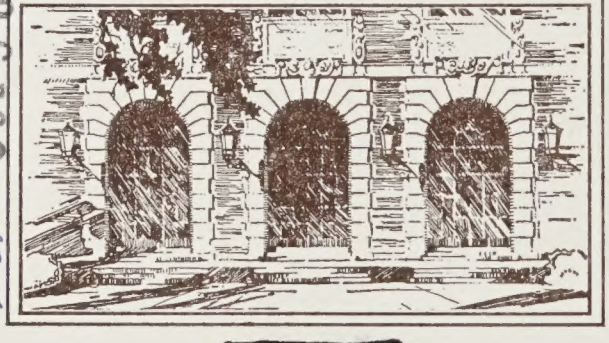
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EDITED FOR THE ASSOCIATION BY

WILLIAM O. MARKHAM, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PHYSICIAN TO ST. MARY'S HOSPITAL.

VOLUME I FOR 1864.

JANUARY TO JUNE.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY DR. MARKHAM.

LONDON: SATURDAY, JANUARY 2, 1864.

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.*

BY

A. T. H. WATERS, M.D., M.R.C.P.,

PHYSICIAN TO THE LIVERPOOL NORTHERN HOSPITAL, ETC.

LECTURE I.

Physiology in its Relations to Pathology and the Practice of Medicine. Recent Physiological Researches. Cardiac Physiology in Relation to Cardiac Diseases. The Reflex Function of the Nervous System in Relation to Pathology, Diagnosis, and Therapeutics; its Bearings on Certain Organic and other Diseases, etc.

MR. PRESIDENT AND GENTLEMEN,—The mutual relations of physiology, pathology, and the practice of medicine, have ever formed a subject of no less interest than importance to the members of our profession; and I think it is scarcely possible for us to direct our attention too frequently to the questions which these relations involve. It cannot be doubted that, as our knowledge of structure and function has improved, so have we been able more easily, and more fully, to appreciate departures from physiological conditions, and, more rationally and successfully, to apply our remedial measures to the relief of these morbid states; and I think it capable of proof that it is with reference to those organs, the intimate structure and physiological action of which we are best acquainted with, that our diagnosis of disease is most accurate and that our therapeutics are most advanced. But it is not merely with reference to the condition of an individual organ that we form our opinion from the disturbance of its physiological action; but beyond this, and above this, is it not by the application of the same test to the system at large, that we estimate the general condition of a patient, and the impression which a disease has produced on the constitution? Is it not by the amount of functional disturbance which a local affection has caused in the various organs of the body, more especially in the nervous and vascular systems, that we gauge the severity of a disease and regulate our treatment?

In any local affection, the recognition of the extent to which the organ attacked has departed from a physiological condition, both in regard to structure and function—and the one is often, but not always, the gauge of the other—is the first point to which our attention is directed; but this ascertained, it is the amount of general functional disturbance which is considered. By this we judge of the reflex effects of the disease, or the way in which the system sympathises, if I may use the term, with it. By this we estimate the reserve force which the patient possesses; and by this, also, we judge as to the nature of the therapeutic measures to be employed.

And when, again, we have to deal with those affections which are truly of a specific character, but for which we have, as yet, discovered no distinct method of cure, is it not by the amount of functional disturbance they create, rather than by any local condition which results from these diseases, that we appreciate their mildness or severity? In the management of cases of fever, of small-pox, of measles, of scarlatina, diseases which depend on some poison which has found its way into the blood, and for which no specific remedy has been discovered, we judge of the nature of the treatment which is required, by an appeal to the extent to which physiological actions are perverted.

But it is unnecessary that I should illustrate by examples, or that I should further dwell on, the importance of the subject which I have selected for these lectures. Of the difficulty in which its consideration is involved, no one is more conscious than myself; and I shall not attempt, on such an occasion as this, to deal with it in any other than a very partial manner. To treat fully of a theme so important, would be a task far too comprehensive for such a course of lectures as this. My object is rather to consider briefly a few points which appear to me, not only of practical importance, but of general scientific interest; and I trust that in this first course of lectures which our Society have thought right to institute, no shortcomings on my part will be allowed to mar the prosperity of a scheme, which has been projected with every wish for the welfare of the Association.

In estimating the extent to which various circumstances have influenced the progress of medical science, it must always be a matter of great difficulty to assign to any one of them its proper value; nor shall I even attempt to show the effects which the use of the microscope or the test-tube has had in this respect. That the most valuable aid has been afforded by the microscope to the student of anatomy and physiology, and that the investigations of the chemist have thrown great light on many of the healthy and morbid processes of life, no one will for a single moment doubt; nor can we doubt the influence which anatomical and physiological knowledge has had on the establishment of correct principles of pathology, diagnosis, and therapeutics.

Even with regard to that single science which teaches of the structure of the body, it would be easy to show, did time permit, by taking up any in-

* Delivered at the Liverpool Medical Institution, before the members of the Lancashire and Cheshire Branch of the British Medical Association.

dividual organ, that in proportion as researches into its minute structure have been attended with difficulty, so has our physiological progress been slow, and so also has our pathology remained imperfect and obscure. The researches into the structure of the kidneys, the liver, the lungs, and the other glandular organs of the body, have brought our knowledge of these structures to a degree of perfection, which has enabled us to see more clearly into the manner in which their functions are performed. It is true, however, that, in reference to some organs, although our anatomical knowledge is definite and precise, there are points in connection with their functions, of which we are still in doubt. We cannot with certainty assign a definite function to the spleen; nor do we rightly understand, in all its integrity, the function of the liver; and in respect to one particular pathological condition of the body, the diabetic, much doubt remains as to the particular organ, whose faulty action gives rise to the morbid secretion which appears in the urine. Even here, however, by pursuing a course of careful experimental inquiry, we seem to be tending towards some more definite conclusion, as to the nature of the disease, than has hitherto appeared probable.

I need not remind you of the investigations of Claude Bernard, which were of so striking, and, at first sight, so conclusive a character. From researches which commenced fifteen or sixteen years ago, Claude Bernard stated he had discovered that the liver possessed a glycogenic, or sugar-forming, power. He found in animals, only recently killed, that the blood of the portal vein, passing to the liver, was devoid of all traces of sugar; whilst that of the hepatic veins, leaving the liver, contained it in large quantities.

The conclusions arrived at by Bernard have been called in question by Dr. Pavy, whose experiments seem to show that the formation of sugar in the liver is a *post mortem* process, due to the rapid transformation of the "amyloid substance", which is stored up in the liver, into sugar. He believes that this change takes place only to a slight extent, if at all, during life.

This opinion, however, has not been confirmed by the most recent inquirers; and the original views propounded by Bernard have received substantial support, especially by Dr. Harley, who has experimented under the direction, and with the assistance, of Professor Sharpey. And, although there is conflicting evidence on the point—which we must naturally expect for a few years, in relation to so difficult and abstruse a subject—the present state of our knowledge seems to prove that, during life and health, a certain amount of sugar is formed in the liver, no matter what the diet may be; but that, as soon as vitality ceases, the quantity formed increases largely.

Now, in reference to a disease like diabetes, in which sugar is formed in excessive quantity in the system, and found largely in the urine, we shall never, I think, arrive at a knowledge of its true pathology, until we have learnt the exact relation which the formation of sugar bears to a state of health; in fact, we must study the disease from its physiological side.

It has been proved of late that the urine contains in health a small quantity of sugar; that a highly diabetic condition may be artificially produced in animals; and that, as a consequence of certain diseases, or injuries of the nervous system, sugar frequently appears, in considerable quantities, in the urine of man. Anything which tends to produce a congestion of the liver, such as partial asphyxia, a division of the sympathetic, and especially of the medulla oblongata, will give rise to diabetic urine. Further, I have myself found sugar, in quantities to give a decided reaction to the copper test, in the urine of patients recovering from severe illness.

Now, it would occupy too much time to attempt to show how these various causes act in producing the result I have named; but, briefly, I may observe that, just as after death, when the regulating and controlling power of the nervous system is withdrawn, we find that the amyloid substance, stored up in the liver, becomes *rapidly* converted into sugar, so, when the circulation through the liver is retarded, and when, especially, its nervous influence is cut off, do we find that a similar result takes place. And although we cannot say, that diabetes consists either in a general or local deficiency of nervous power, it will be well to bear in mind the facts which experimental physiology and pathology have taught us. Nor need we, I think, despair that we shall yet discover the true nature of the disease. It is by steps such as I have referred to, and by a more careful study of the slightest deviations from normal action, that obscure diseases, like diabetes, will probably receive their full elucidation. And as we come more clearly to understand the relations of this newly-discovered "amyloid substance", the exact part which the liver plays in the transformation of the different elements of the food, and the various pathological states in which an excess of sugar appears in the urinary secretion, we shall probably be able to speak as certainly of the diseases of the liver, whether functional or organic, as we can now in reference to those of another organ, with the physiology of which we are far more intimately acquainted. I mean the heart.

And there are, perhaps, no diseases which show more fully the progress which medicine has made, and the influence of physiological knowledge, than those of the central organ of the circulation. Compare for a single moment, the condition of our knowledge of cardiac diseases at the close of the last century, when but few affections of the organ were recognised, with that of the present day.

We now know that the heart is subject to various diseases; and so great is our power of diagnosis, that we are able to discriminate, not simply whether it is the substance of the heart, or the bag which encloses it, that is diseased; not simply whether the muscular or fibrous structure has undergone a change, but the nature of the change which has occurred in the muscular walls, and the exact set of valves which is affected. And a knowledge of this kind is not only of importance in reference to therapeutics; but also, as I hope to show in a subsequent lecture, in regard to the probable duration of life, and the chances of sudden death occurring. And if, as is sometimes the case, we are told that medicine rests on no scientific basis; that it is founded on no fixed principles; that it is a mere empirical art, without any pretensions to the distinctions of a science; we may, I think, fairly point to the accurate knowledge we possess of the diseases we are referring to, to controvert the allegation. If,

from direct observation and experimental inquiry, we have ascertained the exact nature of the action of an individual organ, that under a condition of health it gives rise to certain phenomena, of whose sequence, of the period of whose occurrence, and of the movements which accompany and cause them, we have precise and positive knowledge; if, starting with a knowledge of these facts of physiology, we meet with the organ in a pathological condition, and pronounce as to its state; and if in the vast majority of cases this opinion shall be found a correct one, what, I ask, is this but the most rigid induction from clearly ascertained facts? and if this is not the practice of a science, I venture to ask, what is?

Nor is it any reproach to medicine that we possess no means by which we can specifically cure the various diseases to which the central organ of the circulation is subject. We know that, although we have no remedy that will absolutely cure a pericarditis, we can by the use of certain therapeutic measures, in the large majority of cases, promote the function of the organ attacked, and guide our patient through the disease. We have reason also to believe that, in reference to one very serious affection of the substance of the heart, in which it undergoes a degeneration of its tissue, we can, by the use of therapeutic means, and especially by the administration of a particular remedy, check the progress of the malady and prolong the duration of life; and in regard to those valvular affections of the heart with which, unfortunately, we so constantly meet, although we know of no means by which the morbid deposits can be removed, we do know that, when the deposit is the result of a chronic action, we can, by regulating the habits of life, by maintaining the physiological action of the various excreting organs, prevent the occurrence of that condition which is most favourable to further deposit; and that thus we can retard, or even check, the progress of the disease. And when these deposits have permanently settled on the heart, is it to be a reproach to the physician that he is unable to remove them? Should it not rather be considered the highest praise, that, by a mere physical examination, he is able to recognise their existence and their exact situation?—that he is able to direct his patient in the course of life which he shall follow, so as to stay the progress of those pathological processes which will necessarily ensue, and that rapidly, unless precautions are taken? Is it nothing, by the simple application of the ear to the chest, to recognise, from the absence of certain physiological phenomena, the results of a past pathological process; to be able to predicate the steps which the disease will take; and to find, as time rolls on, that our prognosis is verified; that, in obedience to pathological laws—laws whose action we are acquainted with—the changes we anticipated ensue, the abnormal takes the place of the normal, pathology steps in where physiology existed, and death slowly succeeds to life.

[*To be continued.*]

HEALTH OF SAN FRANCISCO. The San Francisco *Medical and Surgical Journal* says: "If we estimate our present population at 100,000, our rate of mortality has been less than 1 in 49; showing a degree of salubrity which may be advantageously compared with that of any large city in the civilised world."

Lectures

ON

ORTHOPÆDIC SURGERY.

BY

BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

LECTURE V.

ON CURVATURES OF THE SPINE.

(*Continued.*)

The Causes of Lateral Curvature of the Spine.

Obliquity of the Pelvis, as was stated in the last lecture, is a very common cause of scoliosis. It gives rise first to a lumbar curve, as is shown in Fig. 13. But, perhaps, the mode in which spinal

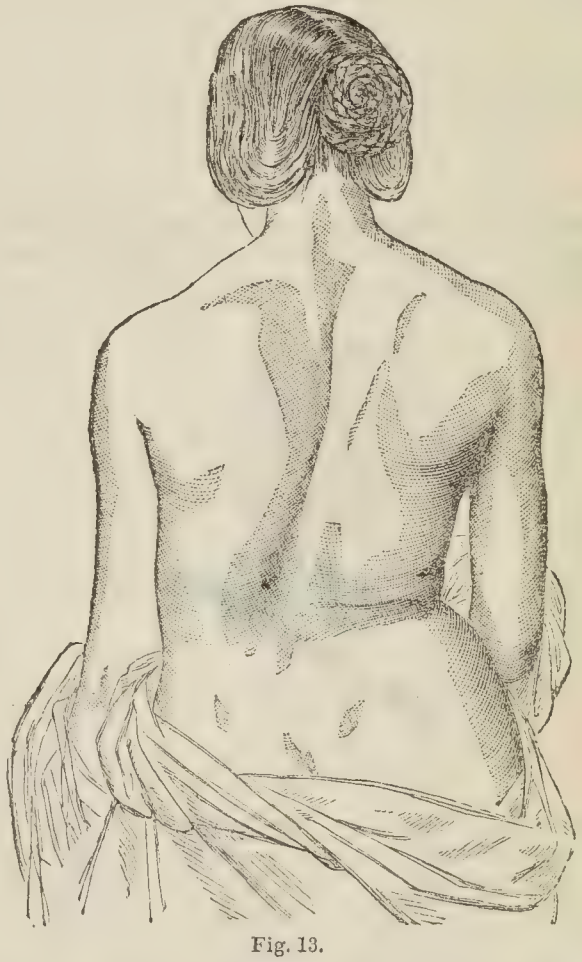


Fig. 13.

curves are formed will be more readily understood by means of the following diagram (Fig. 14). Suppose the lines A B C D to represent the pelvis and spinal column in their normal relations; namely, that the spinal column forms together with the pelvis a right angle. And let E F represent the pelvis rendered oblique, from whatever cause; and G B the inclined column still retaining a right angle together with its base. How is equilibrium to be maintained? It is manifest that the line G B, if continued, would render equilibrium impossible; and, therefore, a series of curves about the perpendicular line A B are formed for this purpose as is better shown in the following figure (Fig. 15).

It will be seen that the cervical curve corresponds to the line G B; and such must, more or less, be the

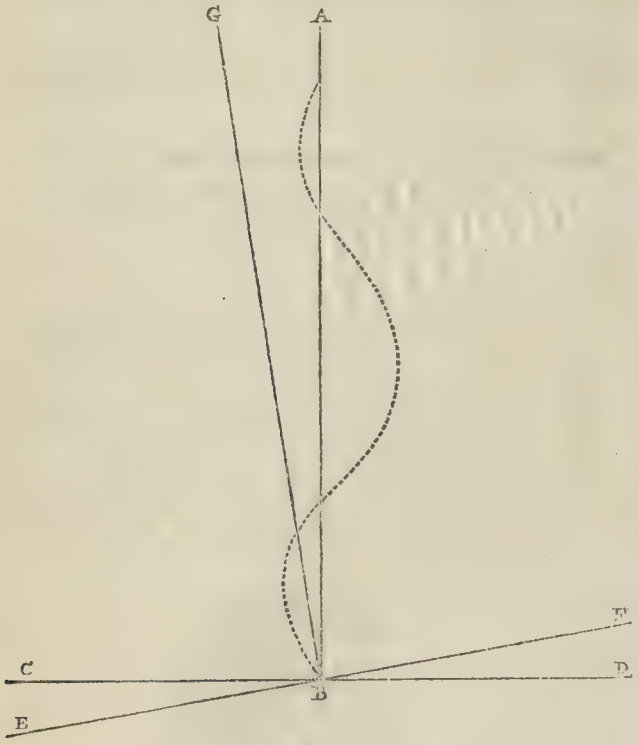


Fig. 14.

case until equilibrium is being restored through increase of distortion; when the cervical curve approaches the perpendicular line A B, as in Fig. 14.

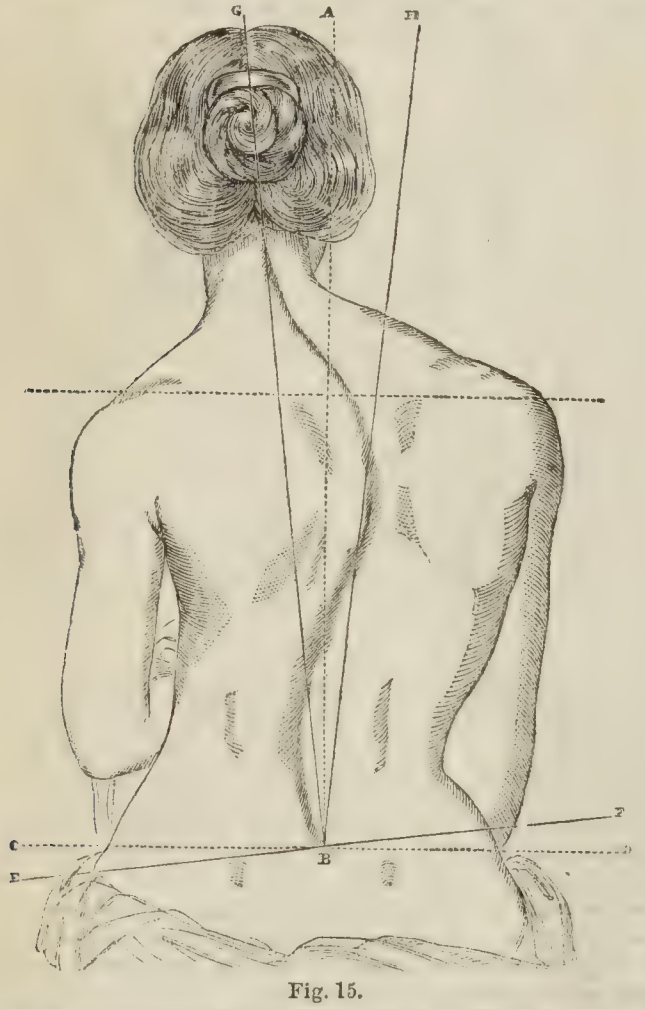


Fig. 15.

A primary curve may be either lumbar, dorsal, or cervical, depending on the cause which gives rise to it. Thus, a lumbar curve will be produced through hip-joint disease, and a cervical curve through torticollis; while through excessive use of an upper extremity, a dorsal curve will certainly be formed as the primary curve.

No curve can remain single; but it is necessary for equilibrium that, in every instance, secondary curves should be formed, compensatory of the first; and thus, a series of curves is formed—two, three, or more—according to the severity of the primary curve, and to the period during which it has existed.

A rachitic spine is not a very common affection. Rachitic disease of the long bones is very common, and of the pelvis it is not rare; but, perhaps, the spinal column is more rarely attacked by this disease than any other portion of the bony skeleton. When rachitic curvature is fully established, the changes which take place in the vertebræ themselves, and the excessive distortion which is produced, render it impossible to restore the column to its normal condition.

Increased or diminished capacity of either side of the thorax will occasion lateral curvature of the spine. As a result of inflammation, and after the removal of the effused fluid from the pleural cavity, the ribs sink to the compressed lung, the lung itself being bound down by adventitious membranes so that it cannot expand. The side becomes flattened, and the lung remains contracted. Compensation then follows, through amplification of the sound lung and enlargement of its containing cavity taking place. This form of lateral curvature is well shown in Fig. 16.



Fig. 16.

Again, deficient development and excess of development of the bodies of the vertebræ are among the rarer causes of spinal distortion. Examples of these are to be met with in many of our pathological museums. And caries of the bodies of the vertebræ occasions more frequently, and in a somewhat

imilar manner, a like result—a curve forms above nd another below the seat of disease. It need carcely be said that solid bony union must have aken place before lateral curvature is possible.

The *Symptoms of Lateral Curvature of the Spine* re so marked that it would be thought by some, erhaps, impossible to overlook a distortion where the ait and figure of the person proclaim the affection. nd yet this distortion is constantly overlooked; or he awkward appearance is attributed to any but he right cause. Such was the case with the pa-ient from whom Fig. 7 was taken. This was an only nd an orphan child, to whom her mother was en-irely devoted. She was 16 years of age; and the urves must have existed during at least four years; et curvature of the spine was never suspected until ne week before advice was sought. Then, during visit to a relative, the distortion was pointed out. t will scarcely be credited, however, that curvature hould not have been discovered in the patient from hom the following drawing was made, and that it ad to be pointed out to the mother when it had rrived at the stage at which it is depicted. (Fig. 17.)

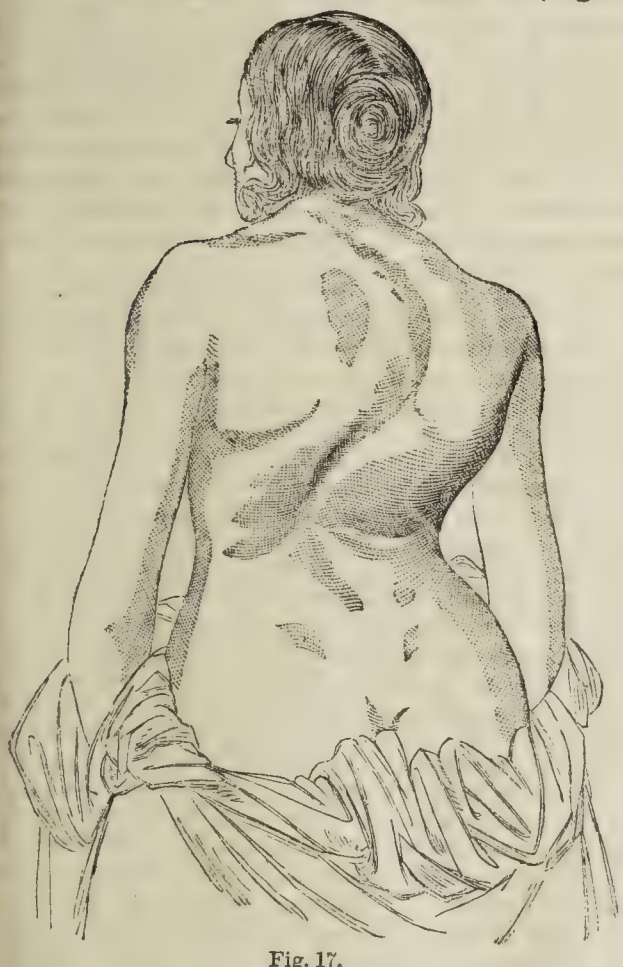


Fig. 17.

nd still more strange will it appear when it is ated that, in consequence of great general debility, r mother always assisted her to dress; yet it was ver discovered that the spine was crooked. We ght almost believe that some eyes which con-antly rest on a deformity cease to see it; just as ne ears cease to be affected by a din close to em.

The *external characters of scoliosis* differ as much the periods of development of the affection itself fer; and, consequently, they are not the same en curvature is incipient and when it is con-ned.

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

CASE OF FATAL OBSTRUCTION OF THE BOWELS.

By Humphry Sandwith, M.D., Hull.

[*Read Sept.* 23, 1863.]

Our late lamented associate, the late Mr. Land of Patrington, was in the fifty-ninth year of his age. He was rather slightly organised and of the nervous temperament. He had latterly become thinner and paler in the face, which wore a somewhat cachectic aspect. His health was nevertheless tolerably good. His general habit was to have two loose evacuations daily. He called on me in Hull a few days before the actual seizure by his fatal malady, and during our interview on another subject, he incidentally mentioned his having been for a week or two tormented with a noisy rumbling in his bowels, so audible as greatly to annoy him when in the company of others. Assuming that this arose from a little indigestion, I simply advised him to take three grains of rhubarb with every meal. I saw him a few days afterwards, when, as he still complained of flatulent distension, I prescribed two grains of calomel at bedtime, and rhubarb with tartrate of potash the following morning.

On the following day he mentioned his case to Mr. Craven; this was on Wednesday morning, August 26th. There was now decided obstruction of the bowels. Mr. Craven prescribed five grains of calomel, to be followed by a pill containing one grain of calomel and three of extract of colocynth every fourth hour, to be assisted by soap and castor-oil injections. Late in the evening of the same day, myself and Mr. Craven were summoned to Patrington, which we reached at midnight. We found our patient very much worse. The obstruction continued; the abdomen was a good deal distended; the pulse was 100; and there was slight vomiting occasionally, but not stercoraceous. We learnt that he had lately eaten some veal, which might have led to the attack. As there was some tenderness on pressure in the right iliac region, but none elsewhere, we applied twelve leeches over the ilio-cæcal region, to be followed by a blister. He was also placed in a warm-bath; and afterwards, turpentine was freely applied to the surface of the abdomen, alternated with hot fomentations. We also prescribed one grain of the pure extract of aloes with two of extract of henbane every third hour, as also the continued use of injections.

On Thursday, August 27th, at our morning visit, the symptoms were unabated; but the pulse was at 90, which was the limit of its range ever afterwards. He had not slept, and the abdomen was more distended. Mr. Craven now carefully introduced O'Beirne's tube, which was pushed far beyond the sigmoid flexure. Some pain and resistance were incurrred in the upper part of the rectum, and flatus passed from the tube. Two or three pints of warm water were injected; and five grains of calomel were placed on the tongue. The operation with O'Beirne's tube was repeated at our evening visit; but on both occasions the water returned, not even discoloured by an admixture of fæces. On one occasion afterwards, he voided a little mucus tinged with blood, which we saw the next morning.

On Friday morning, August 28th, we found our patient suffering from severe hiccup, which had harassed him during the greater part of the night. As was to be expected, he was much discouraged by this symptom. And here, I may remark, that from the time of his first interview with Mr. Craven, he had felt and expressed the presentiment of a fatal issue of his disorder. The abdo-

men continued much distended, but with very little tenderness; for he could bear deep pressure everywhere beyond the precincts of the blistered surface without flinching. We now put him upon soothing doses of opium—a quarter of a grain of powdered opium with half a grain of calomel every second hour, to be alternated with the aloes and hyoscyamus the following hour. At our evening visit we reintroduced the warm water injections through O'Beirne's tube, which returned with very minute fragments of fæcal matter, but not sufficient to discolour it. The opiate plan had already allayed the hiccup, and we advised its continuance and that of the aloes, but both of these less frequently. With that plan we had also combined an antispasmodic containing chloric ether, and allowed small doses of brandy with beef-tea.

On Saturday morning, August 29th, the hiccup had quite gone; he had slept several hours, and he was more cheerful. We again threw up the warm water, and persuaded him to smoke tobacco while on the night-chair, to which he reluctantly consented. We also advised a continuance of the common injections with castor-oil and small quantities of turpentine. On our evening visit we found that the last evacuation had been largely fæculent, as witnessed by his son, who is a surgeon. Unluckily the servant had removed it. It was followed by a smaller one, which we saw, and which was decidedly fæculent. The patient's mind was now much relieved, and he was more hopeful of a successful issue. His friends also were much encouraged. Still our patient complained of thirst, and the abdomen had not sensibly decreased in volume.

Early on Sunday morning, August 30th, we were summoned to Patrington. On our arrival, we had the mortification to learn, that after a restless and anxious night, and without any further action of the bowels, Mr. Land had expired half an hour before, while in the act of vomiting an immense quantity of dark coloured and offensive fluid matter. His death was probably occasioned by the shock given to the nervous system, which was originally feeble, and still further weakened by the want of sleep and insufficient food, and a state of prolonged irritation. The shock was evidenced at first by great mental depression, subsequently by hiccup, and eventually by collapse in the last fatal act of vomiting.

I cannot close this melancholy narrative without expressing the deep regret, which we all must feel for the loss of an associate, whose gentlemanly bearing, transparent character, high integrity, and love of his profession, entitled him to a high place in the esteem and regard of his professional brethren.

A *post mortem* examination made about nine hours after death—in which we were assisted by Mr. Evans, the able house-surgeon of the Hull Infirmary—revealed the following appearances. There was more fat than usual in the omentum, mesentery, and cellular tissue covering the parietes of the abdomen. Lobules of fat also surrounded the diseased structures of the rectum, wherein was the focus of the principal disease. There were no signs of peritoneal inflammation anywhere. The mucous membrane of the small intestines shewed a few patches, and but a few, of congestion in its slighter forms. The same was true of the mucous membrane of the large intestines generally, except that it was much congested for a few inches above the stricture in the upper part of the rectum. There was no distinct pouch above the strictured part, as is often the case; but instead of the distension of this part, all its tissues had become thickened. On the other hand, the portion of the rectum below the stricture was thinner than natural. The stomach and small intestines had been largely evacuated by the last and fatal act of vomiting. But the entire colon from the sigmoid flexure to the cæcum was greatly distended with fluid fæces, probably amounting to two quarts, but without any scybala or solid masses. The transverse arch of the colon through all its coats was thin and degenerate and easily lacerable. But we will now advert to the principal seat of the disease. This consisted of a distinct strictured portion of the rectum a little below the sigmoid flexure of the colon, as if a string had been tied around it, all the coats being massed together in a homogeneous tissue of scirrhous matter, but with its inner surface deeply ulcerated. On subjecting a minute portion of the interstitial deposit of this mass to the microscope, we detected here and there the true cancer cells. "Scirrhus," Dr. Baillie tells us, "is found much more frequently at the sigmoid flexure of the colon, or in the rectum, than anywhere else." And the explanation of the fact is, that "there is more of glandular structure in the inner membrane of the great intestines towards its lower extremity than in any other part of it; and this sort of structure has a greater tendency to be affected with scirrhus than the ordinary structures of the body."

The above narrative of Mr. Land's disease, coupled with the concluding *post mortem* disclosures, suggests not a few important practical reflections. Obstruction of the bowels, through all its varieties, from simple constipation to the iliac passion, is a subject of great interest to the practical physician. The various causes of ileus should ever be present to his mind, such as hernia both external and internal, intussusceptio, the presence of a large gall-stone in some part of the intestines, and contraction of the calibre of the bowel, sometimes of the ileum at its termination in the colon, but more commonly in some part of the colon, as in its transverse arch, or about the sigmoid flexure, or lastly, in the rectum. The disease may also arise from the adhesion of two contiguous portions of intestine, or from latent inflammation, which may be easily confounded with colic. As the treatment is largely governed by our knowledge of the cause of obstruction, hence the importance of not only acquainting ourselves with what has been recorded by others, but also of widening our personal acquaintance with the results of *post mortem* inquiries. It has fallen to my lot to witness four fatal examples of the disease, in which the scalpel revealed the following organic changes. In a comparatively young lady, there was gangrenous perforation of the cæcum; in a young man, there was an ulcerative perforation of the appendix vermiformis, which was intensely inflamed, and of a blood-red colour; in a farmer, about 70 years of age, there were two strictures in the colon, one a few inches above the cæcum, and a second at the sigmoid flexure; and in our late lamented associate, there was an ulcerated carcinomatous stricture of the rectum below the sigmoid flexure. In the former two of these four cases, we had the results of peritonitis in its most intense form as the consequence of perforation, but not in the two latter. No opportunity should, if possible, be lost in all fatal cases to ascertain by the scalpel the cause of death. For it is not only sometimes a solace to our own minds to find, that every resource of art must have proved unavailing, but it may also, in other cases, discover some defect in our treatment, and thus give a clue to more successful practice in similar forms of disease.

One symptom of the existence of stricture in the colon is the fact, that the fæces are never discharged except in a liquid state, as appears latterly to have been the case with Mr. Land, or, if figured, that they are of an extremely attenuated calibre. Dr. Mason Good describes the case of a lady, aged 35, and then living, who had been subject to it for ten years, and whose fæces were not more voluminous than those of an infant; also the case of a man, aged 49, who had laboured under the disease for twenty-one years, and could never pass a motion larger than a crow-quill. By means of a purely liquid diet both these individuals contrived to enjoy a tolerably comfortable existence. I need scarcely remark, however, that we may have habitual liquid stools without

stricture. A distinction, moreover, should be drawn between cases of thickening and stricture of the intestine from simple chronic inflammation, and that produced by carcinoma, which, as in Mr. Land's case, produces a destructive ulceration, as well as contaminates the blood and wars with vitality. "In advanced stages of the disease," says Dr. Baillie, "the countenance is sallow, the strength is much impaired, the body is much emaciated, and the constitution at length altogether sinks." This downward course had already begun in Mr. Land's case, but had not advanced far, when he was cut off by an acute attack of ileus. It is remarked by Dr. Abercrombie, that "there is a state of the bowels in which fluid fæces may be discharged regularly and freely, and apparently in abundant quantity, while there is yet going on for a length of time an immense accumulation of fæculent matter in a very hardened state, extending through the whole of the colon." No scybala, however, were found in our patient's bowels, but an oppressive load of liquid fæces, which Nature, being incompetent to get rid of it *per vias naturales*, made a desperate effort to discharge by regurgitation and vomiting, and sank exhausted. Much light is thrown on this incompetence both by the thinness and degeneracy of the transverse arch of the colon through all its coats, and by the thickened and congested state of the tissues of the rectum for a few inches above the stricture, not losing sight of the impediment offered to the passage of the fæces by the scirrhous mass itself with its deeply ulcerated surface. It is remarkable that, with the exception of the liquid stools and the rumbling flatulence which annoyed him for a short time before the fatal attack, he appears to have had few of the usual premonitory symptoms of stricture, such as the straining and distress in evacuating the fæces.

PRETERNATURAL LABOUR: RARE PRESENTATION.

By HENRY MUNROE, M.D., F.L.S., Lecturer on Medical Jurisprudence at the Hull School of Medicine, etc.

[*Read September* 23, 1863.]

IT will happen to every medical man who has a large midwifery practice, that now and then he will be called to a case in which all his skill, tact, and judgment will be required. In my own time, I have had many difficult cases of midwifery, having attended during the last twenty-four years about four thousand, exemplifying most of the presentations described by writers on this subject; but the one I am about to bring before your notice has been the only one of the kind I have had; nor have I noticed any description of a similar presentation. The case is as follows.

Elizabeth Richardson, a thin spare woman, poorly fed and living in a single room in the locality of Witham, was taken in labour of her third child about 5 A.M. on Saturday, February 21st, 1863.

She was attended by a neighbour, who, on this occasion, undertook the office of midwife. The membranes were ruptured, and the liquor amnii escaped about 6 A.M. The labour pains after this somewhat ceased. She had slight pains during the whole day of the 21st; but the child made very little progress. Towards evening, the pains gradually increased; but as night advanced, they began again to decline. The midwife, on Sunday morning, the next day, July 22nd, finding the pains increase, but the progress of the child not at all advanced, or not at all understanding the presentation, sent for Mr. Anningson, surgeon, about 1 P.M. When Mr. Anningson arrived, he found, on examination, that five parts of the child were presenting themselves; viz., one leg was very well down in the vagina, also both arms, the funis, and the crown of the head.

He attempted to turn the child by bringing down the leg, but found that he only wedged the child up tighter, and that all his efforts to deliver in this way were futile. About 2 P.M., he sent for me to assist him. I immediately attended. There could be no difficulty in making out the presentation and the position of the child. I found it quite impossible to return the arms and bring the head into a natural position, on account of the close contact of the uterus over the child.

I at once placed a broad ligature round the child's leg, and gave it to Mr. Anningson. Then pushing up the head and shoulders, and necessarily the arms, I requested Mr. Anningson to make strong traction with the broad ligature. The pains were then not very forcible, for the woman was growing much exhausted. By alternating our movements of pushing up the head and chest and pulling down the leg, our efforts were in about a quarter of an hour rewarded with success by getting the breech into the pelvis low down. The other leg was somewhat in the way; but, by a little manipulation in passing the finger over the thigh, it was also got down. The case now being made a footling case, the child was easily brought into the world alive.

The pressure on the hand and arm of the operator was very great; but the woman recovered without any bad symptom.

How the cord had escaped pressure, I can scarcely tell; but so it was. The child was born alive, and is now in a healthy condition.

Reviews and Notices.

THE SCIENCE AND PRACTICE OF MEDICINE. By WILLIAM AITKEN, M.D.Edin., Professor of Pathology in the Army Medical School. Second Edition, revised and rewritten. In two Volumes. Vol. I, pp. 727. Vol. II, pp. 1095. London: 1863.

THE tendency of writers on Medicine has, during several years at least, been decidedly to produce special rather than complete systematic treatises. Thus, while we have had fevers, the diseases of the lungs, the diseases of the heart, those of the nervous system, of the abdominal viscera, of the kidney, etc., most ably described by men who have given their attention more particularly to these parts of the human body, Dr. Watson's classical *Lectures* have been nearly, if not altogether, the only example of an attempt at a comprehensive work on Medicine; and these have owed their well-merited reputation rather to the fact of their containing the teachings derived from a long experience and able judgment, than to their being a thorough digest of the doctrines at present held by the most able and laborious investigators in things medical. Besides this, in the interval of time which has elapsed since the publication of the last edition of Dr. Watson's work, the progress of inquiry has been continuous, and much new and valuable matter has been laid before the medical world. Hence the preparation of a work like that of Dr. AITKEN, the object of which is "to incorporate and connect the more recently established facts which illustrate the nature of diseases and their treatment with the time-honoured doctrines on which the Science of Medicine has been based," is by no means a superfluous undertaking.

The book is divided into four parts. The first part is on Topics relative to Pathology; the second, on Methodical Nosology—Systematic Medicine, or the Distinctions and Definitions, the Nomenclature and Classification of Diseases; the third, which naturally occupies the greatest portion of the two volumes, is on the Nature of Diseases: Special Pathology and Therapeutics; and the fourth is on Me-

dical Geography, or the Geographical Distribution of Health and Disease over the Globe.

In the ten chapters contained in the first part, the author treats of, 1, Medicine as a Science and Art; 2. How the Nature and Causes of Disease may be elucidated; 3. Relative Nature of the Terms "Life", "Health", and Disease"; 4. Morbid Phenomena, Symptoms, and Signs of Disease; 5. Morbid Anatomy and Pathological Histology, the Special Means of Investigation; 6. Elementary Constituents of Lesions; 7. Complex Morbid States, viz., Fever, Inflammation, and Degenerations of Tissue; 8. Types of Disease, and their Tendency to Change; 9. Modes by which Diseases terminate fatally; 10. Principles which dictate the Treatment of the Complex Morbid Processes.

The second part consists of three chapters. In the first of these, the author treats of the Aim and Objects of Nosology, and the Nomenclature and Classification of Diseases; the second contains a Tabular View of the Classes and Orders of Diseases according to the Nosology of Dr. Farr; and the third, a similar Table arranged according to the English, Latin, French, and German Names at present in Use.

In the third part, the diseases described are arranged under the following classes: 1. Zymotic; 2. Constitutional; 3. Local. In speaking of each class, some general observations are made; and further divisions are made as follows.

The first class, that of Zymotic Diseases, is divided into Miasmatic—including Eruptive Fevers, Continued Fevers, Mucous Fevers; Enthetic—including Hydrophobia, Glanders and Farcy, Malignant Pustule, and Syphilis; Dietetic—including Scurvy, Purpura, Ergotism, Delirium Tremens, Lead Palsy, Bronchocele or Goître, and the Paralysis of the Lower Extremities produced by the Use of Lathyrus Sativus; and Parasitic—including the Entozoa, Epizoa, and Epiphytes.

The second class, Constitutional Diseases, are divided into the following orders: Diathetic—including Rheumatism, Gout, Anæmia, Chlorosis, Leucocythemia, Suprarenal Melasma, Beriberi, Chronic Bright's Disease, Diabetes Mellitus, Spasmodic Asthma, and Cancer; and Tuberculous—including Tuberculosis.

The third class, that of Local Diseases, is subdivided according as the seat of malady is the Brain, in the Spinal Cord and Nerves, in the Thoracic Organs, in the Mouth, Tongue, and Adjacent Parts, in the Abdominal Cavity and its contained Viscera, in the Kidneys, in the Spleen, and in the Skin.

In the three chapters of which the Fourth Part, that on Medical Geography, consists, Dr. Aitken treats of, 1. The Scope and Aim of this Branch of the Science of Medicine; 2. Malaria and Places known as Malarious; 3. Acclimation, or the Influence of Climate on Man. To this part is appended a coloured Map, after Mr. A. K. Johnston, of the Geographical Distribution of Health and Disease over the Globe.

So far as regards the variety of subjects treated of, Dr. Aitken's book is the most comprehensive of any that have in late years been published on the practice of medicine. Besides the descriptions of several diseased conditions which have only lately been defined and received names, such as disease of the suprarenal capsules and leucocythæmia, we find notices of several diseases which have been described long ago, but of which an account is rarely to be found in English medical works; *e. g.*, beriberi and sun-stroke. In fact, there is, as far as we can see, not one topic of pathological or practical interest that has been the subject of modern investigation and discovery, which the author has omitted to notice. We may mention a few of them.

In the first volume, at pages 42-58, Dr. Aitken gives the conclusions which have been laid down by Wunderlich regarding the value of regular thermometric observation of the temperature of the body in the diagnosis and prognosis of diseases attended with fever. The subject may be called a nearly novel one in English medicine; as, according to Dr. Aitken, "with the exception of Dr. Parkes and the pupils he taught when clinical professor at University College Hospital, the usefulness of the thermometer in recognising febrile disease does not seem to have been hitherto sufficiently appreciated in the medical schools of this country." And further on, in describing several of the diseases, such as the eruptive and continued fevers, and pneumonia, the author has given, from Wunderlich, diagrams illustrating the typical ranges of temperature. The thermometric variations in the bodily temperature during acute diseases appear certainly deserving of study by the physicians of this country, if we may judge from the importance attached to it by Wunderlich and Parkes, and from the following introductory observations by Dr. Aitken.

"There are certain phenomena especially related to the development and progress of fever, which ought to be determined by clinical observation and experiment in all cases of disease where fever may be present. The facts to be ascertained are not less significant of the abatement, subsidence, or '*defervescence*' of the febrile state than of the advent of local lesions. The term '*defervescence*' in fever, is a comparatively new one in English pathology. It was first used by Professor Wunderlich, and subsequently adopted in this country by Dr. Parkes. It signifies the period in which the temperature of the fevered body is declining to its normal amount from that intense degree of heat attained in the state of accession of the febrile phenomena. This '*defervescence*' may be sudden, when it is regarded as a 'crisis'; or it may be gradual, and is then described as a 'lysis'; or it may be partly sudden and then slow, when it may be described as 'wave-like', with gradual and sometimes regular alternations of high and low temperature, as Dr. Parkes was the first to point out. It is the exact sequence of phenomena we desire to know in every case where pyrexia is present, as well as the meaning and co-relation of the phenomena.....Up to within a comparatively short time ago, the classification and diagnosis of 'Fevers' was not such as to distinguish and separate their varied forms and varieties from each other. 'Common continued fever' was a comprehensive name which included many very different types of fever; and no means of observation have been of late so exactly discriminating, by helping the physician to distinguish one form of disease from another where fever co-exists, as accurate observations on the temperature of the patient, determined by the thermometer." (Pp. 40-41.)

Among the Degenerations of Tissue described in the seventh chapter of the first part, we notice specially the most comprehensive account of the various researches on the condition termed "Amyloid Degeneration," with which we have as yet met.

The important and much debated subject of the Change of Type in Disease occupies an entire chapter. Dr. Aitken favours the opinion that the character of disease has changed; or rather, he is disposed to agree with Dr. Watson "that there are waves of time through which the *sthenic* and the *asthenic* characters of disease prevail in succession, and that we are at present living in one of its adynamic phases." Dr. Aitken, indeed, recognises with several other medical writers the action of degenerative change going on for many years past in the human constitution; yet, at another page, he consoles us with the assurance that "there is abundant evidence to prove that we now have a more healthful enjoyment of our life on the whole (although the constitution may not be so strong) as in the so-called halcyon days; and that the duration of man's life of late years has been, on the whole, prolonged." While we recognise the fact of the greater prolongation of life in modern times, we cannot, for the present at least, go with Dr. Aitken in embracing the opinion that there has been an actual change in the type of diseases. It may fairly be asked whether much of the evidence brought forward in support of this hypothesis has not arisen (independently of the question of treatment) rather out of the more accurate and more widely diffused observation of modern times, than from phenomena occurring now which have not occurred in times past.

The third chapter in the second part, giving the French and German synonyms of the names of diseases, is likely to be useful. As to Dr. Farr's classification, which Dr. Aitken gives, there is a note from Mr. Longmore, the Professor of Military Surgery at Netley, to the following effect.

"The list of diseases named is chiefly applicable to returns explanatory of the mortality which occurs in a population. All the causes which lead to death are in this nomenclature, but not the causes of simple infirmity, or disability for particular pursuits.....A classified nomenclature, to be suitable for the purposes of an invaliding military hospital, should not only include the diseases which may prove causes of death, but also all those disqualifying physical imperfections and infirmities which prevent men from properly performing the duties of military service." (P. 183.)

The defect pointed out by Mr. Longmore is an important one, and certainly impairs the value of the nosological table, notwithstanding its general high merit, for other purposes besides those of military invaliding.

In the brief space which we can allot to the review of this book, it will be impossible to notice various points in regard to classes and orders of diseases, and the individual diseases, which are treated of in the third part. We must notice, however, that Dr. Aitken claims syphilis as a medical disease, for which proceeding he has good ground in the investigations that have recently been made in regard to the manner in which the disease affects internal organs. The description of Malignant Pustule is abridged from that given by Dr. William Budd in this JOURNAL; and some diseases are described, such as Beriberi, Sun-Stroke, and the Fungus Foot-Disease, which have special interest for practitioners in the colonies.

Great credit is due to Dr. Aitken for having been the first to introduce into a work on Systematic Medicine a notice of the Geographical Distribution of Disease. The subject was first prominently brought forward, in as entire state as the state of knowledge on it permitted, by Mr. A. K. Johnston in 1856; and, as we have already said, one of his maps illustrates the present work. Dr. Aitken also refers, as sources of his information on medical geography, to the writings of Dr. Mühry, Dr. J. C. Nott, Sir A. Tulloch, Dr. Marshall, and Sir Ranald Martin. *Apropos* of this matter, we must say that we notice with much pleasure the extreme care which Dr. Aitken has taken in acknowledging all his sources of information.

In concluding this notice, we have to thank Dr. Aitken for so ably placing before the student and practitioner the Science and Practice of Medicine as it now exists. He has undertaken a work of great labour, and one demanding much patience and vigilance; and, although we do not hold ourselves pledged as to the accuracy of all that he says, we heartily commend the work as deserving of a large and speedy circulation among the profession. Of the real value to be attached to this and all works of the kind, we cannot speak better than in the words of Dr. Aitken himself, who says, in his concluding remarks:

"After the student has read and carefully studied all that is contained in books of this kind, he will soon find that he has only commenced the great study of his professional life. To extend his knowledge, and to acquire practical skill, he must possess, cultivate, and foster, above all things, the faculty of observation and the exercise of a sound judgment. From books of this nature, which simply transmit to the future a sketch or record of our present knowledge of the natural history of diseases and their remedies, he may acquire a book-knowledge of the Science of Medicine; and by clinical instruction, with such books as a guide, and experienced clinical teachers to point out to him the best methods of investigation, he may acquire some practical experience. It is such kind of study which will give him an extensive view of the Science of Medicine, and at the same time some experience in the Art of investigation and in the management of disease, which will eventually place the young medical man in the best position to begin practice." (Vol. ii, p. 1059.)

BEQUESTS. The late Rev. William Spencer Phillips, Isle of Wight, has made the following bequests:—To Charing Cross Hospital, £200; to St. George's Hospital, £200; to Westminster Hospital, Broad Sanctuary, £200; to the Hospital for Consumption and Complaints of the Chest, Brompton, £200. All free of legacy duty.

TESTIMONIAL TO DR. WEST. A testimonial, consisting of an elegant tea and coffee service in silver, was presented a few days ago to Dr. West of Wimpole Street, as an acknowledgment on behalf of the medical professors of King's College, London, of his services in performing the duties connected with the chair of midwifery last year, during the illness of Professor Priestley. The Principal of King's College; Dr. Watson, President of the Royal College of Physicians; Mr. Arnott, of the Royal College of Surgeons; and a large number of the medical professors of King's College, were present on the occasion. Professor Bentley, the dean of the medical department, presided, and presented the testimonial to Dr. West, in the names of Dr. Priestley and the other medical professors.

British Medical Journal.

SATURDAY, JANUARY 2ND, 1864.

A NEW YEAR'S THOUGHTS.

In entering on a new year of our editorial duties, we have, in the first place, to express our sincere wishes for a continuance and increase of prosperity to our profession and all who honourably practise it, especially those with whom, as members of the British Medical Association, our relations are the more immediate.

While the new year has but just commenced, we may for a few moments glance back on that which has past, and note a few of the principal topics which have interested the medical world, and their influence for good or evil on the profession.

Medical art and science has been pursuing its steady course, not distinguished indeed by any great discovery, but still one of progress. Various questions relating to the course, nature, and treatment of disease, have continued to occupy the attention of able and honest investigators; and medicine, although it has not made any apparent approach towards establishing a claim of infallibility, stands in a position, as regards the knowledge possessed by its followers, in advance of that which she occupied at the beginning of the year. The societies which meet periodically in London and the large towns and cities of the kingdom, for the discussion of subjects connected with medical practice in general or with special departments of it, have continued their useful work of communicating knowledge among their members. In the performance of this duty, the Branches of our Association have increased their share; and the number and variety of the papers read at the various meetings, and communicated to this Journal for publication, have shewn that there has been no want of men willing to communicate, for the good of their professional neighbours and of medical science, whatever important practical facts they have observed, or whatever opinions they have, on reflection, considered to be calculated to promote the advance of medicine.

Among special departments of medicine, the study of epidemic diseases and of the laws which govern their origin and spread, as well as of their prevention and diminution, has continued to receive that attention which its importance demands. Some important questions in regard to the soundness of the views generally held as to the etiology of zymotic diseases have been raised by Professor Christison; and the present position of our knowledge, and the expectations which we may entertain as to its future progress, were ably set forth in a paper read by Dr. Richardson before the Epidemiological Society, and published in this Journal. Of individual epidemics, small-pox, from its increased prevalence during the past year, has attracted much attention, and has given rise to a more vigorous consideration of the best means of rendering more effective the great preventive means which we possess in vaccination. The disease in sheep, to which the name of small-pox has been given, has been most ably elucidated, especially by the researches of Dr. William Budd, who, in his admirable address read at the last annual meeting of the Association, proved the special character of the disease, and its non-communicability to man or to other animals.

In internal pathology, our knowledge has gained in precision. Syphilis, for instance, hitherto known almost exclusively as a "surgical" disease—that is, affecting parts lying externally, or within reach of the surgeon's eye—has come to be recognised as capable of exercising its destructive action on almost any organ in the body; and to be, in fact, as truly a disease for the study of the physician and pathologist as are cancer and tubercle.

The laryngoscope, in the hands of those skilled in its use, both in this country and abroad, has proved an instrument of even greater practical utility than we anticipated when it first became an object of professional curiosity. By its aid, parts formerly hidden from the eye are brought readily into view; and diseases of structure, formerly appreciable with uncertainty, are now easily diagnosed, and, when advisable, removed by the aid of surgical means, with as much ease as if they lay within ordinary reach of the operator's eye and hand.

Various proceedings in operative surgery are continuing to receive that investigation which will in due time establish more accurately the indications for and the best method of their performance. Ovariotomy, in the hands of English surgeons, has gradually gained its position as a legitimate operation; and the increasing success which has attended it here has led to its performance in various countries of the continent. The excision of joints, regarding which there has been some reason for fear lest the excessive zeal of its supporters, and a want of proper judgment in the selection of cases and in the performance of the operation, might bring it into undeserved discredit, is, to use a common phrase, finding its level. To this end the researches of Dr. Humphry, demonstrating the manner in which the process of growth of the bones is conducted, have been of much value.

The discussion which has been held and is still going on in the pages of this Journal, as to the merits of iridectomy, will, it is trusted, enable our readers to form their conclusions regarding the safety and efficacy of the operation. All that has been

said on the subject shews how necessary it is to be careful in adopting suggestions for operations of the kind, even when they come before us sanctioned by the names of men of the highest professional skill and honesty as their proposers.

We might go on noticing other matters which demonstrate the continued interest which has been taken during the past year in the progress of medicine and surgery; but we will pause here, with this remark only—that our countrymen have borne their share of labour, and deserve a full portion of the credit due to those who have endeavoured to make our science and art more perfect than before.

In regard to the political and social relations of our profession, various circumstances have occurred which have called for notice during the past year.

The education of the medical student, once a comparatively simple matter, has, from the great accumulation of direct and collateral professional knowledge, because a subject so vast and difficult as to have caused the inquiry whether it may not be simplified consistently with the demands of practical utility. The subject has been mooted before the Medical Council, and is likely to again receive the attention of that body; and, in the meantime, Mr. Syme of Edinburgh has, within the last few weeks, very ably and lucidly laid his views on the matter before the profession.

In its relations to the public, the state of the medical profession has not been altogether that which could be desired. There is still, as was ably pointed out by Dr. Symonds in his introductory address at the Bristol meeting, a want of appreciation, on the part of the public, of medicine, in its scientific relations especially. They still continue to follow the faulty course of reasoning now as they did in the days of Bacon.

"Almost all other arts and sciences are judged by acts or master-pieces, and not by the successes and events. The lawyer is judged by the virtue of his pleading, and not by the issue of the cause. The master of the ship is judged by directing his course aright, and not by the fortune of the voyage. But the physician, and perhaps the politician, hath no particular acts demonstrative of his ability, but is judged most by the event; which is ever but as it is taken; for who can tell, if a patient die or recover, or if a state be preserved or ruined, whether it be art or accident? And, therefore, many times the imposter is prized, and the man of virtue taxed. Nay, we see the weakness and credulity of men is such, as they will often prefer a mountebank or witch before a learned physician." (*Advancement of Learning.*)

There has still been, too, much reason to call for improvement in the position of those members of the medical profession who are engaged in the public service. The condition of the medical officers of the army and navy, the provisions of the Royal warrants regarding whom have been rendered comparatively nugatory, was brought under the notice of the Association at its annual meeting; and memorials to the heads of the departments for the removal of their grievances were there agreed on. The case of the Poor-law surgeons, too, continues to demand the sympathy and aid of their brethren in the profession; and such cases as that of Dr. Griffin, on which we have recently had occasion to comment, show how much boards of guardians require to be enlightened in their appreciation of the services of their medical officers.

Among the most regrettable of the occurrences which have happened in the profession during the past year, have been several actions in which medical men have appeared as defendants in courts of law, and have been undeservedly exposed to danger and loss in their character and means. We have unfortunately had occasion to notice several such instances, either in regard to the hardships inflicted by the ignorance or malice of the prosecuting parties, or to the lamentable spectacle afforded by those members of the medical profession who were too ready to give evidence, on however insufficient grounds, against the defendants. The last named topic has been discussed in some of the Branches of the Association; and endeavours have been made to lay down general rules which should guide medical men when called on to give evidence in cases involving the moral or professional character of numbers of their brethren. It must not be forgotten, as a creditable fact, the profession has shown itself always ready to afford its encouragement and sympathy to those victims of unjust persecution, and to give them practical proofs of the same.

A few words must, in conclusion, be said about the Journal. Our duty is to carry out the objects of the Association of which the Journal is the organ; and this we have endeavoured and will endeavour to do with our best judgment, and always honestly. Our endeavours, however, to maintain the Journal in the highest rank in the medical periodical literature of this country would be vain but for the aid of our fellow-associates; and for the willing and abundant manner in which this has been afforded us, we here offer our sincere thanks. Never, we believe, has the Journal at any period of its history been so amply and steadily supplied with contributions of practical value as during the past year. And we may, we think, point to our list of contributors without fear of its being found inferior to that of any of our contemporaries; for it contains the names, among others, of such men as Beale, Hughes Bennett, Brodhurst, Bryant, G. Budd, W. Budd, Chambers, Christison, Harley, P. Hewett, G. Hewitt, Hutchinson, Latham, H. Lee, Mayo, Meryon, Nelson, Nevins, J. W. Ogle, Paget, Prichard (of Bristol), Radcliffe, Richardson, Russell (of Birmingham), Salter, Sankey (of Hanwell), Swayne (of Bristol), Symonds, Walker (of Peterborough), Walton, E. Wilson, etc.

As to the future, we prefer not to follow the ex-

ample of some of our contemporaries in specifying the names of various eminent professional men as having promised to furnish lectures or papers on certain subjects. All that we will engage to do is to act as we have hitherto done; to endeavour to obtain the best intellectual food for our readers that can be provided; to seize such opportunities as may be offered from time to time of making this JOURNAL the medium of imparting scientific and practical knowledge; and to promote in every way that occasion may demand or our judgment may indicate, the advancement of medical science and the welfare of the medical profession.

IRIDECTOMY.

OUR excellent contemporary, the *Medical Times and Gazette*, is wont occasionally to indulge in cloudy flights of sentimentalism and shrouded metaphysics. These airy regions are dangerous to the tread of ordinary mortals; and to few is it given to follow with satisfaction or benefit their barren paths. Why cannot our learned and angry friend indulge us with a few "rational" arguments on iridectomy, instead of repudiating our "rationalistic" arguments, as he calls them?

The case is a very simple one. Iridectomy, as practised by Von Gräfe and his followers, either is or is not a desirable operation. Some surgeons of very high special repute affirm that it is so. Others of equally high repute affirm that it is not so. Who is right, is the question to be solved; for solved it cannot be said to be, so long as high authorities are opposed *toto cœlo* touching it. Perhaps now that the *Medical Times and Gazette* has read the letters of Mr. Dixon, Mr. Wharton Jones, Mr. Wilde, Mr. Haynes Walton, and Mr. White Cooper, it may begin to discover, that the discussion we have opened is one of real and deep practical importance to humanity as well as to surgery.

Mr. Bowman and his school have brought the matter to a very distinct issue. Great credit, indeed, is due to Mr. Bowman, for having so boldly stated his views. He has enabled us to place the question in the plainest relief. Mr. Bowman says: For such and such affections of the eye iridectomy will alone give relief; and more than this, he adds: If in such and such affections you do not perform iridectomy, your neglect will cause the loss of your patient's eye; there is no other treatment for the case but this; and if you employ it not, blindness to your patient is the inevitable consequence.

Well, on the other side, we find surgeons—oculists—of the highest repute, skill, and knowledge, who affirm the very reverse of Mr. Bowman's proposition, and who, of course, do not perform iridectomy as prescribed by Von Gräfe and Mr. Bowman.

Cannot our cotemporary see the practical consequences which inevitably result from such a position of the question? Both sides cannot be right; and the question in dispute is not an abstract problem. Mr. Bowman's practice condemns his opponents' practice; and *vice versâ;* and, in the meantime, men's eyes are undergoing a considerable sacrifice. Are we to blame in wishing to bring unity into such a remarkable and fatal discordance in practice?

Very great credit, as we have said, is due to Mr. Bowman for enabling us thus distinctly to lay down the case in dispute; and we are glad to find that, so far from taking umbrage at our statement of it, Mr. Bowman accepts and applauds it. How that gentleman will laugh when he finds himself converted into a martyr in the hands of the *Medical Times and Gazette*; and made to perform illustrations of other people's bigotry by the side of Jenner, Galileo, and Co. Instead of resorting to this exploded and somewhat senile tale of bigotry and persecution, and obscuring a simple tale by wordy generalities and angry nothings, why does not the *Medical Times and Gazette* discuss the question on its merits? Why does he not imbue his understanding and his heart with the positive fact, that one of the parties—either those who practise iridectomy (as advised by Bowman), or those who do not so practise iridectomy, are—one by the act of commission, and the other by the act of omission—the cause of loss of human beings' vision. Let him lay hold on this one positive conclusion which comes out of the discussion; and then we are sure that he will aid us, instead of the contrary, in the search for the truth of the matter.

TOWNLEY THE MURDERER.

THE convict Townley has, by the order of Sir G. Grey, and at the instance of Baron Martin, been visited by Mr. Wilkes, Mr. Campbell, and Mr. Foster, Commissioners of Lunacy; and, whatever may have been the nature of their report, the result of it is, that the man is respited—we suppose we may say, his sentence commuted to perpetual seclusion in a lunatic asylum, where every attention will, for the remainder of his life, be paid to his health and comfort, and where he will enjoy complete *otium*, if not *dignitatem*. It is possible that the sentence may have been commuted on the ground of his having turned lunatic since the commission of the murder—the theory of the English law being, that no man should be hanged in that state, because he may be thereby incapacitated from pleading extenuating circumstances, etc. The result of this very remarkable trial will, we believe, considerably alter the present judicial dictum concerning the liability to punishment of supposed criminal lunatics. Baron Martin's ruling in this case, as we have already

stated, is of a much more merciful character than that which has heretofore been generally laid down by the judges.

Until we hear the grounds upon which the sentence of this murderer has been respited, we cannot well argue as to its propriety; but we may safely say that, if this man escape hanging, it will be difficult ever to hang a murderer in the future. We cannot help adding a few remarks from the judge's charge to the jury, as a commentary on the respite.

"The prisoner's letters appeared to be the most sensible he had ever read. As a reason for the commission of the crime, he said: 'She should not have proved false to me'; and if by this we are to understand that he did the act from revenge or jealousy, that would be murder. His remark that he should be hanged for it showed that he knew the consequences of the act. All the evidence failed to show the existence of any delusion in the prisoner's mind. *None of his family conceived him to be mad.*"

And, in passing sentence, the judge added:

"If the defence set up in your behalf had prevailed, it would have been attended with consequences injurious to society."

Hence, then, it is clear that the discovery of the man's lunatic state of mind was first made by Dr. Forbes Winslow. And hence, also, is it evident that those learned judges who have hitherto so indignantly repudiated the idea of lunacy doctors occupying the position of jurymen, will now have the mortification of finding that the charge of a judge and a verdict of a British jury are put aside by the report of three Lunacy Commissioners. What will our learned Lord Chancellor say, who affirmed so boldly in the House of Lords that one man was as good a judge as another of what lunacy was? What will the British Lion say if it finds its jury-verdicts upset by Commissioners, and apparently without any additional information having been furnished other than what was laid before the jury? Can it be that Townley is all the time acting a part? that he has deceived Dr. Forbes Winslow and the Commissioners skilled in lunacy? We can scarcely suppose this possible; but if he have not, then we must conclude perforce that George Townley was sane when he committed the murder, but insane when he was tried for the same. And we must add, also, that money alone enabled him to keep his neck out of the noose; for we suppose it is certain that his life would already have been by this forfeited on the gallows had his friends not been able to secure the potent services of Dr. F. Winslow. But this is hardly equal justice—equal to the poor and the rich. Justice seems to hold the scales with one eye open, when she lets a poor criminal go to the gallows because he cannot fee some celebrated doctor in lunacy to come and prove his lunacy, which ordinary people cannot discover.

The law of England, wisely or absurdly, throws on the lunatic the onus of proving himself to be a lunatic. Hence, therefore, in cases of this description, the pauper criminal lunatic must of necessity go to the gallows, because he is unable to pay for the services of an expert skilled in the specialty of lunacy. However, all is for the best in this best of worlds; and doubtless this case will start a new era in Calcraft's occupation.

The druggists complain that the Medical Council are trying to take the bread out of their mouths by introducing a Bill into Parliament which, if carried, will deprive upwards of 30,000 of them of the best part of their trade, under the pretext of insuring greater security to the public. A druggist says that

"A doctor's knowledge of drugs is only incidental. Practically speaking, dispensing under the new Bill would be in the hands of the doctor, who, his time being already fully occupied, would delegate it to his man or boy. The medical man enjoys comparative immunity when any evil consequences are occasioned by his remedies; while the chemist, on the other hand, is held strictly responsible for any mistake. I think that doctors have already made too great an inroad upon the rights of druggists, by driving the poor to their surgeries and dispensaries for every pennyworth of medicine. Those who are so unfortunate as to be obliged to seek the parish surgeon are sometimes treated badly enough even now; but how will it be when the druggist is deprived of his right to advise any poor person what to take when suffering from a slight ailment?"

Such is a fair average of the kind of opposition which the Medical Council will have to meet, in their attempts at reducing the druggist to his proper position of a dispenser—not a prescriber—of drugs.

A correspondence between Mr. Corbin and Mr. Foster of Guernsey had been forwarded us for publication. Mr. Corbin states he has heard that Mr. Foster has met Dr. Ozanne, the homœopathist, in consultation; and writes to ask him if this be true. Mr. Foster answers as follows.

"Old Court, December 21st, 1863.

"Dear Sir,—I hasten to answer your note. I *was* in attendance yesterday upon Mr. ——. Homœopathy had nothing to do with it, as far as I was concerned. Simply I was required to give my advice and assistance touching a mere local surgical ailment. There could not be any consultation between me and Dr. Ozanne in which the smallest element of homœopathy was introduced. It would be the height of folly to ask me to any such consultation; our different modes of practice would render it impossible. But I cannot understand why I should refuse to visit A, B, or C, to perform a surgical operation, because the patient may prefer the follies of homœopathy to the more rational and sensible mode of practice which you and I follow, "I am, dear sir, yours truly,

"M. A. Corbin, Esq." "John F. Foster.

We much regret that Mr. Foster should sustain such a position as he does in reference to meeting homœopaths. We had hoped that every member of the profession understood now, at this time of day, that to meet a homœopath in the sick-room is to all intents and purposes to meet a homœopath in con-

sultation. It is all subterfuge to pretend anything to the contrary. To meet a homœopath in the sick-room is to encourage homœopathy—is to acknowledge the existence of homœopathy as a means of cure—is to admit that it is not a thing to be utterly discarded by the profession. But surely it is unnecessary for us to repeat all this, which has been accepted as a rule by the profession. The matter is not one which requires further discussion. The medical man who meets a homœopath at the bedside of a patient, under any pretence whatever, meets a homœopath in consultation, encourages homœopathy, and, in the eyes of the profession, must occupy the position of the man who consults with homœopaths.

The cause of Mr. Thackeray's death was effusion of serum in the brain and the membranes, following exhaustion and excessive vomiting. He had long been the subject of bilious derangement. The statement made in the papers, that Mr. Thackeray's brain weighed 58½ oz., is perfectly true; it weighed, in fact, several ounces more before it was sliced up, and the serum had escaped from it. Mr. Thackeray had, we believe, long suffered from urethral stricture. There also existed some slight kidney disease. The *post mortem* examination was made by Mr. Henry Thompson; Dr. Merriman of Kensington, Mr. Traer, and Mr. Seymour, being also present.

It is probable that some alterations may be made during the next session of Parliament in the Medical Bill. If so, we suggest that it might be advisable to take steps for the alteration of that part of it which places the nomination of a certain number of members of Council in the hands of the Crown. It seems to us that elections by the Crown are very objectionable, and for obvious reasons. The Crown cannot of itself know whom to choose as fit and proper persons; and the result is, that it is forced to take the advice of some individual, and naturally a member of the medical profession. In this way, the Crown elections fall absolutely into the hand of some one member of the profession, who thus has, in fact, the patronage of sending four members to the Council. We suppose that no one would for a moment admit the sense or wisdom of such a power being placed in the hands of the wisest and most honourable of medical men; and yet it seems to our reading of the matter, to be the inevitable result of the working of this Crown nomination system. The Home Secretary has no knowledge of his own, out of which to select proper nominees; and therefore, naturally and of necessity, falls into the hands of his medical friend. Suppose his medical friend were a homœopathic or mesmeric Dulcamara, and suppose the Home Secretary resolved that a leaven of such quackery should be introduced into the Council—what is there to forbid his selecting a fashionable globulist or powerfully framed odyliser to sit in that august assemblage of Regulars? We suggest these things for the Council's consideration.

Another attempt to extort money from a medical man on the grounds of improper treatment has failed. As a rule, we may safely say that actions of this kind are sporting actions got up by the attorney for the sake of the costs which come out of them. The present case is a very gross one. The plaintiff was a bricklayer, and fell and injured his foot. He was attended by Mr. Peat, against whom the action was brought. The case of the defendant, as stated by Sergeant Ballantine, appears strictly corroborated by evidence.

"The plaintiff had been made a party to a severe persecution of a man who had treated him most kindly. The defendant had done all he was bound to do, and would have preserved the foot if the man had followed his directions; and it was not till more than twelve months after the accident that the action was brought. This respectable body of men were sometimes scandalously ill-treated. The comforts of life of a man were destroyed for a time; and after recovering a verdict, he would have his own costs to pay. It was lamentable to see a gentleman of education and a scholar thus treated. The plaintiff was told that the cure of the foot depended upon himself; all would be right, but it would be a nine or ten weeks' job. The defendant, at the end of a fortnight, discovered that the bandages had been wantonly taken off. The defendant called at the house, and was actually refused admission; and he further heard that he was dismissed; and from that time, only three weeks after the accident, he had ceased all medical attendance. He would say that every day's practice would convince them that medical men willingly made every sacrifice to assist any man, however poor, either at the time of an accident or afterwards in a court of justice. This was a most cruel and ill-founded prosecution."

Several witnesses were called to prove that the plaintiff had spoken of the great kindness and attention of Mr. Peat; and the judge told the jury that "he thought the medical evidence amounted to this, that if the case were such as the defendant had stated, the treatment was quite correct." The jury at once gave a verdict for Mr. Peat. But Mr. Peat will no doubt have to pay his own expenses, and also has had to undergo the pain of this action. These repeated injuries inflicted on the profession—and we have no doubt, in most instances, through the instigation of unscrupulous lawyers—require very serious consideration. Surely, the profession should join together in some way to resist the cruelty thus inflicted on individual members of it. Who is there of us who may not at any moment require the sympathy and aid of the profession under similar circumstances?

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
West Somerset. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20th.
Midland. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Jan. 21st, 2 P.M.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 8TH, 1863.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON SOME UNUSUAL OCCURRENCES DURING THE CURE OF A POPLITEAL ANEURISM. BY CHARLES H. MOORE, F.R.C.S.

THE aneurism was in the calf, under cover of the gastrocnemius. It was as large as the fist, and had been observed four weeks. From the shape of the tumour, and the greater force of its beat externally, it appeared probable that the opening was on the outer side of the artery. The extent of its alternate dilatation and recoil showed that the opening was a large one. The patient, an athletic man, aged forty, had a wide arcus senilis, and an audible roughness produced by the current of blood in the aorta.

Genuflexion was first employed, and the beat of the aneurism was kept somewhat reduced for eight days. A tourniquet was also applied to the groin by day, and the hip flexed by night. A little diminution took place in the size of the aneurism, but the bending of the knee caused such intense pain in the sole of the foot that it could never be long continued at any angle which materially lessened the arterial impulse. That plan of treatment was accordingly abandoned.

Compression of the femoral artery by two tourniquets, tightened alternately, was next made, and was continued twenty-five days. During the greater part of the same period the patient took an ounce and a half of iodide of potassium. At the end of the time mentioned the aneurism beat less, was half full of solid substance, and was larger than before; the veins of the leg were distended, the skin was dusky, the tissues œdematous, and the beat of the artery on the foot imperceptible. On the next day the skin was of a bright pink colour and of high temperature, and some collateral vessels were enlarged. The aneurism seemed to be near its cure.

On the twenty-seventh day of the treatment by compression sudden severe pain struck the aneurism, which was over in two minutes. The feeling at once returned in the foot, which had been painful and benumbed; and the tumour was found to have fallen in at its highest part between the heads of the gastrocnemius. The veins returned to their natural size, the artery beat again on the instep, and the enlarged collateral arteries disappeared. The hope of an imminent cure was gone.

Compression was continued for three weeks longer, and the aneurism improved; but it advanced so slowly that digital compression was resorted to. It was employed occasionally for three days with manifest advantage, and a day without any pressure was accordingly allowed for the skin to recover itself. Digital compression was then made for thirty-five hours, except at intervals of two hours, when a tourniquet was tightened for half an hour. After fourteen hours' rest the femoral artery was again pressed with the fingers for twelve hours, and at the end of that time the aneurism was found to be pulseless and firm. In thirteen hours it beat again, but an hour and a half's effective pressure stopped it finally.

The author remarked that genuflexion was inapplicable in this case on account of the pressure which happened to be made upon the posterior tibial nerve by the aneurism in that posture of the limb. He thought it not unlikely that the iodide of potassium might have facilitated the deposition of fibrine in the sac during the seventeen days in which it was taken; but he attributed to that medicine a mischievous acceleration of the pulse, which, by keeping the aneurismal sac constantly tense, occasioned its enlargement. He added some observations upon the varying condition of the aneurism, according as the pulse was quick or slow; as well as upon the different kinds and sources of pain in the case; which observations might be of service in the study of internal aneurisms. The remarkable interruption of the cure he assigned to the detachment of a portion of the fibrine in the aneurism from a situation in which it had previously compressed the nerve, artery, and vein. Upon the removal of this pressure, and the restoration of the current of blood to its natural channels, the enlarged collateral arteries had subsided.

CASE OF POPLITEAL ANEURISM, SUCCESSFULLY TREATED BY FLEXION OF THE KNEE.

BY ARTHUR E. DURHAM, F.R.C.S.

E. P., a pale, unhealthy looking man, aged 31, was admitted into Guy's Hospital, under the care of Mr. DURHAM, on August 5th, 1863. The patient was suffering severely from an aneurism in the right popliteal space, the first symptoms of which had manifested themselves ten or twelve weeks previously. The aneurism was about as large as an orange, firm to the touch, and not easily emptied to any extent by manipulation. Pulsation was very distinct, and the characteristic aneurismal *bruit* could be clearly heard by means of the stethoscope. When the knee was bent as far as expedient, pulsation in the tibial arteries could be scarcely felt.

The case appearing in many respects a favourable one, it was resolved to try Mr. Ernest Hart's method of treatment by flexion. Accordingly, on the 7th, the limb was bandaged, flexed, and supported by pillows in the manner recommended by Mr. Hart. Each succeeding day a fresh roller was applied over those already on the limb, and the degree of flexion somewhat increased. On the 11th the bandages were removed, and the aneurism examined. No pulsation could be felt; but, on making deep pressure, a slight thrill was just perceptible. The limb was again flexed and rebandaged. The next day (that is, the fifth from the commencement of the treatment) neither pulsation nor thrill could be felt or *bruit* heard. The aneurism was, in fact, cured. It gradually diminished in size, and the patient got about comfortably in the course of two or three weeks. He left the hospital on August 28th. During the treatment the patient took every three or four hours a draught containing tincture of opium, tincture of digitalis, and hydrocyanic acid, with manifest good effect.

NOTE OF A CASE OF POPLITEAL ANEURISM CURED BY FLEXION OF THE KNEE (BY THE LATE MR. H. C. JOHNSON.)

BY ERNEST HART, ESQ.

Mr. H. C. Johnson, the late much esteemed and lamented friend of the author, had communicated to him more than a year since some details of a case of popliteal aneurism in which he had effected a cure by forcible flexion of the knee, carried out in the manner which proved successful in the first case which Mr. HART communicated to the Society. The circumstances under which the cure was effected were somewhat peculiar, and Mr. Johnson had intended to bring forward a statement of the case. That intention having been unhappily frustrated, and as he had already authorised Mr. Hart to

make use of the case, it was thought desirable briefly to record it, as a pendant to Mr. Durham's case.

The patient was an adult male, admitted into St. George's Hospital under Mr. Johnson's care, with a popliteal aneurism of moderate size, and of a few months' duration. He employed pressure with tourniquets for nearly three months, but ineffectually, and was on the point of proceeding to ligature when flexion was suggested. He bandaged the leg to the thigh, including the whole foot and leg in the bandage, as it was best, the author thought, to do, and the result was consolidation in six days. The cure was permanent.

The previous failure of compression made this case very interesting, and recalled that in which Mr. Spence, of Edinburgh, found flexion successful in curing a relapsing popliteal aneurism, which had recurred after ligature of the femoral at Scarpa's triangle, where the two unpromising alternatives were the ligature of the iliac under these peculiarly unfavourable conditions, or the old operation of Antyllus, of which the mortality in that region had been very great. The cases brought forward on the present occasion, the author remarked, raised to twelve the number of cures of popliteal aneurism effected by British surgeons since September 1858, the date of his first case.

NOTE ON THE APPLICATION OF INDICES TO ANEURISMAL CLAMPS AND OTHER PRESSURE INSTRUMENTS.

BY ERNEST HART, ESQ.

The marked want of success which had attended the use of clamps and tourniquets in this country, as applied for the cure of aneurism, especially popliteal, by indirect pressure on the femoral, had, the author observed, become very evident to him in collecting published cases, and comparing the results in English Hospitals with those which had been obtained by the Irish surgeons, who felt for this method of treatment all the interest which parentage could give. It was unnecessary to give figures or details for the purpose which he had in view; and he need only say that the analysis of the unsuccessful cases showed that the greatest part had failed through the pain caused by the pressure, the ulceration or sloughing of the skin under the pad, or the extreme tediousness of the process, causing its abandonment as ineffectual, and recourse to the ligature of the main artery. Ligature after compression had failed gave less satisfactory results than primary ligature. In thirty-seven cases treated by English surgeons, in which it had been employed after compression had failed, there were fourteen deaths.

The sloughing, ulceration, and excessive pain, in a large number of the cases which he had mentioned, seemed to him to be the consequences of defective application of the pressure. To maintain continued and graduated pressure upon the femoral artery, even with any of the best compressors, without exerting too much on the one hand, and yet controlling the flow of blood on the other, was by no means easy, and required skilled and constant attention; and a certain amount of loving care was needed to prevent excess or defect. The most usual faults on the part of those entrusted by the hospital surgeon with watching the case were, employing an excess of pressure, or exerting pressure in a wrong direction; so that power was wasted in compressing muscles, and the artery was not fixed against the bone. The surgeon placed the pad carefully in position, but it must presently be relaxed, and then the assistants commonly erred in greater or less degree in reapplying the pressure.

The application of indices to the instruments was likely, the author thought, to obviate much of this difficulty, and to remove some prevalent causes of failure in instrumental compression. The surgeon, on putting the pads in position, could in each case ascertain for himself with what amount of pressure the femoral circulation could be stopped, or slackened, according as he might desire to produce the one or the other effect. Having determined the minimum force by which this could be effected, he could then inform his assistants, and point out to them the limits within which they must keep the pressure. If, in replacing the instrument subsequently, they found that the circulation was not controlled with that degree of pressure, they would know that the pad was not well placed; and instead of screwing down the clamp, and increasing the pressure until the pulsation was stopped, they would be careful to improve the direction of the pressure. It would be very useful for the surgeon himself to know what amount of pressure he was employing to stop the flow of blood; and it would be still more useful for the assistants to have under their eyes a constant monitor as to the correctness and care with which they were carrying out the surgeon's directions.

To give a long table of estimations of the degree of pressure in different subjects would not, the author thought, serve any useful purpose, as this would need to be ascertained for each particular case at the commencement of the treatment. He might, however, just select the three following from his notes of the results of experiment on this point, as giving average figures for three typical subjects.

A. D., adult male, 5 ft. 7 in. high, somwhat emaciated after illness; measuring (at the level of the perineum) round the thigh 15 in., above the knee 12 in. Pulsation arrested at apex of Scarpa's triangle by a pressure of 7 lbs.; at Hunter's canal by a pressure of 8lbs.

J. R., adult male, 5 ft. 6 in. high, robust and powerful; measuring (at the level of the perineum) round the thigh 22 in., above the knee 14½ in. Pulsation arrested at apex of Scarpa's triangle by a pressure of 11 lbs.; at Hunter's canal by a pressure of 14 lbs.

A. N., adult male, 5ft. 4 in. high, of slight and feminine build; measuring round the thigh at the level of the perineum 20 in., above the knee 12½ in. Pulsation of femoral arrested at fold of groin by a pressure of 4 lbs.; at apex of Scarpa's triangle, by 10 lbs.; at Hunter's canal, by 11 lbs.

In the instrument which the author had made, and which he offered for inspection, the pressure is registered by a needle on a scale, and it is effected by a strong spring, which affords a pressure capable of nice graduation from four to twenty pounds. This instrument had already been tested in practice, and had worked well. Mr. HART owed to the kindness of the Director-General of the Army Medical Department the report of a case in which it answered expectation in curing a popliteal aneurism. The analysis of cases showed that elastic pressure was best borne.

The principle involved in the application of indices seemed to the author not unworthy the attention of the Society, for it was obviously one which might be applied with advantage to other instruments of pressure and extension in surgery; and on the table would be seen an index of a similar kind applied to pulleys for reducing dislocations. It might be useful to apply them to apparatus for overcoming fibrous anchylosis, and restoring bent and deformed limbs.

HARVEIAN SOCIETY OF LONDON.

NOVEMBER 19TH, 1863.

W. WADHAM, M.D., Vice-President, in the Chair.

Evidence against the Internal Use of Mercury in Syphilis and other Diseases. By CHAS. DRYSDALE, M.D. The author quoted the remark of Mr. J. S. Mill, that the experimental method of treating disease is very unsatisfactory. We could reasonably administer Epsom salts, opium, etc., because we were aware how these drugs acted on persons in health; but, with the exception of

quinine in ague, we do not now possess any undoubted specific or antidote for disease. With regard to mercury, it was, like many poisons, a purge; but after saying that, all its other virtues were doubtful. Experiments on dogs had shewn it capable of producing caries and profound degradation of the animal. Mercury had been called a cholagogue: but recent experiments on dogs had shewn that calomel actually *diminished* the biliary secretion. Some of the best surgeons have now abandoned mercury in traumatic cases, in peritonitis and orchitis. In iritis mercury had been shewn to be useless, and probably injurious, by H. Carmichael, Dr. Williams of Boston (who treated sixty-four cases of all its varieties, with sixty perfect recoveries), and also by Mr. Zachariah Laurence, and by Dr. Hughes Bennett. Even Mr. Acton confessed that iritis is often *caused* by courses of mercury. As to pericarditis, forty cases published by Dr. J. Taylor of University College Hospital, showed that salivation had been injurious, and never of any benefit in it. In acute hydrocephalus, Dr. Hughes Bennett was of opinion that the great mortality was partly caused by the calomel used; and as to pleurisy, pneumonia, and bronchitis, the perfect inutility of the drug might be perceived in the fact that one hundred and fifty consecutively treated cases of pneumonia, by Dr. Hughes Bennett, had made a good recovery without mercury or bloodletting. Dr. Walshe says that mercury never does any good, but often much harm, in inflammations; and Dr. Hughes Bennett considers mercury always an evil, and *never* of any service.

With regard to syphilis, he considered the evidence against mercury in this case very strong. Firstly, Dr. W. Fergusson, in his works (1812 and 1846), had shewn how thousands of soldiers had recovered perfectly, "without a particle of mercury"; and how, on the contrary, our troops suffered frightfully in Portugal from Hunter's plan of treatment, whilst the Portuguese, without mercury, escaped with a mild disease. Mr. Guthrie, late President of the College of Surgeons, had shewn, that all ulcers of the genital organs get quite well without mercury. Dr. Hennen, in 1818, mentioned four hundred and seven cases of ulcers treated without mercury: only one case of iritis ensued; two of exostosis; and no bone-disease or deep ulcer of the skin. Dr. John Thompson had treated large numbers of troops in Edinburgh Castle for many years, and found that the only secondary symptoms that appeared without mercury were sore throat and slight eruptions (sometimes tedious), but all disappearing completely, without leaving any bad effects behind them. No deep ulcers of the skin or bone-disease occurred. Dr. Desruelles had treated a vast number of troops at the Hôpital Val de Grace, from 1819 up to 1841, without mercury, with low diet, cleanliness, and external applications, with the most complete success. Writing in 1841, he says that 300,000 cases had been recorded, as having been thus treated in different countries. Dr. Fricke treated, from 1825 up to 1841, 15,000 cases in the venereal ward of the Hamburgh Hospital, without mercury, by low diet, Epsom salts, and external applications. In a work of his, 1828, he says of the cases therein contained, that, when mercury was not used, there had been no iritis, or alopecia, or bone-disease, or deep ulcer of the skin; all of which had commonly occurred when mercury was used. The Swedish Government's experiments from 1822-36, showed conclusively the immense superiority of the simple or physiological treatment of all forms of the disease: 46,687 cases were recorded. In 1833, the French Council of Health recorded 5,271 cases treated without mercury. No caries had occurred, and only two of exostosis. M. Ricord had founded a new school, which, abandoning mercury in soft chancres, recommended a six months course of it in hard sores, followed by three months of iodide of potassium, as an *antidote* to the poison. Dr. Drysdale had seen dreadful effects from this treatment; and quoted Mr. Syme's energetic denunciation of the "fearful system, which has in recent times been founded on the ruins of the mercurial delusion." Professor Syme states, that the natural history of the disease consists of the primary sore, followed in some instances by slight, though sometimes tedious, eruptions and sore throat; but never followed by bone-disease or any severe symptom, except when the poison of mercury is added. Dr. Hughes Bennett says that "the idea that mercury is an antidote in syphilis, and the incalculable mischief it has caused, will constitute a curious episode in the history of medicine at some future day." Mr. Weeden Cooke and Mr. Spencer Wells both ascribe bone-disease and all bad symptoms to the mercury added, not to the natural disease. Professor Boeck's (of Christiania) experiments, published in 1863, show that, of 1,008 cases treated by calomel, protoiodide and bichloride of mercury, of primaries and secondaries, a mean time of sixty-two days was required for treatment; whilst 611 similar cases, treated by Epsom salts and external applications, required a mean time of only thirty-eight days. Again, when primaries were treated with mercury, 24 per cent. became affected with secondaries; when treated without mercury, only 14 per cent. The direction of the United States' army had recently forbidden the supply of calomel, on account of the bad effects which notoriously ensued from its use; and Dr. Diday of Lyons, once a mercurialist, is now relating the fearful effects which M. Ricord's treatment gives rise to, in causing mania, apoplexy, salivation, and dyspepsia. Dr. Diday is now treating even most cases of *secondary* syphilis without mercury. Cullerier, Fournier, and most of the French school, have now given up mercury in primaries, and await the eruption; which Dr. Drysdale hoped was the first step towards leaving it off altogether, and returning to the far more successful plan of rational treatment. In infantile syphilis, the author said that, 1. He believed this condition of infant was most frequently due to the *mercurio*-syphilis of the parent, not to the natural disease. 2. This disease was far more successfully treated by diet and regimen than by mercury, as had been proved by Mr. Allingham and himself.

Mr. Zachariah Laurence said, in referring to his paper "On the Treatment of Inflammations of the Eye by Morphia", in the *Edinburgh Journal*, that, in his opinion, the greater part of these inflammations originated in irritation of the branches of the fifth nerve, to which the congestion of the blood-vessels was only secondary. As familiar illustrations of this, he referred to the act of blushing, and the congestive condition of the cheek, following upon neuralgia of the part. The so-called absorbent powers of the combination of calomel and opium, he considered a natural consequence of the subsidence of the inflammation, altogether independent of the specific action of either of the drugs. He lastly called attention to the fact, that the advocates of mercury employed three agents in their "experimental" inquiries. 1, mercury; 2, opium; 3, nature. To which of the three were we to ascribe the result? Mr. Laurence agreed with Dr. Drysdale's views, in ascribing it to the latter. At any rate, the non-mercurialists had the advantage of simplicity; inasmuch as they only employed *one* agent —nature—in their experiments.

Mr. Sedgwick fully concurred with the opinions entertained by the author of the paper, which he regarded as a very valuable contribution to medical literature; and considered that the evidence adduced against the use of mercury in disease generally, and more especially in syphilis, was too strong to be refuted by any facts at present in our possession, even if it could be refuted at all. He had become convinced that mercury was useless, if not also injurious, in the treatment of syphilis, when assistant to the late Mr. Morton of University College Hospital, and subsequently by having treated a large number of cases among soldiers and private pa-

tients without it. Why was syphilis now so mild in its symptoms? Had it changed its type? Certainly not. The horrors formerly attributed to syphilis were due to mercury. For his own part, he considered it injurious in the treatment both of the sore and the eruption; which latter he considered ought no more to be attacked by a specific, than the rose-spots in typhoid fever. Mercury had not been proved to prevent secondaries; but, even if it had, he should consider that rather an injury than a benefit.

Mr. De Méric said the Society ought to be much obliged to Dr. Drysdale for his elaborate collection of evidence on one side of the question. The author had, however, shaded his picture too deeply; and the arguments reminded him of those against alcohol, which resulted in people still partaking of it. It must not be supposed that, because such an array of facts can be brought against the use of mercury, there is nothing to be said on the other side. He objected to the name mercurialist being applied to practitioners who were in the habit of giving mercury, when they considered the case required it. Did the Society think, said Mr. De Méric, that men of experience would go on administering a drug which they found to be injurious? As to the experiments quoted, these, from Fergusson down to Desruelles and Fricke, were valueless, because they did not discriminate the cases requiring mercury; and modern surgeons would not use it in the majority of the cases. As to bone-disease being caused by mercury, he had seen bone-disease frequently in cases where no mercury had been used; and in two cases periostitis had been the first secondary symptom, proceeding on to a fatal result. Hereditary syphilis was considered by some authors not to require mercury; and also said by some to be partly owing to the poisoning of the parents with mercury: but he had recently shewn that syphilitic infants are not always born of syphilitic parents. He thought one argument contained in Dr. Drysdale's work, *On the Treatment of Syphilis, etc., without Mercury*, very illogical. The author, in August 1863, had, on visiting the Hôpital du Midi in Paris, been struck with the paucity of bone-disease or bad cases, and had attributed this partly to the fact that Cullerier and the other surgeons had given up mercury in treating primary sores.

Mr. Lane, after complimenting the author on the amount of evidence collected to support his argument, said, if names were wanting for the other side, he would point to Mr. H. Lee, Mr. L. Parker, and Mr. De Méric. If there is one point better ascertained than another in modern surgery, it was the utility of small doses of mercury in the treatment of syphilis; both in the indurated sore, which healed rapidly by means of it, and also of the secondary eruption, which was quickly removed by its use. In bad tertiary symptoms, however, mercury was not advisable; and it was in this discrimination that the superiority of the modern school was seen. As to bone-disease, he could corroborate what had fallen from Mr. De Méric, that he had seen syphilitic bone-disease, when no mercury had been taken. In infantile syphilis, mercury, especially in inunction, was a most valuable remedy.

Mr. Weeden Cooke, referring to what Mr. De Méric said, observed that what we were talking of was true syphilis and its treatment; and that the error of practitioners consists in their using mercury as a specific for the disease. Were they merely to give an occasional dose as a purge or a cholagogue, he would say nothing against the practice. He thought that syphilis was an animal poison, and that the eruption was the natural cure of the disease. In most cases the skin and liver act well, and eliminate the poison completely, when not interfered with by mercury. If so, the system was weakened, and the eruption might continue indefinitely. As to the term "mercurialist", objected to by Mr. De Méric, he might remind him that at present the term "anti-mercurialist" was much more of a reproach; and he had lately suffered under it. Mr. Cooke complimented the author of the paper on his boldness in bringing the subject so prominently before the Society. He himself had scarcely dared to do so.

Mr. Allingham said that, in the first place, what was at present most wanted, was the natural history of syphilis; *i.e.*, to what lesions the disease will give rise when uninterfered with by so potent an agent as mercury. For his own part, he had for many years treated all sores on the genitals without mercury; and, although not so rooted an anti-mercurialist as the author of the paper, he believed all forms of syphilis to be quite curable by cleanliness, diet, and external applications, and without mercury. As to infantile syphilis, he had been so discontented with the results with mercury, that he made some inquiries, which showed him that 29 per cent. of deaths took place when mercury was used. He had therefore abandoned it, and found the greatest benefit in so doing; as, out of fifteen cases of infantile syphilis, he had had fourteen recoveries, and only one death.

The President announced that, as several members desired to address the meeting, the discussion would be adjourned until December 10th.

Correspondence.

IRIDECTOMY.

Letter from Wm. Bowman, Esq., F.R.S.

Sir,—The extract from a private letter of mine, given by Mr. Walton last week, conveys—unintentionally, I have no doubt—an imperfect account of the communication between us; but it is not necessary to explain further so trivial a matter.

I cannot agree with Mr. Walton (page 678 of last volume), that "*it would be utterly impossible, even for one conversant with eye-diseases, to tell, after an iridectomy had been performed, whether such an operation had really benefited the patient.*"

On the contrary, such a conference as I proposed could hardly have failed to harmonise our views as to the diagnosis of glaucoma, to define differences of opinion, and to test in a satisfactory manner the results obtained.

My offer was made in entire good faith, and with the confident expectation of modifying his views by new evidence. I had no wish to prevent his sending you his opinions, or to cause him "to formally give up his judgment", but only to furnish it with new materials on which it might be impartially exercised. I regret on all accounts that he did not feel able to accede to my suggestion. Any number of meetings between us on such a question would have been most agreeable to me, though at some cost of time.

The fact is, that this is precisely one of those subjects on which differences of opinion are likely to continue so long as men do not discuss them with the facts before them, and in friendly conference. The reason is, that much of the diagnosis, though very positive, depends on an exact appreciation of delicately marked physical conditions, such as the degree of tension of the eyeball, the appearance of the fundus of the globe under the ophthalmoscope, the extent of the visual field, tests as to the power of vision, etc.

These may be more satisfactorily investigated and settled by a few experienced persons meeting privately, than at a society's *soirée*, or by discussions on paper; at least, individual conviction is more likely to be obtained by such a method. Mr. Walton has himself very properly suggested, in the last edition of his work (*Surgical Diseases of the Eye*, 2nd edit., 1861, page 644), that if

iridectomy be tried, fitting cases should be selected; full and well authenticated reports, extending over a sufficient period, should be given to the public; and, withal, that *the facts be attested by others* (the italics are my own). It was not unnatural then that I should have thought he would be glad to inspect a few cases which (among many others) seem to me to prove incontestably what he had avowed his inability hitherto to discover; viz., the positive efficacy of iridectomy in a disease which, from all we know of it, and from the uniform testimony of authors and men of experience, he himself will still, in the absence of iridectomy, have to treat by remedies doomed beforehand to fail.

With regard to Mr. Wharton Jones's qualified approval of the use of iridectomy in glaucoma (page 678 of last volume), his opinion is entitled to all the more respect, as he states it to have been formed in opposition to his and Dr. Mackenzie's first prepossessions. He does not, however, say whether it is now founded on cases within his own personal experience, nor does he enter at all into details from which it might be judged at what stage, or in what way, the iridectomy was performed. I say this, because he seems to make no distinction between the operation for glaucoma, and the forms of iridectomy for displacing the pupil, formerly as well as now in use, and having no necessary conformity with glaucoma iridectomy. If he have found the results of iridectomy in *chronic* glaucoma to have been *not brilliant*, it may be said, on the other hand, that the effects of other kinds of treatment, or of no treatment at all, have been *disastrous*, for the disease without iridectomy leads to loss of sight, though at various rates of progress and in various ways. In the slow and insidious forms of glaucoma, the disease, being overlooked or misunderstood, has often *nearly run its course* before an opportunity is given for the operation. The same may unfortunately still be said too often of the acute and subacute forms, though I hope every year that passes will lessen the number of such cases. If the little remaining sight of such eyes be saved permanently, or even if the further loss of sight be much delayed, it is indeed a great gain for the sufferers, and one which they can most highly appreciate; though perhaps from the delay in operating, they may have lost a great part of their field of vision, and appear to those about them to walk and act very like blind persons. I know a gentleman whose field of vision thus retained to him is so contracted, that every one would be ready to call him *blind*, for he gropes his way, and runs against every object, and yet he reads the *Times* for some hours every day. Such a result in such a disease, and at such a stage of it, may be even styled *brilliant*. I am, etc., W. Bowman.

5, Clifford Street, December 23rd, 1863.

Letter from J. E. Smith, Esq.

Sir,—I read Mr. J. Z. Laurence's account of his operation of iridectomy on Mrs. P., in your number for November 14th, with much interest, and having known the lady about two years ago I called on her. From her account it seems that she had suffered in her left eye for about three weeks previously to the operation, but had had nothing the matter with the right eye till within a very few hours after the iridectomy. This right eye was operated on five days after the attack. This was surely a favourable circumstance. It appears that she required a great deal of chloroform at both operations. At the first, it was three quarters of an hour before she became insensible; at the second, a full hour. The quantity taken she, of course, does not know. She attributes the illness which she suffered for months afterwards to the chloroform. She wore a handkerchief over her eyes from February 19th—date of first operation—till some time in July, since when she has constantly worn a green shade, and uses her eyes as little as possible. For some time, up to July I believe, she could not raise the upper lids, and has still a considerable amount of ptosis in both. She wears slightly convex spectacles, not quite so strong as she did before the operation, and can see to sew with them, and read large print. She sees best with the right eye; with the left, she could only distinguish me as of human shape when I sat close opposite to her. From the marks remaining it appears that, the operation on the left eye was performed on the internal side of the pupil rather above the middle line; on the right eye it was performed on the external side; and there appears to be a patch of white opacity of the cornea running up from the wound. She is at present suffering from headache uneasiness, very similar to what she did previously to the first attack, and, I believe, intends shortly to go up and consult Mr. Laurence again.

From the above facts, this does not appear to me so very favourable an instance of the success of the operation as one might wish; but I suspect we have not seen the end of it yet. Would the right eye have been affected if the operation had not been performed on the left? From the statements made lately by iridectomists in our Journal, it would seem that, when a patient has incipient glaucoma he has only to have iridectomy performed, and he may go off dancing like the individual in the toothache cure advertisement. A few cases such as the above, for which our thanks are due to Mr. Laurence, would be of far more use than folios of argumentative writing. But then the cases should be followed up for months after the operation, till all disturbance has ceased. The unfavourable cases also should be given as well as the successful ones, and the causes of each result be reasoned out. I shall keep my eye upon this case, and trust Mr. Laurence will eventually give us the final result, with explanatory remarks. With many apologies for the length of this communication.

I am, etc., J. E. Smith,
Late House-Surgeon to the Hereford Infirmary.

Hereford, December 18th, 1864.

P.S. I should add that, while waiting for her husband's reply concerning the operation on the second eye, it was profusely leeched, which, however, did not much relieve the pain, etc.

Letter from George Critchett, Esq.

Sir,—It will perhaps be thought by many that the subject of glaucoma and its treatment by iridectomy has been sufficiently discussed in your columns; and, if a lucid statement of the various forms and stages of this disease, and a strong and well-grounded assertion of the value of the operation, by eminently competent authorities, were all that is needed to place this method of treatment upon a solid basis, I should leave the subject as it now stands. It is, however, evident from some of the letters that have appeared, and from opinions and statements that are put forth from time to time, that there still are to be found members of our profession who are opposed to iridectomy in the treatment of this disease, and a still greater number who pause and suspend their judgment. As it is of great importance to the cause of science and humanity that truth should prevail in regard to this matter, it appears to me to be the duty of those who have had extensive experience, spread over a long period of time, to publish their opinions.

The disease has been so admirably described by Von Gräfe, by Mr. Bowman, and others, that I do not think it desirable to enter at any length upon this part of the subject. I may, however, briefly state that under the name of glaucoma we now include a great number of conditions; and that, whilst we recognise a common law binding these together, we find an ever increasing diversity of manifestation. Thus glaucoma may exhibit

all the symptoms of the most acute inflammation of the globe, attended with agonising pain, sickness, and prostration, and destroying sight in twenty-four hours; or there may be a slow form of inflammation, extending over many months, sometimes proceeding steadily on until sight is extinct, at others presenting temporary remissions and ameliorations, which are sooner or later followed by relapses; or, again, we frequently meet with cases in which the sight is slowly pressed out of the eye, until vision is totally gone, without the least evidence of inflammatory action, and in such cases the interval between the commencement of dimness and the total loss of sight may sometimes be reckoned by years. Between these extremes we have every shade of difference; and the common condition or law that binds them all together is *increased tension or hardness of the eyeball.* Even the opponents of iridectomy seem to admit that glaucoma is incurable by ordinary treatment. I can well remember the pain I often experienced, and the helplessness I felt, when these cases came under my care, before iridectomy had been discovered. A case would often present itself in which one eye was hopelessly gone, utterly disorganised. The same disease would be commencing in the other eye. Symptoms would perhaps remit; would recur with increased violence; treatment, however varied or active, would utterly fail; hopeless, permanent blindness would bring the sad drama to a close; the black curtain would fall, never to rise again. In an experience of twenty years, I do not recall a single exception to this sad result. Every ophthalmic surgeon, who possesses a wide field of observation, knows that the painful picture is drawn from life. Well do I remember the half hopeful, half doubting joy with which I heard that a remedy had been discovered for glaucoma. The reports of Von Gräfe's brilliant and immortal discovery came to us at first like an uncertain sound; it seemed too good to be true. Mr. Bowman was the first to perform the operation of iridectomy in this country, at the Ophthalmic Hospital. Shortly after this, in June 1857, I performed my first iridectomy upon a lady I saw in consultation with Mr. Goude of Cheapside. I published this, together with three other cases of acute glaucoma treated in a similar way, in the *Ophthalmic Hospital Reports*, January 1858. Another lady, upon whom I operated in September 1857, and whose case is also published in the same paper, called upon me a few days ago, after an interval of six years, in the enjoyment of good sight—proving not only the efficacy, but the permanent effects of the operation. Since that time, I have been in the constant habit of performing this operation. Scarcely a week has passed without giving me an opportunity of testing its merits. After having operated upon above two hundred cases, I can confidently state that the results have been most satisfactory; and that glaucoma may be pronounced a curable disease, when the operation is performed at a sufficiently early stage. As there is universality in the law that binds all cases of glaucoma together—viz., *increased hardness or tension of the eyeball*—so is there universality as regards the effect of iridectomy on the glaucomatous eye—viz., *it restores to it its natural elasticity.*

The actual effect of the operation upon vision varies greatly, according to the special circumstances of each case. Of these effects, time and space only permit me to give a very brief summary, in confirmation of statements made by other authorities, and as the result of my own experience. All observers admit, that it is in acute glaucoma that the results of iridectomy are most brilliant. As the eye is speedily and violently destroyed by this form of the disease, so does iridectomy, if performed within a few days of the attack, restore the sight to something very nearly approaching the normal standard. But, although the effects of the operation upon other phases of the disease, and in more chronic cases, are less striking, they are not less certain or satisfactory, if compared with the alternative that awaits the patient when iridectomy is not performed.

In all cases of chronic glaucoma, past experience warrants the expectation that the amount of sight existing at the time of the operation will be preserved; moreover, the restoration of elasticity to the eyeball, gives to the partially paralysed retina the best chance of recovering some of its functions and sensitiveness. I have met with several interesting cases of this kind, in which the field of vision has gradually extended, and the acuteness of sight has gradually increased for many months, and even for years. In those cases in which there has been slow limitation of the field of vision without inflammation, the result of simple pressure, iridectomy arrests the disease, and preserves all the sight which remained at the time of the operation; but it does not usually restore that which has been lost. There are other very interesting cases, in which the premonitory symptoms of acute glaucoma exist, and in which the operation, timely performed, prevents the acute attack; but this belongs rather to minute details, upon which I do not propose to enter.

Having stated the result of my own experience, and my convictions in regard to the curative effects of iridectomy in glaucoma, I may add that this autumn I attended an ophthalmic congress at Heidelburg, where above thirty representatives of the science were present. There were eminent oculists from many of the principal towns of Germany, from France, Holland, Switzerland, etc., and they were quite unanimous in their recognition of the value of this operation; and I believe I am justified in stating, that every oculist of eminence and position on the continent holds the same opinion.

It is hardly too much to say, that no recognised fact in medicine or surgery rests upon a surer basis of numerous and well observed cases. Convinced of the truth of what I am now asserting, I would ask those whose opportunities of investigating these facts are very limited, to take these statements upon trust; and, if there be any ophthalmic surgeons, whose name and experience give weight to their opinions, entertaining impressions and views adverse to iridectomy, I would ask them as fellow-labourers to pause, and to carefully and calmly investigate the entire subject, ere they commit themselves to strong statements. Recantation is always painful; but it is a yet more painful alternative to carry on a life-long struggle against a truth, in which science and humanity are equally interested. I am, etc.,

GEORGE CRITCHETT.

75, Harley Street, Dec. 17, 1863.

LETTER FROM HAYNES WALTON, ESQ.

SIR,—I proceed to discharge the promise I made in your JOURNAL for December 5th. Besides the reasons then assigned, I think that I ought not to be silent when such tirades have been published against those who do not believe in the efficacy of Iridectomy. There is censure, there is the stringent accusation of culpable ignorance and prejudice, and of wilful wrong to suffering humanity. This culminates in severe denunciation, and the loss of reputation even is predicted for the anti-iridectomists, however deservedly well they may be established in practice. Certainly this savours of personality, seeing that the ophthalmic body, if I may so call those who work at ophthalmic subjects, and in reality do those operations, is very small compared with the mass of the profession, only as units to thousands; and it is still more pointed, when a portion of that small circle, who are known to be opposed to the new operation, is so addressed by some of its own members.

As regards myself, such animadversion is uncalled for and unjust. A great deal, too, has been written, which, besides answering to this objection, is wholly irrelevant, and ought never to disfigure a scientific discussion. I

can only deprecate and deplore it. However, I am determined not to entertain the least particle of ill-will nor of jealousy against any one concerned in the discussion. No subject can be thoroughly sifted when a spirit of opposition prevails. On the contrary, sympathy and assistance are needed. Men are not entitled to be violent with each other respecting opinions in matters therapeutic, since no two are likely to treat a patient exactly alike; and which one of us is not repeatedly in error, and still more often at his wits' end for knowledge? Our position as agents—that is, our scope and purpose arising out of the state of the healing art—is such, that a qualified man is fully justified in following out his convictions in the treatment of any particular disease, so long as there is no evidence of injury inflicted directly, or through neglect. Where are we to find the man so infallible in his observation, as to be warranted in supposing that no one can honestly hold a different opinion? I accord the fullest sincerity to the iridectomists.

I am sure that it will interest your readers to tell them how iridectomy was introduced; and I can hardly conduct my argument without this short sketch.

"Iridectomia," or iridectomy, as it is expressed in English, is the term originally introduced to express the operation for the formation of an artificial pupil by removing a portion of the iris. More commonly, however, we say artificial pupil by excision. The modern operation is the same, only on a far more extended scale.

Iridectomy to cure disease was first performed by Professor Von Gräfe of Berlin, and was quickly taken up in England, in consequence of certain circumstances which it is unnecessary to narrate.

Von Gräfe's attention was first drawn to the efficacy of the treatment in internal inflammation of the eye-ball, by observing the results of the operation for artificial pupil by excision after irido-choroiditis with closed pupil. In such cases, he ascertained by experiment "that the increased power of vision was in no way dependent on reabsorption of the pupillary exudations, but was entirely to be ascribed to an improvement in the choroidal complications." I quote from Mr. Windsor's translation in the Sydenham Society's Volume for 1859.

Encouraged by success, he proceeded to operate on cases in which, after previous iritis with pupillary exclusions, there had resulted atrophy of the globe of the eye from secondary choroiditis. He treated by repeated iridectomy many cases in which the globe had become very soft, and much flattened by the action of the recti muscles, and it was ultimately perfectly re-filled. He relates the case of a man to whom he had formerly given a certificate of incurable blindness on account of atrophy of both globes. Vision was limited to a dull quantitative sensation of light. At the time of writing, the operation having been performed *six times*, the patient could count fingers at the distance of some feet, and distinguish letters of the largest print, and the vision was weekly improving.

This statement about resuscitating collapsed eyes puzzled me for a long time; at last I was able to understand it. After an operation by solution for soft cataract, in an unhealthy and softened eye-ball, I found the softness exchanged for more than natural plumpness; and this actually lasted for weeks, so long, indeed, as the preternatural vascularity arising out of the operation remained. The increased vascular action was the secret. This surely points to Von Gräfe's incorrect observation, and false conclusion. And if so, what a basis to theorise on!

After this he directed the new remedy to glaucoma, then to chronic and recurrent iritis, and irido-choroiditis, and found it specially useful in ulceration and infiltration of the cornea, in partial staphyloma of the cornea, and staphylomata of the sclerotic. In acute glaucoma, the results were said to be very striking; the earlier the operation was done the better; but the duration of weeks, or of months, did not exclude complete restoration.

In chronic glaucoma the disease was arrested, and the existing amount of sight was preserved. More rarely the improvement was temporary; atrophy ensued, but the pain did not recur.

Von Gräfe argues against the retina being originally invaded by the disease; he makes the pathology to be derangement of the choroid, hypertrophy of the vitreous humour by endosmosis, and, as a consequence, pressure on the retina. Will any one attempt to reconcile the two opposed actions, the filling of a flabby eye-ball, and the softening of a tense one by the same operation? He removes a portion of the iris, because he supposes that this diaphragm is the source of the aqueous secretion, and that, by reducing it, less fluid is poured out; less pressure is therefore produced; and, accordingly as the operation is done as to time, so is the retina completely preserved from injury, and rescued from complete destruction. I have discussed this, and other theories that have been advanced on the *modus operandi* of iridectomy at length in my book, and urged my objections; but I shall not notice them here, as I find that, in the letters addressed to you, the writers not only do not stand out for theory, but ignore any such support. But I do not like this off-hand method. I require some explanation; because, to my mind, iridectomy, or the cutting off of a portion of eye-tissue to cure a blood-disease, involves a positive absurdity. According to the showing of Von Gräfe, it gives dissimilar results, and it could not cure, as he alleges it does, in affections of such different pathology as those named by him. It is no answer to ask, how does quinine or opium act? This is not a question of the action of drugs. I presume no one ever expects to be able to read vital processes, and to tell the ultimate workings of living machinery; but I do require some show of reason before I adopt a surgical operation which breaks the structure, and disarranges the wonderful mechanism of the glorious and precious eye.

I pass on to consider practically the effects of iridectomy, and to notice the statements of those who believe in its virtue. At once I say, that benefit is to be got, not through any direct effect on the iris, but solely in consequence of the evacuation of the aqueous humour. It is not, then, the iridectomy that does this, but that which takes place as an inevitable step of the operation as a preliminary measure, namely, the "paracentesis corneæ." More than half a century ago, the value of tapping the cornea was clearly made out by Mr. Wardrop, who did more in this country to advance ophthalmic surgery than any man of his time. His writings attest to his great labour, the accuracy of his observation, and the wonderful extent of his investigations. It is with great pleasure that I refer to his practical and philosophical paper "On the Effects of Evacuating the Aqueous Humour in Inflammation of the Eyes" in the *Medico-Chirurgical Transactions*, vol. iv, p. 145. He was led to try the remedy in consequence of certain morbid changes in the dead eye, from which he drew physiological deductions, and fortunately afterwards verified them by surgical experiment. This paper is a model for the imitation of those who would conduct original investigations in practical surgery. His first trial, very strange indeed to tell, as apposite to the point, was in a case of milkiness of the cornea, distended eye-ball, and acute inflammatory symptoms. He says, "I discharged the aqueous humour by a small incision through the cornea, and had the satisfaction to find that the operation produced not only an alteration in the degree of transparency of the cornea, but also that the pain and all the inflammatory symptoms were removed." After this I find the plan applied to cases of violent inflammation of the eye-ball, in which the cornea was not involved. Again, he points out that in those cases where

the practice of evacuating the aqueous humour is judiciously employed, although the operation may create some temporary irritation, yet its good effects will become immediately perceptible, and in most cases will be permanent. The more obvious of these are a more or less considerable improvement in vision, particularly where there is a cloudiness in the anterior chamber; a complete cessation of the sense of fulness of the eye-ball, and pain in the head; and in some cases a very remarkable change in the size of the inflamed vessels. It would almost seem as if he were in this controversy when he remarks, that the great and immediate relief of evacuation of the aqueous humour most probably arises chiefly from the sudden removal of *tension*. He wishes it to be understood that the discharge of the aqueous humour is not here to be recommended as the sole remedy in any case of ophthalmia, but is only to be considered as a powerful auxiliary in some, and in others as a sure, and perhaps the only means of preventing a total destruction of the organ. I advise all surgeons who are interested in ophthalmic surgery to study the essay; for this author claims a far greater range of benefit for his patients than does the warmest advocate of iridectomy. He is assured of its potency in all inflammations of the eye-ball; in purulent and gonorrhœal ophthalmia; in corneitis; in mechanical injuries of the eye-ball. Such, it seems to me, is the nature of the remedy that, theoretically speaking, if found useful in any one condition of inflammation of the eye-ball, we can hardly be wrong in generalising, and trying it in all.

Mr. Wardrop's rationale is this. The object is to diminish suddenly the overdistension of the eye-ball; the evacuation of the aqueous humour must fulfil this intention in a more complete manner than can be conceived probable by any means of abstracting blood from its vessels; for, as the ophthalmic artery comes from the skull, little blood can be taken directly from any of its branches, and it would require a great quantity of blood to be drawn from the temples or neighbouring arteries, to make any remarkable change in the quantity of the contents of the eye; or, at least, a change equal to that which would be produced by the discharge of the aqueous humour. From the advantages also which have been universally found to arise from a sudden depletion of blood, in comparison with what can be derived from a slow detraction, considerable benefits might be expected from the practice.

I have the greatest faith in the remedial efficacy of tapping the eye in all inflammatory affections, and even under other states of disease; and I have often found the repetition to tell, where a single operation has given but little or no result; and in very severe cases, I have occasionally repeated the proceeding even several consecutive days. Yet I do not exalt the measure beyond the limit the originator modestly claimed for it.

It would not serve my purpose to do more at present than merely to state general results, for detail. I could not strengthen my argument; and I might be tedious. Again and again, I have seen dispelled, by the corneal tapping, the premonitory symptoms of what would be now called glaucoma. I have repeatedly given relief by discharging the aqueous humour, in many stages of ocular disorganisation, when nothing else would relieve. I have seen a small staphyloma of the sclerotic, resulting from a long continued acute inflammation of the eye-ball quite pass away, leaving only marks, after a few tappings, by which the vascular action was quelled. The several symptoms occurred after a needle operation for cataract, and long after the cataract was absorbed. Iridectomy was strongly urged in consultation, but I resisted it, for which the patient says he cannot be too thankful. I have the most thorough conviction, that by this system of tapping, combined with general treatment, is to be secured the highest attainable success in inflammatory diseases of the eye-ball. I use the expression, inflammatory diseases, because I wish to avoid the nice distinctions of ophthalmic nomenclature. There is sure to be a difference of opinion among those addressing you on this point; and, indeed, I know no greater ophthalmic puzzle than to point out practically the distinctive differences between what is called acute glaucoma, choroiditis, and arthritic iritis. There is a deal of confusion here for future investigators to simplify. Many of the cases of so-called glaucoma that I have seen operated on, I should describe as choroiditis. Thus I have heard some of these affections regarded by another surgeon as "arthritic posterior internal ophthalmia." Again, I find one of your correspondents of great reputation, defining glaucoma to be "the whole course and several varieties of disease, leading to that last hopeless stage of extinguished sight and disorganised tissues." There can be no more comprehensive description than this; it will take in every ophthalmic inflammation; and still more, this gentleman goes even further, and in his several writings speaks of glaucomatous complications, and the glaucomatous element; conditions, that I, as a man practised in eye-diseases, fail to comprehend.

I am anxious to prevent any young surgeon from supposing that tapping the eye is a perfect panacea. It is not so; neither is any other operation a perfect cure for all idiopathic inflammatory affections. Many cases are met with, that baffle all art and science. I only speak of it in the same terms as its author; as an aid, and to be used along with other means. Nor have we yet discovered any practical surgical measure for curing the bad old-fashioned disease called glaucoma, as understood by me, and by my teachers, Lawrence, Tyrrell, Dalrymple, and expresed by Dr. Mackenzie in his works. According to my experience, it is a very rare disease, each attack of which, each paroxysm, inflicts a definite damage. The eye may be destroyed at once; or it may retain some amount of sight after several periods of renewed activity. Tapping will often relieve; and so will iridectomy as a means of tapping. Pain will be lessened, and perhaps the period of attack shortened. I speak cautiously about the amount of substantial benefit to the eye, because I have so often seen all operations and treatment fail and the eye perish; and in cases where there has been no operation, the spoiling of tissues has been incredibly small. It is not a matter of "cut and you save, don't cut and you destroy." However, our duty is to adopt every likely measure that may do good, while it will not damage.

I cannot help a passing remark on the alleged cause of destruction to the eye in glaucoma; namely, pressure on the retina, of which the greatest evidence is said to be got in "cupping" of the optic disc. I find this "cupping" apart from glaucoma, and even when the eye-ball is not hard; and I am perfectly sure that it is not to be seen in many of the cases of acute glaucoma, when the fundus of the eye can be examined. It more commonly exists in the eyes that have long been blind. There it appears, I suspect that the nerve-tissue has been primarily invaded by disease, or coincidently with the implication of other parts. I regard pressure, if it have any influence at all, as acting secondarily. When this nerve-change exists, by which the eye must be more or less spoiled, I do not believe that any treatment is available. To say that the cupping becomes less, is to admit the generation or reproduction of nerve-tissue. And how could it be proved that the cupping is less? and if it could be demonstrated, would a fractional change be of any advantage, when the least cupping is known to be associated with damaged sight?

In glaucoma, as in every other acute inflammatory ophthalmic disease, the eye-ball is tense, it is hardest of all in long standing glaucoma, and this can only be by an increase of its fluid contents. The choroid and the iris hold very nearly all the blood that is in the eye, and there is an increase in the size, and perhaps even in the

number of blood-vessels. It is likely, too, that exudation from the vessels tends to the augmented overfulness. Now all this takes place in every case of severe inflammation of the eye-ball, whether it be from purulent ophthalmia, from wounds, from mechanical injuries of all kinds, from gout, rheumatism, syphilis; and who ever found the optic disc cupped from this pressure? It is likely enough that the pressure on the retina has the largest share in eclipsing sight; but after the inflammations from these causes have been subdued, although weeks have elapsed, the eye is often restored to perfect integrity. The same may be said when the eye is pressed on from without by tumours. Sight may be lost for a time; but if the pressure be removed, the patient sees again, and the ophthalmoscope shews a perfect eye. Too much stress has been laid on the tension of the eye-ball. When there is the increased volume in the eye from inflammation, tension must of course always exist; and if it be made a signal for iridectomy, I can only say that the surgeon in ophthalmic practice who so regards it, and acts, will always have a large stock of cases ready for his knife, and in proportion as he multiplies his operative surgery, so will he decrease the eye-sight of his patients. It is through such examples that we get the astounding records of wonders. Mrs. A. is blind to-day, as she might indeed be from rheumatic inflammation, etc. She is "iridectomised," and in a week she can, with spectacles, and while looking through a pin-hole, read No. 10 Gräfe's type. The poor woman would have read No. 6 without any appliance, if her iris had not been trimmed, and if general treatment only had been used. I rejoice to think that in private practice I have saved many cases like Mrs. A's from damage.

It will not do to say that there is a difference in the kind of tension between that arising from glaucoma, and that from other inflammations. Moreover, I will not allow that such pressure admits of being recognisable under several degrees—seven it is said. Without weight and measure, how can such estimates be conveyed from one mind to another? A medical man consulted me about impaired vision from some obscure cause; I could detect nothing wrong with the eye-ball. He went to a surgeon of considerable reputation, who pronounced one eye to be like ivory, the other like India-rubber. He (the patient) could not perceive any difference to the touch, nor could I. He consulted another ophthalmic surgeon in a high position, who declared that there was no difference in the tension of the eyes. I mention this to shew how differently persons estimate things by the sense of touch.

I can state that, I have never met with any bad result from tapping the eye. The worst thing that ever occurred was a slight prolapse of the iris, and that in a single instance.

Iridectomy is an operation that demands very considerable nicety in execution, and is done better under the influence of chloroform. This is not in itself objectionable; but it has significance in my argument. There are many frequent unavoidable dangers attendant on it, immediate and remote, of which the profession are ignorant, and they have been kept in the back-ground.

It is not always possible to complete the operation according to the prescribed rules, especially the tearing away of the iris to its very root, in consequence of bleeding, by which the parts are concealed from view; and in the attempt to remove the blood by pressure, the only available method, there is much risk of dislocating the lens, or of so injuring it as to cause opacity. When the lens is dislocated, the vitreous humour may be lost. But cataract may follow without this direct injury, as I think, by interruption of the nutrition of the lens through the disturbance set up in the surrounding nervous and vascular tissues. It is not correct to say that the cataract is only a consequence of the glaucoma; as I have seen it, produced quickly after the operation, when the iridectomy has been done because of rheumatic inflammation of the eye. I omit speaking much about the accidental wounding of the lens (not an uncommon event), because that will be attributed to bungling.

Then the eye-ball may suppurate—a disaster more imminent when a great deal of inflammation is present. In the legitimate making of an artificial pupil, a careful surgeon never operates until the activity of the disease which has closed the pupil has passed away, lest destructive inflammation with its contingencies arise.

The operation may be frustrated by the closing up of the pupil, and the gap newly made. The eye-ball may become atrophied. I should like to know how often the eye-ball has been extirpated, because of the ill results of iridectomy. Imperfect union of the edges of the tunic of the eye through which the incision was made, with the bulging of the new and imperfect tissue, occasionally takes place. Who will dare to gainsay all this? Two or more of these conditions might occur in the same individual. A gentlemen with old rheumatic inflammation in both eyes, who saw enough to read the newspaper in a good light without glasses, in the interval of acute attacks, was doubly iridectomised against my advice; but two opinions were against mine, so I was set at nought. In the one eye the pupil closed; in the other, cataract formed. A second iridectomy was done in the first eye. I met the poor fellow accidentally at a friend's house, able only to grope his way about. The cataract was shortly to be extracted.

Iridectomy destroys the integrity of the eye by interfering with refraction, adjustment, and the regulation of light to the eye. I never saw perfect vision after the operation; that is, no person so mutilated could see small things and distant, in different degrees of light, equally well with one of the same age, whose eye might be called normal and healthy. I have been careful to inspect this. A very imperfect idea is given in the reports of cases of the true condition of sight. A person may blunder over this or that sized type, a few inches from the face, with a pair of spectacles in a carefully arranged position as to the light, and yet have very imperfect sight. Several whose cases seemed in print to be all that could be desired I have found to be miserable cripples.

Iridectomy also spoils the appearance of the eye. To lessen this it has been proposed always to operate at the upper part of the organ. But the German propounder of the operation objects to this on the score of difficulty, and greater liability to accident.

Now, Sir, I bid farewell to the discussion of iridectomy.

I am, etc., HAYNES WALTON.

December 25th, 1863.

LETTER FROM W. WHITE COOPER, ESQ.

SIR,—The subject of iridectomy has already occupied so large a space in your columns that I feel reluctant to trespass upon them; nor should I have done so now had not my name been prominently mentioned by you in connexion with the operation in question.

The views entertained by me are so entirely in accordance with those ably stated by Mr. Dixon in your last number, that it would be mere waste of time and space to enter at length into the discussion; I will therefore content myself with expressing my opinion that, valuable though iridectomy is in some cases, its indiscriminate use is fraught with danger: it is far from a slight operation; serious evils not unfrequently attend or follow its performance; and it should be resorted to with the greatest caution, since I am convinced that many of the cases for which it is recommended are amenable to general treatment,

I am, etc.,

W. WHITE COOPER.

Berkeley Square, Dec. 28, 1863.

LETTER FROM T. PRIDGIN TEALE, JUN., ESQ.

SIR,—At the present time, when the question of iridectomy in glaucoma is attracting much attention, I trust that the record of a few cases from my own practice may not be without use.

In the *Medical Times and Gazette* for Dec. 1, 1860, I published a series of cases in which iridectomy had been performed for the relief of various affections of the eye. In concluding the paper, I stated my conviction that "we possess in iridectomy a most powerful agent in arresting many disorganising processes in the eye-ball, which were little if at all under the control of any method of treatment previously in use." This opinion I can now, after nearly six years' experience of the operation, most emphatically confirm. As the present discussion is chiefly limited to the use of iridectomy in glaucoma, I will especially refer to cases of that disease.

CASE. I. *Subacute Inflammatory Glaucoma of both Eyes* (published in 1860), July 19th, 1860. Mrs. M., aged 60, ten weeks previously, was seized with severe pain in the right eye and brow, attended with dimness of vision. Three weeks ago the left eye became dim and painful. During the whole of this time she suffered intense agony. Her medical attendant having tried blisters, leeches, mercury, and opium, without any relief, requested me to see her. I found both eyes in much the same condition. The globes were hard; the cornea dull; the retinæ were invisible by the ophthalmoscope from muddiness of the humours. Her sight was so defective that she could not tell time by the watch. July 19th. Iridectomy of both eyes was performed. August 20th. She read large print. The optic discs were visible by the ophthalmoscope; not cupped. The pain gradually abated during three weeks after the operation, and had now ceased. October 20th. She read No. 4, Jäger, and was free from pain. November 30th 1863. Three years after operation, she reads No. 1 Jäger with each eye. She has occasional aching in the eye, but never severe attacks of pain. The globes are of natural tension. The field of vision is so much contracted that, although she reads No. 1, she has rather the aspect of a blind person on entering the room. She states that before the attack of glaucoma, she had required for some time very strong convex glasses; since the attack, she reads even small print without any glasses whatever.

This case is republished in order to show the permanence of the cure at the end of three years.

CASE II. *Acute Glaucoma of Left Eye.* July 14th, 1863. Martha A., aged 57, during the last two years had had several attacks of inflammation in the left eye. Three weeks ago, she had a more severe attack than usual, and the sight became dim. The globe was hard; the cornea dull, like ground glass; she had severe pain in the forehead. She could only distinguish light and shade, and had no qualitative perception of light. July 14th. Iridectomy was performed. July 18th. The globe was of natural tension; the cornea bright. August 18th. With convex glasses she read No. 19, Jäger. October 10th. With convex glasses she read No. 6, Jäger. The optic nerve entrance was slightly cupped.

CASE III. *Glaucomatous Choroiditis.* February 24th, 1863. Mrs. C., aged 36 (?). Six years ago, the right eye was inflamed and painful, and after being under medical treatment for a year and a quarter, she recovered, with slightly impaired vision. Six weeks ago, the eye again inflamed. It was now (Feb. 24th) very painful, and looked red and dull. The iris was sluggish and half dilated. The globe was hard. She saw letters of No. 19, Jäger, but could not read the words. For a week she used atropine drops, which relieved the pain, but did not cause improvement of vision. March 4th. Iridectomy was performed. March 19th. She read No. 14. The cornea was bright. She had no pain. The tension was natural. May 12th. She read No. 8. Tension was natural. September 11th. She read No. 2, and with convex 50, No. 1. The tension was the same as in the other eye, which was perfectly sound.

The foregoing cases, and others where recovery of sight took place in a less marked degree, show that iridectomy, if performed at an early stage of the destructive processes, may secure a great amount of recovery of sight. Unfortunately, however, cases of acute glaucoma rarely come before the ophthalmic surgeon until the ordinary routine of remedies has been tried and has failed, and the critical period in which sight might have been saved has gone by. In many of these cases, besides loss of vision, the patient suffers intensely from pain, which, occurring either continuously or in paroxysms, and prolonged for weeks or months, resists all ordinary means of relief. In a large proportion of these cases iridectomy, although incapable of restoring vision, relieves the pain.

The following cases are illustrations of loss of sight from delay, and of relief of pain, and restoration of a healthy condition of the eyeball by iridectomy.

CASE IV. *Subacute Glaucoma.* June 1, 1861. Mrs. W., aged 56 (?), having for a year or two suffered from occasional pain in the right eye, with the appearance of coloured rings on looking at the candle, was seized last Christmas with an attack of subacute glaucoma, which, in the course of two months, extinguished vision. Six months after the attack, she consulted me. She was then suffering from pain in the eye, and from severe neuralgia of the forehead, which had continued with short intermissions since the commencement of the attack. She appeared worn down and broken in health. The globe was hard, the cornea vesicated. Dilated tortuous veins emerged from the sclerotica. She had no perception of light. June 3rd. Iridectomy was performed. July 22nd. The tension of the globe was almost natural. The cornea was bright. The neuralgia was almost gone. The pain in the eye had ceased. Her health was improved, and she looked stout and well. There was return of sight. December 6th, 1863. She tells me that before the operation the eye had been constantly inflamed, and subject to intense pain for six months, and that the operation arrested the inflammation, from which, up to the present time, she has been perfectly free. She suffers occasionally from pain in the head, which, when severe, causes aching of both eyes. The tension is natural; perhaps the eye is not quite so soft as the other sound eye. The eye looks bright; and the enlarged sclerotic veins have disappeared.

CASE V. *Subacute Glaucoma.* July 13th, 1863. Mrs. W., of G—, aged 58, having suffered occasionally from attacks of inflammation in the right eye, was seized six weeks ago with a much more severe attack than usual, which continued up to the present time. As the inflammation did not yield to ordinary treatment, I was requested to see her. The globe was very hard. The iris was extensively adherent to the capsule of the lens. The cornea was dull, like ground glass. The optic disc could not be seen by the ophthalmoscope. She suffered frequently from pain in the eye and side of the head. She could just distinguish light and shade. July 14th. Iridectomy was performed. July 18th. She returned home much relieved of pain. August 31st. The pain had entirely ceased. The neuralgia of the head, which she had not attributed to the eye, had left her. The optic disc was visible by the ophthalmoscope. She could now count fingers.

CASE VI. *Glaucoma (?) with Periodic Attacks of Inflammation.* August 20th, 1861. Mrs. H., of K—, aged 45, for several years had had cataract of the right eye, which had a calcareous appearance. During the last few months, she had suffered from repeated attacks of inflammation, accompanied with very severe pain, which have occurred every second or third day during the last

month. The globe was hard. She had fair perception of light. There was a peculiar opacity of the cornea, which suggested the probability of calcareous degeneration of some of the internal tissues of the eye. (In a similar case of opacity of the cornea in a disorganised eye, at the Moorfields Ophthalmic Hospital, I heard Von Gräfe express his opinion that there would be found calcareous deposit near the neighbouring ciliary processes.) The surface of the cornea was vesicated. August 20th. Iridectomy was performed. For three days after the operation there was perfect relief from pain. On the fourth day, she had an attack of inflammation; and on the eighth day, a second attack. October 30th. The attacks having occurred almost as frequently as before the operation, I began to despair of permanent relief from iridectomy, and had obtained her consent to extirpation of the globe. On considering, however, the perfect relief conferred for a few days by the first operation, I persuaded her to submit to a second iridectomy. She would herself have preferred extirpation, so great were her sufferings. Iridectomy was accordingly performed for the second time. A large portion was removed from the lower part of the iris. January 17th, 1862. She had had only two or three slight attacks since the operation. November 30th, 1863. Her husband wrote to me, "After the second operation, the attacks became less and less severe, and at longer intervals of time. It is now some months since she had one at all. The eye is slightly harder than the sound one, but is not painful when touched."

In concluding this paper, I cannot refrain from relating the following two cases; which, although not instances of glaucoma, illustrate the wonderful power of iridectomy in relieving disturbed conditions of nutrition of the eyeball.

Case vii. *Failure of Sight after Extraction of Soft Cataract; Recovery after Iridectomy.* H. C., Esq., of Y——, having had a soft cataract extracted by me from the right eye in October 1859, was able three months afterwards to read the *Saturday Review;* and nine months afterwards "to read small print for several hours very comfortably." During last winter he worked very hard at his occupation as a clerk; and, as he said, "overworked his eyes." His sight rapidly failed; and he made up his mind to go out to Australia as a farmer, fearing that his eyes would not bear work. Finding, however, that the iris was drawn up to the scar of the wound through which the cataract had been removed, I urged him to suspend his decision to emigrate; to submit to iridectomy of the right eye; and to have a partial cataract of the left eye extracted. July 18th, 1863. The area of the pupil of the right eye was clear; free from opaque capsule. He read No. 16 Jäger. Iridectomy was performed on the right eye; and the imperfect cataract in the left was freely punctured. July 22nd. The softened cataract was extracted by a curette through a small opening in the cornea. Aug. 13th. He read No. 2. Sept. 1st. He read No. 2 with the right eye, and No. 1 with the left. The pupil of the left eye was perfect, central, and active. The iris was not adherent to the scar.

In the above case I attribute the deterioration of sight in the right eye to the disturbed condition of the eyeball consequent upon the entanglement of the upper portion of the iris in the corneal scar; and the restoration of sight to the relaxation of the iris obtained by iridectomy. I feel, moreover, great confidence that the eye will now bear reasonable work without fear of deterioration; and also that the left eye will be less liable to fail than the right one, because the iris remains perfectly free from adhesions to cornea or lens.

The following case is, perhaps, more striking.

Case viii. *Failure of Sight after Extraction of Soft Cataract: Recovery under Iridectomy.* Master A., aged 9, having had soft cataract of the right eye extracted by me in February 1861, was able in July to read No. 4 Jäger. The pupil, however, was drawn upwards to the site of the corneal wound, to which the iris was adherent. 1862. June 10th. The sight had become defective, so that he could now only read No. 14. 1863. Aug. 25th. He was now unable to read No. 20, or even to count fingers. Iridectomy was performed downwards, opposite to the corneal scar. Aug. 31st. He read No. 14. Sept. 12th. He read No. 2.

I am, etc., T. Pridgin Teale, Jun.

Leeds, December 5th, 1863.

Medical News.

Apothecaries' Hall. On December 17th, 1863, the following Licentiates were admitted:—

Bartlett, Joseph James Henry, Ladbrooke Square, Notting Hill
Caldwell, John Thomas, Knutsford, Cheshire
Cook, John, Warwick Street, Regent Street
Dickson, James, Colsterworth, Lincolnshire
Gray, William John, Princes Street, Cavendish Square
Haire, John Hillary, Gosport
Hughes, Robert, Woodbridge, Suffolk
Lewis, William Thomas, St. Bartholomew's Hospital
M'Caull, Charles Nathaniel, Wilton, near Salisbury
Rayner, William, Leeds
Ryder, Dudley Howe, Greenwich
Symonds, William Nathaniel, Sprowston, Norfolk
Tibbits, Robert William, Ashton, near Bristol

At the same Court, the following passed the first examination:—

Barrett, Joseph William, Guy's Hospital
Lattey, Walter, St. George's Hospital
Vise, William Foster, Middlesex Hospital
Wilford, John George Frederick, Guy's Hospital

Admitted December 24th, 1863:—

Cooke, Alfred Square, Gloucester
Hanks, William, Snaith, Yorkshire
Levett, Nathaniel, Grosvenor Place School of Medicine
Martin, Paulin, Abingdon, Berks
Mence, William Henry Dison, Cambridge
Ruddock, John Robert, Leeds
Simpson, Philip John, Gower Street, Bedford Square
Steward, Thomas Theodore, Wolverhampton
Walker, Samuel Edward, Warwick

At the same Court, the following passed the first examination:—

Paull, Josiah, St. Bartholomew's Hospital
Shaw, Charles Edwin Martin, St. Bartholomew's Hospital
Tomlinson, David Webster, St. Mary's Hospital

APPOINTMENTS.

Arnison, William C., M.D., elected Resident Medical Officer to the Newcastle-on-Tyne Dispensary.
Bobart, William M., Esq., appointed Resident Surgeon to the Birmingham Lying-in Hospital.
Chambers, Thomas, Esq., elected Assistant-Surgeon to the London Surgical Home for the Diseases of Women.
Fisher, Stephen W., Esq., elected District Surgeon to the Bristol Dispensary.
Jordan, Robert C. R., M.D., appointed Additional Honorary Medical Officer to the Birmingham and Midland Free Hospital for Sick Children.
Oldman, John, Esq., appointed Surgeon to the Huntingdon County Hospital.
Potter, John B., M.D., appointed Resident Surgeon to the Birmingham Lying-in Hospital.
Roberts, Edwin, Esq., elected House-Surgeon to the West Kent General Hospital.
Roberts, F. T., M.D., appointed House-Surgeon to the Liverpool Northern Hospital.
Smith, William J. F., M.D., elected Physician to the Royal Infirmary, Aberdeen.

Poor-Law Medical Service.

Atkinson, George P., Esq., to the Knottingley District of the Pontefract Union.
Freshfield, Allen, Esq., to Districts Nos. 1 and 2 of the Tendring Union, Essex.
Freshfield, Philip W., jun., Esq., to Districts Nos. 1 and 2 of the Tendring Union, Essex.
Jamieson, John, L.R.C.P.Ed., to the Ashill Dispensary District of the Newport Union, co. Mayo.
Mitchell, Thomas C., Esq., to the Pickhill District of the Thirsk Union, Yorkshire.

ARMY.

WALSH, Staff-Assistant-Surgeon T., to be Assistant-Surgeon 12th Foot, *vice* A. H. F. Lynch.

To be Staff-Assistant-Surgeons :—

LEWIS, A., M.D.
LYNCH, Assistant-Surgeon A. H. F., 12th Foot.

ROYAL NAVY.

BOWER, John, M.D., Surgeon, to the *Hogue*.
EDWARDS, Robert, Esq., Surgeon, to the *Lyra*.
HOLLINSWORTH, J. M., Esq., Acting Assistant-Surgeon, to the *Cumberland*.
KEELAN, Patrick, Esq., Assistant-Surgeon, to the *Aurora*.
MOORE, George B., M.D., Surgeon, to the *Rattlesnake*.
WOODS, H. C., Esq., Acting Assistant-Surgeon, to the *Royal Oak*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers :—

HARRISON, R., Esq., to be Assistant-Surgeon 1st Lancashire Engineer Volunteers.
PROSSER, T., Esq., to be Assistant-Surgeon 2nd Administrative Battalion Monmouthshire R.V.
SHEPHERD, W. G., M.D., to be Assistant-Surgeon Middlesex Victoria R.V.
STEWART, H. C., M.D., to be Surgeon Middlesex Victoria R.V.

To be Honorary Assistant-Surgeons :—

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BIRD, P. H., Esq., 36th Middlesex A.V.
FERGUSON, J., Esq., 4th Elginshire R.V.
WATSON, W. M'C., Esq., 3rd Kincardineshire A.V.

BIRTHS.

CROOK. At Northfleet, Kent, on December 26th, 1863, the wife of *J. Evelyn Crook, M.D., of a son.
FLETCHER. On December 22nd, 1863, at 13, Mornington Terrace, Liverpool, the wife of *F. D. Fletcher, Esq., of a son.

DEATHS.

BOOTT, Francis, M.D., at 24, Gower Street, aged 71, on December 25, 1863.
DANIELL. On December 24th, 1863, at Newport Pagnell, aged 66, Henrietta, wife of *Edward Daniell, Esq.
GIRLING. On December 24th, 1863, at St. Ives, aged 67, Sarah, wife of *G. L. Girling, Esq.
JONES, Thomas. Esq., Surgeon, at Chesterfield, on December 18.
SINCLAIR, Alexander, M.D., Staff-Surgeon, at Southsea, on December 26, 1863.
SMYTHAN, George, M.D., at Canaan Park, Edinburgh, on December 25, 1863.
THOMSON. On December 24th, at Edinburgh, Mary, wife of *David Thomson, M.D., Staff-Surgeon R.N.
WHEELER, C. W., M.D., at Shirley Lodge, Hants, aged 71, on December 26, 1863.
WOODY. On December 22nd, 1863, at Tamworth, Alice, widow of the late Robert Woody, M.D.

THE MEDICAL COUNCIL is to meet on the 15th of January.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY. Dr. A. Douglas Maclagan has been elected President of this Society.

DENTAL HOSPITAL. The College of Surgeons now recognise both the National Dental Hospital and the Dental Hospital in Soho Square.

AT LAST. We believe that the *Pharmacopœia* is actually printed off, and now only awaits the operations of the binder.

DR. EUSTACE SMITH accompanies the Duke of Brabant, as medical attendant, in his journey to a warmer winter climate than is Belgium.

GUY'S HOSPITAL. Sir Lawrence Peel has been elected President of Guy's Hospital, in place of the late Mr. B. Dobree.

EDINBURGH MEDICAL SCHOOL. It is not improbable that another year the Christmas holidays may be done away with at Edinburgh, and the session closed at the end of March.

MR. GREEN was buried on the 19th ult., at Highgate Cemetery. His funeral was attended by the President and many of the Council of the College of Surgeons, as well as by a large number of his old pupils and friends.

GLASGOW SOUTHERN MEDICAL SOCIETY. Mr. Edward M'Millan has been elected President; Dr. W. F. Lonergan Vice-President; and Dr. H. R. Howatt Treasurer.

GLASGOW MEDICAL SOCIETY. Dr. James Stewart has been elected President; and Dr. A. M. Smith and Dr. G. H. B. M'Leod Vice-Presidents of this Society for 1863-4.

MR. WM. LAWRENCE has been elected an honorary member of the American Academy of the Arts and Sciences, as well as of the French Academy of Sciences as announced last week.

TESTIMONIAL TO A HOUSE-SURGEON. A case of surgical instruments and a purse have been presented to Mr. W. Oxley of Rotherham, as a mark of esteem for the way in which he performed the duties of house-surgeon to the Huddersfield Hospital during seven years.

ACTION AGAINST THE SUPERINTENDENT OF AN ASYLUM. An action was lately brought against Dr. Lalor, the superintendent of the Richmond Asylum, Dublin, by the widow of a lunatic who was killed there by another lunatic. The jury, however, gave a verdict in favour of the doctor; not considering the death of the lunatic as any pecuniary loss to the widow.

POOR-LAW GUARDIANS' LIBERALTY. We are glad to be able to be record the following act of justice done by a Board of Guardians. We only wish that it were one of those exceptions which prove the rule. At the beginning of the summer, on Dr. Gibbon's recommendation, the Guardians of the Holborn Union admitted small-pox cases into a detached portion of the workhouse. Their medical officer treated eighty-six, many of them natural, cases of small-pox, with only three deaths. At the termination, they voted Mr. Norton £25 for his extra work. May the publication of this induce other Boards to follow the example.

THE CONVICT TOWNLEY AND THE GOVERNMENT COMMISSION. The conviction of George Victor Townley has been the prevailing topic of conversation in the midland counties ever since his trial. With the exception of one or two journals, all the power of the press has been used to applaud the verdict and concur in the sentence. Against these fearful odds the friends of the murderer have worked, and have succeeded in inducing the Government to send a Special Commission to examine the man. The Home Secretary has been supplied with statements on oath from various members of the prisoner's family, deposing to the numerous instances of insanity existing amongst its various branches; that the views of the prisoner, as expressed by him to Dr. Forbes Winslow, were opposed to the notions he had previously entertained; and that his previous life was most exemplary and moral. He was also furnished with declarations by persons who were cognisant of delusions entertained by the prisoner, including one referring to the former breach of the engagement by Miss Goodwin about eighteen months ago, in which the prisoner was said to have displayed extraordinary acts of eccentricity, such as turning pictures upside down, purchasing a number of white hats and umbrellas at one time, and taking a bath with his clothes on. A memorial signed by nine or ten of the jurymen was also sent, asserting that although in their opinion the verdict was legal and just, they were also of opinion that an inquiry should take place as to the prisoner's mental condition at present. Sir G. Grey yielded to the request; and Messrs. Wilkes, Foster, and Campbell—two medical men and one lawyer—consequently had three long interviews with Townley. The borough justices subsequently communicated to Sir George Grey the impression on their minds that the prisoner is insane. *(Derby Mercury.)*

OPERATION DAYS AT THE HOSPITALS.

ONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

ESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

EDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

IURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

RIDAY..... Westminster Ophthalmic, 1·30 P.M.

ATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

ONDAY. Medical Society of London, 8.30 P.M. Dr. F. W. Mackenzie, "Retroflexion of the Gravid Uterus, with especial Reference to its Occurrence in the Latter Months of Pregnancy."—Odontological (Anniversary).

EDNESDAY. Pharmaceutical Society, 8 P.M. Mr. J. Eliot Howard, F.L.S., "Note on the Root-Bark of Calisaya"; Mr. Daniel Hanbury, F.L.S., "Note on *Cassia moschata*"; Mr. David S. Kemp, "On Goa Powder"; Mr. T. B. Groves, "Note on the Recovery of Essential Oils from their Watery Solution"; Thompson's Patent Bottles, and Thonger's Patent Label for the Prevention of Accidental Poisoning, will be exhibited.—Obstetrical Society of London, 8 P.M. Annual Meeting; Election of Officers for 1864; President's Address.

IURSDAY. Harveian Society of London, 8 P.M. (Anniversary); President's Address, Election of Officers, and Conversazione.

TO CORRESPONDENTS.

* *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

ORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

OMMUNICATIONS have been received from:—THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. LOWNDES; Dr. W. H. O. SANKEY; Dr. A. T. H. WATERS; Mr. A. H. DOLMAN; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Dr. PARSONS; Mr. W. G. CORBIN; THE HON. SECRETARIES OF THE OBSTETRICAL SOCIETY; Mr. BRODHURST; Mr. W. WHITE COOPER; Mr. BREMRIDGE; Mr. G. L. GIRLING; Mr. HAYNES WALTON; Mr. E. DANIELL; Dr. J. WILLIAMS; Dr. QUAIN; Dr. DOBELL; Dr. CANDY; Mr. G. B. IRVING; Dr. BREE; Mr. T. P. TEALE, JUN.; Dr. C. H. MARRIOTT; Mr. F. D. FLETCHER; and Mr. J. SPROULE.

BOOKS RECEIVED.

Life and Death. By W. S. Savory, F.R.S. London: 1863.

The Stomach Medically and Morally Considered. By L. J. Beale. London: 1863.

The Science and Practice of Medicine. By William Aitken, M.D. Second edition, revised and rewritten. In Two Volumes. London: 1863.

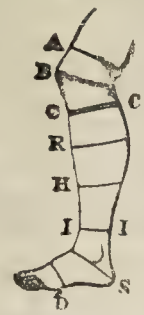
Obstetric Aphorisms for the Use of Students. By J. G. Swayne, M.D. London: 1863.

A System of Qualitative Chemical Analysis. By Dr. C. Remegius Fresenius. Sixth edition. Edited by J. Lloyd Bullock, F.C.S. London: 1864.

ADVERTISEMENTS.

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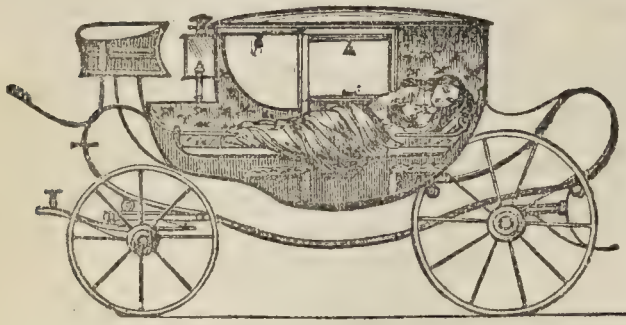
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Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

A. T. H. WATERS, M.D., M.R.C.P.,

PHYSICIAN TO THE LIVERPOOL NORTHERN HOSPITAL, ETC.

LECTURE I. (*Concluded.*)

Physiology in its Relations to Pathology and the Practice of Medicine. Recent Physiological Researches. Cardiac Physiology in Relation to Cardiac Diseases. The Reflex Function of the Nervous System in Relation to Pathology, Diagnosis, and Therapeutics; its Bearings on Certain Organic and other Diseases, etc.

But, in attempting to show the relations between physiology and pathology, and the improvements in practical medicine which are due to the generalisations of these sciences, I should perhaps be placing too favourable a picture before you, were I to leave it as it now stands; for, unfortunately, there are other organs of the body, in advancing the knowledge of whose diseases, the elementary sciences have as yet done much less than in reference to those of the central organ of the circulation. The fault does not, however, rest in the fact that there exists disparity in the mutual relations of the physiology and pathology of these organs, and the therapeutics of their diseases, but simply from the imperfection of our elementary knowledge, and our consequent inability to follow, and rightly appreciate, the pathological changes which ensue in disease, and the symptoms they produce. As I have before remarked, wherever great difficulty attends mere physical investigation, there our knowledge of functional changes is imperfect, and, as a necessary consequence, our insight into diseased processes becomes less clear; and it is, perhaps, with reference to the nervous system, that we see this most forcibly exemplified; for, notwithstanding the researches and discoveries which have been made in reference to the nervous centres, our knowledge both of their structure and function, is much less accurate and precise than that which we possess of other portions of the body; and when we turn to the diseases of the nervous system, we must at once confess how much there is of obscurity in reference to their diagnosis, pathology, and treatment. From the peculiar character of the nervous tissue, and from its complex arrangement, there is unquestionably, as far as our present means go, an immense difficulty attending all inquiries into its mere anatomy; and I think it is very doubtful whether we shall ever gain as much aid from this source, in the investigation of the functions of the nervous system, as we do with reference to other organs. And we shall perhaps find that—although we derive much information from direct experiment, and from a careful comparison of the nervous centres throughout the whole animal kingdom—the most positive advances in neuro-physiology will be made, by the observation of the symptoms which are produced in man, as the result of pathological conditions, and especially of those rare and most important cases, where there is an accidental lesion of a portion of the nervous centres, and when, in fact, we have repeated, on man, the experiments which the physiologist performs on the lower animals. It is impossible to over-estimate the importance of such cases. They probably occur more frequently than we are aware of; but, unfortunately, the exact symptoms existing during life are not carefully noted; and even if a *post mortem* examination is made, it becomes valueless, inasmuch as the phenomena existing during life have not been observed. These cases are met with, for the most part, in the surgical wards of our hospitals. I venture to direct the attention of those who are engaged in hospital practice, and especially the house-surgeons of our public institutions, who have generally the first opportunity of seeing these cases, to this important subject. I would suggest to them the propriety of taking careful and accurate notes of the symptoms existing in all cases of injury about the head or spine; and, should the issue afford them an opportunity of making a *post mortem* examination, to note the particular portion of the brain or cord which is the seat of lesion, and the exact nature of the lesion. One important case (*Med.-Chir. Trans.*, vol. xlvi), which occurred in the Northern Hospital, and which I was enabled, through the kindness of my colleague Mr. Hakes, to see, is probably familiar to some of you. It afforded a remarkable illustration of the untenable nature of a theory, long held by many eminent physiologists, and a valuable confirmation of the conclusions arrived at by more recent investigators.

Amongst the most important facts with which we have become acquainted of late years, in reference to the nervous system, is the discovery—for I think it must be ranked as such—of the reflex function of the nerves distributed to blood-vessels. Of the bearings of this principle on physiology and pathology we can speak in a very positive manner; and of its therapeutical relations, numerous instances might be mentioned. I think it probable that, as attention is more directed to this subject, we shall find it of far wider application than we at present see, both in reference to pathology and the treatment of disease.

We are all familiar with the phenomena of reflex action of the so-called voluntary muscles, the relations of which to pathology and therapeutics were rendered familiar to the profession by the labours of Marshall Hall. The principle of reflex action, however, has been shown to have a more extended application than was formerly supposed. In fact, we now know that not only every voluntary or striped muscle may be the seat of reflex action, but every involuntary or unstriped one also. We know that the blood-vessels of the body may be made to contract in obedience to reflex action. In fact, we have learnt further, that reflex phenomena may exhibit themselves as acts of secretion, nutrition, and sensation.

It is a fact with which we are all acquainted, that, in many cases of hæmorrhage from the nose, the application of ice, or of any cold body, to the back of the neck, is followed by an arrest of the hæmorrhage.

Again, I believe I am right when I say, although here I cannot speak from actual experience, that the

application of cold to the surface of the abdomen will often restrain an uterine hæmorrhage.

Further, and of this I can speak from my own observation, if we place one hand into ice-cold water, the blood-vessels of the opposite hand will contract —not the vessels of the foot, nor the vessels of the trunk, but the vessels of the opposite hand—of that part, in fact, which is parallel to the part affected.

Now these are assuredly important phenomena—important not only physiologically, but in a pathological and therapeutic point of view.

But, before I make any practical application of the principle, let us stop for a moment to consider how the result is produced. When we arrest the bleeding from the nose by the application of the cold body to the neck, it is assuredly not by the direct effects of the cold that the contraction of the nasal blood-vessels is caused. The mere fact that the surfaces, although distant from each other, are yet continuous the one with the other, will not account for the phenomenon, any more than it will explain the contraction of the vessels of one hand when the other is submitted to the influence of extreme cold. The effects are unquestionably due to the impression made on the sensitive nerves of the skin, which impression, being conveyed to the spinal cord, results in a reflex act sent along the vaso-motor nerves.

This principle, then, established, I proceed to point out how it may show itself in acts of secretion, nutrition, and sensation. And first of secretion. It is well known that an irritation of the sensitive nerves of the face will produce an abundant flow of tears; that an irritation of the nerves of taste will cause a secretion of gastric juice; and that an irritation of the gastric nerves will give rise to a copious flow of saliva. Other instances might be mentioned, but these will suffice.

With regard to nutrition, there is abundant evidence to show that an impression made on one part of the body may give rise to a morbid process, an alteration in the nutrition, in a distant part. Injury of the sensitive nerves about the eye will often produce inflammation of the eye itself; and traumatic inflammation of one eye will often give rise to inflammation of the opposite eye. Again, how frequently do we find that a neuralgic affection of the fifth pair of nerves gives rise to a congestion or inflammation of the eye. These are instances in which an irritation of a peripheral nerve has produced, through reflex action, a morbid process; and I might adduce other examples. Again, in reference to sensation, the subject is one of no small practical importance. As injury, or disease, of a sensitive nerve may give rise to perverted nutrition, so may perverted nutrition give rise to pain, at some spot far distant from the seat of disease. Pain has been described, in the poetic language of Romberg, as "the cry of the nerve for healthy blood"; and although, in a given case, we can see no evidence of disease, either in the part which is the seat of pain or elsewhere, we must never forget the reflex effects produced by pathological processes. How otherwise can we explain the pain in the knee, with which surgeons are so familiar, in hip-joint disease? How otherwise, also, can we explain the varying seat of pain so frequently observed in some affections of the brain? Do we not frequently find that diseases of the brain, similar, as far as their morbid anatomy is concerned, are in some persons for a long time attended with few or no symptoms, or symptoms of a particular kind; whilst in others the symptoms are much more urgent, or perhaps even of a different character altogether? Do not these facts add much to the obscurity of these disorders, and increase the difficulty of our diagnosis? And can we explain them on any other principle than that the perverted nutrition of the part involved in the disease has given rise, in different individuals, to different reflex manifestations? These reflex effects of disease are unquestionably of the greatest possible importance, especially in reference to obscure affections. How often do we see that a serious organic disease of the brain has gone on to an extent necessarily involving a fatal issue, without giving rise to any symptoms except of so mild a character as scarcely to attract the attention either of the patient or his medical attendant; and yet symptoms have no doubt occurred—symptoms not the direct production of the diseased parts, not involving any perverted function of the organ attacked, but indirectly produced in a distant part of the body, and showing themselves there as reflex acts of nutrition, secretion, or sensation.

Facts of this kind should make us additionally cautious in our diagnosis of obscure affections, and should teach us not to regard, as a trifling matter, every superficial pain, or slight disturbance of function, the immediate bearings of which we cannot exactly see; for symptoms of this kind, unimportant as they may at first sight appear, may be no other than reflex demonstrations of some incipient deep-seated disease. And just as, in the early stages of degeneration of the kidneys, a slight anatomical change, a mere puffiness of the under eyelid, may point to the distant affection, whilst apparently health exists, so a slight perversion of physiological action may indicate the existence of an important organic malady.

Again, consider for a moment the pain in the arm and hand, and the altered circulation in the fingers, which so constantly come on in cases of fatty degeneration of the heart. This pain, and probably a large portion, if not the whole, of the pain of angina pectoris, is but a reflex manifestation of the internal disease, just as the pain in the knee is the reflex manifestation of the hip-joint disease; and the altered circulation in the hand can be ascribed to no other cause than a reflex contraction of the capillaries of the affected parts. We cannot attribute the phenomenon to the feeble action of the heart; for it is often confined to one or more fingers, and almost always to one hand. It is a symptom which always merits our careful consideration. In the late instance of death occurring to an eminent member of the legal profession, the symptom was strongly marked; in fact, it was the only prominent feature in the case. Its significance does not, however, seem to have been correctly appreciated until after the fatal result occurred.

I might further illustrate the importance of the principle of reflex pathology, in reference to various other morbid phenomena. Take, as an instance, the distressing symptoms which frequently arise, in connexion with thoracic aneurisms, before we have any physical evidence of the existence of these tumours. How often does it happen that we get a sudden accession of severe asthmatic, or laryngeal, symptoms—

spasm involving the muscles of the larynx, or the whole, or a portion, of the muscular fibres of the bronchial tubes. Such cases most of us must be familiar with. The first impression is, that we have to deal with a severe asthmatic seizure, or a case of laryngitis. And how often has it happened that, acting on the latter supposition, the physician has directed his remedies to the relief of this supposed malady. And have not the most accomplished practitioners even thought of proceeding to the operation of tracheotomy, when perhaps the symptoms have suddenly become modified, and have thus indicated their true reflex nature?

How important is it that these facts should be well impressed on our minds, and that we should examine in all its relations this subject of reflex pathological action! It is perhaps not too much to say that, by a careful study of it, we might learn not only to diagnose with greater facility the more obscure affections with which we have to deal, when they are fully established, but, what is of greater importance still, to recognise them in their earlier stages, and at a time when remedial measures might be more successfully used.

Again, I might refer to the importance of a knowledge of this reflex principle in regard to some other diseases; and I would specially single out certain forms of paralysis which are occasionally met with. It is not every case of paraplegia which depends on organic disease of the spinal cord, or of the canal in which it is lodged. There is a paralysis which results from some peripheric irritation, which is altogether independent of any softening or inflammatory action going on in the cord, which will last as long as the exciting cause remains, but which admits often of very speedy cure, when once the exciting cause is removed. Graves relates the case of a sailor who was treated by Dr. Hutton for a stricture of the urethra. There were chills, dysuria, and loss of power over the lower limbs. "A very remarkable amendment took place in his back and lower extremities in a few days after the introduction of a catheter; in fact, it was almost sudden. The paraplegia was soon cured, together with the disease of the urinary canal."

I give this as an illustrative case; but I might refer to others of a similar kind, where paralysis has come on in conjunction with inflammation of the bladder—a case of which kind I have now under my care—abscess of the prostate, nephritis, or enteritis; and where the power over the limbs has rapidly returned without any specific treatment, but merely in consequence of the removal of the original disease.

Again, cases of the following kind must be referred to the same cause. After exposure to wet or cold, or both, loss of power over the limbs comes on, without the existence of any of those symptoms which characterise organic disease of the cord or its membranes. I have had two such cases under my care, and one quite recently. In both instances, there had been exposure to wet and cold; and this was followed by a paralysis, in one patient of the lower extremities only, in the other of all the limbs. There were no symptoms of softening, or inflammation, of the cord or its membranes, nor of disease of the vertebræ. Both cases yielded in a few weeks to simple treatment.

There is one other disease to which I would briefly refer, on which the principle of reflex action has undoubtedly very important bearings. I mean epilepsy. It is probable that the more we know of the nature of this disease, the more we shall see that it is one which will never admit of distinct, specific, and definite cure; but that, depending on various constitutional conditions, each case will require its own peculiar treatment, directed more to the general state of the individual than to any specific morbid condition of the nervous system.

The application of the principle of reflex action of voluntary muscles, to the phenomena of an epileptic seizure, was undoubtedly an important step in explanation of these phenomena; but it by no means served to explain the sudden loss of consciousness in the affection, nor why in one individual a local irritation, either palpable or obscure, should give rise to the clonic convulsions which characterise the affection, whilst in the majority of individuals no such conditions arise.

It would occupy too much time to consider the question of the exact condition of the brain in the epileptic seizure; but, passing over this point, there are some pathological views of the disease which appear to me worthy of attention, especially as I have observed beneficial results follow a treatment directed in accordance with their indications.

Admitting that the epileptic fit is a phenomenon of a reflex character, it is obvious that there must be some centre from which this reflex action proceeds. Now without dwelling at length on the subject, it seems probable that this centre is the medulla oblongata—that in epileptic patients there is some peculiar condition of this portion of the nervous system, which is the cause of the seizures. It has been shown by the pathological researches of Dr. Schroeder van der Kolk, that, in old-standing cases of epilepsy, a *post mortem* examination has revealed a vascular condition of the medulla oblongata. Even if we admit that, in the earlier stages of the disease, there is no increased vascularity, and that the vascularity in these old cases is the result of the repeated attacks from which the patients have suffered, yet the fact of such vascularity existing, shows the tendency for the medulla to become implicated; and we may fairly allow, that supposing the medulla to be the centre from which the reflex action, giving rise to the convulsions, proceeds, any increased vascularity, or alteration in its nutrition, might increase its excitability.

As I have already remarked, I am convinced, from my own observations of the disease, that no particular line of practice will be universally applicable to it; but guided by the pathological views to which I have just alluded, I have certainly found a treatment, which appears to have been very successful in the hands of Schroeder van der Kolk, followed by more satisfactory results than any other I have employed. This consists in the use of such general measures as the nature of the case may indicate, the great point being to keep the blood in a healthy condition, and to regulate the various functions of the body; and further, in the occasional application—especially in some cases where pain is complained of in the back of the head—of one or two leeches, or the use of dry cupping, or of counterirritation in some form, to the nape of the neck.

But what has appeared of more real value than any of these local measures, is the systematic and

prolonged use of a tepid or cold douche to the back of the head and neck, continued for from five minutes to a quarter of an hour every night.

I have thus endeavoured to point out some of the relations of the reflex function of the nervous system, more especially as regards the vaso-motor nerves; and I have shown that we can, through the medium of the function, act on distant parts; that by irritating the skin of one part of the body, we can produce a contraction of the blood-vessels of another part. On this principle, I believe, hinges, in great measure, the value of counterirritation.

For a long time I could not satisfactorily account for the effects of counterirritation; but I now think that a knowledge of the principle of reflex action of the nerves of the blood-vessels enables us, in great measure, to explain the phenomena, and affords us a rational basis on which to ground our practice. Just as, by the application of ice to the neck, or hand, we can produce a contraction of distant capillaries, so, I believe, by the application of other counter-irritants, we may produce a like contraction of vessels, and perhaps the more so, if those vessels are morbidly dilated.

It may be thought that there is no parallel between the sudden contraction of the vessels of the nose, or hand, from the application of ice, and the more gradual effects produced on an inflamed organ by a blister or other irritant; but it must be borne in mind that, in the one instance, the cause is sudden, and produced in all its intensity at once, whilst, in the other, the cause acts more slowly, and its effects are likely to be more gradual.

Further, the vessels in the one case are in a condition of health, whilst in the other they have lost their tonicity and cannot suddenly recover it. Again, although the contraction of the vessels of an inflamed part is an important element in the cure of an inflammation, it is probably only a part; and the reflex action may not be confined to the mere diminution of the calibre of the vessels, but may influence, in other ways, the nutrition of the parts.

Before I conclude my remarks on the relations of reflex action, I wish to direct your attention very briefly to a subject which has long occupied the attention of the profession, and which, at the present time, is undergoing re-discussion. I mean apnœa. And the main points to which I wish to refer are: first, the distinctions we should draw between the apnœa of the still-born, and the apnœa occurring after respiration has been fully established; and secondly, the difference in details of treatment applicable to each.

It is somewhat remarkable that, although the distinctions may have struck those who have given attention to the subject, they have never been practically insisted on, and the same measures for effecting the entrance of air into the lungs of an infant, who has never breathed, have been, and still are, recommended, as in the case of an adult.

It is well known that I have, both in this institution and elsewhere, advocated the use of Marshall Hall's ready method in cases of suspended animation, when we meet with it after respiration has been fully established; and from the numerous instances of recovery which have been recorded, in the case of still-born children, where this same method has been used, its applicability to such cases may appear to be well established.

A little consideration, however, will, I think, serve to show us that, in these latter cases, the method can be of no avail as a direct means of getting air into the lungs. The great feature on which the value of the ready method rests, is this: *that by first compressing the chest, we drive air out of the lungs, and thereby bring into play the elasticity of the thoracic walls, by which means air is drawn into the lungs.*

By alternate compression and relaxation, a constant current of air to, and from, the lungs may be produced; but the *first* step in the process is the expulsion of air from the lungs. Now, in the still-born infants' lung there is *no* air; the air-sacs, the bronchial tubes, and the trachea, are unexpanded; in fact, they are in a perfectly solid state. It is quite obvious, therefore, that no air can be forced out of the lung, and consequently, that the primary step in the ready method cannot be accomplished. It is true, that if respiration have been established, however feebly, the method may be brought into play with benefit, but respiration cannot be commenced by this process.

The case is, however, far different in all instances where the lungs have been previously in action. Here the essential condition for the performance of the ready method exists. Air is present in the lungs.

It appears to me, therefore, that the apnœa of the still-born child and that of the adult differ very materially; and in their treatment, although the same principles may be applicable, yet they must be modified to meet the requirements of each case. In the infant, respiration has to be primarily excited; in the adult, it has to be restored. In the infant, setting aside the question of direct inflation of the lungs, a proceeding of very doubtful value, all efforts should be directed to produce such an impression on the cutaneous nerves as will result in a reflex act of inspiration. In fact, we have to imitate the process of nature; the first inspiration is the result of the impression of air on the surface of the body. If this fail, the child is still-born, and impressions of a more powerful kind must be resorted to. The alternate use of hot and cold water to the skin, the brisk application of the palm of the hand to the back, friction of the chest, even rolling the body, may produce the desired result, a reflex inspiratory act.

And does not actual experience confirm these remarks? I have frequently been told by those who have had to resuscitate still-born children, that the ready method has appeared to them of little or no use; whereas, means calculated to excite reflex action have been most efficacious. It is well that whatever plan we adopt, we should have distinctly before us the objects at which we aim. Those who are familiar with the condition of the infant's lung before respiration has occurred, must, I think, feel conviced that, setting aside direct inflation, nothing can be of any avail to get air into them, except the expansion of the chest-walls by muscular action.

Matico. In consequence of the war in America where matico is in great repute as a vulnerary, and where, for that reason, it is unhappily just now in great request, true officinal matico—the leaves of *Artanthe Elongata*—has become a scarce article in this country.

Original Communications.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page 604 of last volume.*]

The cases of melancholia narrated in the former papers have exhibited—1. Alterations or lesions of the moral faculties as a morbid degree of depression, grief, anxiety, fear, etc.; 2. Alteration or lesion of the psychical or intellectual faculties, as false perceptions, false conceptions, illusions, delusions, etc.; and 3. Alterations in motility; but, so far as we have yet gone, only an excessive motion or restlessness has been illustrated. There are cases in which the prominent feature is a lesion of motility, but which consists in an indisposition to move—in torpor of movement. Cases of this kind are next to be detailed.

Bearing in mind that the lesion of the moral faculty appears to be, as it were, the starting point or groundwork of the disease, it would appear that cases are to be met with in which the whole of the phenomena seem to be confined to this division of the mental faculties, while in other cases this groundwork is involved with one, or chiefly with one, of the other subdivisions. On the one hand, we meet with cases in which the motility is scarcely affected; or, on the other hand, we find cases in which the psychical functions appear but very partially implicated. It is a common cause of surprise to the friends of melancholic patients that the melancholic talks or writes quite rationally or coherently; that he is quite correct in memory; or that he argues as acutely as ever. When, however, there is torpid condition of the motility, the patient, though he often retains his intellectual powers nearly intact, bears the expression of the lowest degree of dementia; the features are dull and heavy. The French call this form *melancolie avec stupeur*. The next case is of this kind, and the intellect proper was only partially implicated.

Case ix. A. K., aged 34, married, wife of a butler, was formerly a lady's maid. She lived, previously to her marriage, eleven years in one place, and married the butler. This appears to have been an unfortunate match. The family made frequent inquiries about the patient. The husband has taken very little interest about her. He attributed her disease to stubbornness; and requested by letter that she might be treated with firmness and "well routed." The medical certificate accompanying the order of admission gave the following description of the patient just prior to her reception:—"She sits weeping and miserable; says she has broken her husband's heart; that she is better without food. Her landlord and fellow-lodgers found her in a state of complete exhaustion from want of food. The children also appeared half-famished. She declares she heard voices forbidding her to eat or drink, or light fire, or go to bed."

In this hearing of voices there was evidence of distinct intellectual or psychical disturbance. It never, however, manifested itself afterwards.

On admission (Oct. 21st, date of disease uncertain), she conversed quietly and correctly, though in a weak tone of voice. She said she had been living in London with her children in a lodging. She had no headache. The tongue was much furred. The bowels were confined. She took beef-tea only for dinner. She had no thirst. Pulse 60, feeble. There was no cough, nor any morbid chest-signs. She was ordered full diet, one egg, and two glasses of wine daily.

Oct. 24th. She was up; was pale, but had considerable turgescence of the vessels of the conjunctiva. The tongue was red; bowels not open. An aloetic draught twice a day was ordered.

It will be sufficient to describe the progress of the case by entries taken at the different epochs. During the first three months, she continued constantly depressed; was always more or less indisposed to exert herself; would not dress herself. She declined in strength, but made no complaint. During my temporary absence from home, her head was shaved and blistered without apparent benefit. The bowels continued obstinate; but she would seldom take an aperient; and she occasionally refused food.

Jan. 8th (three months after admission). She varied from day to day. One day she refused all food, and said she did not require it; that she could do without it. Another day she ate ravenously. The bowels seldom acted. She refused medicine. She emaciated visibly. Pulse 70, regular. There were no cough nor chest-symptoms. She was always listless and depressed. The expression of the features was dull and heavy.

Jan. 13th. Her mind was in the same state; but she ate ravenously. She would gorge herself if not watched; she filched the meat from the other patients' plates.

Jan. 20th. She again refused food. She sat moodily in one position for long periods. Her features were dull and expressionless. She allowed the nasal secretion and saliva to dribble from her as she sat.

Feb. 10th (four months after admission). Motility was still more involved. She sat for long periods in one posture, apparently indifferent to all around, and too lazy to move. She was like a statue in immobility; but the attitude was expressive of hebetude. She hung her head; the features were relaxed, and did not change; her arms dangled by the side of the chair as she sat. The secretions were dropping from the mouth and nose, and the lacrymal secretion had dried upon her cheek. The breathing was slightly accelerated. Her bowels were confined. She was at the present date eating largely. Three grains of podophyllin were ordered.

Feb. 26th. She was moving down the gallery at a snail's pace. Her head was drooping, and her arms hanging heavily by her side. Her dress was neglected. She had not menstruated since admission. Compound iron mixture was ordered.

March 2nd. She would not take the medicine; was still more dull and heavy. She stood about in one position, obstructing the passage, and did not move to allow one to pass. She appeared motionless and statue-like. Her arms and head drooped. The saliva and nasal secretion dribbled from her. She dropped her fæces about, and wet herself as she stood. She never attempted to dress or wash herself. The pulse was 60; the circulation appeared torpid; the nose and lips were purplish; the hands cold and puffy. At times she would eat, and at times refused food for days together; she had, however, gained flesh.

March 9th. She asked voluntarily for some paper, and sat down and wrote a letter to her sister, requesting her to send her some needlework. The letter was correctly worded and spelt; but rather less neatly written towards the close; and it was without signature.

Great improvement in the appearance of the patient took place from this date, and increased. The work was sent, and she took to it at once.

163*rd day* (*or five months*). Her expression was greatly improved. She was now quite animated. The

features had undergone such a change that she was scarcely recognisable. She was tidy, cleanly, cheerful, and disposed to be rather mischievous, playing tricks upon the other patients.

The sudden amelioration of the symptoms in cases of melancholia is not uncommon.

However, from the above date, the progress towards recovery was less satisfactory. The patient continued to work well at her needle. Her health improved; menstruation became re-established. On several occasions she exhibited libidinous feelings, as shown in watching the workmen and following them whenever she could get the opportunity. She wrote several times to her relations; her letters were correctly and clearly indited. She has had one or two attacks of hysterical character; and has been more than once again depressed for a short period.

She is still in the asylum; and is now, at about the 400th day of residence, passing gradually into a state of mental imbecility.

The case illustrates the degree to which the torpor may be present, giving the appearance of dementia, while the intellect is comparatively but little affected. It is also an example of the occurrence of erotism in a melancholic, which is the form of insanity in which that symptom is most frequently connected; and it illustrates also the suddenness with which the symptoms of melancholy sometimes pass off.

The following case is one in which the motility was still further implicated; but the intellectual faculties were less free than in the foregoing case.

Case x. A. L., aged 32, married, the wife of a fruit-hawker; had had two children, the youngest of whom was 12 years old. Her education had been very moderate. She was of sober habits; and was said to have been insane two years and a half at the time of admission. The affection was attributed by the parents to the ill-treatment of her husband, who, when drunk (which was frequently the case), was in the habit of beating her savagely. She had been separated from him during the same period of two years and a half. The mother, a country labourer's wife, gave but an imperfect or confused account of the symptoms. She said that when her daughter was first taken, she appeared silly or simple; and soon afterwards became slovenly and neglectful, and then very timid. She "was afraid to be left in the dark, and said she was going to be killed." These symptoms, thus described by this peasant, were probably the usual first signs of melancholy—dulness, listlessness, carelessness, and neglect of home, morbid apprehensions, and imaginary dangers. At the end of two years and a half from the commencement of the symptoms, the patient fell down in a severe fit; "she fell, foamed at the mouth, and struggled much." She begun immediately afterwards to show a further alteration in her conduct. "One Sunday she went from pew to pew and shook hands with everybody, gentlefolk as well as poor people." Her morbid fears continued; she still imagined she was going to be destroyed, and became afraid to go to bed.

Note on Admission. March. She was feeble. Her manner was strange; but she was neither depressed nor elated. She was quite quiet; appeared harmless. At times she sat listlessly for some hours. She seemed disinclined to speak.

She continued in this condition for several weeks. She had several slight attacks like syncope, at intervals of two or three days; but without convulsion. This continued through April and part of May, when she refused food for several days consecutively. In June, she had several attacks of excitement, but without any act of violence. In one of these attacks, she stripped herself quite naked in the airing-court, and appeared to be in a state of ecstasy. The features, however, expressed dulness and hebetude. At times she was taciturn; but at times, as it were by a sudden impulse, became talkative and voluble. She said, on one of these occasions, that she conversed with God; that God told her this or that; and occasionally made use of disgusting language. In some of her paroxysms, she appeared in a semi-cataleptic state. She had several of these attacks, which appeared to have at first all the characters of feigning. In one of them, however (on August 10th), their character was placed beyond suspicion; and she was removed back to the infirmary. The note, which is brief, says that on this day she lay as she was placed. She had scarcely moved since she was put to bed some hours ago. If placed in another position, she continued in it for long periods. When the hand was lifted up, it was slowly drawn back. She had passed a large quantity of urine. She drank much. Her appetite was indifferent. She took food as it was given, and answered questions when spoken to. This state of indisposition or indifference to move lasted six or seven days. It was succeeded by a state of mental excitement. She made numerous frivolous complaints, and behaved with an air of contempt towards the nurses. The cataleptiform seizure being at about the fifth month at the date of five and a half months, the following change occurred.

She was strange in her conduct to-day. She had been excited, and jumping about in a grotesque manner. She spoke in an incoherent strain, and addressed imaginary persons. Her talk was chiefly in blame directed against her husband. She was somewhat grandiloquent, and said, in a preaching kind of tone, "The water follows me," and "The sun follows me," etc.

Six days later, the entry is: "Puts herself into constrained postures, which she maintains for long periods; *e. g.*, rests on her toes and knees, and on her vertex; and says it is when she prays that she does this. At times she sings, and repeats the words of her song correctly from memory."

Seventh Month from Admission. The same peculiarity of the motility continued. She usually sat in one position and in one place, and did not move till she was told. She moved to the dinner-table only when told. She began to eat when directed, but not before. Her attitude was often very obviously an uncomfortable one, but she did not alter it unless bidden. Her bladder was one day found to be enormously distended; and when questioned about it, she said no one had told her to pass her urine; and, on being told, she passed, according to the rough estimate of the nurse, nearly half a gallon. The pulse was 84. She took her food well. Her bowels were open; but she emaciated slightly.

During the eighth month, but slight variation in the above condition took place. About the middle of the month, she complained that she could not remember her catechism, and was much annoyed and excited about it.

Ninth Month. The motor symptoms continued. She sat in an awkward posture, like an image, and without moving for very long periods. She allowed the flies to feed on her face and hands undisturbed, and said they wanted food as well as she herself. She waited to be told to pass her urine; and, if not told, she wetted the bed or her clothes. She took her nourishment well, and assisted as before, but always waited to be told.

About the tenth month, she was visited by her mother, who brought her a bible; and she was considerably excited about it; put the book on the fire, and said there were lies in it; that God was unjust; and upbraided God that she had become dirty in her habits. The statue-like immobility continued.

About the eleventh month, she fell in a well-marked epileptic fit, in which she was much convulsed. One week afterwards, she began to show a difficulty in articulation; she stammered, but protruded the tongue well. This difficulty gradually increased. She was quite conscious of the change, and complained of it. She complained also about this period of occasional headache, and a sensation in her arm which she called a jumping of the bone.

After this, she became gradually excited, and disposed to be violent. Her movements were stiff and slow. The excited conduct extended from the eleventh to the fourteenth month from her admission. Her general health was not greatly impaired; she took her meals, and retained her usual amount of flesh. She had no return of fit. On May 10th (fourteenth month after admission), she was, after a day of great excitement, taken with vomiting. The bowels were also confined. She would not take medicine, but was relieved by an enema. A few days afterwards (May 14th), she became libidinous in her actions.

May 15th. She continued very excited; threw herself about in a wild manner and somewhat indecently. The skin was moist, and emitted an extremely offensive odour.

May 17th. She had a restless night, and had a very violent fit this morning. At my visit about 2 P.M., she had a second fit, from which she did not rally. She died in the convulsion; the face being flushed, and the limbs contracted.

[*To be continued.*]

DIPSOMANIA.

By F. D. Fletcher, Esq., Liverpool.

[*Read before the Medical Society of Liverpool.*]

Among the many evils produced by drunkenness which come under our notice in the practice of our profession, not the least is the origination of that morbid state of mind and body to which the title of Dipsomania has been assigned.

I propose now to make some observations as to this condition; in reference to its characteristic features; the manner in which it is occasioned; the course which it runs; and the treatment by which we may attempt its cure.

The special symptoms which characterise this form of mania are, I think, as distinct as those which mark the individuality of any other form of monomania. The maniacal tendency to drink is as evident in the dipsomaniac as is the maniacal tendency to kill, to burn, or to steal, in the homicidal monomaniac, the pyromaniac, or the kleptomaniac. I may be asked, perhaps, what we are to understand by this general term of maniacal tendency, and I reply that I hold that tendency to be maniacal in its character which has acquired such power over an individual as to completely subjugate his will—so that in obedience to its impulses he will act in direct opposition to the dictates of his judgment, his instincts, his interests and his own desires. I do not consider a man maniacal whose conscience and judgment are simply silenced for a time by the voice of his passions, and who for a time surrenders himself voluntarily to their misguidance; but I do consider that man to be maniacal who, with his conscience and judgment alive and active, has a will so powerless that he is at the mercy of every influence brought to bear upon him.

I do not profess to be able to draw a line which shall exactly mark the boundary between that condition in which a man does evil of set purpose and that in which he does evil in spite of himself; but I think that facts bear me out when I assert that there is such a psychological condition as that which Coleridge described, from his own experience, as "paralysis of the will," and in asserting further that the place and influence of the paralysed will are usurped by other powers that act upon the mind and soul. It has often seemed to me that between our physical and psychical natures there is this analogy; that, as the physical part of us when its power is at a low ebb becomes susceptible of morbid influences which, at other times, and when its vigour is in full force, pass over it and produce no effect, so when the psychical part of us (which I take to be synonymous with the moral part of us) sinks low in depravity, it also becomes the helpless subject of forces of evil which are powerless against a nature which breathes a purer moral atmosphere and lives in a higher moral condition. Now to apply these general principles to the particular class of cases before us, I think that those who have many drunkards brought under their notice, and who inquire into their natural history, will see that they are divisible into two great general orders—those who drink because they like to do so, and those who drink because they cannot help it. I use the term drink generally, but I should of course group habitual opium eaters along with dipsomaniacs.

Inquiring into the causes of drunkenness, I find that by far the larger number of those who come under my notice at the workhouse ascribe the commencement of their debauches to drinking just because they are in a drinking company, or to drinking to drown care. A smaller number cannot say why they drink, and some acknowledge that having once begun they cannot stop.

It seems that there must be some constitutional difference of a physical nature and independent of the moral condition, which determines the desire for stimulants which we find in some people and the indifference to them that there is in others. Drunkenness does not always accompany moral degeneracy. We find some men who are neither moral in their habits nor scrupulous in their associations, who live in the society of those who drink, and who yet themselves do not drink. We find others whose moral character is good, whose associations are good, and in whom, nevertheless, there is a tendency to drink sometimes heroically vanquished, at others tyrannously asserting its power, over-mastering the most solemn resolutions and driving its victim into excesses to which he looks back with loathing and shame. Again, among drunkards themselves there is likewise discernible a fainter trace of the same diversity; there are among them the habitual deliberate drunkards, who can go to bed drunk every night and yet be up and fit for work every morning; and the impulsive, occasional drinkers, who, when once fairly launched on a debauch, can no more stop themselves than they can arrest the wind or tide.

How is this condition occasioned? At times we get clear proof of the hereditary transmission of this tendency from parent to child, coming out sometimes in the precocious appetite which some children manifest for stimulants, but more frequently evidenced by the later development of intemperate habits in successive generations of the same family. In some cases where drunken habits infest certain families, it may be difficult to say how much of the bad result is due to bad example and bad training; but we do find occasionally the drinking propensity developed where there has been no cause to blame the example offered to a child or the training to which he has been subjected. It is, however, but in a minority of cases that we can prove the hereditary transmission of this taint; far more frequently we can trace the course of the patient's drunkenness upwards to its source, and ascertain how the tendency has been acquired. We may find three distinct stages in the patient's history;

the first, in which his will had its full power and kept the passions in check; a second, in which the power of the will was impaired but not lost, and when he struggled with various alternations of success and failure against the temptations which beset him; and a third, in which the will had surrendered at discretion, all self-control had been lost, and in the full development of dipsomania he had become less amenable to reason and conscience, and more thoroughly a slave to mere appetite than a brute.

As a classical example of the inherited form of this disease I would instance the case of poor Hartley Coleridge, and of the acquired form that of the still more miserable Branwell Bronte, brother of the author of *Jane Eyre*.

Are we to consider all habitual drunkards as dipsomaniacs? I think not. A man who habitually drinks and who as a result only habitually gets drunk —whose senses return to him as often as the drink dies out of him, must be a very bad man, but may not be a mad man. Again and again I have noticed the fact that an overdose of alcohol which makes one man drunk will make another man mad. But it may be asked is not every drunken man mad—for a time in a condition of acute dipsomania? I think that the evidence points the other way. In simple drunkenness the old proverb comes true—"in vino veritas." The man's whole powers are in a state of unnatural activity, his passions are uproarious, their din drowns the voice of his conscience, and the real animal such as he is, when unrestrained by moral laws or conventional decencies, comes clearly into view. The same features which distinguished his character when sober are discernible when he is drunk, though it may be in an exaggerated and distorted form. But in another class of men there is something widely different from this. A few glasses of wine make the man truly "a man beside himself," make him a being as different from his former self as darkness from light—produce not drunkenness but mania. He does not go reeling through the streets, he does not go helplessly off to sleep. He is excited truly, but you have not the exaggeration of his own character but the development of another; "all that was intellectual has become devilish, all that was animal has become beastly." His mania may manifest itself in mere recklessness; in the manner he will stake hundreds or thousands on a game at "blind hookey," or the prodigality with which he will stand champagne all round for all chance comers. Just as frequently it shows itself in wanton destructiveness or blind ferocity. A man will go home from the public house and smash his windows or his furniture, or possibly his wife and children, if they happen to be the articles that come most readily to hand. There is further a difference noticeable in the secondary effects of prolonged excess, which results in some cases in delirium tremens, in others in fixed hallucinations without the sleeplessness tremor and depression of delirium tremens. Now though I cannot assert that the two classes of cases which I have described are divided by a sharply defined limit; still I think that evidence warrants the assertion that alcoholic intoxication eventuates, in some cases, in mere excitement, followed by corresponding depression, and that again by delirium; and in others it ends in the production of distinct mania.

It may not be out of place here to mention that analogous phenomena are sometimes met with among the effects produced in different persons by the fever poison, which occasions in most a confused delirium, but in some gives rise to acute mania; so that occasionally cases under my own notice have seemed to be those of simple mania till the appearance of the fever rash has revealed their true character. I believe, then, I may fairly assert that there are two distinct sets of causes of drunkenness and two distinct kinds of results; that one set of men drink because they like it—they are drawn into drunkenness; another set drink to appease a craving which over-masters their will—these are driven to drunkenness; and that drinking results in some men in making them drunk only, in others in making them mad as well as drunk.

As illustrations I may quote two cases that have come under my own observation. A. B., a professional man, first seen under the secondary effects of drink, had no distinct delirium tremens, very slight delusions if any, was very violent and outrageous at times, but there seemed this method in his madness, that all his extravagancies and outrageous behaviour were just means to an end, simply employed to make those about him uncomfortable until they got him something to drink. I was informed that his father drank himself to death; that the patient had many years since manifested a strong tendency to drink, becoming at times uncontrollable; that his drinking bouts had become more and more frequent since the death of his wife. He had reduced himself to the most miserable condition, could neither eat nor sleep; he simply lay in bed and drank; sometimes to the extent of a quart of brandy in a night. As the result of this he had sunk into a condition like that of a patient in pyæmia or some other blood poison disease, with a cold skin, small thready pulse, almost constant vomiting, very slight delirium, but a constant cry for drink. Under the use of small, frequently repeated doses of morphia, the superintendance of a keeper, with the disuse of stimulants and the careful administration of food, he soon recovered. I then advised, as his only chance, complete abstinence from all stimulants. This advice he followed rigidly for some time; but now it became evident that he really did get thoroughly out of condition on the teetotal plan, that he lost flesh and became subject to the development of boils and carbuncles. I dared not advise him to resort again to any form of alcoholic drink, but earnestly counselled him to get away from town and to put himself under treatment at some hydropathic establishment, where he would be away from the temptation of drink, and where the change of air and scene would soon tide him over this period of depression. Unfortunately this advice was not followed. He began to take a little porter, thinking that he could keep to that and avoid spirits. The fallacy of this idea was only too soon made manifest, the old habit reasserted its supremacy, and even with more vehemence than before; all the old symptoms were reproduced, and brought with them a new one—epilepsy, a symptom which I have learned to dread more than any other, when it comes as the result of long-continued drunkenness. It was evident that no means were likely to be beneficial while any personal liberty remained to him, and he was therefore removed to an asylum, where he speedily recovered his health and strength, and whence, after about three months, he was discharged quite well. For a time he then went on steadily; but, as before, the old feeling of want of some support besides food, the old craving for drink, returned, and again he sank into a condition like that already described. He was again committed to an asylum, but this time the epileptic symptoms gained a fuller development than before, and proved rapidly fatal.

Another case recently under my care is worth notice, as an instance of the acquired tendency to drink. A lady, aged something more than fifty, a widow, first sent for me for what she termed a bilious attack. Under very simple treatment she soon recovered from her "bilious" symptoms. These, however, returned two or three times in a manner that somewhat puzzled me and made me suspect some unacknowledged cause. At last I was surprised

to find one of these attacks eventuating in distinct mania, the cause for which was betrayed by the discovery of a small battalion of empty gin bottles in her cupboard. I found that in her case no tendency to drink was perceptible, till some time after one of her confinements, when, being rather low and weak, she was ordered a certain quantity of stimulant as part of her regular diet. It unhappily occurred that her husband was a good deal out, and she therefore a good deal alone, and by degrees she unfortunately found how her solitude was rendered more tolerable, and her depression of spirits mitigated, by an extra glass or two. The habit thus acquired strengthened by degrees its hold upon her, till her reason for a time was completely unhinged, and she became for about six months an inmate of an asylum. Here she happily acquired the art of living without stimulants; for a long time never tasted a drop, and was, according to her own account, never better than during this period. In this respect especially this case differs from the former one; the patient made no excuses on the score of any alleged necessity that she felt for it, but said that a craving she could not explain, and that overpowered her strongest resolutions, drove her to drink. Happily for her, any large amount of spirit at once gives rise to considerable stomach disturbance, ending in violent vomiting and purging. In the last two attacks, both induced by brandy drinking, there have been no head symptoms, and only those referrible to the stomach. She is now, I hope, keeping well, having most strenuously promised to be a strict teetotaller. How long this reformation is to last, however, I feel no certainty whatever.

One phenomenon in fully developed cases of dipsomania is the progressive deterioration of all the faculties, physical, intellectual, and moral. Conscience seems obliterated, and nothing is more marked than the loss of all truthfulness, and the acquisition of an actual talent for lying.

What can we do to prevent and to cure these miserable cases? Their prevention is only likely to be accomplished by the gradual spread of sounder ideas than appear to be generally current as to the use and abuse of stimulants. I do not think it likely that there will ever come a time when wine and strong drink shall be banished from our dietaries and immured in the pharmacopœia; but I do think it both likely and desirable that a time should come, and that speedily, when though we may profitably use these things as we use our food, yet we shall have outgrown those barbarisms and superstitions the remnants of which keep up a few of the old drinking customs which have been the curse of this and other northern nations. As to their cure two things have to be attempted—1, to relieve that physical depression which originates in some the craving for stimulants; and 2, to rouse the will to assert its rightful supremacy over the man. With regard to the first of these I need offer no advice to an audience such as this. With regard to the second, if in the early stage of the disease we can succeed in influencing the will, *viâ* the conscience, if we can make the patient determine that he will die rather than drink, we have a gleam of hope that we may check the tendency before it has acquired the mastery which a mania possesses when once inaugurated. But suppose we fail. Well, if the patient cannot restrain himself, we must perform that necessary function for him. Here we come to one of those practical difficulties which beset every thing that ought to be done—that of deciding when it is morally right and legally safe to deprive a man of his liberty, if he is mad upon one point only, and that drink.

As the law appears to be now generally understood, we must be able to allege some overt acts of the patient over and above the mere maniacal drunkenness in order that he should be committed to the safe custody of an asylum. We are thus cut off in many cases from the possibility of enforcing sobriety in the early stages of the malady, when some permanent good might be expected to result. Under present circumstances, also, the subjects of this mania are liable to be discharged from confinement very soon after they return to apparent sanity. This is in most cases at a period when their maniacal tendency is far from being eradicated, and is only repressed by the restraint which has been enforced. What can we do, then? If we are convinced that dipsomania is as real a morbid condition as melancholia, if we believe that, like other forms of mania, it is most likely to be cured by keeping the patient from scenes and circumstances which favour the growth of the ideas whose morbid development determines the specific form of his mania, we shall claim for the victims of dipsomania the same advantages which we accord to other mischievous monomaniacs. These others are not so unfortunate as to be left at large, nor is the fatal gift of liberty thrust into their possession as soon as the obtrusive symptoms of their maladies subside. No, they are as happily for themselves as for society, secured as soon as their monomania is distinctly developed, and they are retained in safe keeping till there has been time for morbid ideas to loose their hold, and for the mind to regain its vigour. We all know that in cases of homicidal monomania especially, imprisonment during her Majesty's pleasure, being interpreted into fact, very frequently signifies precautionary confinement for life. If it be possible for us to inaugurate a wise and successful plan of treatment for these cases, we shall rescue many a life from a miserable and disgraceful close, and save many a family from the penury in which they would otherwise be plunged by the recklessness of a madly drunken parent.

I would suggest that means should be taken to ascertain what amount of dipsomania really exists, and whether it exists in such amount as would render justifiable the establishment of special legal regulations for the treatment of the victims of this mania; that the proof of an uncontrollable tendency to drink should be held by itself to legalise the confinement of the individual; that the necessity of restraint for some time after apparent recovery should be recognised by the Commissioners of Lunacy, and its enforcement authorised; that in cases of relapse this period of probation should be at least doubled every time that a patient is readmitted.

If it be objected that provisions such as these interfere with the liberty of the subject, I at once admit that they do; but, I ask, do they interfere more than humanity and common sense demand? If a man's liberty is incompatible with the well-being of society, or even incompatible with his own safety, we rightly take his liberty from him.

But there is yet one other way which has been tried, and I believe successfully in America and in Scotland.* Many a maniac is conscious of the impotence of his will to resist the impulses which sway his feeble mind and voluntarily surrenders liberty. Many dipsomaniacs may feel this too, and I believe that were reformatories for drunkards established in this country, many a one might be snatched from his doom.

Gentlemen, we all know that the cases to which I have referred are not few and far between—are not limited to any class of society. Which of us has not seen them blighting the families in which they occur, planting a sorrow more bitter than that of those who mourn for the dead in the hearts of those to

* I am informed that in the Isle of Skye and some other of the islands of Scotland, patients *who are willing to place themselves under treatment* may be kept from the temptation to obtain drink, without subjecting themselves to anything like the restraints of an asylum.

whom the victim is dear? Which of us has not seen men, or still worse women, possessed by this impulse, descending swiftly, and only too surely, that easy slope which leads from one level of degradation after another lower and lower to the dark waters of a hopeless death.

These cases come fairly within the range of our discussions. They demand, *I* think, our very serious consideration. Their prevention and their cure demand our most earnest efforts.

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

TWO CASES OF MEDIAN LITHOTOMY: ONE RECOVERY: ONE DEATH.

By Frederick James Brown, M.D., Rochester.

[*Read at Maidstone, Oct.* 30, 1863.]

Case I. Thomas F., aged nearly 2 years and 7 months, residing in Delce Lane, Rochester, was seen by me and sounded for stone on April 23rd, 1862. The child had been suffering for seventeen months from decided symptoms, which commenced suddenly one day after the return of the child from the fields in which it had been playing.

The sufferings were severe; so much so as to cause the child to tear its hair and to scream on the passage of the urine and of the fæces. No blood was ever passed except when the sound was used by the surgeons that were consulted on his case.

I operated on the child at 3.30 p.m., on April 28th. Chloroform was administered with excellent effect by Mr. Fayle. I was further assisted by my brother John and by Dr. La Fargue. I used Millikin's No. 1 staff and Poland's forceps. I performed Allarton's operation. The large size of the stone made it necessary for me to introduce a probe-pointed bistoury and to incise the prostate on one side. I then introduced a larger pair of forceps and extracted the stone. The child soon recovered from the effects of the chloroform, and was removed to bed. The size of the calculus was one inch and a half in length, one inch and an eighth in breadth, and thirteen-sixteenths of an inch in depth. The weight was 270 grains. The surface was tuberculated in some portions, smooth in others, and the colour was yellowish and clay-coloured. The composition appeared to be a lithic acid nucleus coated by lithate of ammonia.

At the evening visit, the child was found sleeping, waking up at intervals and crying for a few moments. There was no vomiting and no hæmorrhage.

Next day, the child was visited at 7 a.m. It had slept through the night, but had been light-headed. The urine had passed freely through the wound.

Vomiting commenced early in the morning, and was increasing in urgency. The vomited matter consisted of mucus; cold water alone was retained. The abdomen was swollen. Calomel and fomentations were prescribed. The child changed for the worse at ten o'clock, and was found in a moribund state at 3.30. Death occurred at 4.40 p.m.

Post Mortem Examination, twenty-six hours after death. The abdomen was distended by gas within the intestines. There was redness of the small intestines; and effusion of lymph on the most prominent portion of intestine near the umbilicus. The rectum was uninjured, and free from inflammation. The *cul-de-sac* between the rectum and bladder was free from injury and from inflammation. The bladder was contracted and perfectly empty. No fragments of stone were found within its cavity. There was a violet tint on some of the folds; but the mucous membrane was firm and free from laceration. The walls of the bladder were hypertrophied; but they were healthy in structure. There was a bruised opening in the anterior part of the bladder, insufficient, in the dead state, to let the calculus pass through it. There was no extravasation of blood or of urine within the pelvis. The wound in the perinæum was in excellent condition.

The death-certificate was thus worded:—Calculus vesicæ, seventeen months; median lithotomy, twenty-four hours; peritonitis, twenty-four hours. *Post mortem* examination.

Remarks. The remarks that I have to make on this case, relate to the duration of the complaint, the size of the stone, and the cause of death. The child suffered severely for the entire period of seventeen months, during which time the stone came to occupy the cavity of the bladder fully when this viscus was empty. The size of the stone was so great that it was impossible to remove it in an entire condition without injury to the fascia attached to the neck of the bladder, yet there was no extravasation of fluid. The cause of death—namely, peritonitis—and the early period of death have been noted as usual in the extraction of large calculi from children.

Case II. William M., aged 3 years and 7 months, residing at Hoo, was brought into Rochester to be operated on for stone. I performed Allarton's operation on August 18th, 1862, at 5 p.m., assisted by Mr. Fayle, Mr. Hutchins, and my brother John. The symptoms had been present for eighteen weeks, and the sufferings had been severe. The child was in the habit of screaming twenty times in the night, or oftener, so as to disturb the neighbourhood. The rectum and bladder were very irritable. No blood was ever passed.

Chloroform was administered with good effect by Mr. Fayle. Millikin's staff No. 3 was used. When the finger was introduced into the bladder, the calculus was felt to be at the fundus. A short pair of forceps was used successfully after failure with a long pair. The calculus was extracted without force. The child was pale after the operation, and in a state of stupor, from the effects of the chloroform. Cold water was freely used. Silvester's method of artificial respiration was employed. The child soon recovered consciousness, and was removed to bed. The calculus measured fifteen-sixteenths of an inch in length, three-quarters of an inch in breadth, and half an inch in depth. It weighed sixty-three grains. Its composition appeared to be a lithic acid nucleus coated by phosphates.

The child was visited at 8.30 p.m. He had vomited at eight o'clock. He occasionally cried out from pain in the back and in the abdomen. Urine tinged by blood had passed through the wound. Tenesmus and dysuria were present. Flannels wrung out of hot water were applied to the perinæum.

August 19th. The child was found to have passed a good night, sleeping at intervals; but he cried out when urine escaped by the wound. There was no vomiting and no bleeding. The wound presented a healthy appearance, with its edges in close approximation. Milk and arrow-root diet were ordered.

Evening. The bowels had acted once, and the urine had passed freely through both the meatus and the wound. The child had been pulling at the penis to relieve the scalding pain caused by the passage of the urine through the meatus. There was some pain in the abdomen; but there was no swelling. Mercurial ointment was ordered to be applied to the abdomen.

August 20th. The child had passed a good night,

but was feverish. The abdomen was free from pain and tenderness. The urine escaped partially by the meatus.

Evening. The urine passed entirely by the meatus, causing great pain.

August 21st. He was progressing favourably, but suffered much pain. The child writhed and screamed on micturition.

August 22nd. The child was down stairs to-day. The wound was healed to within a few lines of the surface.

August 23rd. The child was running about out of doors. There was no pain on micturition in the upright posture; but considerable pain in other positions. Meat-diet was ordered.

Sept. 1st. There had been no drawback since the last report. The child was discharged cured, and returned to his home at Hoo.

CASES OF LITHOTOMY.

By Frederick Fry, F.R.C.S., Senior Surgeon to the West Kent Hospital.

[*Read at Maidstone, October* 30, 1863.]

Case 1. *Metal Catheter breaking in the Urethra, leaving three inches, which slipped into the Bladder: Operation: Median Lithotomy: Successful Result.* On the evening of Sunday, June 14th, 1863, John Glover, aged 63, came to the West Kent General Hospital, having a short time before met with an accident in using on himself a metal catheter. He is a small, but strongly-built and healthy-looking man, having for very many years been employed as a huntsman. He said that for nearly twenty years he had been afflicted with stricture; for the greater portion of which time he had been in the habit of passing an instrument for himself. The portion of catheter produced by him bore traces of long usage, and had been repaired in one or two places, at one of which it had at last unfortunately given away whilst he was the act of withdrawing it. The separation had taken place just at the commencement of the curved portion, leaving about three inches behind. His perinæum was immediately examined; and the end of the piece could be distinctly felt in the first portion of the urethra; but, unfortunately, whilst his legs were being raised for the purpose of cutting down on it, the end which projected into the bladder seemed to have been tilted up and it slipped into the bladder. Its presence in the bladder did not appear to occasion very much pain or distress, so that he was carried to bed, and passed a tolerably comfortable night, being able to pass urine with tolerable freedom.

June 15th. Very little constitutional disturbance seem to have resulted as yet. The urine was passed frequently, but with very much difficulty. After standing, it deposited a thick, ropy mucus, which it seemed to have done, from the patient's report, more or less, for some time. It did not look bloody; but a small number of blood-corpuscles were rendered visible by the microscope. The bowels had acted freely.

June 16th. His constitutional condition continued much the same; though the calls to micturate were rather more frequent, accompanied by considerable mental disquietude. He was ordered an enema; and it having been decided that the fragment should be removed without further delay, the patient was put under chloroform, and Mr. Fry proceeded to perform the median operation of lithotomy, as being the operation most applicable to the case; the size of the body to be withdrawn (the weak point of that operation) here, not being a subject for conjecture. A staff deeply grooved along the convexity having been introduced, an incision of about three-fourths of an inch was made into the mid-line of the perinæum, a little above the anal aperture; and the membranous portion of the urethra opened immediately in front of the apex of the prostate; and through this opening, the finger was gradually inserted along the staff into the prostatic portion of the urethra and neck of the bladder gradually dilating these parts; the bladder proved rather difficult to reach, owing to the great depth of perinæum. This having been got over, and the piece of catheter felt lying contiguous to the neck of the bladder, with its long axis placed transversely, a slender pair of polypus-forceps were passed guided by the finger, and Mr. Fry succeeded in his second effort in grasping the end of the fragment and quickly withdrew it, when the patient was returned to bed. Very little blood was lost during the operation. The patient suffered no ill effects from the chloroform; and continued to be very comfortable till about five hours after the operation, when he became somewhat feverish, and complained of great heat of the perinæum and tenderness over the lower portion of the abdomen. This was found to be due to a stoppage of the wound by coagula; which being cleared away, and a warm fomentation applied to the abdomen, the urine passed freely by the perinæum; and an opiate having been administered, he passed a fairly comfortable night.

June 17th. Pulse 89, of fair quality. He took his beef-tea freely. The tongue was clean. The abdominal and perinæal tenderness was much diminished. The wound looked clean and healthy, and urine came freely through it. He had also passed a small quantity *per urethram*. The sedative draught was repeated.

June 18th. He passed a pretty good night. The urine came chiefly through the urethra; during the day it gradually ceased to come either way, and his discomfort considerably increased. Pulse 90, weaker. He took his beef-tea freely. He was ordered to have six ounces of wine in the twenty-four hours. He experienced a sensation as of urine passing through the urethra, but voided none.

At the evening visit, a No. 8 gum-elastic catheter was easily passed, through which about six ounces of very thick and offensive urine were evacuated, with evident relief to the patient. It having been thought that the enlarged prostate, favoured by the recumbent position, occasioned a lodgment of water at the base of the bladder, it was determined to plug the catheter and allow it to remain; taking care to empty the bladder at short intervals. The sedative draught was repeated; and he was ordered to have an aperient draught in the morning.

June 19th. His general condition was much the same. He passed a very tolerable night. The tongue was clean. He was allowed a little meat for his dinner, and strong beef-tea *ad libitum*. The bowels were freely moved. The urine passed through the catheter; was acid in reaction. The wound looked healthy; but contracted very slowly. The catheter was withdrawn, to be passed thrice in the twenty-four hours. The scrotum had almost lost the ecchymosed appearance which it had assumed the day after the operation; but he complained of great tenderness of the right testicle, which was slightly enlarged.

June 20th. He passed a rather restless night. Pulse 86, weaker. The tongue was slightly furred. The urine was very offensive, particularly that which was drawn off by the catheter. The wound looked clean and healthy, and contracted slowly. He was ordered to have two grains of sulphate of quinine three times a day.

June 21st. His general condition was much the same. The bladder was this morning washed out

with tepid water through a double current catheter, bringing away a large quantity of very offensive mucus and pus. There was still a free dribbling through the wound. The right testicle was much swollen and very tender; and was ordered to be suspended. He took his food—namely, four ounces of cooked meat, eight ounces of bread, a pint and a half of beef-tea, three ounces of wine, and the same quantity of brandy—freely. The bowels were regular; the tongue fairly clean, but rather more dry. The bladder was ordered to be washed out every morning, and the catheter passed as before. A draught of ten minims of dilute nitric acid and an ounce of decoction of pareira was prescribed, to be taken three times a day.

June 22nd. The testicle was swollen and tender. The urine was still offensive. The patient's general condition was slightly better.

June 24th. He had little in the way of pain or discomfort to complain of. The wound was healthy, reduced to about the size of a crow-quill. Urine passed both ways. The catheter was passed twice daily.

June 27th. He progressed slowly, though satisfactorily; ate, drank, and slept well. The urine had improved in appearance, and was acid in reaction; but there was still some ropy mucus brought away by the tepid injection. The perinæal wound was still not quite healed, and permitted some slight dribbling through it.

July 2nd. During the last day or two, he had been permitted to get up for a short time; and had been placed on full diet, with wine as before. This morning, there was a good deal of erythema and œdema of the glans penis and scrotum, due most likely to the contact of the irritating urine, which he was unable yet forcibly to expel. Means were ordered to be tried to catch the urine more effectually than had been hitherto done.

July 6th. The erythema of the scrotum had nearly disappeared. He began to pass the urine better, and in larger quantities at a time. There was very little ropy matter brought away now by the tepid injection, which had lately been used every other day only. The urine had ceased to come by the perinæum.

July 13th. He seemed to be gaining strength and appearance considerably. There was no longer any necessity to wash out the bladder; he emptied it thoroughly. The urine was normal in appearance and in reaction, making no deposit whatever.

July 23rd. The patient had progressed favourably since the last report, and was now almost convalescent; and a No. 10 catheter could be passed without any difficulty.

Case II. *Calculus in a Child* 1 *Year and* 10 *Months old: Operation: Lateral Lithotomy with Hutchinson's Rectangular Staff: Successful Result: Recurrence of Calculus in the same Child Two Years after: the Result.* A child, 1 year and 10 months old, was admitted into the West Kent Hospital suffering with calculus. The operation of lateral lithotomy, with Hutchinson's rectangular staff, was performed by Mr. Fry, and a stone weighing thirty grains was extracted. The child did well; and was discharged cured in a few weeks.

Two years afterwards, the same child was brought to the hospital suffering from symptoms of stone. The child was sounded by Mr. Fry, and a small stone was clearly detected, not only by him, but also by Dr. Woodfall, Mr. Prance, and the house-surgeon. The child was taken into hospital on the Monday, and on Friday afternoon was put upon the table, and tied up for operation. On this examination, no stone could be detected; and on making inquiry, the nurse explained (the child slept with her) that on Tuesday and Wednesday nights, the child was out of bed seven or eight times to make water, but she noticed on Thursday night that the child went to bed at eight o'clock and never woke up once all night. On further inquiry, it was ascertained, that on Thursday morning the child was attacked with violent diarrhœa seven or eight times in as many hours, and the efforts were violently expulsive, the child crying from pain; and the only conclusion to be drawn was that during one of these expulsive efforts the stone was passed *per urethram*. The child was removed and put to bed and kept in hospital for a week; but remaining well, was discharged, and has not been seen since.

This case is narrated as another proof that, although a calculus may have been previously detected, no operation ought to be performed, if the stone cannot be then discovered.

Progress of Medical Science.

ANATOMY, PHYSIOLOGY, & PATHOLOGY.

Development of Ciliated Epithelium. Professor Oehl of Pavia has studied the development of cilia in the *petromyzon*. On examining the ovum at the twelfth day after deposition, a large number of embryonic cells are still found, filled with the fatty matter of the yelk. The smallest of the adipose vesicles lie nearest the circumference, and are seen to possess an energetic movement, not only oscillatory, but even circulatory. Next to these cells are some, subsequently more abundant, which either become elongated transversely and enlarged, or remain spherical; presenting in common, however, the character of being free from vitelline matter in a more or less extensive portion of their periphery. The adipose vesicles are as it were circumscribed in the opposite part of the cell, and in the part which is free from these only very minute granules or vesicles are seen. At this period, it becomes possible to ascertain the presence of a nucleus.

While the embryonic cells still contain vitelline vesicles, their membrane begins to present a system of pores, either confined to a portion of the circumference in cells which are to be partially provided with vibratile cilia, or extending over the whole in globular cells which are about to be entirely covered with cilia. These pores, which at first are confined to the cell-membrane, gradually become canals, penetrating towards the interior of the cell in prolongations of its membrane, so as to give the appearance of a system of very fine short tubules.

These porous openings having then appeared, there is seen surrounding the cell, or on that part which corresponds to the pores, a very delicate amorphous semitransparent substance, which, when partial, forms a kind of hood to the cell, from the interior of which it without doubt proceeds. In some cases, this matter may be seen to be lying externally on the cell, while the vitelline matter has not yet disappeared from the interior. According to Dr. Oehl, the substance in the interior of the cells, having acquired a consistence analogous to that of sarcode or of the substance of the amœba, escapes through the canals already described; and, these being very fine and thickly set, the filaments of the internal matter which have escaped through them lie so close together as to give the appearance of an amorphous layer. By the action of alcohol, which removes the water from the external layer, a radiated arrangement, though faintly defined, is detected.

The radiated appearance is soon developed spontaneously. The cell-wall increases in extent, and the

porous canals become more distant from each other; so that the cilia are also rendered more distant, and spaces are observed between them. The radiated arrangement commences at the peripheric portion of the layer of external matter, and extends gradually towards the cell-wall; so slowly, however, that the progressive stages of development may be observed with tolerable ease. In some cells, the radiated disposition begins to appear at the periphery in the form of short and very fine transparent lines, separating one filament from another; in others, these lines have advanced halfway through the external layer of matter; and in others, they have reached their limit, and the individualisation of the cilia is arrested, without quite reaching the porous wall of the cell. The deeper and apparently amorphous portion of the external matter is what is seen in vibratile epithelium in the form of a transparent subciliary zone; through which, however, it is possible, with the aid of proper reagents, and especially alcohol, to see the prolongation of the cilia into the cell-wall.

Professor Oehl has not been able to throw much light on the cause of ciliary motion; he believes it probable, however, that the first appearance of the vibration is synchronous with the escape of the material from the interior of the cell. (*L'Imparziale*, 1 Octobre 1863.)

Fissure of the Sternum: Ectopia Cordis. At a meeting of the Société de Biologie in Paris, M. Ranvier called the notice of the members to the case of a child born in M. Duplay's wards at the Lariboisière Hospital. It lived one hour. The sternum was fissured; the two vertical pieces representing that bone were separated at their lower part, so that the heart, which lay immediately under the skin, formed a projection, on which the arrangement of the anterior aspect of that organ could readily be recognised. On examination, the sternum was found to be composed of two vertical cartilaginous pieces, united by a kind of symphysis in the part corresponding to the manubrium. The parietal layer of the pericardium was intimately adherent to the skin; and was also bound down to the visceral layer, either by large patches of adhesion, or by long narrow tendinous cords, which, on microscopic examination, appeared to be formed of connective tissue without many formative cells. The arch of the aorta, the thoracic and abdominal aorta, the brachio-cephalic artery, the carotid, subclavian, pulmonary, and umbilical arteries, the pulmonary veins and the inferior vena cava, and the ductus venosus, were normally formed. The only anomalies in the conformation of the vessels that were formed were the absence of the ductus arteriosus and the presence of two inferior venæ cavæ. (*Gazette Médicale de Paris*, 21 Novembre 1863.)

Action of Digitaline on the Urine. According to Dr. B. H. Stadion, of Kiew, the following are the results derived from a series of experiments. 1. Digitaline produces in health a diminution in the quantity of liquid secreted by the kidneys. 2. It diminishes the amount of the principal constituents of the urine, such as urea, chloride of sodium, the phosphates and sulphates. 3. The uric acid alone is increased; but the degree of acidity of the urine remains the same. 4. The specific gravity of the urine is diminished. 5. Digitaline at first increases the frequency of the pulse; it then produces a diminution in the number of contractions of the heart. 6. The rapid emaciation and the retardation of nutrition which follow the employment of digitaline are two important facts which aid us in understanding its action and proper mode of administration. 7. Digitaline acts like digitalis on the circulatory, nervous, muscular, and generative systems. 8. It is an energetic depressant of the generative system, and may for the time abolish all sexual desire. 9. Its action on the intestinal canal and digestive organs is less than that of digitalis. 10. A peculiar affection of the nasal mucous membrane, under the form of coryza, appears to constitute a characteristic symptom during the use of digitaline. 11. The power of digitaline appears to be thirty times as great as that of digitalis. 12. The ordinary dose of digitaline should not exceed one-fifth of a grain daily; in most cases, from one-twentieth to one-sixth of a grain is sufficient. (*Vierteljahrschr. für die prakt. Heilk.*; and *Gazette Méd. de Paris*, 28 Novembre 1863.)

Fatty Embolia as a Cause of Pyæmia. According to M. E. Wagner, pyæmia is in some cases accompanied by fatty embolism of the smaller arteries and capillaries. Liquid fat, proceeding doubtless from foci of suppuration, enters the blood, becomes accumulated in the pulmonary capillaries, and is transported by the systemic circulation into different organs or regions, where it produces metastatic abscesses. M. Wagner relates two cases in which he found metastatic abscesses in the muscles, in the lungs, in the tissue of the heart, in the kidneys, etc. Microscopic examination showed the presence of liquid fat in the pulmonary capillaries, even in those parts of the lungs which were not infiltrated; and also in the capillaries of the other diseased organs. (*Archiv der Heilkunde*; and *Gazette Méd. de Paris*, 5 Dec. 1863.)

Disease of the Suprarenal Capsules. Dr. J. Erichsen of St. Petersburg relates the following case. Olga, aged 21, born of healthy parents, enjoyed good health until the age of 13. In the summer of this year, her tint became browner than ordinary; the catamenia appeared once, and then ceased until the next year. At the age of 14, she had a severe attack of scarlatina; and brown patches were observed on the chest, and remained after the scarlatina had left her. From this time, the coloration increased in intensity; at first on the face and trunk, lastly on the extremities; until, three or four years before her death, no portion of her skin had its natural colour. At first the patient felt no remarkable symptoms; but in her last years she was almost constantly troubled with an indefinable *malaise*. She preserved her appetite, and digested easily, nearly to the end. The menses were at first regular; afterwards scanty and pale. During the last three or four years, she had increasing mental and bodily hebetude. She had no severe illness after the scarlatina; she vomited frequently, especially after copious meals; she never had pain in the loins nor in the head. Two days before death, she had a slight attack of angina, followed by vomiting and violent headache, with great loss of power. In the night preceding death, the prominent symptoms were syncope, convulsions, delirium, and wide dilatation of the pupils.

On *post mortem* examination, the body was found to be well nourished. The skin was of an uniform bronze colour, deeper at the joints, which appeared as if surrounded by a steel-coloured ring. There was a very vascular false membrane beneath the dura mater on the left side. The arachnoid was infiltrated, cloudy, of an iron grey appearance, and loaded with vessels gorged with blood. The brain was much injected, and had a greyish colour. The ventricles contained much serum. The cerebellum was hyperæmiated. The cavities of the heart contained coagulated blood; the mitral valve was slightly thickened. The lungs were œdematous and vascular, and presented on section a deep—almost violet—colour. The peritoneum was healthy; the mucous membrane of the stomach and intestines was tumefied; the spleen was enlarged, injected, softened, and presented

the same tint as the lungs. The parenchyma of the liver was spotted with a deep brown pigment; it was injected and soft. On microscopic examination, the bile-cells were found cloudy, and there was a remarkable abundance of granular brown pigment on the centre of the lobules. The mesenteric glands were tumefied, and contained pigment. The kidneys were of natural size, but injected. The microscope showed slight cloudiness of the epithelium of the canaliculi, in the cortical layer. The suprarenal capsules were enlarged to about three times their ordinary dimensions; they were lobulated, and surrounded by a thick capsule, through which calcareous concretions were scattered. This capsule sent vertical partitions towards the interior of the organ, the interspaces between which were filled with a kind of atheromatous, cheesy, yellowish mass, like fatty *detritus*, mixed with a large quantity of calcareous granules and crystals of cholesterine. No trace of the normal elements of the suprarenal bodies could be detected. The cutaneous pigment was deposited in the Malpighian network, especially in the deepest cellular layers. The cells of these layers, and those above them, were filled with a granular brown pigment, forming above the papillæ a brown limiting membrane of very elegant appearance.

Dr. Erichsen does not find reasons for believing in a relation of cause and effect between disease of the suprarenal bodies and bronzing of the skin. He believes that the coloration of the skin, the disease of the suprarenal bodies, and the other symptoms observed, are the results of some common cause—probably a lesion of the abdominal sympathetic nerve. (*St. Petersburgh Medizin. Zeitung*; and *Gaz. Méd. de Paris*, 5 Decembre, 1863.)

British Medical Journal.

SATURDAY, JANUARY 9TH, 1864.

THE STUDENT AND HIS EDUCATION.

THE assembling together of medical students at this season of the year must naturally bring prominently to the minds of many of our readers the subject generally of medical education. Is the machinery, it may be asked, under which the student's education is at present carried out, the most effective which could be employed? Do the courses of lectures laid down by the various authorities as requisite for his proper instruction form the best programme which could be suggested for the purpose? Are the differences in the kind and quantity of lectures demanded by different examining bodies merely matters of minor significance? Have we, upon the whole, arrived at a tolerably perfect and fitting system of instruction?

No one, we take it, can at present hope to give a full and satisfactory reply to these questions; but they are, nevertheless, questions which cannot fail, at an early date, to press themselves on the serious attention of our governing bodies, and our Medical Council in particular. That we have not yet arrived at the one true solution of the difficulty is shown by the fact, that there has, as yet, been no absolute line of education laid down by the Medical Council of Education, which has been unconditionally accepted by the various examining boards. Different schools of medicine have their own opinions on the subject as well as the Medical Council, and they have also their own interests, unfortunately, to serve; and, consequently, there is, notwithstanding the fact of the existence of a Council of Education, a very considerable difference prevailing as to what should be the amount and kind of instruction imparted to the student.

One of the great functions of the Council was, we have always understood, to establish an uniform system of weights and measures in this matter of knowledge-imparting throughout the country; but, whatever be the reason, the golden land of uniformity has not yet been arrived at. No doubt, the General Council can show excellent reasons why it has not yet had the courage or the capacity to establish one uniform rule; and no doubt the different representatives of corporations, etc., forming the Council, are each satisfied that their own scheme of education is the most complete.

Perhaps, therefore, it might be of advantage if we were to ask the profession to consider the matter from a practical, not from a medical corporation, point of view. Let us ask ourselves, what are (judging from our experience as practical men of business) really the wants of a student aspiring to medical instruction.

Now what must strike every one at the outset, on reflecting on the subject, is the fearful amount of information which the student is called upon to imbibe in his few years of medical study; the number of sciences which he is called upon to cultivate, in addition and as auxiliary to the perfecting himself in his especial business, the art of treating disease.

Perhaps we reconcile ourselves in some measure to the fact, by the reflection that much of this scientific instruction is really only a nominal affair, and that we expect the student to attain merely a smattering, and indeed a temporary smattering, of a considerable part of this sort of instruction. But there is clearly something wrong in any loose, slip-slop, or defective method of learning; and, therefore, considering the thing in abstract, we believe every one will admit that, if possible, the student's attention should be fixed and concentrated on certain especial objects of study, and that nothing but what is absolutely necessary to the preparation of his mind for a due comprehension of the art of medicine, and is requisite for the future practice of it, should be allowed to distract his attention during his short time of student-life. This position, theoretically, is one which, we venture to think, no one will dispute. But then comes the very impor-

tant question, why do we not practically adopt the system of education here alluded to, which is so good in theory ?

To this question, we will now attempt to give an answer, by quietly considering the value of the courses of instruction now imparted to the ingenuous youth in our medical schools. Are the systems adopted by us really such as most effectually economise the short period of the youth's years of study, and most effectually bring home to his understanding the most valuable things which those systems contain within them, as well as best training his mind for their reception ?

And, first, as regards the systematic courses of lectures required from him, are they all equally of service in their way, equally necessary ; and is the instruction contained in them always imparted in the most useful and appropriate manner ?

Now, we apprehend that, as regards lectures, every one will admit that those lectures are most valuable —rather, we might say, are absolutely requisite— which, closely affecting the study of medicine, impart information by the aid of physical demonstration. In this way, for example, we acknowledge at once the necessity of lectures on anatomy and physiology, including, of course, demonstrations by the aid of the microscope ; of lectures on chemistry ; of lectures on surgical operations ; and on pathology and pathological anatomy.

A knowledge, and a full knowledge, of these subjects, as auxiliary to medicine, are absolutely requisite ; and clearly they are to be learnt by demonstration only. No man can learn anatomy from books.

But if we come to systematic courses of medicine and surgery, we find that we have a different class of subjects to deal with. The greater part of this systematic instruction is merely verbal recital, not demonstration ; and it may be learnt from the perusal of the works of authorities on those matters equally well as from the written lectures of the professor himself. We willingly admit that all that part of systematic medicine and surgery which cannot be learnt at the bedside of the patient, and which cannot be imparted through clinical lectures, must be given systematically. But let our readers ask themselves how much of medicine or surgery is there which cannot be imparted by demonstration, that is, clinically ? We apprehend very little indeed. Let us illustrate this view of the case by reference to any, say kidney-diseases. Is there anything to be told in a systematic lecture on this subject which may not be found equally well told in the works of acknowledged authorities on the subject ? Clearly, the natural way to impress a true knowledge of these diseases on the student's mind is to show him the effects of the disease in the living subject, and to show him the nature of the disease after death ; to connect the differences in symptoms observed during life, with the differences in the nature of the kidney disease as shown after death. But all this is surely the business of clinical instruction and of pathological anatomy.

Lectures, we must remember, are somewhat ancient inventions. They were, like sermons, introduced to meet a manifest need ; they were things of infinite service and of absolute necessity in times when the press and its immense field of instruction was closed to the world. But no one can doubt that these ancient wants have been greatly compensated by an abundant literature.

Of what use, again, is it to describe minutely the steps of an operation, except in so far as the steps of the operation are themselves demonstrated either on the living or the dead subject ? Surely, the mere reading of the instructions—the description of the "periods" of the operation—may be as well and usefully done by the student for himself as by the lecturer for him. We do not pretend to describe the course of a nerve ; we demonstrate it. The student has already himself read up the subject ; and he now follows our demonstration on the body to a purpose. Why should we weary him with oral descriptions of the courses, the diagnosis, the symptoms, and all the rest of it, of fevers, when we can take him, who has already learnt all he can learn in that way from his books, into the wards and the clinical theatre and demonstrate these things to his eyes ?

Perhaps we may be told that students, if they attend not systematic lectures, will never read anything on the subject. To this we would venture to answer, that so long as we give systematic courses of lectures, we encourage them not to do so. But, after all, what amount of reading-preparation does the student require for clinical instruction, more than he now requires for anatomical demonstration ?

The fact is, we fear, that in this matter the student's interests and the professor's interests run in somewhat divergent paths. It is, of course, to the interest of the professor that the student should attend a large number of courses of lectures. The greater the number of courses attended, of course the greater the fees of the professor. It is natural enough, therefore, that the professor should defend his chair ; but it is equally necessary and natural that our systems of education should undergo discussion ; and clearly, if we would act fairly towards the student in devising for him a model system of education, we must not allow the private interests of the professor to be taken for a moment into consideration.

Let any man not of the profession be asked his opinion of a system of education in which he finds the student running about, hour after hour, from one subject to another, all day long, swallowing civic

feasts of knowledge. Would he say the student was capable of digesting such a compost? Rather, would he not say that such a variety of entertainments was enough utterly to destroy his digestive powers? The student, we will suppose, starts off with an hour of chemistry; and then, without time for reflection, he rushes to demonstrations; and, with oxygen and phosphorus still flashing in his eyes, finds himself suddenly engaged with the foramina and processes of the sphenoid bone. What opportunity is there here for reflection or concentration, for digestion and healthy assimilation?

Surely no professor will be found to deny the unfortunate fact that the student has a vast deal more lectures to swallow than he can possibly digest; and if so, he must surely admit that it would be very advisable to diminish the number. Now, we have no hesitation in saying that, if the professors would consider the subject solely from a patriotic point of view, they would soon discover that the lectures might in fact be most materially diminished in number. But where is the professor who is ready to commence the auto-da-fe? We know not; but, in the meantime, will venture a few suggestions on the point.

We have already spoken of systematic courses of medicine and surgery, and have suggested that they should be merged almost wholly into extended clinical courses of medicine and surgery. Evident also is it to us that under these heads should come instruction on the application and uses of therapeutical agents. The student has no time to listen to a learned disquisition on the virtues and real or supposed properties of every article in the *Pharmacopœia;* what he should be called upon to observe is the effects of the agent *in corpore vili.*

We must remember that the real question for us to consider in this matter is, not whether it is well for the student to be learned in this or that particular branch of knowledge, but how to occupy the short period of his scholastic medical life in the way which will most effectually fit him for the practice of his art. We should concentrate his studies to this one main object; and admitting, as we all must do, that in the programme laid down before him, he is required to master more matter than he possibly can, we should select out of the whole quantity that particular part which is most essential, and pass lightly over the other less essential parts. Is not the lesson of the plainest common sense?

With this idea, let us consider another branch of his required studies—for example, botany. Of botany, no doubt, every educated gentleman should possess a knowledge, as he should of natural philosophy and other like studies; but we venture to think that it is hardly necessary to call upon the student to attend a special course of lectures on the subject. No doubt, whilst doing so, he is well employed; but the question which all the while forces itself upon us is this: Could he not be much more profitably using the short time allotted to him for the acquirement of medical knowledge? The best way to test the value of the thing, it seems to us, is to ask of what service to the man of medicine—to the medical practitioner—is this knowledge of botany in after-life, *quoad* the practice of medicine? What turn does it serve him while engaged in this, the real business of his life? By the answer to this question we would try the value of the study, and apportion the amount of instruction in it.

We might apply the same kind of reasoning to lectures on materia medica and therapeutics. As far as the chemical history of medicines is concerned, we apprehend that the student has learnt enough whilst engaged in his chemical lectures. And then, in respect of the appearances and general qualities of drugs, of what service is any special knowledge to men in practice? We put it to our brethren, how often in their lives have they ever had occasion to put this knowledge into practice? When do we care to distinguish between various specimens of opium, or to select the different species of cinchona barks? This is all clearly the business of the pharmaceutist. Surely the surgeon might just as well be expected to go through a course of lectures on surgical instruments. And then, again, as far as the therapeutical actions of remedial agents are concerned, this, as we have already said, should be taught by the clinical teacher at the bedside of the patient. Indeed, we might truly say that a didactic course of lectures on therapeutics is at the present moment an impossible thing; and for the reason—to use the language of Dr. Handfield Jones—of our great ignorance concerning the effects of the weapons which we use. Surely, to tell the student systematically of the effects of every drug in different diseases is simply to deal out hypotheses—in fact, we may say, to mislead him. We have no hesitation in saying that such a course of lectures at this moment is an impossibility. How, for example, in the present distracted state of our profession on the subject of the uses of mercury in disease, can any one pretend to lay down dogmatically the effects and uses of mercury in all the diseases for which it has the credit of being of service? Let us, therefore, ascertain how much materia medica knowledge is required by the student, and give him that quantity and no more, and give it him in the most practical and effective manner.

We need not tell our readers that all these matters will shortly have to come under the consideration of the Medical Council, thanks to the movement of Mr. Syme; and we have, therefore, the occasion fitting for calling attention to this most important subject, of the student of medicine's education.

TOWNLEY, THE MURDERER.

Dissatisfaction is, we believe, felt at Derby respecting the respite of Townley. On the 6th inst., at the Derby County Sessions, Mr. Crompton strongly condemned the proceedings which had led to that result.

"He considered that the commission appointed to inquire into Townley's state of mind was improperly constituted, and had been improperly influenced. The magistrates composing it had previously, one and all, signed a memorial expressing an opinion that Townley was insane; therefore they were biased in favour of that view before being appointed a commission. The two medical men who had officially assisted them in arriving at a conclusion were also, it might fairly be assumed, predisposed to find that the murderer was insane. One of them had signed the memorial already mentioned, and the other was the partner of a gentleman who had given the strongest medical evidence in favour of the criminal's insanity. He, therefore, did not think that the commission had been properly selected; and there was a strong public opinion that this was an instance of there being one law for the rich and another for the poor. Dr. Heygate, M.D., F.R.S., stated that 'he felt it his duty to say that never during the whole course of his life had he ever known a case in which the plea of insanity had been set up or maintained on such flimsy pretexts.' Mr. Crompton concluded some further remarks by saying: 'I name no names; I merely say, that as for Townley, money has saved him; and I move that the remonstrance be adopted.'"

For our own part, we cannot do otherwise than regard this respite of Townley as the beginning of the end of capital executions in this country—a deep cry of Humanity's voice. It must be clear to every one of us, and certain as the day, that if Bill Sykes had done this murder on Jane Scroggins, he would have been already hanged on the gallows; and that Townley's life has been spared simply and solely because he was able to pay an expert's fees. We admit willingly that in all this proceeding there is distinctly shown a great and growing dislike to capital punishments; and naturally such a dislike would exhibit itself rather in favour of a Townley and his penknife, than of a Sykes with his bludgeon and bulldog. But then, where is equal law? If Townley hang not, why should Sykes? If we save Townley, we must perforce spare Sykes, who is probably, at bottom, much the more respectable character of the two. Hanging is gone; for every man, except Calcraft, who is concerned in promoting the operation, tries to wipe his hands of the business. The prosecuting counsel prosecutes most mildly; the judge sums up most mercifully; the jury condemn most reservedly; the judge sentences apologetically. "The sentence," he says to the murderer, "is none of mine; it is the law's." And then, when the prisoner is lodged in the condemned cell, philanthropists by the score plead urgently, putting severe screws on the Home Secretary. Next comes Sir G. Grey; and he, shirkingly, shifts the onus of the deciding signature on to the conscience of a couple of lunacy commissioners. So that the end of all this precious business is, that juries grand and petty, judges, British law and judgments, Queen's prerogative, and all the rest of it, are just quietly subjected to the opinion of two no doubt most learned and accomplished commissioners in lunacy!

Was ever such a trick or farce played upon British criminal law—justice so turned upside down and put to such complete ridicule? Well; it was not to be supposed, when all the apparatus of the English law—the Queen, by her representative, solemnly presiding—had been found incapable of declaring Townley worthy of the halter, or rather, had shirked the onus of finally decreeing that he should die, that the Commissioners would be so foolish as to accept the responsibility. They did what every other rational soul put in such a position would have done. They refused to make theirs a hanging commission, and decided for Townley's lunacy. Throughout the whole business, only one man stands firm to his post and ready for his business, and that is Calcraft. He never falters, nor apologises. To such a pass has "hanging" come! What can all this mean, if not that English humanity is beginning to doubt the propriety of extinguishing that light which once put out can never be re-lit?

SENSATION NOVELISTS.

Mr. Charles Dickens has appended to the sensation novel of Mr. Reade, just concluded in *All the Year Round*, a sort of general apology:—

"Note. The statements and opinions of this Journal generally, are, of course, to be received as the statements and opinions of its Conductor. But this is not so, in the case of a work of fiction first published in these pages as a serial story, with the name of an eminent writer attached to it. When one of my literary brothers does me the honour to undertake such a task, I hold that he executes it on his own personal responsibility, and for the sustainment of his own reputation; and I do not consider myself at liberty to exercise that control over his text which I claim as to other contributions.

"Charles Dickens."

We doubt of the acceptance of this apology by the medical profession. If Mr. Dickens had published in *All the Year Round* a libel recognisable in a court of law, such an excuse for its publication as that here given would hardly avail him. He would be told by judge and jury that he is responsible for what appears in his journal; and that it is neither satisfaction nor redress to the libelled to hear that he, the editor, is not responsible for the sayings of writers in his journal because they are "eminent."

Mr. Dickens fathers the "statements and opinions" of the smaller fry who shed ink for his journal; but when a great man like Mr. Charles Reade lets off sensation fireworks in it, then Mr. Dickens withdraws, and avows himself no longer responsible for

the effects produced by the squibs, and crackers, and Bengal lights of his illustrious *literatus*. Now, here Mr. Dickens clearly draws an over-fine distinction between a legal and what we must be allowed to call a moral injury. His note above given would not free him from the pains and penalties, pecuniary and moral, attaching to the publication of an illegal libel. How, then, can it release him from the moral liability attaching to the publication of an injury on the medical profession, merely because it is not punishable by pecuniary fine? Mr. Dickens is assuredly morally responsible, though he is legally irresponsible; and Mr. Dickens, let it be remembered, is one of our great moral instructors. He has long had the credit of improving the intellects of the million; of elevating their sentiments; of teaching us all to tell the truth, to be honest in our dealings, to love our neighbours, and above all to keep our tongues and pens from evil speaking, telling stories, and slandering. In a word, Mr. Dickens is universally regarded by civilised spinsters of all classes, by nursery-maids, and sentimental young ladies, as a sort of literary Spurgeon.

Mr. Dickens will not take advice from us. Nevertheless, we will tell him that the medical profession has long looked with an evil eye on a good deal of his late instruction. They think it not well that Mr. Dickens should indulge the people in mesmeric novels; in true and authentic ghost-stories; that he should puff up spontaneous combustion, and other such remnants of deplorable ignorance; and, least of all, do they think it well that he should permit an honourable profession to be shamefully abused, simply to ensure the success of a sensation novel published in his lucrative periodical. They think the success of such a novel is not worthily purchased at any price.

Few men, we would remind Mr. Dickens, are more under obligation to the medical profession than *literati* in general. Dr. Johnson knew their worth, if Mr. Charles Reade does not. And, lastly, we put it to Mr. Dickens: Is it fair that a whole profession of honourable men should be travestied and evil spoken of in *All the Year Round*; even if it be true, as doubtless it is, that a certain number of black sheep are to be found amongst them. Is it fair and decent that the whole profession should be brought as criminals to the bar of public opinion, and made responsible for the deeds of these few black sheep? Because scoundrels have disgraced literature, are all literary men to be denounced as scoundrels?

Under the able presidency of Mr. Prescott Hewett, the Pathological Society has reached an unprecedented height of prosperity. Yearly have its members increased in number, and yearly has its financial position become more favourable. Not only this, but much more. The attendance of members at its meetings is conspicuously and distinguishably great. No better compliment than all this could be paid to the wisdom of the founders of such an excellent Society. They manifestly supplied a professional want. The Report of the Society, after telling of its prosperity, refers to a difficulty which most of us have long foreseen would naturally arise out of the very success of the Society. The difficulty results from the abundance of pathological specimens presented at the meetings. The Council have, by alluding to the fact, clearly indicated that, for the more effectual carrying on of business, it will be necessary to subject the specimens sent for exhibition to some kind of control. Ordinary specimens of diseased products have now become so well known in the Society, that frequent exhibition of them gives to the Society too much the appearance of an elementary teaching school. The proper business of such a Society is manifestly rather to advance the knowledge of pathology, than to be a mere school for the spread of the primary facts of the study. We are sure that the Council will bestow a great boon upon the Society if they hit upon some just mean through which they may be able to satisfy the aspiration of exhibitors, as well as the desires and wants of those who go there to learn and to listen to exhibitors.

Mr. Syme has, we believe, been requested to lay down a plan for carrying out the reform which he lately showed was so greatly needed in medical education. We trust that gentleman will comply with the request; and shall look forward with great interest to his proposals for dealing with the difficulties which beset all reforms of this nature.

The following are the lecturers and their subjects of lectures, at the Royal College of Physicians of London, for 1864: *Gulstonian Lectures:* Dr. Markham—"The Uses of Bloodletting in Disease." *Croonian Lectures:* Dr. Basham—"On Dropsy, its Significance as a Symptom in Renal, Cardiac, and Hepatic Diseases." *Lumleian Lectures:* Dr. A. W. Barclay—"Fallacies in the Application of the Inductive Method of Reasoning to the Science of Medicine." A course of lectures by Dr. Garrod, on "The Nature and Therapeutic Value of the New Remedies in the *British Pharmacopœia*," will be commenced soon after the publication of the new *Pharmacopœia*.

The Metropolitan Association of Medical Officers of Health have undertaken a most desirable investigation; viz., that of the effects of diseased meat upon the health of those who eat it. They have, therefore, issued a series of queries to which they invite replies. In this way, and in this way alone, can they ever arrive at the real facts of the case. We trust the profession at large will assist in the inquiry by

supplying the required information as far as possible :—

"In the detail of any cases that may be kindly forwarded, the Association begs that as many as possible of the following particulars may be included :—

"1. The nature and stage of the disease in the animal.

"2. The physical character of the meat.

"3. The degree of cooking it had undergone.

"4. Whether kept several days after cooking, and under what circumstances.

"5. The effects on persons consuming the meat.

"6. Any *post mortem* appearances where death has resulted.

"7. Any experiments undertaken to establish the connexion between the use of the meat and the disorders supposed to be its results.

"R. D. THOMSON, *President.*
"G. BUCHANAN, } *Secretaries.*
"J. N. VINEN, }

"Communications to be addressed to Court House, Marylebone, London.

"December 1863."

OUR contemporary, the *Social Science Review*, from which we have often quoted, and which has always zealously defended the interests of medical science, appeared on the first of the present month in a new form and as a new series. It is now published as an octavo, and monthly instead of once a week. The change is, we think, a great improvement ; while the addition of an abstract Review of the general as well as the social sciences gives to the journal a much wider and more useful range. The first number of the new series, now before us, commences with the first part of an essay on the Diseases of Overworked Men, written in a style fitted for lay readers, by Dr. Richardson. Then follows an excellent common-sense article on the Teaching of Elementary Science in National Schools. Next comes an article entitled Forgotten Treasures : the Vision of Hystaspes—a philosophical production supposed to have been written by a contemporary of Cyrus. The next article in the *Review* is a statistical one, on Violent Deaths and Suicides in France. The very important subject of Legislation and Prostitution then occupies five pages. A contributor, who knows how to write pleasantly, next furnishes a Talk about the Tyrol. A statistical article, on the Emperor's Recruits, is founded on a work by M. Boudin. The remainder of the number is occupied with several carefully written reviews, various scientific abstracts, notices of sundry topics of social interest that have occurred during the month, and letters from correspondents. The current number is thus exceedingly rich in subjects of deep interest to those advanced members of the profession who watch the progress of moral and physical sciences not less than the medical ; and, when we add that the name of our associate, Dr. Richardson, is on the title-page as editor of the new series, we shall be sure to gain for it a favourable acceptance by the members of the Association. A Review, such as this, supported by the profession, can do much more to diffuse a correct knowledge amongst the general public of the true position of medicine than can any organ which is purely professional ; for this reason, we wish the *Social Science Review* continued success.

THE Bethnal Green Board of Guardians has been for some time conspicuously on its trial before the public. Its manner of treatment of its doctor is very like (only something a little worse than) the ordinary manner in such case. The Poor-law Board has even had to give the Bethnal Greenites a small hint or two. Thus, for example, we find that the Board has requested, which we suppose means ordered, the guardians "to discontinue the present form of order for medical attendance on the sick poor" ; and it is added :

"The note at the foot of the form given in the case of Mrs. Ketlowe should of course be omitted."

We give this note in all its naked insolence.

"Any complaints against the medical officer for neglect of duty can be made before the Board of Guardians at the Workhouse on Mondays, at four o'clock."

Translated into plain English, this means simply, that the guardians, being at loggerheads with the doctors, absolutely invited their patient to accuse them. Such is the contumely to which our profession is ever subjected. Is there no redress for such wrong? We have never hesitated in telling our brethren that there is but one we know of, and that to set a proper value on the price of the services we render. The public estimate us at the price we accept for our work ; and if we accept mechanics' wages, they will treat us as they treat mechanics. It is no use our looking up to Jupiter—to the House of Commons—and asking him to come down and help the cart out of the mire. Our help lies in ourselves ; and if we apply not our own shoulders to the wheel—*i. e.*, refuse to work except for proper pay—then we must, and deservedly, stick helplessly in the mire.

THE *Journal of Mental Science* is now conducted by Dr. Maudsley as well as by Dr. Robertson. The October number has several interesting articles. Dr. Skae publishes in it the address delivered by him at the annual meeting of Medical Officers of Asylums, etc., in July last—A Rational and Practical Classification of Insanity. Mr. Eastwood has a paper on Private Asylums for the Insane ; and Dr. Maudsley one on Homicidal Insanity. There is also, amongst other information, a Report by Dr. Arlidge on Foreign Physiological Literature.

SPECIMENS of exfoliation of the mucous membrane of the bladder have been presented to the Pathological Society by Mr. H. Lee, Mr. Spencer Wells, and

Dr. Martyn. Some doubts were once thrown on the possibility of such complete exfoliation; but the report to the Society on the specimen referred to them leaves no doubt of the fact.

M. Nussbaum pretends that he has discovered a supplementary anæsthetic. Whilst the patient was under the influence of chloroform, a solution of acetate of morphia was injected subcutaneously; and the result was, that the patient did not awake out of a tranquil sleep for twelve hours. M. Nussbaum repeated the experiment, and successfully, in three other cases of operation.

A young prisoner in France committed suicide by swallowing daily a little pebble of the size of a nut. After his death, 300 *grammes* of stones were found in his stomach.

"Nélaton is the model of a clinical teacher. Of an equable temper, simple in his manners and language, no one can reproach him with being vain or proud, as was said of Dupuytren. Of a calm, upright, and positive turn of mind, like Boyer, he deviates not from the path of rigorous observation and experiment. It may be said of him, as of Boyer, that he is wanting in animation. The theatre of the Hôpital des Cliniques is too small for his auditory; every seat is occupied before the lecture begins. The foreign students are very numerous, and it pleases the ear to hear their praises of the professor. His diction is easy and correct. His language is clear and limpid and measured, and its distinctive character is lucidity. Everything is sacrificed to clearness. No useless ornament is admitted. He goes straight to his object. His teaching is plain, precise, and methodical."

The following *exposé* of the situation of matters medical in France is taken, in summary, from the *Moniteur*. From the 1st of January, 1858, to the 15th of October, 1863, there have been 36,436 patients, most of them convalescent from hospitals, received into the Imperial Asylum at Vincennes; 150 beds are to be added to it. Also 10,000 convalescent workmen have been received into the Imperial Asylum at Vésinet. Five new establishments, destined for orphans, the blind, the indigent sick, and workmen out of employ, have been declared works of public utility in five of the departments. By an imperial decree, the public lunatic asylums are to be reorganised. New asylums will be opened. In the department of La Seine, two vast agricultural asylums have been commenced, and a clinical establishment, where the principal types of lunacy may be studied. The new method of teaching the indigent deaf and dumb has been adopted by the government, and introduced into the primary schools. At the Faculty of Medicine of Paris, six supplementary courses of practical medical studies have been established. The system of *concours* for *chefs de clinique* in the Faculty has also produced excellent results. The number of students has increased in all the different Faculties. In 1860, the number of diplomas delivered in all the Faculties was 7,233; in 1861, it was 7,819; and in 1862, it was 8,326. The preparatory schools of medicine and pharmacy remain stationary. The scientific collections of the Faculties and of their libraries have increased. The museums of physics and the chemistry laboratories have received considerable additions. A special laboratory of physiology has been established at the Faculty of Medicine of Paris, and new dissecting-rooms built at the Ecole Pratique, and a new chemical laboratory built at the School of Pharmacy. The Commission appointed in 1861 to revise the *Pharmacopœia* "is actively pursuing its labours, and will before long apprise the world of the results of its labours." At Tours and at Lille, a chair of physiology and a chair of natural history have been formed.

The Medico-Chirurgical Congress held at Rouen has just published a volume containing the *compte rendu* and the works of the Congress. It contains 450 pages, and its price is 5 *francs*.

M. Poggiale has found chromate of lead used in butter for purposes of coloration.

Professor Grisolle has been elected President, and M. Malgaigne Vice-President, of the Academy of Medicine. M. Béclard remains Annual Secretary; and MM. Cruveilhier and Poggiale are made members of Council.

M. Cazot, *à propos* of marriages of consanguinity, observed that the kings of Persia, having no European scruples, marry without hesitation their sisters and even their daughters; and that none of those evil results attributed to such marriages had been noted as resulting therefrom.

Mr. Lawrence, Rokitansky, and Dr. Simpson of Edinburgh, were proposed for corresponding members of the Academy of Sciences; Mr. Lawrence being elected.

M. Quatrefages announces that M. Garrigou has found in a cavern in the south of France, at a depth of about three yards, under a layer of stalagmites, a surface of earth bearing manifest signs of the residence of man. A fireplace, charcoal, bones and teeth of man, as well as bones of the raindeer, have been found by him. This is supposed to be another proof of the high antiquity of man. It is well we should remember that what are called these proofs are occasionally found out to be no proofs at all; and hence the proofs, seem to be accumulative, whereas they are, some of them at least, gradually fading away under the light of better observation.

Dr. Graves considered that hæmorrhage from the bowels in typhoid fever was not, as a rule, a dan-

gerous symptom. Trousseau also agreed in this, that the symptom was not nearly so dangerous as it was generally supposed to be by practitioners; indeed, he even went further, and considered it favourable. Dr. Boys de Loury, of Saint Lazare, has lately made a similar remark. M. Costilhes has also observed the same; but he holds that hæmorrhage is of service only in the early stage of typhoid, and as critical hæmorrhages. M. Peter, of Hôtel-Dieu, relates the case of a young woman who had been often bled in previous disease, and wished to be bled when suffering from typhoid fever. She was, however, not bled; but, at the fifteenth day of the fever, she had three abundant hæmorrhages from the bowels, and thereupon followed a notable amelioration of her symptoms. Shortly afterwards, a young man there had a considerable hæmorrhage in the third week of the fever—passing a *litre* and a half of blood, and on the second day afterwards recovered rapidly.

Dr. Callegari, surgeon-in-chief of the hospital at Venice, died there on October 4th, from the prick of a dissecting-instrument. Argenti, Dean of the Paduan Faculty, also lately died.

The Academy of Medicine has just decreed its prizes for 1863. Dr. Raimbert takes the Academy's prize of 1000 *francs* for his memoir on "Malignant Pustule in Man and Animals."—Baron Portal's prize of 1000 *francs* found no worthy competitor.—Madame de Civrieux's prize on "Dyspepsia" brought forth no less than eighteen memoirs, Dr. Guisson's carrying off the 1000 *francs*.—Baron Barbier's prize found no worthy prizeman; neither was Dr. Capuron's prize awarded; but 600 *francs* and 400 *francs* were awarded to Dr. Toulin and M. Roger, the subject of the prize being "The Comparative Advantages and Inconveniences of Pelvic Version, and the Application of the Forceps in Contraction of the Pelvis."—Dr. Lefevre's prize of 2000 *francs*, "Melancholia" being the subject, was adjudged to Dr. Colin; and honourable mention made of Drs. Motet and Voisin.—Amussat's prize was not awarded.—The Marquis D'Argenteuil's prize—a sexennial one of 12,000 *francs*—was destined for the author of the best means of "Cure of Urethral Strictures" between 1857 and 1862, or for the author of the best means of "Cure of any of the Diseases of the Urinary Organs" during that term. Twenty candidates sought this desirable sum of money and honourable prize. None of the required advances in treatment, however, were judged worthy of the prize; but the following recompenses were adjudged: 6000 *francs* to M. Bourguet; 1500 *francs* to M. Dolbeau; 1500 *francs* to M. Maisonneuve; 1500 *francs* to M. Mathieu, the surgical instrument maker; and 1500 *francs* to Mr. Henry Thompson. Prizes were also adjudged to many vaccinators, for the zeal displayed by them in the discharge of their duties.

M. Depaul, and M. Bouley the veterinary, have had a grand tourney *à propos* of the origin of vaccine virus, in the Academy of Sciences. M. Velpeau, the President, had some difficulty in restraining the language of M. Bouley—in preventing him from striking a "foul" blow. M. Depaul declares that there is no such thing as vaccine virus, what we call so being simply variegated variolous matter. The horse and cow, he says, are subject to a disease identical with the small-pox of man. The cow may be readily inoculated from the horse, and *vice versâ*. Man may also be inoculated from the horse, as well as from the cow; and the small-pox of man may be transferred by inoculation to the cow, the horse, etc. An epidemic of small-pox in man may spread by contagion amongst animals; and, on the other hand, it may commence in animals and spread to man. The dangers of inoculation of small-pox in man have been greatly exaggerated. M. Bouley's anger was chiefly raised against M. Depaul in that M. Depaul had visited the school at Alfort day after day, at M. Bouley's invitation; and had there been shown, without stint, all M. Bouley's ideas and doings in this matter; had kept his own counsel; made no remark to M. Bouley, or exposition of his own views; and then, weeks afterwards, gets up in the Academy and fires off details of many of M. Bouley's scientific properties! However, all this grand discussion will, we suppose, leave us practically just where it found us, as regards vaccination.

M. Naudin has been elected titular member in the Botanical Section of the Academy of Sciences, in the place of M. Moquin-Tandon.

Dr. Cadillot of Meurthe has addressed a note to the Academy against marriages of consanguinity. Of fifty-four marriages between relations of the third and fourth degree of consanguinity, fourteen were sterile. The other marriages furnished a very large proportion of dumb children and idiots.

Dr. Brown-Séquard's *Journal de Physiologie* is about to take the name of *Journal d'Anatomie et de Physiologie Normales et Pathologiques de l'Homme et des Animaux*, and will appear under the editorship of M. Ch. Robin and Dr. Brown-Séquard.

M. Trousseau has been elected President, and MM. Guersant and Beyran Vice-Presidents, of La Société de Médecine Pratique.

M. Maisonneuve, *le chirurgien hardi par excellence*, on the 3rd of September last performed extirpation of almost the whole of the tongue, for cancer, by means of his *cautérisation en flèches*. All other methods of operation in such cases, he says, are full of danger. "I have abandoned them all for this, of which experience has shown me the really marvellous innocuousness. It is, moreover, incomparably more simple and easy of execution." The patient was seated on a chair, and his mouth kept open by a

dilator. A puncture was made immediately behind the tumour and just in front of the left pillar of the fauces, and into it was forced an arrow (*flèche*) five *centimètres* long; then another on the opposite side; a third and a fourth on the right side, and a fifth and sixth on the left side of the tongue; and then a seventh and eighth on each side of the frenum. The operation lasted three minutes. Not ten drops of blood were lost. The patient was told to keep his mouth motionless for an hour. Then food was given by the œsophagean tube. Next day the tongue was completely converted into a greyish slough; no fever, œdema, or difficulty of breathing; the patient could drink readily. On October 3rd, the sloughy mass was taken away in one piece. It consisted of the whole of the tongue to within three *centimètres* of the epiglottis, and of a voluminous mass of soft parts taken out of the space in the cavity of the inferior maxillary bone. When this "enormous sloughy mass" came away, the patient, who could previously talk and swallow, was instantly rendered speechless and unable to swallow. He was, therefore, again fed by the tube; and, considering that the enormous space left in the mouth was the cause of this loss of speech, etc., M. Maisonneuve had it filled up with a mould of gutta percha. By this means the patient was able to swallow easily, and to speak so as to make himself understood. The patient removes the artificial tongue as he pleases.

Judge Martin on a Notoriety. In summing up the case of Townley, the Judge said:—"About two years ago the case of a gentleman from the eastern part of England, became the subject of a long inquiry to which great public interest was attached. There was great difficulty in deciding the question whether he was sane in point of law. But if I remember right, there was not a single thing proved to show that he was insane. It might have been proved that he was a foolish wandering person—that he squandered his property, and so on; but there was not a single thing to show that the man was not in such a state of mind as would render him criminally responsible for his acts. I have since seen the man, he was examined before me as I sat officially. He appeared to me, as far as I could tell, able to be examined—that is, he was able to give his answers in a satisfactory manner—and that so far, I repeat, as I saw him on that occasion, although he was not probably the wisest man, yet he was in such a state of mind as to cause him to be held responsible to himself and to his country." (*Derby Reporter.*)

Female Army Nurses. Women nurses in the American General Hospitals have proved a failure, except in a few isolated instances. The failure is due to the want of properly educated and thoroughly devoted women adapted to the work. The Sisters of Charity is the only organisation that have as yet, in our military hospitals, succeeded in utilising women's labour. Miss Dix still continues to exert herself to introduce women into hospitals, but with only partial success. A recent order of the Secretary of War still gives her full power to assign women to hospitals, but it is doubtful if anything useful will result until women are thoroughly trained to this special work. (*American Med. Times.*)

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, January 14th, 6 P.M.
West Somerset. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20th.
Midland. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Jan. 21st, 2 P.M.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

December 10, 1863.

A. Stookes, M.D., Vice-President, in the Chair.

Fracture of the Spine. Dr. Nottingham shewed two specimens. In the first case, a lad of 19 fell from the top of a building and fractured the lower part of his spine. There were the usual symptoms, paralysis, etc., and he lived a few days. The fracture was transverse and gaped on the posterior aspect, forming a cleft, while the anterior aspect shewed nothing remarkable. In the second case, a very stout man, a labourer aged 21, fell from a height of thirty feet and lit upon his head. He had a very long scalp-wound, but no fracture of the skull. When brought to the Southern Hospital the faculties of the mind were entire. There was very great difficulty of breathing. There was found to be fracture of the sternum and of the spine at a point opposite, about the fourth dorsal vertebra. There was great displacement at both seats of fracture, so that the whole upper part of the body was displaced forwards; one of the tranverse processes was broken, but the cord was not much injured. There was paralysis of the bladder, but not, to any extent, of the extremities. The patient died on the fourth day after admission.

Perforation of the Stomach. Dr. Nottingham showed a specimen taken from a boy who had been a patient at the Southern Hospital for very severe injuries caused by a fall off a pile of timber. He had serious injury to the head, followed by severe head symptoms, also a fracture of the thigh, a fracture into the elbow joint, and a wound in the perinæum very similar to that which would be made in lithotomy. The accident took place in September, and everything went on well for some time, and the boy seemed getting well and was able to move about a little, until a few days ago, when he was seized soon after his dinner with sudden collapse, and died in a very short time with symptoms of some abdominal perforation. The stomach was found to be very much dilated and to have passed up into the chest through an opening in the diaphragm, and at its upper extremity there was a perforation; part of the colon had also passed into the chest; the left pleura was full of food, sconse; the left lung was compressed, and the heart itself rather flattened. The stomach would hold without difficulty five and a half pints of fluid; its lining membrane was in parts of a brilliant scarlet colour; there was no thickening about the edges of the opening, and they were not very rough. The aperture in the diaphragm had smooth edges, from which Dr. Nottingham was led to infer that it may have been congenital rather than the immediate result of the accident, and he had ascertained that the boy had always been subject to dyspeptic symptoms, flatulence, etc. As an illustra-

tion of this malposition arising from an accident, he instanced a gentleman on whom a bale of cotton had fallen; there were a number of fractures, and the diaphragm was found to be ruptured, and the stomach lying under the left clavicle.

Dr. Desmond thought if the opening in the diaphragm was recent, and the result of violence, we should find some adhesions.

Mr. Hakes said the mode of death in this case was curious. Looking at the nature of the perforation of the stomach, he was of opinion that it could not have existed before death, but must have been caused by the action of the gastric juice. The distended stomach itself pressing on the heart might have caused death.

Dr. Nottingham said the smoothness of the edges of the opening seemed to impress Mr. Hakes with the idea of its being the result of the action of the gastric juice, but when first seen there was some roughness and redness about the edge as if from vascular action. Besides, there was a mechanical objection to Mr. Hakes's view; this opening was elevated, and not in a part towards which fluids would gravitate. There was also the alteration in colour to be considered.

Mr. Hakes said that in the recumbent position the portion perforated would not be out of the reach of the gastric juice, and indeed that is the very part in which this post-mortem perforation is usually found.

Mr. Hamilton thought if the rupture of the stomach was not the cause of death, the boy's death was very unaccountable; within half an hour from the first sudden collapse he became convulsed and insensible, and died. Dr. Nottingham thought the state of the diaphragm congenital, but he thought it more probable that the rupture in it took place at the time of the accident; the constant movement of the stomach through the opening might prevent any adhesions forming.

Mr. Higginson said, supposing perforation of the stomach did take place, the vicinity to the heart would account for the sudden collapse.

Dr. Desmond was disposed to agree with Dr. Nottingham as to the deficiency in the diaphragm being probably congenital from the nature of the large tendinous opening. Serous membranes readily adhere, and if there had been a mechanical rent or injury, nature would try to repair it, and we should find adhesions.

Mr. Rawdon adverted to the interest this malformation possessed in relation to comparative anatomy.

Deep-seated Pectoral Abscess. Mr. Rawdon related the case of a patient recently in the Royal Infirmary with a large abscess in the left mammary region. The matter was deeply seated, the swelling showed no tendency to point anywhere, and took the shape of the pectoralis muscle. The man's health was impaired. A trocar was introduced, and about three quarters of a pint of pus escaped; the sac was not thoroughly emptied, and a large heavy poultice was applied. Within twenty-four hours of the opening being made febrile symptoms came on, with shivering and pain in the side, and soon after the patient coughed up a quantity of pus. The purulent expectoration and the discharge from the external opening gradually diminished and ultimately ceased, and the patient went out well. The abscess was peculiar in its nature, and wherever it originated must have formed a communication with the bronchial tubes.

Mr. Lowndes recently had a very similar case under his care at the Northern Hospital. The patient was a man of broken down constitution; the abscess formed a globular tumour firmly bound down; it was emptied three times with a trocar, and each time rapidly filled; it was then laid open; some days after a great quantity of pus was suddenly coughed up, nearly suffocating the patient, and at the same time signs of partial pleurisy presented themselves. The purulent expectoration was very copious for some time, but gradually decreased, and the man was able to get about and was improving in appearance, when he was attacked with apoplexy, and died in a few hours. No inspection of the body was permitted.

Some discussion ensued as to the nature and origin of the abscesses in these cases.

Pneumonia. Dr. Gee showed a specimen in which, concurrent with the pneumonia, there was some old deposit looking like a cicatrix near the periphery of one of the lungs. It was of a calcareous nature and the size of a hazel nut; the lung was in an advanced stage of pneumonia. The freedom of the rest of the lung from tubercle would lead one to believe that this is not tubercular.

Dr. Nottingham noticed that this white matter was surrounded by a dense cyst.

Pirogoff's Amputation at the Ankle Joint. Mr. Higginson showed a cast of a stump after this operation taken from a patient in the Southern Hospital who had had disease of the tarsus and ankle joint. The stump was rather a long time before it became firmly consolidated, and the cast was taken rather more than two years after the operation. The leg is between two and three inches shorter than the other one.

Embryo of Early Date. Mr. Higginson showed a specimen and gave data to prove that it was a little more than eight weeks old.

Perforation of the Skull, for which Trephining was performed. Mr. Higginson showed a specimen from a patient who had died at the Southern Hospital. A rigger of intemperate habits fell from the rigging of a ship, and received a severe scalp wound, and a depression of the skull could be distinctly felt; when the flaps were turned back, this hole now shown could be seen, and several fractures around it. It looked just as if the man had been trephined before. As there were symptoms of compression, a small circle of bone was removed with the trephine, and a small gush of blood followed its removal. The man died two days after. In the portion of bone now shewn there were two natural openings, one on either side of the vertex, caused, he supposed, by the glandulæ pacchioni, and there were two other parts very thin and diaphanous. Lymph and pus were found effused on the surface of the brain. One of these natural openings it was that was seen at the seat of injury and taken for a depression.

Dr. Nottingham said it was very important to know that we might have these natural holes in these situations; this important deficiency is not generally alluded to in surgical works.

Mr. Lowndes should have thought that when the opening was examined after the accident, the sound dura mater would have been seen and would have precluded the idea of depression; was the opening examined with the probe?

Mr. Higginson said there was a firm band partially covering this opening, and on throwing back this flap he found a fracture and the dura mater in part detached. There was a piece of bone wanting that he could not find, and as there were symptoms of compression, he thought it well to trephine.

Mr. Hakes thought that under the circumstances this was the only course to be adopted.

Soft Calculus found in a Child's Bladder. Mr. Rawdon shewed a specimen. A child was admitted into the Royal Infirmary, under Mr. Long, with symptoms of stone; there was prolapsus ani, great pain before micturition, pus, etc. in the urine. There was, however, no pain after micturition. The child was sounded on four occasions; twice it was thought that a stone could be slightly felt, but on the last two occasions it

could not be felt at all. The child sank and died. The kidneys were found much diseased, one extensively sacculated, and its cortical structure nearly gone; the other much enlarged. The bladder was very small, and in it lay a calculus which consisted of a hard central nucleus that lay imbedded in a thick layer of soft material, that seemed to consist of mucus and fibrine, and a little fine gritty matter deposited among these. This outer covering could be cut or torn easily, and after it had been in spirit for some time it had a laminated appearance like the contents of an aneurism. The stone was about the size of a large olive.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, DEC. 7TH, 1863.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

ON EPIDEMIC PLEUROPNEUMONIA IN SOME SHIPS OF THE MEDITERRANEAN FLEET.

BY A. BRYSON, M.D., R.N.

THE disease was of a low asthenic or typhoid type, accompanied with great congestion, usually of the lower lobes of the lungs, and in many of the cases in the ship chiefly affected, the *St. Jean d'Acre*, with scorbutic symptoms, although the diet of the crew was in every respect as good as in the other vessels of the squadron. In the *Cressy*, too, there was an unusual prevalence of lung-disease, often of an obscure and anomalous character, which was not easy to designate. The evidences of the pulmonary tissue being congested, or even consolidated, in different parts of the chest, associated with pleurisy or pleurodynia, and with such a cachectic condition of the system as might probably lead on to tubercular degeneration in chronic cases, were the most conspicuous features of the malady. Effusion into the chest was discovered in a few instances. Diarrhœal and dysenteric attacks were common both in the early and late stages. The following table shows how very differently different ships of the squadron were affected with diseases of the lungs in the course of the year, and also with other diseases the extent of whose prevalence is usually regarded as a fair test of the healthiness or otherwise of a ship's crew. Attention should be paid to the number of the crew in each vessel, to estimate aright the marked difference in respect of the number of cases under each head in the different ships. The reader can easily calculate the ratio of attacks to the crew for himself. *a* denotes the number of cases; *b*, cases of sickness in year; *c*, diseases of lungs, etc.; *d*, diseases of bowels; *e*, fevers, continued and remittent; *f*, ulcers.

	a	*b*	*c*	*d*	*e*	*f*
Marlborough .	1145	927	129	64	10	75
Agamemnon .	840	881	241	58	17	30
St. Jean d'Acre	815	1601	401	171	136	115
Cressy . . .	720	1483	298	254	12	102

The deaths from disease in the *St. Jean d'Acre* and in the *Cressy* were twice as numerous as in the *Marlborough*, notwithstanding the much smaller crews of the former vessels; and the number invalided from the first ship was fourfold as numerous. As to the chief cause of this enormous disproportion in the sickness and mortality, etc., in two ships of the same fleet and similarly exposed, it was clearly shown that this lay in the excessive overcrowding of the men at night in the *St. Jean d'Acre* on the lower deck, while in the *Marlborough* the men were more distributed on the different decks, and greater attention was paid to ventilation of the between-decks. Only fourteen inches space was allowed to each hammock in the former ship; and so thoroughly was fresh cool air excluded from the men while asleep, that the air above the hammocks was found to be from eight to ten degrees hotter than the air below the hammocks, and so offensively impure as to cause nausea to any one going down from the open air! With such a state of things, it is not wonderful that the health of the ship was so bad during the two years while on the station, that it was at last found necessary to send her to England to be paid off. Besides several features of resemblance in the symptoms of the pleuropneumony in the *St. Jean d'Acre* and *Cressy* to the lung-disease in cattle, it is to be noted that there are good grounds for suspecting that the affection was communicated by the sick landed from the vessels to other patients in Malta hospital.

An animated discussion, in which Drs. Babington, Bryson, Dickson, R.N., Stratton, R.N., Murchison, Milroy, and Mr. Burge took part, followed the reading of the paper.

OBSTETRICAL SOCIETY OF LONDON.

DECEMBER 2ND, 1863.

H. OLDHAM, M.D., President, in the Chair.

EIGHT gentlemen were elected Fellows. Dr. Gervis and Mr. Ray were appointed auditors.

Craniotomy Forceps. Dr. BARNES exhibited and described a new instrument of this kind. It combined the advantages of the instruments of Professors Simpson and Murphy, and by a further contrivance added by Dr. Barnes was rendered much more effective than any other instrument with which he was acquainted. The elbow on the inner blade, allowing free room for any fold of scalp at the point of perforation, permitted the duck-billed toothed portions of the blades to be pushed high up to secure a firm hold of the cranium, without the danger of straining the lock. By this means the blades were always kept in perfect parallelism, ensuring a widely diffused grasp of the cranium, and avoiding the risk of tearing away. Having properly seized the cranium, it became a point of great importance to secure the hold in a manner to save the operator the fatigue and muscular strain of pressing the handles together, whilst at the same time considerable extracting power is required. For this purpose he had adapted a powerful screw which united the extremities of the handles, setting the blades fast at any interval required. Another advantage provided for was the fitting the blades with a modification of the French forceps-lock, so that the instrument could either be used as one piece, or the two blades could be applied separately. The entire length of the instrument was fifteen inches. Dr. Barnes said he had used the instrument several times, and that its grasp and action were so perfect that he had never been obliged to take a fresh hold. It was made by Weiss.

Ovarian Dropsy. Mr. BAKER BROWN read a case which had three years and a half ago been treated by him with tapping and pressure, with apparent recovery for three years and a half. The cyst, however, began at the end of that date to enlarge, and the patient, being in good health, was recommended by Mr. Brown to submit to ovariotomy, which was performed by him at the London Surgical Home in the usual way, with a very small incision. The cyst was nearly unilocular, but was not of the ovary, which was healthy and free, but in the broad ligament; the pedicle was broad. She recovered without a bad symptom, and is now well. Mr. Brown considered the case of especial interest just now, proving that no adhesions were produced by the previous tapping and pressure.

Extrauterine Fœtation. The report of the committee

(Dr. Tyler Smith and Dr. Braxton Hicks) appointed to examine a specimen of extrauterine fœtation, in which two fœtuses were found in connection with the same Fallopian tube, was read. They considered that the smaller fœtus was the result of a former conception, and was attached to the fimbriated portion of Fallopian tube in such a manner as not to impede a subsequent conception, which also remained extrauterine about the middle of the tube, from the bursting of which the patient had died.

Combined External and Internal Version. Dr. J. Braxton Hicks read a short appendix to his former paper on this subject. He stated that in consequence of not having seen Wigand's memoir, he was unable at the last meeting to reply to the statement made by Dr. Barnes, that he had *fully* described internal and external version. Since that time he (Dr. Hicks) had been able to go over the work, and took exception to the above statement as far as regards internal version. In comparing this memoir with his own paper, he pointed out that although in regard to cephalic version there was much similarity in the two plans, still Wigand had no knowledge of the pushing on the child from within, in the direction of its head, so as to produce podalic version; that he had never adopted complete podalic version; and that he makes no mention of the way to convert a more or less cephalic version into podalic. Wigan's plan was to bring that part to present which was nearest the orifice of the uterus. Therefore he applied it only to the rectification of *abnormal* presentations. Consequently, on comparing the two methods, it would readily be seen that very many of the conditions to which Dr. Hicks applied his plan were contraindicated in the other as mentioned by Wigand himself. It was shown that the only use he makes of the internal hand is to first determine the presentation, and to receive the part as it is pressed down from above, and guide it to the os uteri. Dr. Hicks again pointed out that it was by combining the two powers, within and without, that made the plan he had brought forward much more complete and available than either employed separately.

Difficult Labour from Distension of the Fœtal Uterus. Dr. Gervis exhibited the body of a child, in whose birth, after the passage of the head, extreme difficulty was experienced in completing the delivery, owing to a great enlargement of the abdomen. It was, however, accomplished by simple traction. On dissection, this enlargement was found to be due to an enormously distended uterus, presenting two distinct cornua, and with an imperfect septum dividing its cavity. It was filled with a turbid serum containing white flocculi. The os uteri was impervious. There was no indication of an anus, and the rectum terminated in a *cul-de-sac* attached to the posterior part of the uterus.

The President remarked that it was a most interesting specimen, and suggested that Dr. Gervis should, jointly with Dr. Hicks, furnish a further report upon it.

Abnormal Condition of the Fœtus Impeding Labour. Dr. J. Braxton Hicks read three cases. In one, there were found three quarts of ascitic fluid, in combination with cystic enlargement of the pelves of both kidneys, in consequence of occlusion of the ureters. In another, the abdomen of a female fœtus was distended by the bladder, which reached to the ribs, and which was full of fluid. No obstruction existed in the urethra. Both were delivered readily after puncture by the crochet. In the third there was dropsy of the amnion to an enormous extent, coupled with a very peculiar enlargement of the forepart of the neck of the fœtus, which had to be ruptured before labour could be completed. It was partly filled with serous fluid. The mothers in all the cases recovered.

Dr. Graily Hewitt remarked that, the occurrence of cases such as those brought before the Society by Dr. Hicks favoured the idea that normally a secretion and excretion of urine from the fœtus was going on during intrauterine life. He alluded to cases recorded by Mauriceau and Depaul, similar to Dr. Hicks's case.

Dr. Hicks was invited to report further on the tumour, conjointly with Dr. Gervis.

On Distension of the Bladder Considered as a Cause of Post Partum Hæmorrhage. By J. Lumley Earle, M.D. The author pointed out this condition as one of the many causes of *post partum* hæmorrhage; and called attention to the propinquity of the bladder to the lower portion of the uterus, so that when the former was distended the latter was not only displaced, but prevented from contracting completely. He pointed out the usual symptoms which would lead to the discovery of the accumulation of urine; and gave three cases in illustration that the removal of urine caused the subsidence of the flooding.

On Pertussis: its Practical Treatment and more Rapid Cure. By R. Marley, Esq. After alluding to the history and symptomatology of this complaint, the author analysed the various modes of treatment. He laid stress upon the value, in the second stage, of conium, belladonna, and hydrocyanic acid taken internally; and also the careful inhalation of chloroform at the commencement of the attack, whereby the fit was invariably mitigated or stopped. Although he had by the use of the above treatment been led to think very favourably of it, yet he did not urge it to the exclusion of all others. As in all other diseases, the treatment must be modified by the special features of each case. He advocated warmth during the first stage, and change of air in the third.

Dr. Day thought it was scarcely safe to leave chloroform in the hands of nurses. He considered that the disease should be treated on general principles. Bromide of ammonium had been latterly much recommended, but in the few cases in which he had tried it he had not found it to possess much influence on the disease.

Dr. Holt Dunn thought that the treatment in hooping-cough was uncertain, and that we should hail with pleasure any plan which gave more satisfactory results. He had tried the last named drug, and thought he had found more success with it than with any other.

Dr. Graily Hewitt had some years ago examined carefully into the causes of death from hooping-cough. In the cases he had examined, which were for the most part children badly fed, ill-nourished, and in other respects diseased, death had occurred from collapse of the lung—a condition formerly described as lobular pneumonia. It was useless to attempt to treat such cases by specifics. In all cases of hooping-cough he had found the greatest benefit from a treatment mainly consisting of hygiene—good food, exercise, warmth, ventilation, etc. Antispasmodics and sedatives were frequently required, and were not seldom of great use; but the primary object of the treatment should be to maintain the general health of the child.

Army Medical Examinations. Mr. B. Bell, the President of the Edinburgh College of Surgeons, lately remarked upon the system of army examinations, for which young men, who had been pronounced qualified by the professors of this the first school of medicine in the world, had to undergo an immense amount of laborious cramming: a fact which showed there was something radically wrong in the public service examinations.

Correspondence.

IRIDECTOMY.

LETTER FROM WM. BOWMAN, ESQ., F.R.S.

SIR,—Mr. Wilde (last vol., p. 696) refers you, for his present opinions on iridectomy, to *Medical Epidemics—Glaucoma and Iridectomy*, a review written by him in the *Dublin Quarterly Journal of Medical Science* for August 1860, and separately printed and circulated, of which he sends you a copy. If you will run your eye over its pages, you will understand why I should have expressed my regret at the appearance, from so respectable a quarter, of a production characterised by a tone so unusual in medical literature. I have no wish to recall what is painful by making any extracts from that review; but should any of your readers be inclined to peruse it, I would ask them to turn also to my reply, published at the time (*Med. Times and Gazette*, Aug. 25th, 1860), in which I defended both my friend, the proposer of the new treatment, and the method itself, in terms to which, so far as I remember, no rejoinder was attempted.*

My reply explains what is meant by the promoters of this operation, both as to the steps of its performance, the cases to which it is applicable, and the results to be reasonably expected in each kind of case. It supplies, I believe, a sufficient answer to many of the objections which are still often reproduced as novel by those who have not been at the pains to master practically the recent niceties in the diagnosis of glaucoma, and have not themselves experimentally tested the treatment.

I suppose I am doing no injustice to Mr. Wilde in supposing that he has never himself thought it right to treat glaucoma by iridectomy either before or since 1860. If so, the divergence in our views may be not unnaturally explained; and his opinions on this subject must be left to make that kind of impression which depends on high reputation, great ability, and a sincere desire to arrive at the truth, but where the full materials of a comprehensive and exact judgment have not been taken advantage of. I should hope, however, that the perusal of Mr. Critchett's admirable letter in your last number will induce him to think iridectomy at least worth a trial, and that it is neither "a dodge" nor "a medical humbug".

I now feel called on to offer a few remarks upon the letter of my colleague Mr. Dixon in your last number. Mr. Dixon, it is well known, was a strong opponent of this practice at first. He spoke and argued in opposition to it; and this makes his present avowal of its *necessity*, as *the only cure in true acute glaucoma*, all the more likely to exert a valuable influence on the minds of men like Mr. Wilde and Mr. Walton, who seem to be still, *toto cœlo*, opposed to it.

I infer from Mr. Dixon's letter, that he performs iridectomy *only* in the *acute stage* of *acute glaucoma*. But why should he not perform it also, on the same *kind* of grounds, in the *subacute period* which often precedes and ushers in the acute attack; and also in the *receding* and *relapsing* stages by which the acute attack, not having destroyed sight, but only damaged it, frequently as it were pauses in its destructive course, and when, very often indeed, much sight may still be rescued? I do not see how he can logically operate only in the crisis of that rather rare form of acute glaucoma which, as he says, "hurries the patient into utterly hopeless blindness within a few days or even hours from the onset of the attack," and withhold the same relief where the same *kind* of disease exists and the eye is equally hard, the chief difference being in *the amount of inflammation present and of sight still recoverable*.

When once he shall have experienced the pleasure of saving one-quarter, one-half, or even the whole visual power of an eye previously undergoing deterioration under the premonitory or receding stages of acute glaucoma, I am persuaded he will be ready to extend the application of the remedy to the other stages and forms of typical glaucoma, where the signs of *acute* inflammation do not yet, or do not still, present themselves; and also, perhaps, even to suitably selected cases of simple non-inflammatory glaucoma, where it is desirable to permanently lessen that undue tension which is slowly and painlessly, but not the less surely, inducing blindness.

Mr. Dixon, in his letter, insists much on what he terms the *abuse* of iridectomy; he "deplores the reckless manner in which it is so often resorted to"; "numbers of these hopeless chronic cases are now-a-days operated on by the blind—I mean the morally blind—advocates of iridectomy"; apparently wishing thus to explain to others, or to excuse to himself (unless I am mistaken) the slowness with which he took up the operation, when others around him were warmly promoting it, and were perhaps even enthusiastic in favour of what was seen by them to be so great a boon. Now, it is no part of my duty to notice these statements of his, except to say what, in simple justice to those about me, I feel bound to affirm; viz., that I do not know to what operations or what operators Mr. Dixon here refers. The charge is, indeed, a serious one, taken in the ordinary meaning of the words, and one calculated not so much, perhaps, to damage individuals, as to lower the high reputation of English science and of English humanity abroad. I have seen a great deal of the operations for glaucoma from the first. When it became early recognised that undue tension could be permanently lessened by iridectomy, some enthusiasm, on the part especially of our younger colleagues, was to be anticipated. *I would not have had it otherwise.* And when what I call *splendid cures* were accomplished in a disease which had hitherto baffled all skill, and while the disease itself, in its several forms and complications, was undergoing new investigations, both on the continent and here, under the impulse communicated to the whole subject, it may be readily conceded that occasional errors of diagnosis and blemishes in the operative procedure may have occurred, which would not now be met with.* But that anything took place, or is now being enacted, at all meriting the censure here referred to, I entirely disbelieve. I am of opinion that Mr. Dixon (I am sure without intending injustice to any one, of which he is not capable) must have formed an exaggerated estimate of the harm done and the errors committed. I incline to think that glaucomatous patients have suffered in a far greater degree from that sort of *abuse* of the operation which consists in its not being used where it would benefit, than from its having been imperfectly or inopportunely performed, where it could yield no advantage.

But it is the last two paragraphs of Mr. Dixon's letter

* See also Dr. Bader's excellent reply, *ibid.*, p. 196.

* I remarked long ago (see *Medical Times and Gazette*, August 25th, 1860): "While the modern doctrine and treatment of glaucomatous affections are so new, it is to be expected that errors in the diagnosis may occur even among well instructed practitioners; and the operation is doubtless in some danger of being brought into discredit by being undertaken in cases to which it is not rationally applicable, or by being defectively executed. I do not see how this can be avoided; it is the necessary fate of all novel proposals, and this one must face the ordeal. It is the part of intelligent men to make allowance for these incidents of human progress, rather than to allow them to prejudice the march of truth."

which should especially fix the attention of all interested in this discussion, because they contain *what I regard as a fundamental error as to a plain matter of fact*, on the part of some of those who oppose, more or less, the use of iridectomy. I allude to the *phenomenon of tension*.

Mr. Dixon quotes me correctly* as saying (last vol., p. 593) that "all diseases attended with augmented tension of the eyeball should now be embraced within the term glaucoma, and as a class should be treated by iridectomy"; and he states that "tension is present in several inflammatory conditions in which iridectomy is wholly inadmissible." "We can only judge of *tension* by its phenomenon *hardness;* and to say that all inflamed eyes which are harder than natural are to be subjected to iridectomy *will be to inflict that operation upon numberless cases of iritis, keratitis, etc.*, which can be perfectly and readily cured by judicious medical means." Here it is, in effect, stated that *numberless cases of iritis, keratitis, etc., are attended by hardness of the eyeball*, and it is argued that hardness is therefore a sign of little or no value in the diagnosis of glaucoma, or as an indication for iridectomy.

Mr. White Cooper states (*ante* p. 23) that his "views are so entirely in accordance with those so ably stated by Mr. Dixon in your last number, that it would be mere waste of time and space to enter at length into the discussion"; and Mr. Walton also expresses the same view, if possible even in more express and positive terms (that "in every acute inflammatory ophthalmic disease the eyeball is tense"), as I shall have occasion to point out next week.

Now, it may seem to many of your readers an almost inexplicable thing that, on a question of fact seemingly so simple, and so easy of determination on occasions of daily and hourly recurrence, there should be any room for difference of opinion between men (I venture to say it with diffidence as regards myself) whose competence as observers, and whose large experience and truthful habit of mind are alike unquestionable; and yet I, on my part, affirm, after having paid a great deal of attention to this special subject of eye-tension for many years (see BRITISH MEDICAL JOURNAL, Oct. 11, 1862, pp. 378 and 379) that *I am directly at issue with these colleagues on the matter of fact;* that ordinary corneitis, iritis, choroiditis, retinitis, in fact *all the ordinary inflammations of the internal tunics are not characterised, as a rule, by undue tension;*† and that if, in their course, the eye becomes tense (and in the *advanced* or *protracted* stages of some, *particularly irido-choroiditis*, it is so apt to do so that tension becomes almost a normal incident of such stages), a new element of danger is introduced depending on a new order of conditions, to be met by treatment conducted on a new principle, *though not always necessarily by iridectomy*. I may explain myself further next week. If I am right as to the fact, it will be apparent that the subject of eye-tension, all important as it is in glaucoma, has yet to be studied by some of my colleagues who oppose iridectomy, as I am, indeed, but too conscious that it still requires to be more completely studied by myself.

I am, etc., W. BOWMAN.

5, Clifford Street, January 4th, 1864.

* The short letter (last vol., p. 593), from which Mr. Dixon here quotes, was written in answer to a question by "a Surgeon" perplexed by a difficulty as to the supposed frequency of glaucoma in former days; and the above sentence, detached from its context, may seem to mean more than I intended it to convey. I may state that I am in the constant habit, and have been for many years, of treating some special limited forms of tension (*secondary or intercurrent complications of other ocular conditions*), and also some conditions unattended by tension, by the old, and occasionally excellent method of puncture, sometimes carried out in a peculiar manner, according to the case. Of this, more I hope at some future time. But it was the non-inflammatory and the slighter inflammatory forms of *primary* or *typical* glaucoma that I was alluding to in that sentence, as having now a recognised alliance with the acute form, and, in the present state of our knowledge, demanding like it, *as a class*, of course not absolutely without exceptions, the employment of iridectomy.

† See particularly BRITISH MEDICAL JOURNAL, October 11th, 1862, p. 378, and last vol., p. 649, in both which places the same thing is stated in express terms.

Medical News.

APPOINTMENTS.

BURKE, William M., M.D., appointed Medical Registrar for Ireland.
CLELLAND, John, M.D., appointed Professor of Anatomy in Queen's College, Galway, and Surgeon to the Poor-House Hospital.
ILIFFE, Frank, Esq., appointed House-Surgeon to the Coventry and Warwickshire Hospital.
MAUDE, Frederick W., Esq., appointed Resident Surgeon to the Royal Sea-Bathing Infirmary, Margate.
RITCHIE, Robert P., M.D., elected Physician to the Hospital for Sick Children, Edinburgh.
TULLOCH, James S., M.D., elected Assistant-Surgeon to the London Surgical Home.

POOR-LAW MEDICAL SERVICE.

CLARKE, Francis W., M.B., to District No. 5 of the Abingdon Union, Berks.
CROSS, John, Esq., to the Hale District of the Prescot Union, Lancashire.
HILL, Hilary, Esq., to District No. 3 of the Worcester Union.
LANE, John W., M.D., to the Norbury District, and for the Bishop's Castle No. 2 District of the Clun Union, Salop.
MACKESON, Henry S., Esq., to the Blankney District of the Sleaford Union, Lincolnshire.
NEWMAN, Augustus, M.B., to the Blackawton or No. 2 District of the Kingsbridge Union, Devon.
NEWTON, Henry William, L.F.P.S.Glasg., to the St. Andrew's or No. 1 District of the Newcastle-upon-Tyne Union.
OLDMAN, John, Esq., to the Huntingdon District of the Huntingdon Union.
RUSHER, James G., Esq., to the Upton Snodsbury District of the Pershore Union.
SECCOMBE, John T., M.D., to Districts Nos. 4 and 5 of the Wisbech Union.
SMITH, Charles S., Esq., to the Fulbeck District of the Newark Union, Nottinghamshire.
SOPER, Isabell H., Esq., to the Nant-y-Glo District of the Bedwellty Union, Shropshire.
TAYLOR, Frederick, Esq., to the Silverstone District of the Towcester Union.

ROYAL ARSENAL, WOOLWICH.

BRISCOE, Surgeon-Major, M.D., re-appointed Principal Medical Officer to the Infirmary.
CULLEN, Staff-Assistant-Surgeon, appointed Second Medical Officer to the Infirmary.

ROYAL NAVY.

ANDERSON, Charles A., M.D., to be Deputy Inspector-General of Malta Hospital, *vice* A. Armstrong, M.D.
BANKS, George T., Esq., Surgeon, to the *Rattlesnake*.
DAUN, Edward, M.D., Assistant-Surgeon, to the *Indus*.
MORTON, Charles, Esq., Assistant-Surgeon, to the *Dasher*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

GIRDWOOD, J. M'Ewen, Esq., to be Honorary Assistant-Surgeon 3rd Stirlingshire R.V.
MUNRO, H., Esq., to be Honorary Assist.-Surg. 21st Durham R.V.

BIRTH.

SANKEY. On January 4th, at Maidstone, the wife of *George Sankey, Esq., of a son.

DEATHS.

BULMAN, Darnell, M.D., at Newcastle-on-Tyne, aged 68, on December 24, 1863.
*CORY, Samuel S., Esq., at Bridport, Dorset, on December 17, 1863.
DAVIS, John F., M.D., at Bath, aged 90, on January 1st.
DERBISHIRE, John, Esq., Surgeon, at 58, Upper Marylebone Street, aged 71, on December 31st, 1863.
GWYNN. On December 30th, 1863, at Wem, Salop, Sarah Jane, wife of *Samuel B. Gwynn, Esq.
HUTSON, John Richard F., M.D., at Demerara, aged 67, on October 13th, 1863.
SLEIGH, William W., M.D. at Brixton, aged 67, on Dec. 30, 1863.
WARD, Francis, Esq., Surgeon, late of Balham Hill, at 4, Angel Terrace, Stockwell, aged 57, on December 31st, 1863.

Mr. Collis's Case of Ovariotomy in Dublin has proved unsuccessful.

Smallpox in Madras. Twenty thousand persons die annually, in the Madras Presidency, of smallpox.

Dr. George Burrows has resigned his office of Physician to St. Bartholomew's Hospital.

A Portrait of the late Dr. Engledue has been placed in the Committee Room of the Gosport and Portsmouth Hospital.

Donation from Workmen to a Hospital. Messrs. Collard's workmen have made a donation of £8 10s. to University College Hospital.

Poisoning by Saltpetre. A man was lately poisoned at Oswestry by saltpetre, which had been accidentally supplied to him by a druggist instead of Epsom salts.

A Special Meeting of the Medical Council will be held on the 13th instant, in Soho Square, for the purpose of electing a president to replace the late Mr. Green.

Obstetrical Society of Edinburgh. Dr. T. G. Weir has been elected president, and Dr. T. H. Pattison and Mr. W. S. Carmichael vice-presidents, of this Society.

The Cuvier Prize, which is given triennially by the French Institute, has recently been awarded to Sir Roderick Murchison, author of *The Silurian System of Rocks*. This is the first occasion on which that honour has been conferred on a geologist.

Falling or Shooting Stars. Mr. Eaton stated at the Meteorological Society, that the velocity of these bodies amounted to sixty miles per second; and that the heat developed by their friction with the air was sufficient to render them intensely luminous, and ultimately to volatilise the materials of which they are composed.

Naval Court-Martial. On the 30th ult., a court-martial was held on Assistant-Surgeon W. C. Fairbairn, of the *Fisgard*, doing duty at the Royal Marine Infirmary, Woolwich, "for conduct unbecoming an officer in drinking intoxicating liquors to such excess as to produce illness, by which he was incapacitated for the performance of his duty on the 2nd day of December last." In support of the prosecution, Deputy-Inspector-General Salmon, principal medical officer at the Royal Marine Infirmary, was examined. After deliberating a short time, the Court considered the charge not proved, and acquitted the prisoner.

Iridectomy. A most interesting and important discussion has been, and is still being carried in the columns of the British Medical Journal, in which Mr. Bowman and Mr. Wordsworth of the Royal London Ophthalmic Hospital appear as chief champions of the operation, and Mr. Haynes Walton, Mr. Wharton Jones, and numerous anonymous writers, as well as the Editor of the Journal, appear *contra*. The subject is of too much importance to be dismissed within the limits of a short leader, but we hope shortly to devote some space to the consideration of the statements of the iridectomists which (if true) make the operation little short of a miracle, and if false should be the condemnation of the practice. (*Dublin Med. Press.*)

Whale-Steaks. In passing along the street we saw strips of whale-flesh, black and reddish-coloured, hanging outside the gable of almost every house to dry, just as we have seen herrings in fishing-villages on our own coasts. When a shoal of whales is driven ashore by the boatman, there are great rejoicings among the islanders, whose faces, we were told, actually shine for weeks after this their season of feasting. What cannot be eaten at the time is dried for future use. Boiled or roasted it is nutritious, and not very unpalatable. The dried flesh which I tasted resembled tough beef, with a flavour of venison. Being "blood-meat," I would not have known it to be from the sea; and have been told that when fresh and properly cooked, tender steaks from a young whale can scarcely be distinguished from beef-steak. (*Pen and Pencil Sketches of Faro and Iceland.* By A. J. Symington.)

Report of the Council of the Pathological Society. In accordance with the established rule of the Pathological Society, its Council presents to the members an annual report, embodying a brief account of the progress which has been achieved during the past year, as well as the position and prospects of the Society. It is a noteworthy fact that, throughout its whole career, a period of eighteen years, the Council has been enabled to furnish an annual record of progressive prosperity; no exception to this happy experience has yet been furnished, and it is with no small gratification that now, on the occasion of another anniversary, your Council is able to announce not merely that the present report maintains the character of its predecessors, but that it records an amount of success beyond that of several preceding years. To commence with the subject of finance:—The total receipts for the past year have amounted to £353 : 1 : 4, of which £12 : 8 : 1 have been realised by the sale of Transactions, and £5 : 14 : 3 as dividend from stock, leaving as the amount of subscriptions the sum of £334 : 19 : 0. Of this £45 : 3 : 0 have been received as life fees, and as composition fees from non-resident members, and will in accordance with previous practice be invested in 3 per cent. consols. Besides this, there is a balance of £190 : 18 : 5½ from the preceding year, making a total of £543 : 19 : 9½. Of this £119 : 19 : 0 have been added by order of the Council to the Society's funded property. The total expenditure amounts to £329 : 3 : 3, leaving in the treasurer's hands a balance of £78 : 2 : 6½ to be carried forward to the account of the current year. The amount of stock in consols held by the trustees for the Pathological Society is now £259 : 13 : 5. Next, in relation to numerical strength it should be stated that, the Society is at this moment constituted by a larger number of members than at any previous period of its existence. The average attendance at its meetings is also higher, a fact which demonstrates the increasing interest which attaches to the operations of the Society. The supply of pathological specimens has been more than ample, and on most evenings more than sufficient for examination, to say nothing of discussion. If any ground for complaint could possibly be alleged, it arises from an absolute superabundance of valuable examples of many forms of morbid product. The often imposing list, the reading of which commences the proceedings of each meeting, sometimes suggests such a reflection as the following:—"It is true that each of these preparations is intrinsically valuable and interesting; that it is necessarily so to the exhibitor who has watched narrowly the phenomena which have marked its development; but has it been considered whether the specimen subserves also that purpose, which is after all the higher one, viz.: to afford interest and perhaps instruction to many of the hundred members whose time will be occupied by its examination, of the four hundred who pay for its record in their annual volume? In conclusion, it remains only for the Council to state that, the energy and activity which have already signalised the career of the present session, offer the prospect of a valuable forthcoming volume as the result of those useful labours which so many of the members have prosecuted on behalf of the Society.

Varieties.

Nervous Influence over the Heart. Upon one occasion I called at the house of a gentlemen advanced in years, whom I had long known as a patient, and found him dressed, as usual, and down stairs. He had, indeed, forsaken his usual easy couch, and was sitting on a common chair at the table. He wished to go into the country, as the change, he thought, would do him good; but he complained of no inconvenience of any kind. To my surprise I found the pulse beating upwards of 120 in a minute. My patient reluctantly consented to go to bed; and in less than forty-eight hours the heart, which had sounded the alarm without any of the ordinary sensations being disturbed, had ceased to beat. (*Mr. H. Lee.*)

Poor-Law Guardians and their Doctors. The Galway Guardians have, by a majority of fourteen to twelve, passed a resolution *reducing* the salaries of their rural medical officers. The reason which actuated the Galway Guardians was, that the fees under the Births and Deaths Registration Bill would be sufficient compensation for the reduction, and that therefore they were at liberty to cut down the salaries by as much as the Act increased the incomes of their medical officers. This course is certainly an out-Heroding of Herod, worthy of no other name than a dishonest, mean, illegal, and pettifogging excuse for appropriating the just remuneration of medical officers for their hard labour to the liquidation of their own debts. (*Dublin Medical Press.*)

Medical Education in Montreal. In the city of Montreal there are two medical colleges, an English and a French one, the former being in connection with McGill University, and the Montreal General, and University Lying-in Hospitals. In the latter, "L'Ecole de Medecine et de Chirurgie," the lectures are delivered in the French language; it has the great advantage of having under its control one of the largest and finest hospitals in the Province—the Hôtel Dieu; it has also the Ste. Pélagie Hospital for Midwifery practice, and La Dispensaire de la Providence, where over eight hundred out-door patients have been prescribed for within the past three months. To the student in medicine, McGill College possesses many unfair advantages, gained by partial legislation. 1. Whilst a student attending the English college requires but three years and a half of study to obtain his degree and license to practise, the law demands four full years if he attend the French one. 2. A student in the English College has his time counted from the moment of commencing his studies; in the French school his studies can only be reckoned from his classical examination, which must be by the College of Physicians and Surgeons of Lower Canada. 3. The English college has the power of granting degrees—the French one possesses no such right. 4. The English College has the right of examining its own students, whilst those of the French are compelled to go before the College of Physicians and Surgeons even for the examination for license to practise. (*Canada Lancet.*)

The Contagiousness of Leprosy. Dr. Daunt writes as follows from Brazil:—"I see that the English Government, after consulting the London College of Physicians, and receiving information from many supposed authorities, have decided officially the non-contagiousness of leprosy! I wish to enter a solemn protest against such decision. *Leprosy is contagious!* I have seen proofs of this repeatedly. This truth is nowise attenuated by the truths that it is hereditary, and that it is also spontaneously produced by the neglect of the precepts of hygiene as to food, cleanliness, exposure, as also that syphilis is also a cause. Why does not the English Government solicit the opinion of the Imperial Academy of Medicine of Rio de Janeiro, or of the Congregation of Professors of the Faculty of Medicine of Rio? Brazil being the theatre of the development of leprosy on a fearfully vast scale, to no country could a foreign government more appropriately turn in search of valuable opinions. The disposition to deny contagiousness in disease seems to me to be a moral malady near akin to the sceptic rationalism which corrupts the intelligence of so many who think the yoke of unbelief lighter than that of tradition. The hygienic precautions as to leprosy, recorded in the Mosaic writings are an *à priori* weighty argument on the side of infection. The rage for disbelieving everything which cannot be materially and mathematically demonstrated in all its parts is a sterile, mal-efficient, and death-generating agent in all intellectual operations."

Cow-Houses in St. Pancras. Last year, a law came into operation, by which no dairyman can keep cows in London in any unlicensed place. The license is to be granted annually by the Justices of the Peace; and every cowkeeper, who wishes to obtain a license, must give a fortnight's notice to the Vestry, in order that the Sanitary Officers may inspect the places, and report on their condition to the Vestry. It then becomes the duty of the Vestry to shew cause against the granting of the license in any case in which the place appears to be unfitted for the purpose. In consequence of the short time which had elapsed since the passing of the Act, the magistrates have been hitherto lenient in their requirements. The nuisance arising from cowsheds in a crowded district is much greater than might be supposed. The food on which the cows are fed in warm weather, gives rise to very disagreeable smells; the cows are huddled together, and there is a general neglect of cleanliness. A few of the worst were shut up, by the licence being refused; but licenses were granted to eighty-eight cowkeepers for a hundred and two distinct cowsheds. In regard to a number of these, the magistrates stated, that unless great improvements were effected during the present year, the license could not be renewed. Of the hundred and two sheds, the amount of space allowed for each cow is not sufficient for the health of the animal in more than about fifteen. After deliberation and consultation with each other, the Medical Officers of Health of the Metropolis were of opinion that a cubic space of a thousand feet should be allowed for each cow. In nine of the sheds in this parish the space was between two and three hundred feet only; in eighteen it was between three and four hundred feet for each cow; in sixteen it was from four to five hundred feet; in thirty-five sheds the space for each was between five and eight hundred cubic feet; in ten it was from eight to ten hundred; and in only ten was it over one thousand cubic feet. (*Report of Officers of Health.*)

Scotch Registrar-General's Report. The Registrar-General of Scotland states in his quarterly return just issued that the marriages registered in Scotland in the third quarter of this year amounted to the average number—a fact which speaks well for the general prosperity of the country—especially as the marriages in the previous quarter were above the average, and therefore might have led us rather to expect a diminution afterwards. The births last quarter were considerably above the average, but unhappily the deaths were still more in excess. The quarter was very unhealthy. Smallpox was epidemic. The Registrar of Walls, in Shetland, states that it is always very fatal there, and that he believes that in that parish (with a population of 1,365 at the last census) there are upwards of a thousand persons unvaccinated. Of Foula, in his district, with a population of 233 at the last census, he has to state that at one time smallpox swept off almost all the inhabitants, and that at present there is hardly a person there who has been vacci-

nated. The Bill of last Session for compelling the vaccination of children in future was not passed without cause, and ought not to be a dead letter. Diphtheria is steadily increasing in Scotland; last quarter it seems to have been more prevalent and fatal in the northern than in the southern half of that country. One of the registrars notices that the night-air is extremely vitiated in the box beds which are still in general use in the damp, ill-aired cottages so common in Scotland; and the reports mention that fever and smallpox have in several instances clung to particular houses and not been prevalent in the neighbourhood. A child died from the bite of an adder at Kirkcowan, in Wigtonshire. One or two deaths occur every year from the poison of this snake. The weather in the last two months of the quarter is described as cold and rainy. There has been a complete absence of the usual amount of autumnal heat, and the meteorological agencies generally were most adverse to health. The registrar of Laggan, Inverness, reports that at six o'clock "on the evening of August 6th," a smart shock of an earthquake was felt throughout the district, and caused much alarm. In one place there was so much oscillation of the ground that workmen had difficulty in steadying themselves.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Palfrey, "A Case of Uterine Polypus, unaccompanied by Hæmorrhage"; Mr. W. Miller, "On Two Peculiar Properties of Chloroform, independent of Anæsthesia"; Dr. Habershon, "Abscess of the Liver."

TUESDAY. Royal Medical and Chirurgical Society, 8 P.M. Mr. Holmes Coote, "Case of Left Ovary found in the Sac of an Inguinal Hernia"; Dr. Habershon, "Effects of the Implication of Branches of the Pneumogastric Nerve in Aneurismal Tumours"; Dr. John Harley, "On Endemic Hæmaturia of the Cape of Good Hope."

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE LATE MR. THACKERAY.—SIR: Permit me to correct a statement appearing in your brief notice of the autopsy of the late lamented Mr. Thackeray. The examination was made conjointly by Mr. Seymour Haden, Mr. Reeves Traer, and myself; with the presence and aid of Mr. Merriman of Kensington.

I am, etc., HENRY THOMPSON.

35, Wimpole Street, W., January 2nd, 1864.

MAN-MIDWIFERY.—SIR: I wish to direct your attention to certain pamphlets published by Mr. Job Caudwell, 335, Strand, which, I consider, are likely to injure the status of our profession with many of the public, always ready for a hit at the doctor. My attention was drawn to an advertisement in a newspaper a week or two ago; and I was induced, through curiosity, to write for the books. One is entitled *Man-Midwifery Exposed; or the Danger and Immorality of employing Men in Midwifery Proved*, etc. By John Stevens, M.D. Another is entitled *The Accoucheur; A Letter to the Rev. Mr. Tattershall of Liverpool on the Evils of Man-Midwifery*. By A Student. Another is entitled *The Death-blow to He- or Man-Midwifery; or Hints based on Truth and Fact; Addressed to Husbands, Fathers, and Brothers*. By Hamilton Fitzwilliams.

We must all allow that the subject is one requiring careful consideration, and there is a great deal of truth in the charges brought against the profession; but I should fain hope that most of the remarks made do not apply to the "man midwives" of this country, but are confined to America. I suppose no good would come of any efforts to suppress the publications in question?

I should also like to know your opinion as to the use of the "pneumoclime" and the "pneumothalp", remedial agents designed to meet the requirements of the Climatic Pathology of the Chest, by Julius Jeffreys, F.R.S., formerly of the Indian medical staff, etc. He sent me a circular by post, two or three weeks since, in the form of an address to the medical profession, on the utility of his inventions. Do you consider that his views on the subject are sound?

Apologising for the length of my letter,

I am, etc., JOHN CANDY, M.D.

Alstonfield, near Ashbourne, December 23rd, 1863.

TREATMENT OF SKIN DISEASES (SAVE ITCH).—Take of acetic acid ℥j; iodide of potassium ℥ij; tincture of iodine ℥vi. Dissolve the iodide of potassium in the acetic acid; then add the tincture of iodine, and shake all together, and apply it with the tip of a feather to the diseased part every morning, and a little oxide of zinc ointment every night. The patient should take internally from one to two grains of mercury with chalk, with from four to six grains of James's powder, every night when going to bed, and some sweet whey afterwards. Of course, a light nutritious diet is absolutely necessary. Milk and vegetables are preferable to any other diet. Tea, toast and eggs, fresh butter, etc., can be used with benefit for breakfast. The tea should be strong, with plenty of cream and sugar in it. After four or five applications externally, the lotion can be left off for a few days, and then repeated again, if necessary. In five or six days, the mercury with chalk and James's powder can be left off, and repeated again, if necessary. I am, etc., J. SPROULE.

Arva, co. Cavan, December 26th, 1863.

CHLOROFORM AND CORONER'S INQUESTS.—SIR: Your article on Chloroform ought to do good, if anything will do good, in warning operating surgeons of the danger of permitting chloroform administration to degenerate into a mere trifle, like putting on leeches, shaving the pubes in a hernia case, or sponging out the adyta of a black eye or cut head, which any zealous first year's student may do. I have heard the chief lithotomist in London say to his class that he never undertakes the operation for stone, without fear and trembling for the patient. I wish we had a little of this feeling as bearing on the caution necessary in the giving of chloroform. At the last inquest, the jury and coroner, doctor and newspaper reporter, were all "at sixes and sevens" as to whether in future cases the pulse ought to be *continuously* felt during the administration, or whether it would answer for a third party standing by to "watch the pulse". At a previous inquest, a coroner's jury found that the pulse comes to the wrist from the *right*(!) side of the heart, where there was heart-congestion (Snow's cardiac syncope). Nay, verily, the coroner had a whole heap of books and the *Lancet* to charge the jury, so as to prove this. Dr. Taylor, of Guy's Hospital, too, was an authority quoted on that side; and as there was this heart-congestion present (the newspapers made it extensive heart disease), the jury were much inclined to bring in a verdict of malpraxis! I told the jury in the meekest manner, but smiling, that all that the coroner found in his authorities was nonsense; that the pulse comes from the left side of the heart, as every boy student knows; that "fatty heart", as a cause of death, was a dream; and that a malpraxis verdict was neither more nor less than fatuity. The coroner still held to his heap of books and journals; and there was a great triumph in favour of the pulse coming from the right side of the heart. "Whatever, as to the heart, was right could not be wrong", said one juryman. I said "not; and so he should rather believe me than trust to popular fallacies now exploded." I see my excellent friend Mr. Gay has got into the same muddle of the coroners and juries; but, as you remark, we are coming to a time when this thing will be a very serious matter indeed, if not discouraged. The pulse is a most valuable test *negatively* that all is going on right; *quoad* the respiration, during chloroform administration; it is of no moment in ninety-nine cases in a hundred as to the direct effect of chloroform in the heart itself. As to a third party standing by feeling and watching the pulse, it would be about as wise as when one is hungry for his dinner, if he get another person to eat it for him, and then wonder something had gone wrong, if, in testing his appetite, he found it still remained, though his friend might protest he has lost his. I am, etc., C. K.

Sackville Street, November 13th, 1863.

COMMUNICATIONS have been received from:—Dr. FREDERICK J. BROWN; Mr. F. FRY; Mr. BOWMAN; Mr. H. LEE; Mr. OLIVER PEMBERTON; Dr. A. C. ROBERTSON; Mr. H. THOMPSON; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. J. VOSE SOLOMON; Mr. BRODHURST; Dr. THUDICHUM; Mr. JONATHAN HUTCHINSON; Mr. G. SANKEY; THE HON. SEC. OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. C. HOLMAN; Dr. S. H. AGAR; Mr. W. R. ROBERTS; Mr. R. HARRISON; Mr. FURNEAUX JORDAN; Mr. J. FOX; Mr. F. D. FLETCHER; Dr. ALEXANDER FLEMING; and Dr. WILLIAM NEWMAN.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture VI.

ON CURVATURES OF THE SPINE.

(*Continued.*)

Symptoms of Lateral Curvature of the Spine.

It has already been said that lateral curvature may be divided into incipient and confirmed curvature. Incipient curvature exists in the erect position of the body, and it may be removed in the horizontal posture. When, however, the curve becomes permanent, it is shown both by the form of the thorax and in the gait, as well as in the inequality in the height of the shoulders and the hips. The shoulders are no longer on the same plane; one is raised, while the other is depressed. The shoulder on the side of the dorsal convexity is not only unduly raised, but the scapula is rendered abnormally prominent, and its inferior angle is carried outwards and away from the median line of the trunk. But, while this occurs on the convexity, on the opposite side the scapula is depressed; for the ribs are flattened and depressed on the side of the concavity, while they are bowed out on the convexity. The scapula changes its position only as the ribs change in form; being raised and rendered prominent as these are bowed, and depressed as they are depressed.

This change in the form of the ribs is caused by rotation of the vertebræ; and thus it is that rotation of the vertebræ constitutes one of the most important characteristics of spinal curvature. It commences so soon as curvature becomes confirmed. Hence I have dealt with it as a means of classification; namely thus: incipient curvature, or curvature without rotation of vertebræ; and confirmed curvature, or with rotation.

The angles of the ribs are rendered abnormally prominent on the side of the convexity of the curve; and the ribs themselves become more horizontal in direction, and they are separated more widely from each other than in their normal condition. On the side of the concavity, they are rendered more oblique in their direction; and they are depressed, or even they overlap one another.

The anterior surface of the thorax also presents changes consonant with those which are going on elsewhere. All the changes are due to a common cause, and they proceed *pari passu*. On the side of the convexity, the ribs are flattened anteriorly; the mammary gland becomes atrophic, and its nipple presents outwardly; and the shoulder is raised and carried forward; while, on the side of the concavity, the ribs become unduly prominent. Thus the greatest diameter of the thorax is in an oblique direction from behind forwards. These particulars are shown in the following figure (Fig. 18).

One of the earliest symptoms of spinal curvature is pain below the scapula, on the side of the convexity of the curve. It is not invariable, however. Not unfrequently pain is only felt when distortion becomes excessive. I have frequently observed this to be the case with hereditary distortions.

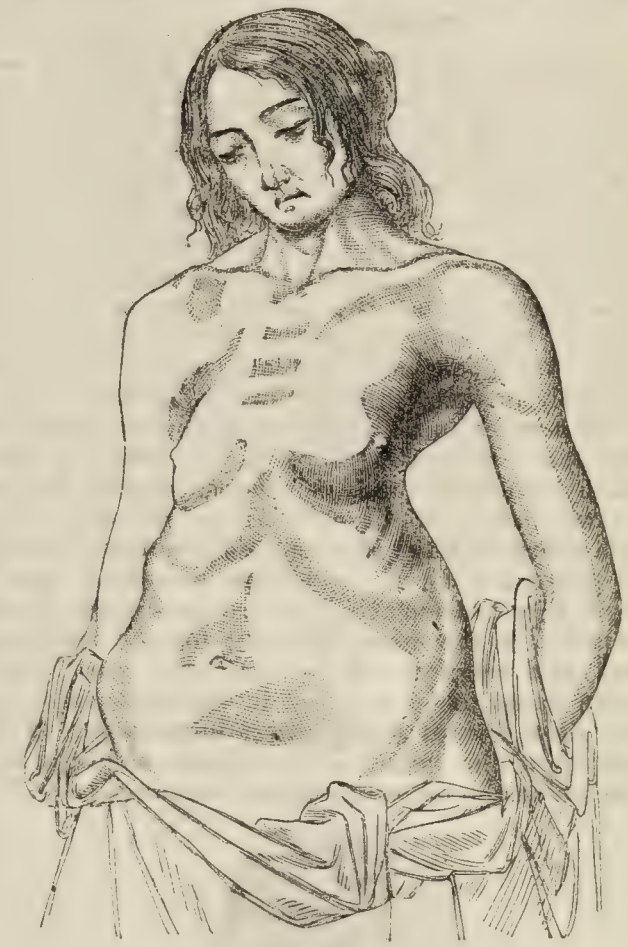


Fig. 18.

A symptom which always gains much attention is the prominence of one hip. The ilium on the side of the lumbar concavity is raised, and on the same side the loin sinks in so as to produce a striking alteration in the form; while on the opposite side—the lumbar convexity—the transverse processes project backwards through rotation of the vertebræ, and the spinal muscles are in consequence rendered tense.

With regard to the formation of the spinal curves, considerable errors exist. Thus, one author asserts that the lumbar curve is always the primary curve; while another—Pravaz—affirms with equal warmth that the dorsal must necessarily be first formed. Others (and it seems to be a prevailing opinion) teach that a spinal curve may remain single.

I trust, in speaking of the causes of spinal curvature, that I may have shown in such a manner as to carry conviction that the primary curve may be cervical, dorsal, or lumbar; and that equilibrium can only be maintained when compensating curves have been formed. A single curve can only exist in the horizontal position. Nothing more is necessary to produce compensating curves than the erect position, and the muscular force which is necessary to maintain that position.

The curves are constantly undergoing change, representing segments of smaller circles, and becoming more rigid, until the height of the trunk is considerably diminished; and, as a necessary consequence, the obliquity of the hips and shoulders is always

diminishing, through the increase of the spinal curves, until they again assume a horizontal direction. And thus, through great increase of distortion, equilibrium may be restored. This position is shown in Figure 17, Lecture v.

Pathological Anatomy.

It has already been stated that scoliosis is *incipient*, or *without rotation of the vertebræ;* and *confirmed*, or *with rotation.* In the former, the muscles are chiefly affected; but, in the latter, the ligaments and intervertebral cartilages are also much implicated. But, although the muscles, ligaments, intervertebral cartilages, and the vertebræ themselves, are implicated and altered in lateral curvature of the spine, these are not the only structures which are affected, but every viscus in the cavities of the thorax and abdomen is liable to become directly or indirectly involved through this distortion.

The *muscles* on both sides of the spine are for the most part somewhat more pallid than in their healthy condition. In the commencement, they are somewhat tense on the side of the convexity; in a more advanced stage, they become prominent through the projection of the transverse processes; and at length they become atrophic through disuse. In the concavity of the curve, they are for the most part weak and relaxed—wholly inactive; yet I have known them to be so tense in the concavity, that they have formed the greatest impediment to the removal of the spinal curve. It was so in the case from which the following figure was taken (Fig. 19).

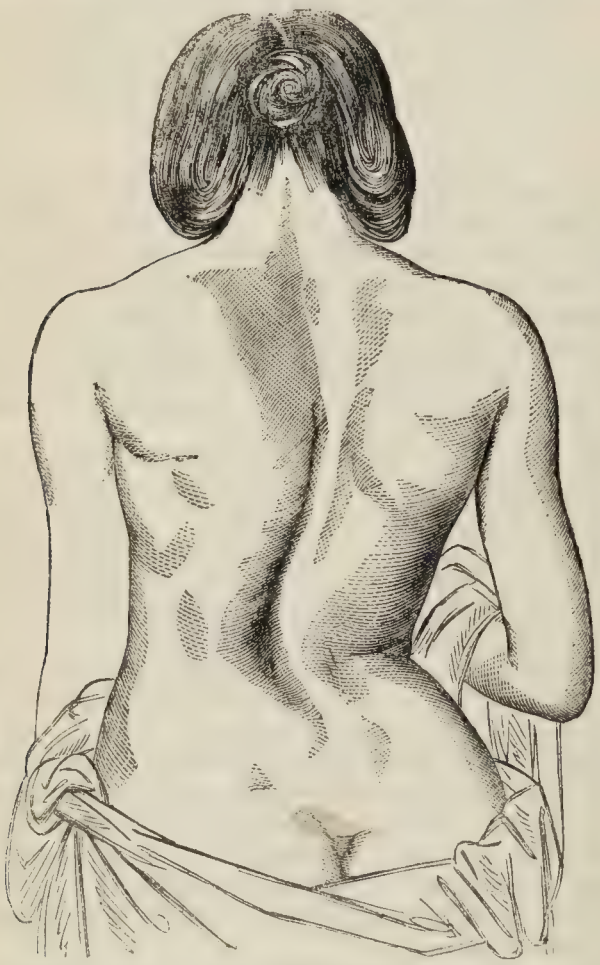


Fig. 19.

In this instance, the ordinary treatment for spinal curvature had been found ineffectual; it had been zealously pursued until the patience both of the patient and the surgeon had been exhausted, when it was determined to divide the erector spinæ. The operation was followed by the happiest result: the spine was speedily straightened, and it remained so. It is exceedingly rare, however, that such an operation is necessary, or that it is expedient to divide any muscular fibres. In France, it has been done to a very great extent, but, as I believe, needlessly, and even to the injury of the patient.

The appearances of the muscles which have been now described differ somewhat, according to the cause of the distortion. This would be anticipated by all, and therefore a general description only would be expected.

The *ligaments* constitute a greater impediment to the removal of spinal curvature than the muscles. If, for the sake of experiment, the muscles be cut through *post mortem*, it will be found that the spinal curve remains unaltered, or nearly so; but distortion may be removed by dividing the ligaments of the spine. These ligaments are shortened in the concavity of the curve, while they are elongated on the side of the convexity.

Great Discovery in Homœopathy. It is found that if all homœopathic medicines are simultaneously administered, only that one which tallies with the disease will act, and the rest will be inert. The Salt of Life contains a mixture of all homœopathic medicines, so compounded, as to prevent chemical reaction, and it *cures all diseases* by *presenting all remedies to the system*, leaving the election of the proper one to nature. Patented and prepared by Hahnemann, Williams, and Co.

Sudden Death in New York. The present state of things bearing on the point is truly lamentable. No provision whatever is made for cases of sudden death occurring throughout the city; a person may die of heart-disease on his way home from business, and, if not immediately recognised by the bystanders, is soon lodged in a lonely cell of the nearest station-house. Here the body is allowed to remain for a very short time, as the Captain of the Precinct is unwilling to have the corpse over night in the station-house if it can be avoided. The coroner is immediately summoned by telegraph to hold an inquest on the body of an unknown person just brought in, with as little delay as possible. This is soon accomplished, and in a short time a permit is made out to inter the body at the city's expense. The relations of the deceased begin to feel uneasy at his prolonged absence from home. Diligent inquiries are made, and a strict search instituted in all directions without avail. At length they are amazed to find that he lies buried in a trench, twenty feet below the surface, in the public burying-ground. It makes one shudder to think how suddenly he may be disposed of, should death overtake him on the public highway, unless the fact comes to the notice of his friends. The policeman who takes the body to the station-house is in a hurry to get rid of his disagreeable duty; the captain of the precinct is in a hurry to get the body away from the station-house; the coroner is in a hurry to get through with his part of the business; and the city undertaker is in a hurry to get through before dark. The result of all this is, that the whole affair may be disposed of in a few hours. There is no exaggeration in the picture we have drawn. It is the mode in which the great city of New York disposes of a portion of its dead. We have known instances where two hours had hardly elapsed after the death of a person, before the body was coffined and on the road to the public burying-ground. (*American Med. Times.*)

Therapeutical Inquiries.

III.—OIL OF MALE-FERN IN TAPEWORM.

Reporter, Alexander Fleming, M.D., F.R.C.P.Lond., Physician to the Queen's Hospital, Birmingham.

The usefulness or otherwise of the oil of male-fern in tapeworm, and the best mode of exhibiting the drug, were the special objects of this inquiry. The question was issued on the 22nd of November, 1862; and the schedules filled up have been returned to me by the following gentlemen.

	No. of Cases.
Anderson, Dr. W., Birmingham	20
Anderton, Henry, Esq., Wavertree, Liverpool	1
Barham, Dr. Charles, Truro	5
Beddoe, Dr. John, Clifton	15
Bennett, Dr. J. Hughes, Edinburgh	1
Bree, Dr. C. R., Colchester. [Dr. Bree's schedule contains a general statement strongly in favour of the oil of male-fern, but without cases in detail.]	
Cooper, Dr. W., Bury St. Edmunds	1
Cornbill, John, Esq., Birmingham	1
Drew, Dr. Samuel, Sheffield	2
Harris, W. J., Esq., Worthing	1
Humphreys, John R., Esq., Shrewsbury	3
Jackson, Vincent, Esq., Wolverhampton	1
Jago, Dr. James, Truro	1
Kelly, Dr. W. M., Taunton	2
Osborn, A. G., Esq., Northampton	2
Ransome, Dr. A., Manchester	4
Sankey, William, Esq., Dover	5
Spender, John K., Esq., Bath	6
Thompson, Thomas, Esq., Queen's Hospital, Birmingham	29
Total number of cases	100

Sex. Of these 100 cases, 30 were males, and 70 females.

The remarkable preponderance of the female sex among the subjects of tapeworm, here shown, and, as I believe, for the first time on numerical data, is full of interest in relation to the cause of the disease, and most deserving of further inquiry. The great majority of the cases embraced in this report are taken from hospital out-patients, among whom the women suffer frequently from dyspepsia, very much more so than do the men; and we can readily understand how the "measle" will have a higher chance of escaping death in a weak stomach, and subsequently making a home for itself in the bowels. As respects the diet itself, the risk run by men must be greater than that by women; as they eat a larger proportion of animal food, and, in Birmingham especially, of pork.

Our returns shew that the male-fern, as a remedy, is of equal efficacy in both sexes.

Age. The age of the patient is not mentioned in 8 of the cases. Of the remaining 92, the average age of all, in round numbers, is 29; of the females, 30; of the males, 28. The returns include cases of all ages except infancy, and prove that the oil of male-fern is an efficient remedy as well in the child as in the adult. A child of 1 year and 11 months is the youngest, and a woman aged 69 the oldest example. The exclusive milk diet of infants, and consequent freedom from the cause of the parasite, explains their immunity from tapeworm.

The Duration of the Disease is not given in 33 cases. Of the remaining 67, it is stated to vary from a few days, as in 4 cases in Dr. Anderson's schedule, to 36 years, as in the example reported by Mr. Anderton. There are 11 cases whose duration varies from 6 weeks to 10 months; 16 are reported of 1 year's duration; 9 of 2 years; 4 of 5 years; 3 of 7 years; 3 of 10 years; 1 of 12 years; 1 of 14 years; 2 of 20 years; and 1 of 36 years. The returns shew that the oil of male-fern has been as efficient as a remedy in cases of long standing as in the more recent.

Previous Treatment. In 35 of the cases, it is stated that there was no previous treatment. Among the remedies which had been used in the others, kousso was employed twice—once with, and once without success. Turpentine had been given on fifteen occasions—seven times with, and eight times without success. The oil of male-fern had been previously used five times—three times with, and twice without success. In one of those cases where it had failed, it was subsequently given in mixture with milk, in the mode which I have suggested, and with perfect success.

Dose, Time, and Mode of Administration. Dose. The medicine has been administered in doses of a few minims, of half a drachm, of one drachm, one and half, and of two drachms. The returns shew that one drachm is a sufficient dose; at least, in the great majority of cases. The larger doses more frequently excite sickness, vomiting, and diarrhœa.

Time. In many of the cases, the oil was given in the morning; in a greater number, at bedtime. The results of the two methods, when compared together, do not show any material difference in success. I prefer to give the drug at bedtime, because the patient should continue to fast for eight or ten hours after taking it; and it is easier to do so during sleep than waking.

Mode. In 47 of the cases, the oil was given with milk, in the manner which I had myself suggested in the observations which accompanied the schedule. The following is the formula referred to.

"Mix well of oil of male-fern one drachm, and mucilage half an ounce. This draught is mixed with one ounce and a half of sweet milk, and taken at bedtime; the patient having omitted the dinner and evening meal of that day. Taken thus, on an empty stomach, the mixture is carried speedily into the intestines, to feed, and at the same time poison, the hungry parasite which nestles there. Milk is the favourite food of the worm. Next morning, a dose of castor oil may be given. If necessary, this medication may be repeated daily, one, two, and three times, or until the worm is discharged."

In the remaining cases, the drug was given without milk, in mucilage or some aromatic water. In nearly all the cases comprised in the returns, care was taken to give the remedy on an empty stomach. The two classes of cases, therefore, or those in which the male-fern was given with milk, and those in which milk was not used, admit of fair comparison; and of the higher efficiency of the first of these methods of exhibition the returns are conclusive. So given, the drug acts more quickly, and at the same time more efficiently. The proportion of failures is nearly the same with both methods; but the length of worm discharged, and, so far as we can judge, the thoroughness of the cure, predominate in those cases where milk was used.

Physiological Effects. Sometimes the medicine operates without pain or nausea; more often, there are sickness, griping pains, and purging. Vomiting is reported in ten of the cases. Dr. Bree observes that,

under its use, the urine was usually loaded with lithic acid. In one of Dr. Anderson's cases, the menses, which had been absent for several months, returned after the use of the oil. The vomiting and purging were caused frequently by the second dose, after the worm had been discharged; and must be ascribed to the action of the drug itself on the gastro-intestinal mucous membrane—not, as some have thought, to the dying struggles of the poisoned worm, though it may be that these play some part in their causation.

In five of the 100 cases, the worm was discharged alive. Except that it was expelled with unusual speed, I cannot trace any circumstance to account for the living state of the parasite in these examples.

The largest portion of tapeworm which is reported to have been passed is fifteen yards. This was in Dr. Bennett's case. No mention is made of any other species of tapeworm than the tænia solium. Large round worms were discharged in two cases.

The worm was for the most part expelled after the first dose, but in a few cases not till after a second or third dose. The worm was often passed before any purgative was taken, and separately from the ordinary evacuation. In one instance recorded in Mr. Thompson's schedule, the worm was discharged upwards by vomiting. This was the case of a female aged 40, who had suffered many years from tapeworm. She took one drachm of the oil of male-fern in milk, according to my formula; and, in the course of an hour, vomited a very long tapeworm, which was quite dead. None passed by stool. After two days, the draught was repeated; and she passed a large quantity of dead and broken tapeworm. The patient had previously taken various remedies without success. In Dr. Anderson's schedule, the case of a girl aged 18 is narrated, who became very sick after taking two drachms of the oil of male-fern in milk, and vomited a large round worm. She was afterwards purged smartly, and passed a quantity of joints of tapeworm.

The average time which elapsed between the administration of the oil and the expulsion of the parasite was six hours. It was discharged in half an hour in seven cases, in one hour in nine cases, in two hours in six cases, in three hours in three cases, in five hours in six cases. The longest interval mentioned is twenty-four hours.

In several of the cases, the worm was passed in a broken and softened state. In these cases, a considerable interval had elapsed between the taking of the oil and the expulsion of the worm, the softened condition of which was probably due to a more or less complete digestion of the already poisoned and dead worm.

The head is reported to have been found in three cases (schedule of Mr. Spender); but, in one of these, its discovery rests only on the authortiy of the patient. It is generally thought that the rarity with which the head is obtained is due to its not being killed and detached with the body; but it seems improbable that the poison should take more effect on the body than the head of the creature, and which it meets first in its passage downwards from the stomach. According to Dr. Nelson, the food is taken in chiefly by the head. I am more inclined to refer the rare discovery of the head to its solution in the digestive fluids. Thin and delicate, it must be easy of digestion. Moreover, placed higher up in the canal, it is in closer proximity to the more active solvent juices. The thin and translucent neck, though found more often than the head, is also generally absent; and probably for the like reason. I am disposed to refer relapses to the growth of other worms, which have escaped the action of the poison, and not to the resprouting of the old head.

Duration of the Cure. Though relapses often occur, there is reason to believe that the cure is permanent in a large proportion of the cases. The length of time (one year) assigned to this inquiry, and the difficulty of ascertaining the future history especially of hospital patients, render the returns in reference to this important point unavoidably of less value than we could desire. I may mention in this place, that Mr. Osborn, in a note to his schedule, states that two cases of tapeworm are known to him, both females, of 38 and 17 years of age respectively, where the oil of male-fern was used with success, and where the patients remained, to his knowledge, well for many years.

In concluding this report, it is only just to remember, in connexion with our subject, the early labours of Peschier of Geneva, and dating so far back as 1830, but which had been almost overlooked in England until Dr. Christison, in 1853, gave the sanction of his authority to the results of Peschier's trials. The later experiences of Drs. Gull, Jenner, Bennett, Willshire, Ransome, and others, have abundantly confirmed their observations, and, conjoined with the results of the present inquiry, establish beyond doubt the great efficacy of the oil of male-fern in tapeworm, and its superiority to the other known remedies of this disease. Further, our report points very decidedly to the most efficient mode of exhibiting the drug; and the whole inquiry has, as I have reason to know, rendered excellent service to therapeutics by making the virtues of the oil of male-fern more widely known and employed throughout the profession.

It remains only for me to offer my best thanks to all the gentlemen who made returns to me for their valuable aid in this inquiry.

Appended Cases. For the better illustration of the nature of the results obtained in this inquiry, I subjoin the histories in detail of six of the cases.

Case I. Alison Robertson, age 26, had suffered from tapeworm for five years, and had already used castor oil and turpentine. One drachm of the etherial extract of the male-fern was given six hours after a dose of castor oil, which cleared out the bowels. No food was allowed to be taken in the interval. The worm was expelled in fragments of various sizes, the longest piece being fifteen yards in length. In some portions, the joints must have been very close to the head; but that could not be found. Eighteen months have since elapsed, without any return of the parasite. The patient is a domestic servant in my own house. (Schedule of Professor Bennett, Edinburgh.)

Case II. J. C., a female, aged 40, had had tapeworm for many years, and had taken various remedies for it with little or no success. After fasting, she took one drachm of the oil of male-fern in mucilage and milk, according to Dr. Fleming's formula. No purgative was given. In an hour after taking the draught, she vomited a very long tapeworm, which was quite dead. No worm nor joints were passed by stool. Two days having elapsed, the draught was repeated; and she passed a great quantity of tapeworm, broken and dead. (Schedule of Mr. Thompson, House-Surgeon to the Queen's Hospital, Birmingham.)

Mr. Thompson's schedule includes the cases of tapeworm which have occurred among my own patients at the Queen's Hospital. The disease prevails to a wide extent in Birmingham, and is often seen in its more severe forms among the out-patients of the Queen's Hospital. As compared with Edinburgh, the greater frequency and severity of the disease are very marked. The patients may often be recognised on entering the consultation-room by their worn, vacant aspect—their trembling gait and hands, staring eyes, wide pupils,

and hesitating manner. Many suffer for years, with alternate periods of aggravation and improvement. Of the relation of cause and effect between the "measle" of the pig, or *cysticercus cellulosæ*, and tapeworm, this town affords ample evidence. I have ascertained that large quantities of "measly" pork are sold and used as food in Birmingham. It is not exposed for sale in the public markets, but is disposed of privately, and much of it is employed in the manufacture of sausages, in which one of my pupils (Mr. Lloyd) and myself have found portions of the "measle" with the microscope. These are made use of to a large extent by the working classes, and are frequently eaten imperfectly cooked or nearly raw. Although the worm must be for the most part destroyed in the mincing, it may frequently escape sufficiently intact to renew its life in the bowels.

Case III. Ellen Mills, age 24, had had tapeworm for seven years. She had already been treated for it, but she could not tell what remedies were used. They had no effect. She had no solid food for twenty-four hours, and then took two drachms of the oil of male-fern in mixture with milk, according to Dr. Fleming's formula. No purgative was given. The male-fern operated in five hours. Half a basinful of joints were expelled with the first stool. The bowels were moved three times. The patient complained only of pain in the stomach. (Schedule of Dr. Anderson, Resident Physician to the General Hospital, Birmingham.)

Case IV. H. B., a female, age 30, had had tapeworm for one year. The treatment comprised first salt-fish diet for three days, then fasting, then three grains of calomel at bedtime, and castor oil at 5 A.M. next morning. At 6 A.M., one drachm of oil of male-fern was given; then at 8 A.M. another dose of castor oil; and at 10 A.M. a second dose of one drachm of oil of male-fern. This plan of treatment was followed twice, once without success; but the second time large masses of the worm were expelled, broken into pieces. Some portions were very thin and tapering, but the head was not found. Ten months have passed since this treatment, and no relapse had occurred. (Schedule of Dr. Arthur Ransome, Manchester.)

Case V. J. P., a female, age 42, had had tapeworm for one year and a half, and had taken for it castor oil and turpentine without benefit. She fasted a whole day, and took at bedtime one drachm and a half of the oil of male-fern in mucilage; next morning, an ounce of castor oil. The worm was passed in its entirety during the night, and before the castor oil was taken. She felt a slight sickness before the worm was expelled. All her unpleasant symptoms were removed. (Schedule of Mr. Humphreys, Shrewsbury.)

Case VI. Ellen Davis, age 2 years, had had tapeworm for six weeks. No previous treatment. On June 14th, a draught composed of fifteen minims of oil of male-fern in one ounce of mucilage was given in a teacupful of gruel, and followed by a dose of castor oil in half an hour. In two hours after the exhibition of the oil of male-fern, several fragments of tapeworm were expelled. No uneasiness was complained of in the interval. On the 16th, the same treatment was repeated; and, eight hours after the oil of male-fern was taken, more fragments of tapeworm were voided, but of smaller size. During the interval, the child was ill, refused food, and complained of pain in the bowels. On the 18th, 20th, and 24th, the draught of the oil of male-fern was repeated. Under the last date, it is stated that there were no worm-symptoms whatever; and the child's appetite, which was formerly capricious, was now uniformly good. (Schedule of Mr. Cornbill, Birmingham.)

Original Communications.

COMA FROM CHLOROFORM INHALATION (SUICIDAL): GALVANISM: RECOVERY.

By William Newman, M.D.Lond., St. Martin's, Stamford.

On October 10, 1863, I was hastily summoned to a man who was said to be dying. I went at once (1.45 P.M.), and was shown to a bed-room on the first floor, where I found my patient lying on a bedstead in the dark corner of the room, insensible to all external impressions. He was lying on his right side, partially undressed, with a woollen comforter wrapped round his head, and his face pressed down into the pillow; not so much so, however, as to prevent a view of the left side of his face, or to interfere with respiration.

The window was at once opened, and the bedstead dragged out into the room. On turning the man from his position, the face was found to be very much congested, almost black; the eyes closed as if in sleep, the irides widely dilated, and the pupils fixed; the mouth partially open; the tongue lying within the teeth. The whole skin was dark to a degree, and moist with cold sweat. The respirations were from six to eight in each minute, and irregular in force and rhythm. The pulse was about 52 in the minute, very feeble, yet regular. The heart's action was very faint, but regular in beat. The breath smelt of chloroform; and a little search discovered a basin with about three ounces of the drug still in it, and some oily matter floating on the surface of the liquid. This was at some distance from the bed; and there was no handkerchief nor cloth near the face on which it seemed that chloroform had been poured.

I sent a messenger to get my stomach-pump and galvanic apparatus; and meanwhile I employed cold affusion and cold sponging, rubbing the chest vigorously afterwards with a dry towel. This had no perceptible effect; the intervals between the respirations were so long, that after each one, it seemed that the last breath had been taken. Then, for about five minutes, a trial was given to Dr. Silvester's mode of performing artificial respiration. The arms were raised from the sides above the head, etc.; but, although with each upward movement air audibly entered the chest, there was no increase in the rapidity of the respirations when the arms were left to lie still on the bed.

2 P.M. I introduced the stomach-pump tube into the stomach. Nothing but a very little glairy fluid escaped. A pint or more of water was injected, and then withdrawn, smelling faintly, yet very decidedly, of chloroform.

2.5 P.M. The galvanic apparatus (Kemp's of Edinburgh) was set in action. The sponges, previously moistened in salt and water, were applied; one about the lower end of the sterno-mastoid muscle to excite the phrenic nerve, the other pushed deeply into the scrobiculus cordis so as to stimulate the diaphragm. Occasionally, the latter sponge was moved about over the surface of the chest so as to excite the pectoral and intercostal muscles. Several minutes passed over before the influence of the current made itself strongly evident, and then the muscles were thrown into action very readily.

2.15 P.M. The respirations were 12 in the minute; the pulse 65, and more powerful. The heart's action was much more evident. The face was possibly not quite so dark. There was no return of sensibility whatever.

2.40 P.M. The face was certainly not so dark. The respirations were 15 in the minute, deeper and more prolonged. The pulse was of better volume, about 65 per minute. The pupils acted now under the stimulus of light, and tended to remain more contracted. He was still insensible to the voice or to pinching; but moved slightly when the position of the sponge was changed on the chest.

3.15 P.M. He had found his voice. He objected suddenly and forcibly to the galvanism, and had just raised himself up in the bed.

When the man had thoroughly recovered, I made further inquiry, and was at once answered, that he had inhaled the chloroform with the full intent of destroying himself; that he was quite uncertain either what quantity he had employed, or for what length of time he had breathed the drug; and lastly, he was very emphatic in his statement that he had not swallowed any.

It is probably not too much to say that, but for the remedial measures employed, this man would certainly have died. The profound insensibility to stimuli, the infrequent respirations, with the slow and flickering pulse, were sufficiently reliable indications of impending death. The impression on my mind certainly was, that he had swallowed the drug in some quantity; the odour about his breath, the absence of any arrangement for convenient inhalation, etc., tended to mislead me; the fluid, too, with which the stomach was just once washed out gave very sensibly the smell of chloroform.

The case simply tells us the use of galvanism, persisted in with but few intermissions, for very nearly an hour before sensibility returned; and having this ultimate satisfactory result only, it would seem, from the rendering more active the respiratory movements; so eliminating with greater rapidity the poisonous agent, and counteracting the tendency to death by paralysis of the medulla.

For the treatment of dangerous symptoms occurring at a much earlier period of chloroform inhalation, distinctive rules are as yet wanting; and these, it is much to be hoped, will result from the inquiries of the Chloroform Committee of the Royal Medical and Chirurgical Society. If in the mean time any reader of the BRITISH MEDICAL JOURNAL, who has practically put the matter to the test, would state the best mode of using galvanism, with the most convenient apparatus, in the treatment of syncopal seizures in patients under the influence of chloroform, he will confer a positive benefit on his professional brethren.

SEVERE DYSMENORRHŒA—SUCCEEDING PROFUSE MENORRHAGIA—CURED BY THE RUSSIAN VAPOUR-BATH.*

By JAMES WILLIAMS, M.D., Accoucheur to the Malvern Lying-in Charity.

H. M., æt. 25, of fair complexion, small but well developed, commenced menstruation at 15; after a few months regularity she removed to a neighbouring town, when the catamenia entirely disappeared, but at the usual periods she suffered from bad headaches, nausea, backache, etc.

On her returning to Malvern, the discharge reappeared and continued with great regularity, but became excessive in quantity, and in the course of two or three years produced so much languor and debility as to seriously interfere with her duties. At this time she was induced to place herself under hydropathic treatment, which in this case was not so successful as is ordinarily reported. She was directed to use tepid, and afterwards cold Sitz baths during the continuance of the discharge. The effect of this treatment was to check the discharge; to render it gradually more painful, clotted, shreddy, bright red, and inflammatory in appearance.

The pain frequently extended down the legs, rendering walking impossible, and also induced great irritability of the bladder. This symptom became peculiarly distressing, the patient being unable to retain the urine more than half an hour at a time, even after the menstrual period had passed away; she also experienced pains for days before the discharge appeared, and then the agony was such as frequently to induce vomiting, and also to confine her to a couch or bed for the remaining four or five days of the period.

As I have stated, headache and languor remained, so that the patient scarcely recovered from one attack before another ensued. I determined, under these circumstances (the patient having been under a long previous course of medical treatment without benefit or relief), to give her the chance of recovery by the vapour bath. Her period being due in nine or ten days, she had only time to take three baths on alternate days. The discharge came on while she was in the third bath (two or three days earlier than usual), and with only a slight spasm; but, from the patient's having to walk some little distance, the pain became severe, requiring opium, hot mustard fomentations, etc, to render it tolerable. She recommenced the vapour bath on alternate days, but the next period was, nevertheless, a very painful one, and required an opiate injection, with morphia internally and saline aperients.

The vapour bath was recommenced on alternate days, followed by a tepid (and at first) warm shallow bath. This plan I invariably adopt now, as I find it generally approved by the patients, and it seems to brace up the skin more effectually than the shower bath, which I formerly used; and the shock of the latter is undesirable also, particularly in nervous subjects.

Her next period was decidedly easier, and came, as before, in the bath with little pain; the discharge was darker in colour. She went home in a carriage, and was quite well in a few days, except the irritability of the bladder, which still continued. It occurred to me that alkalies, etc. would relieve this symptom, but I feel bound to confess that medicine had no influence upon it.

I now made a local examination, suspecting vascular tumour of the orifice of the urethra (as described by Sir C. M. Clark), and found this to be the case. I therefore applied a weak solution of nitrate of silver, which gave obvious relief, and by continuing it occasionally for a few weeks, the patient was enabled to retain the urine several hours.

By continuing the use of the baths on alternate days, the pain at each period was reduced to a moderate degree, and became quite tolerable; and with this change the discharge became dark coloured and natural, and free from the shreddy and coagulated state. She now regards herself as *cured;* she has become four pounds heavier during the three months she has been under treatment, which is sufficient evidence that the vapour bath has not reduced the patient's muscular tissue.

In this case I made an early examination of the

* The vapour bath, to which I refer, encloses the whole person, and is sufficiently large to allow the patient to recline or move about, if he wish to do so. It is also heated by *superheated vapour*, which acts upon the whole mucous membrane of the lungs, as well as upon the external surface of the body. By this arrangement, the temperature is seldom required higher than 108° or 110°, or about 30° less than the Turkish bath; and, at the same time, the unpleasant dryness of the latter is avoided. The patients are never in the slightest degree liable to take cold after its use.

os uteri, but from the extreme irritability of the external parts, it was by no means easy to do so. The orifice of the uterus was contracted, but permeable and healthy in appearance. It did not, therefore, appear desirable to apply leeches, as I have formerly done for dysmenorrhœa; and the conclusion to which I came was that the case partook more of the nature of rheumatic neuralgia, particularly when I remembered its early treatment by cold sitz-baths, etc. I had also in mind the views of quaint, clever, observing Gooch, who even recommended the use of colchicum, guiacum, etc., in similar affections.

I think it must be evident that the treatment in this case has been eminently successful, and it must be also granted that in all cases of a like nature (particularly in unmarried females) the remedy deserves a trial, especially where no evidence of ulceration or other organic symptoms exist.

This patient continues to take an occasional bath, as a luxury, perhaps; but she always remarks that the succeeding period is easier, particularly if used a short time previously.

It may be imagined that the caustic application had some influence in curing the uterine spasm, but it was only applied occasionally to the external urethral orifice; moreover, the vesical irritation had only been superinduced from local association, and entirely disappeared with the dysmenorrhœa. Altogether the case is illustrative of what may be effected by general influences on the whole cutaneous and nervous surface, rather than by leeches, dilatation, etc. in cases and persons where such treatment should be obviously avoided.

The above case continues a complete success, more than twelve months having elapsed, during which time I have tried the remedy in several less severe cases where a few baths have been sufficient to give decided relief, particularly where the affection has been connected with "spinal irritation" and tender vertebræ.

Miss Nightingale, whose continued delicate state of health, we regret to state, causes her many friends much uneasiness, has expressed her intention, through Dr. Foote, of training, at the expense of her fund, properly recommended persons to serve as nurses in Constantinople. The want of such attendance has been long severely felt in our locality, the only existing provision of the kind being that afforded by the Sisters of Charity, the Prussian deaconesses, and a few ill-trained midwives, who afford but a very inadequate supply for the demand for their services. (*Levant Herald.*)

Singular and Important Surgical Operation under Difficulties. On Saturday last the eminent surgeon of Weymouth, Dr. Scard (being on a visit to George Wallace, Esq., of this town), accidentally met a gentleman named Peckham, a resident Christchurch. The latter had been suffering from a tumour, commonly called a "wen," formed over the occipital artery. It had assumed an unsightly form, nearly as large as an egg. On the suggestion of Mr. Wallace, Mr. Peckham agreed that the doctor should at once operate on it; but the latter being without his instruments, except a common lancet—no forceps or other instruments usually used on such occasions—what was to be done? However, by the aid of a silver spoon, the talented doctor totally eradicated the tumour with his lancet, and then showed it to his patient! The operation lasted two minutes only, and Mr. Peckham is now doing well, to the gratification of a large circle of friends, who join him in much deserved gratitude to his kind-hearted and unexpected benefactors, Dr. Scard and Mr. Wallace. (*Southern Times.*)

Transactions of Branches.

BATH AND BRISTOL BRANCH.

ON THE NATURE AND TREATMENT OF NON-SYPHILITIC PSORIASIS.

By John Kent Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

[*Read October 22nd*, 1863.]

I have chosen *non-syphilitic psoriasis* as the subject of a short paper this evening, because observation has led me to believe that we have still something to learn about its ætiology, and a good deal to learn about its successful treatment. I do not profess to offer anything particularly new on the first topic; but the experience gathered from about two hundred cases which have come before me in private and dispensary practice during the last six years, has enabled me to verify certain methods of treatment, some of which are not noticed at all by writers on the subject, or noticed only in a most casual way.

I hope most of us will remember that a schedule of "therapeutic inquiry" about non-syphilitic psoriasis has been issued by our Association under the superintendence of Dr. Handfield Jones, than whom a more qualified "reporter" could not be found. But a plain person may bluntly ask, How am I to know what psoriasis is syphilitic, and what is not? Syphilis is the most subtle of hereditary diseases; vital pathologists are more and more inclined to trace its hidden workings in the malformations and deteriorations of even the third or fourth generation from the original sinner; and Mr. Erasmus Wilson boldly declares that all psoriasis, as well as lupus and kelis, are to be traced to some syphilitic contamination. I cannot see how we are always to eliminate every source of fallacy—how we are to obtain those simple naked data which shall entitle us to affirm with rigid precision that a given specimen of cutaneous disease is non-syphilitic—that is to say, that it has nothing to do with syphilis whatever. Patients sometimes conceal their delinquencies even to their own hurt; and even when we have all the facts before us, we must sometimes be at a loss whether or not to attribute an individual case of psoriasis to an acknowledged primary syphilitic sore contracted fifteen or twenty years before. The action of remedies may help to remove the difficulty, but an *à posteriori* diagnosis is not a very remarkable triumph.

After we have decided, at least to our own satisfaction, that a particular example of psoriasis is of non-syphilitic origin, we shall naturally proceed to examine its anatomical characters, and try and satisfy ourselves beyond all contradiction, that it *is* psoriasis, or that psoriasis has some generic affinities with it. A formal dermatologist will be uneasy until he has classified it with specific nicety, but Mr. Erasmus Wilson has cruelly demonstrated how one variety of skin disease may be scratched and irritated into another, and how a score of trivial casualties may determine the predominance of pustules, vesicles, or scales; and there are abundant other contingencies which have their influence. And thus it comes to pass that to construct, demolish, and reconstruct systems of cutaneous diseases, is as old as nosology itself; and the exercise of doing all this will never end until the morphology of the skin occupies a higher place in our physiological studies.* "Our little systems have their day," the poet says.

* Those who desire that their physiological knowledge shall not lag behind their practice, will read an admirable (though rather dry) article on the Anatomy and Functions of the Skin, in the current number of the *British and Foreign Medico-Chirurgical Review.*

Next, the questions are suggested—how is this non-syphilitic psoriasis caused? What error of "nutritional forces" has brought this large patch, or these large patches, of inflammatory "squamous" affection? And what made those "nutritional forces" first go wrong?

Here we are at once landed into speculation. The most favour has ever been shown to the "poisoned blood" theory, that dear old humoral hobby, which has been ridden so hard. It has been supposed that these is a *materies morbi*, which the system strives to eliminate, and selects the skin as the most convenient instrument for eliminating it. Now, Dr. Handfield Jones wrote a capital series of papers in our JOURNAL more than a year ago on cutaneous affections, and he remarked very pertinently that there was no proof whatever of any *materies morbi*, or of any eliminating process at all. In acute psoriasis, the visible phenomena are: redness, and a slight effusion of serous or of sero-purulent fluid, which may dry into crusts; in fact, closely resembling eczema. In chronic psoriasis, the visible phenomena closely resemble lepra, and this will be sufficient to describe it. The sthenic and asthenic qualities of these two forms respectively, are analogous to acute and chronic catarrh of a mucous membrane; the difference arising from the varying intensity of the "tissue irritation." This phrase is a convenient one, because it expresses simply that the nutrition of certain portions of the skin is disturbed. To use Dr. Handfield Jones's words, the blood may irritate parts, not because itself unhealthy, but because the tissue has become unduly irritable. And Dr. Jones quotes the memorable case from Bateman, of the man who was always attacked by lepra whenever he took spices with his food; consequently to him the spices were a poison, irritating his susceptible skin after being received into his blood; but no one will assert that spices always contain a poison capable of producing lepra, as the scarlet fever poison produces scarlet fever.

Experience leads me to believe that Dr. Jones's doctrine is almost unqualifiedly true; that the real error in most skin diseases lies in the tissues and their nerves, not in the blood nor in the *ingesta*. I shall show presently how acute psoriasis, representing "tissue-irritation" in its highest form, may sometimes be perfectly and permanently cured by soothing local applications, without the internal use of any "specific" medicine whatever; those local applications relieving hyperæmia and pain partly by chemical contact, and partly by being absorbed. And we must never forget the absorptive function of the skin in the propagation of disease. The ducts of the sudoriparous and sebaceous glands are not merely channels of secretion, but surfaces of absorptiou; by their means medicines are sometimes introduced into the system; and by their means the exudative cutaneous affections are sometimes self-propagated.

The *constitutional symptoms* which accompany severe acute psoriasis are of various nature. There may be pyrexia, with loss of appetite and wakefulness. Reflex sympathies may be evoked in spare nervous persons. I have observed the urine to be occasionally of higher specific gravity than usual;* and a fat child now under my care for a grievous affliction of psoriasis, passes a large quantity of limpid non-albuminous urine.

Our next inquiry relates to the successful treatment of psoriasis in its supposed non-syphilitic form.

And firstly, with regard to *acute sthenic psoriasis*. Six years ago I discovered the remarkable properties of the common black wash (made of calomel and lime-water) in allaying the special local symptoms of this disease, in cases in which ointments are clearly unsuitable, and in which the "wet sheet" and "wet packing" are recommended by Dr. H. Jones. Remember that I am speaking of instances not legitimately traceable to syphilis. Supposing that I have before me a case of acute psoriasis on the leg, I proceed in the following way. With black wash, made as above, I mix about a tenth or a twelfth part of glycerine by measure, and let it be well shaken. A small quantity of this mixture being poured into a wide shallow vessel, such as a saucer, strips of linen rag are soaked in it, and, after being lightly squeezed, are placed evenly and smoothly round the affected part of that limb, a portion of the black oxide of mercury adhering to the linen. A bandage of domette flannel secures the dressing in its place, and the work is done. It must be repeated twice a day, and if the surgeon does it the first time, the patient will understand its application afterwards. Two precautions are necessary: the dressings must always be moistened with water before removal, and no impervious covering, such as oil-silk, must be used, for the repressed (or rather the non-evaporated) perspiration would cause an eruption of another kind.*

When the *subacute* stage of a patch of psoriasis has to be treated, no local remedy can for an instant be put into competition with the tar ointment. By tar ointment I do not mean the dark fiery stuff which goes by this name in the *London Pharmacopœia*, but that compound diluted with a large percentage of chalk to give it consistence, and finally, with a moiety of zinc ointment to give it astringency. When thus prepared, and spread thickly and smoothly on lint, it forms a very soothing application, and has the special property of stopping the extension of the skin disease: while a fresh healthy epidermis forms under the chalky incrustation made by the ointment. In our present imperfect therapeutic knowledge, we are obliged to speak of "specifics," and tar is an undeniable "specific" for psoriasis. The dressings of tar ointment just described, may be secured on a limb by a domette flannel bandage, and renewed every other day; in warm weather every day. It must be distinctly understood that recent acute psoriasis will very seldom bear treatment with tar ointment, or with any other ointment; but the active tissue-irritation must first be subdued by black wash, wet packing, or other suitable method.

Dr. Hughes Bennett and many foreign writers have advocated the external use of tar in psoriasis, and analogous skin-affections; and my father used it twenty-five years ago. I am aware that some dermatologists have a great aversion to tar, and one author of repute piteously contemplates the tortures of those who are "tarred outside and inside;" and he even objects to all external applications in skin diseases. But I am convinced that, the judicious use of ointments is of the utmost value; and any objection must arise, as Mr. E. Wilson has pointed out, from the unfavourable qualities of the particular specimens employed. Mr. Wilson's benzoated zinc ointment (I may remark in passing) is a pattern of what an ointment ought to be.†

But while I maintain that all real acute, and many

* Dr. L. Beale has called attention to this fact. It appears to illustrate the vicarious function of the skin and of the kidney; for it would *à priori* have been expected that when large tracts of skin are diseased, and in a physiological sense annulled, the kidney would excrete a *pro tanto* increase of solid material.

* Since reading this paper, my friend Dr. Falconer informs me that, when a pupil at the York Hospital, he learnt the use of the black wash in some cutaneous diseases. I have failed to discover any published statement of the remedy in psoriasis.

† I might refer to the case given on page 68 of the first edition of Mr. Hunt's *Practical Observations on the Pathology and Treatment of Certain Diseases of the Skin*, as conclusively proving the necessity of external applications, though not related for that purpose. To disparage those applications, is to confess the inefficiency of our art and to do only half our duty.

cases of subacute, psoriasis are curable by external remedies alone, provided that the health be good, I am equally prepared to allow that the internal administration of arsenic is required for the cure of much of the subacute and all the chronic forms. To Mr. Hunt we are indebted, not only for introducing this metal in the treatment of skin-diseases, but for a great deal of our knowledge of its therapeutic action. But my experience does not lead me to obey the precept on which he lays so much stress—that of beginning with the *maximum* doses. As susceptibility to the agency of arsenic varies as much as the susceptibility to mercury and opium, so we are sometimes compelled to increase the doses of arsenic in order to obtain testimony of its physiological influence; for not till then usually will its curative properties be developed. Dr. James Begbie lays down the same principle in his Essay on the Physiological and Therapeutical Effects of Arsenic. (*Contributions to Practical Medicine*, p. 270.) Then Dr. H. Jones relates cases in which he was obliged gradually to increase the dose of arsenic, until in one instance he reached the quantity of twenty-five drops of the *liquor potassæ arsenitis* three times a day; and not till then could he cure. But probably no one would dare to begin with such doses. It seems more reasonable, and more in accordance with the principles which govern the administration of other medicines, to prescribe medium doses of arsenic at first, and continue them for a week or ten days; if no steps towards cure be gained in that time, one drop of the solution may be safely added to each dose; and, again, at the end of another interval, we may repeat the same process, if necessary. Such is the simple result of my own experience; and many of my cases must have been unsuccessful if I had acted on any other principle.*

Dr. H. Jones's theory of the action of arsenic is, that it gives tone to the vaso-motor nerves, and thereby removes tissue-irritation. This is the natural explanation of a neurologist; a humoralist might have something to say on the other side. What seems certain is, that we are as yet only on the threshold of learning all the wonderful powers of this medicine. We hear constantly of its efficacy in diseases and disorders in which its curative influence had never been suspected, because there had been no *à priori* ground for supposing that it would do good. Accident and experiment must always have much to do with such discoveries. Dr. Jones's views possibly approximate the truth; for arsenic has a notably astringent action on all the tracts of mucous membrane. The following case tells its tale. A person well known in this city suffered for many years from pityriasis of the scalp, and large daily fluxes from the bowels. He came under my care a little more than three months ago. Opium had not cured his diarrhœa; arsenic alone seemed inadmissible from the irritable state of the intestines; but the triple combination of opium, iron, and arsenic, soon relieved both the pityriasis and the diarrhœa; and he is now nearly well.

There is another interesting point in the therapeutic history of arsenic. In anæmic persons, its properties will sometimes lay dormant, or almost dormant, until combined with some preparation of iron. Give me two scrofulous persons, both marked with patches of chronic psoriasis; let one be treated with arsenic only, and the other with arsenic and iron; the latter will, in nine cases out of ten, get well by far the first. There are other circumstances which endow iron with the power of quickening the curative agency of arsenic; and the same fact is conspicuously observable of its non-metallic analogue, iodine. The following case is interesting. A gentleman, living about twelve milles away in the country, requested my opinion about his cook, who had been ill for seven months with severe psoriasis on the thighs and legs. She had been under medical treatment, and had taken arsenic; for she brought to me a phial containing Fowler's solution in an undiluted state; and her doctor had told her that she could not get well without taking the "drops." Now, her medical adviser was quite right; but he had forgotten the iron and he had forgotten the tar; and when these were added in their proper mode and measure, she rapidly lost her skin-disease.

It deserves remark, that children are often tolerant of (comparatively) large doses of arsenic.

Let us liberate ourselves from the phraseology of arsenic being a "specific" in the treatment of skin-diseases. It cures skin-diseases; and we are so impressed with this fact because we *see* it, that we are prone to forget the identical effect of the medicine on those inner regions of mucous membrane which we do *not* see. Here is a large field of therapeutic research for those who like to sow there; and the harvest will be both rich and large.

With respect to the Bath waters, my impression as to their negative properties in the treatment of most skin-diseases is distinct and positive. But I find that the results of my own observation do not correspond with those of the medical staff of the Mineral Water Hospital; and their aggregate experience must be much greater than mine. Of the sulphur fume, and of the galium aparine, I have no experience whatever; neither do I discover any use in the internal administration of tar. The dietetic and hygienic management of psoriasis is, of course, very important; but on this topic it is not necessary to enlarge.

Finally, I will recapitulate the arguments and facts of this paper:

a. Non-syphilitic psoriasis, so far as it can be proved to be non-syphilitic, presents itself under the three forms of acute, subacute, and chronic.

b. Psoriasis, like its congeners, probably arises from "tissue-irritation", which may be aggravated or perpetuated by an unhealthy state of blood.

c. The acute form requires to be treated locally by black wash and glycerine; the subacute and chronic forms are relieved by tar-ointment.

d. The internal administration of arsenic is generally necessary for the cure of psoriasis when it has passed into the chronic stage.

e. In doubtful cases, when arsenic, single-handed, seems to fail, the union of arsenic with bichloride of mercury will sometimes produce the most satisfactory result.

* Mr. Hunt has announced the superior certainty of the *liquor arsenici chloridi*, and I can fully endorse his views. In the autumn of 1859, I requested a gentleman to consult Mr. Hunt, who had been under my care for several months on account of chronic (and very irritable) psoriasis of the feet. He did not get quite well, though he had taken *liquor potassæ arsenitis*, but probably in inefficient doses. Mr. Hunt prescribed ten drops of the *liquor arsenici chloridi* three times a day. The patient soon recovered, and has continued well ever since.

New York Asylum for Inebriates. It is officially stated that up to December 31st of the past year, the applicants for admission into the Reformatory Inebriate Asylum, in the State of New York, at Binghampton, already approached very near five thousand names, coming from all circles of society, some from foreign lands. Nearly two thousand of these are women from the upper classes—women who, by their position, refinement, and culture, reached superior social distinction. And yet all these, by this very application, confessing that, without assistance, they feel asured they will sink into a premature grave. (*Hall's Journal of Health, America.*)

Reviews and Notices.

On the Immediate Treatment of Stricture of the Urethra by the Employment of the Stricture Dilator. By Barnard Holt, F.R.C.S., Senior Surgeon to the Westminster Hospital, etc. Second Edition, pp. 110. London: 1863.

Some twelve years ago, M. Maisonneuve introduced into practice an instrument for the sudden dilatation of strictures, and he insisted at that time upon the necessity of rupturing the strictures in the cases in which he employed his instrument, and of not merely dilating them. M. Maisonneuve's instrument was composed of two blades like a lithotrite, but the blades could be separated by means of a series of little metal bars, connected by hinges to the blades, to the extent of almost a quarter or a third of an inch. M. Maisonneuve was in the habit of introducing this instrument, and then by a sudden motion of forcibly opening the stricture.

Mr. Holt's dilator is manifestly a great improvement upon M. Maisonneuve's, inasmuch as with Mr. Holt's instrument the stricture is dilated, without the blades moving at all over the surface of the urethra. Mr. Holt's plan, like that of M. Maisonneuve, is to split the stricture. The forcible distension is intended to affect the morbid obstruction only: "the healthy position of the canal not being disturbed, the slightly vascular character of the structural deposition at the same time gives rise to but very inconsiderable bleeding, and perfectly obviates infiltration into surrounding tissues." This last is a most important point in the treatment of stricture; for it must be obvious that, if a mode can be adopted which will deal with the thickened part only of the urethra, the chances of infiltration of urine are very much less than where an instrument has to be moved along the canal, and where, if it once deviate from the proper passage, it soon passes into unadherent parts and structures not consolidated by effusion of lymph.

Mr. Holt says that he has operated upon above two hundred and fifty patients, without any complications or unfavourable symptoms having followed. The instrument used by Mr. Holt is now sufficiently well known not to require any lengthened description. It consists of two grooved blades, fixed in a divided handle, and containing between them a wire welded to their points; and upon this wire a tube is quickly passed, and by forcibly separating the blades splits or ruptures the stricture. The urine should be drawn off after the operation, and again after an interval of four hours. The object of this is to prevent the urine from being brought in contact with the newly lacerated surface; a point which, perhaps, was not sufficiently attended to when this mode of operating was first introduced. The introduction of the catheter should be repeated every other day for a week after the operation, when the patient may be taught to pass his own instrument.

"In simple strictures, however narrow, the relief will be immediate; but in the more complex forms of these maladies, the size of the stream is not increased so directly as might have been anticipated from the immediate enlargement of the canal. Notwithstanding, however, that the size of the stream may for a short time remain somewhat restricted, the patient is able to empty his bladder much more quickly and effectually than before, and has less frequent micturition. The limitation of the jet evidently depends upon the thickening of the surrounding textures, and swelling of the mucous lining; these morbid states speedily subside, and in a short space of time the patient can void his water in a normal manner." (Pp. 12-13.)

Mr. Holt concludes that the process which he describes is facile, speedy, prompt in its effects, and free from every danger, immediate or remote. We doubt not that in Mr. Holt's hands the operation which he advocates has been attended with the best results, and we regard it as a great improvement in this branch of surgery; but we should be unwilling, at the same time, that our readers should believe that any one may practise this proceeding without any risk. This would be to take it out of the category of surgical operations. We have known a patient die within a very few days from the period of the dilator having been used, but in this case the instrument may not have been kept strictly within the limits of the natural passage; and we have good reason to believe, that at present there is, in a well-known metropolitan hospital, a case in which the most severe symptoms followed dilatation of the stricture by Holt's dilator; at the time we write, we believe that this patient's life is considered to be in the utmost jeopardy. We are not sure whether, in this particular case, the plan of drawing off the urine after the operation above alluded to was adopted. In the same hospital, we believe, there is another case in which, after the operation, the patient is in rather a worse plight than he was before. We adduce these instances, not in any way as detracting from the merit of Mr. Holt's operation, which we regard as one of the most important surgical improvements of the day, but in order that a really good operation may not be damaged by being, in the first instance, unduly lauded.

Military Surgery. By George Williamson, M.D., Surgeon-Major, 64th Regiment. Pp. 255. London: 1863.

The author of this work has availed himself largely, for the purpose of illustration, of the specimens of gun-shot and other injuries received in warfare, which are contained in the Museum of the Army Medical Department—formerly at Chatham, and now at Netley. The book consists of an Introduction; a Descriptive Numerical Return of Gun-shot Injuries received in Action during the Mutiny in India; and twenty-one chapters on Gun-shot Wounds in General; Gun-shot Wounds of the various parts of the body; Sword, Lance, and Bayonet Wounds; Miscellaneous Wounds and Injuries received in Action; Amputations; Excisions; the Numbers that are Wounded, and the proportion that Survived under the different classes of Gun-shot Wounds; and the Transportation of Sick and Wounded.

The contents of Dr. Williamson's work will be found very interesting, and no doubt instructive, by military surgeons; and those, too, who are engaged in civil practice, have an opportunity here afforded of studying some of the very varied injuries which are inflicted by gun-shot. In understanding the nature of the various lesions, much aid is given by the insertion of several plates.

The last chapter, that on the Transportation of Sick and Wounded, contains some remarks which are at least worthy of attention. Dr. Williamson believes that, for the proper removal of the sick and wounded without interfering with the effective strength of the army by the removal of men for this purpose,—

"It would be of advantage to have an *Ambulance Corps*, and a certain number of men, under a permanent military officer, belonging to the Military Train, and appointed specially for this particular duty, so that he might be held responsible for the proper equipment of every description of conveyance for the sick and wounded under all circumstances."

Among the various modes of conveyance, he appears to give the preference to *doolies* and palanquins, which are almost universally employed in India, both in peace and in war. He would, indeed, have them adopted, if possible, in European countries. The best bearers are certain of the natives of India; and a supply of these, he suggests, might be procured from that country, "who should be selected, have extra pay for foreign service, and be entitled to a pension on being sent back to India disabled by diseases or injury." Whether the Indian natives would be able, in general, to bear an European climate, would be a matter for experiment. Dr. Williamson thinks they would be; that a native from the country about Cawnpore and the Lower Provinces is "surely as able to serve in the capacity of bearer in an European climate, as the British soldier is able to serve as such in the Bengal climate." But is this comparison, made by Dr. Williamson, very encouraging to his suggestion? One remark of his we must notice, as being founded in justice and good sense, viz., that "the best way to secure the services of these bearers is, to give them the same pay as that given to the fighting portion of the army... When they receive only four rupees a month, with one rupee extra in the field, they are certain to desert when their duties become in any way arduous or dangerous, or when the price of provisions becomes high, as it usually does in a distant campaign; but when seven or eight rupees per month are given, their services may be depended upon under all circumstances, and there need be no fear of their ever deserting."

As to sanitaria, Dr. Williamson agrees with Dr. Muir, that all such institutions in places midway between India and England—as at the Cape or in Australia—will fail of their object. To the Indian hill sanitaria he makes no objection; but, as to the intermediate stations, they fail, in his experience, in reestablishing the health of the sick soldier, for the reason that his mind is set upon a return home.

"At the Cape," he says, "I found it almost impossible to keep the sick really in good spirits and contentment, even when they had every comfort, accommodation, and a good climate for the cure of disease; also, that the convalescents out of hospital were very irregular, and caused great trouble to the commanding officer. According to my experience, when an officer or soldier is really sick on foreign service, send him *home at once*, and not to an *intermediate sanitarium*; for the best sanitarium is home. *England* is a grand word for a sick soldier on foreign service."

It seems to us that the title of Dr. Williamson's book, *Military Surgery*, is somewhat too comprehensive. Compared with other works, such as Dr. Macleod's *Notes on the Surgery of the War in the Crimea*, it shows an omission of several important topics. Nevertheless, as a practical and pathological work on various injuries received in military service, it is valuable; and thanks are due to the author for its production.

Obstetric Aphorisms: for the Use of Students commencing Midwifery Practice. By Joseph Griffiths Swayne, M.D., Physician-Accoucheur to the Bristol General Hospital. Third Edition. Pp. 134. London: 1864.

It is by no means surprising that so useful a little work as Dr. Swayne's *Obstetric Aphorisms* should in a comparatively short time reach a third edition. Many of our readers are probably by this time acquainted with it; but, for the information of those who have not seen it, we may state that it consists of a properly arranged series of brief but clear rules as to what the incipient accoucheur should do in the various circumstances that present themselves to him. The rules, or aphorisms, are arranged in three classes; viz., those relating to the Management of Ordinary Labour; those relating to Cases which the student may undertake without Assistance; and those in which the Student ought to send for Assistance. Such a work, drawn up as it is by Dr. Swayne, is well fitted to fulfil the author's object, that of keeping students, when placed in situations of difficulty, "from the opposite extremes of temerity or timidity".

In the present edition, the author has made some additions to the text, and has added three woodcuts to illustrate the mechanism and treatment of breech-presentations.

A System of Instruction in Qualitative Chemical Analysis. By Dr. C. Remigius Fresenius. Sixth Edition. Edited by J. Lloyd Bullock, F.C.S. Pp. 353. London: 1864.

New editions of this work appear with great rapidity, and each time with improvements. On the present occasion, the author has introduced such new matter as was suggested by the progress of chemical science, and has especially made two important additions. The first of these is the introduction of processes for the preparation and detection of all the known elements; whereas, in former editions, all notice of many of the rarer ones was omitted. In order, however, to prevent beginners from becoming confused, or the size of the work from being unduly increased, many of the directions respecting them are printed in small type. The other additions—without which, indeed, no work on qualitative analysis would now be perfect—consists in the introduction of full directions for the performance of spectrum analysis. The spectral colours of various elements are shown in a coloured figure which forms the frontispiece to the book.

Birkenhead Hospital. This hospital, erected by Mr. Laird, stands on about one acre of land. It is two stories high; it has four wards, each of the same size and shape, and capable of holding about a dozen patients. To each bed is allotted 1,430 cubic feet of air. All its arrangements appear to be most excellently adapted for the object required—the curing of diseased, *tuto, cito, et jucunde*.

British Medical Journal.

SATURDAY, JANUARY 16TH, 1864.

MEDICAL EDUCATION.

MR. SYME has been requested by the Scotch Branch of the Medical Council to produce his plan for remedying the imperfections admitted to exist in the present system of medical education; and he has responded to the call.

It is necessary, as he tells us, that a change in the Medical Act should be made; and that some of the ordinances of the University Commissioners should be rescinded, for the purpose of effecting the object desired.

In the first place, Mr. Syme would have no person registered who did not possess a degree or license showing that he was capable of practising both medicine and surgery; and every registered person should have power to practise his profession in all its branches in every part of her Majesty's dominions.

He would next have those ordinances removed, under which the preliminary examinations are accepted during the period of professional study. This preliminary qualification should be ascertained before professional study commences. He would, also, have done away with the two present stages in medical graduation of Bachelor and of Doctor of Medicine; the first of these degrees being attainable at 21, and the second at 24.

As regards the student's education, Mr. Syme gives 18 as the earliest age at which professional study should commence. The student should have a good previous start in English, Latin, arithmetic, mathematics, and physics, and show proof of his knowledge in these things, before he is allowed to commence his medical studies proper.

Of professional subjects, there are five, Mr. Syme says, which should be studied during at least five months, and with four lectures a week—viz., Chemistry, Anatomy, Anatomy and Physiology, Principles of Surgery, and Principles of Medicine; and there are three which ought to be studied at least three months with four lectures a week—viz., Materia Medica, Midwifery, and Medical Jurisprudence; Practical Anatomy and Clinical Instruction in the Hospital being extended nearly, if not entirely, over the whole period of study. Studies as proposed would require at least three years, each with a winter and summer session, for their proper completion.

To allow of time for reflection, and for the proper digestion of this mental aliment, Mr. Syme would admit no examinations of a kind to clash with the subjects of study, or which would admit of scope for the exercise of the grinding system. Let the teacher have regular class exercises, and ascertain the progress of the student by obtaining answers to written questions, and so supersede the present deceptive system of stated formal investigations which favour the grinding process. And let Corporations and Universities take action so as to be sure that the teachers follow out this proper method of examination.

Lastly, adds Mr. Syme, the Medical Council are considering clauses for a new Medical Act; and, therefore, if they have the will they can readily find the way for making the alterations required. Practically, therefore, the difficulties which stand in the way of putting medical education on a better footing are not so great as they, at first sight, may seem to have been.

We will only add, that whatever may be the differences of opinion held by teachers as to the reforms suggested by Mr. Syme, we are certain that the whole profession will feel greatly indebted to him for having initiated so important and so necessary a reforming movement.

UNFORTUNATE PROPHETS.

THE breaking-up of the frost has put to flight the speculations of the weather- and other- wise ones of the day. That *sages hommes* of the M. de la Drôme calibre should be found to calculate the characters of forthcoming heat and cold, wet and dry, we can readily understand; but it certainly is almost curious psychological study to observe grave medical critics, who are for ever boasting of their facts and experiments, swell the throng of visionaries of the sort. But such is the case.

Men of science of the calibre of Admiral Fitzroy assure us that they are unable to see beyond the next thirty-six hours or so into the futurity of the weather; but their dry science is a stupid bore, and we live in an age when men make fortunes by speculation, and millions change hands on the luck of a Derby day. Hence, in this matter of weather, Admiral Fitzroy notwithstanding, Mr. X, Y, or Z, or some other unknown number, assures the world he has the perfect knowledge, from the most infallible source, that we are about to suffer a winter like that of 1813. Thereupon, all the world unhesitatingly agrees that we are to have such a winter; and, even before the prediction is tried, laud the predictor. This is all very well. But what surprises us is, as we have said, that grave medical critics should be found to take up the running where the weather sages have left it.

The critics we allude to, not only accept the prediction, but they also admit the results; and then calmly set to work to calculate the change in the type of disease which we must expect as the conse-

quence of this long severity of winter. We are told that diseases underwent a change of type in consequence of the severe winter of 1813; and, therefore, that we must begin and look out for the changes in type of diseases which will shortly be upon us, the result of this predicted forthcoming hard winter. It would be hard to find a more curious specimen of heaped-up conclusions based upon a series of purely imaginative data. We doctors are called hard, dried-up, matter-of-fact men of science; but we can certainly at times give way to the wildest delusions, as well as the best of the earth's deluded ones.

JUSTIFIABLE VIVISECTION.

The conditions under which, and under which alone, vivisections may be justifiably performed, seem to us to be clear, and easily stated. We believe a little plain common sense and an ordinary attention to the dictates of humanity will explain the matter just as perfectly as, or, rather, much more satisfactorily than, the long discussions of learned French academicians. We would say then, in the first place, that those experiments on living animals, and those alone, are justifiable, which are performed for the purpose of elucidating obscure or unknown questions in physiology or pathology; that, whenever any physiological or pathological fact has been distinctly and satisfactorily cleared up and settled, all further repetition of the experiments which were originally performed for its demonstration are unjustifiable; that they are, in fact, needless torture inflicted on animals—being, in such case, performed, not for the purpose of elucidating unknown facts, but to satisfy man's curiosity. For example, experiments made at this day to demonstrate the function of the portio dura, or of the branches of the fifth pair of nerves, are in this sense unjustifiable.

In the second place, we would say, that only those persons are justified in experimenting on living animals who are capable experimentalists; that is, who are fully master of the matter they have taken in hand; who are good anatomists and physiologists, and able to appreciate all the facts which their experiments may reveal to them. All amateur performances in this way, and all experiments made by inexperienced and incapable observers, are unjustifiable; and for an obvious reason. The pain in such case suffered by the animals is suffered in vain, because the observer is incapable of seizing upon the facts which a wiser observer would be able to gain from them. Pain so inflicted is manifestly cruelty.

Under the above head of permissible experiments, we, of course, include those practised for the purpose of ascertaining the unknown operations of poisons or remedies; and those experiments, also, made to advance our knowledge of the unknown consequence of surgical proceedings.

All vivisections practised for the purpose of demonstrating or practising ordinary surgical operations are, in our opinion, utterly without excuse. Our best and greatest surgeons have been able to learn their art thoroughly without resorting to any such practices. And, we will venture to say, no one will be found openly to contend, that greater information is obtained from amputating the leg of a living dog than may be obtained from practising amputation on a dead human thigh. Such practices, therefore, as we see them, come under the head of torture.

The same remarks will apply to the vivisections practised by veterinary surgeons in Paris—the sixty-four classical operations practised on one horse, who is kept alive under the torture for ten hours of an end. If, as has been truly argued, a surgeon can learn his art efficiently by practice on the dead human body, surely the veterinarian may be contented to learn his efficiently enough by practice on the dead body of the horse. The pretence that the veterinary surgeon is exposed to great dangers on account of the animal's struggles if he do not learn his business on the living horse, is nonsense—in fact, a mere pretence. He may surely learn how to prepare a horse for every kind of operation without actually operating upon him.

We may add, that no one ought, under any circumstances, to undertake the performance of any kind of operation on living animals without a feeling of the responsibility that rests upon him in doing so—the consciousness that he is doing an act for the benefit of humanity, and that he is properly prepared for an effectual performance of the act.

GEORGE TOWNLEY.

George Victor Townley has been removed from the Derby Gaol to the Criminal Lunatic Asylum in St. George's-in-the-Fields, London. There is, therefore, an end of him as the subject of legal inquiry. But most important changes in our manner of inquiring legally into the mental condition of supposed criminal lunatics will and must spring out of this *cause celèbre*. The chief and main lesson which we read from the incident is this: that the law which throws upon a lunatic the burden of proving himself to be a lunatic is, on the face of it, an absurd and a most unjust law. Townley had friends of wealth, and thereby he was enabled to obtain a high expert's services; and we may add, thereby, and thereby alone, was his life saved from a gallows-ending. Bill Sykes, of whose case we last week spoke, had neither friends nor relatives, and only a few farthings in his pocket. He could fee no expert; and, *therefore*, he died on the scaffold. If justice is to do equity, then, it must henceforth, in such-like cases, place at the disposal of the court impartial experts cunning in lunacy, whose duty it shall be to

instruct and guide the court through the impenetrable mazes and awful mysteries of a diseased mind.

Another lesson which we read from the tale is this: that the public are now at last informed by demonstration that there is a lunatic state of man which is not altogether cognisable by a common jury; and that the opinion of men of large experience in lunacy is as necessary for the clear exposition and interpretation of certain lunatic conditions of the mind, as is the opinion of other skilled men of science in ordinary matters scientific.

The last lesson which we gather from this murder-episode is, that the public are beginning to learn how feeble often is the line of demarcation between a sane and an insane mind; and how hard, therefore, must it often be to have the full assurance that, in hanging a murderer, we are not hanging a lunatic. And the result of the whole lesson will, we believe, be to advance one step the position of those who affirm that hanging should be abolished, through showing the uncertainty which must so often attend the fatal experiment.

THE NEW PRESIDENT OF COUNCIL.

Dr. Burrows was, on the 13th instant, elected President of the Medical Council, having been proposed by Mr. Syme and seconded by Dr. Sharpey. We stated, on previously referring to the vacancy created by the death of Mr. Green, that the eyes of the whole profession naturally turned towards Dr. Watson as his fitting successor. And had Dr. Watson felt it consistent with the due performance of his many duties to accept the chair, there is no doubt that he would have been unanimously placed in the seat of honour. His non-election, therefore, it must be understood, coincides with his own expressed wishes.

Equally clear, it appeared to reasonable people, that if Dr. Watson did not accept, Dr. Burrows would be the man; and certainly a better choice could not have been made. A thorough man of business is Dr. Burrows; well-up in medical politics, of good address, an excellent speaker, and, above all, gifted with the authority required to rule the conflict of diverging and—if it should unfortunately be so—hostile opinions.

Of course, the claims of our Scotch and Irish Councillors to a seat in the president's chair are as great as is the claim of our English Councillors; but it is necessarily admitted, that the President of the Council must reside in London. It was, therefore, an act of indiscretion to propose the name of Dr. Stokes in opposition to Dr. Burrows; and we have no doubt that Dr. Stokes himself considered it to be so.

We may regard this election of a physician to the office in question as the inauguration of a new policy in the Medical Council. We may now hope that the influence of the Royal College of Surgeons of England, which has heretofore been made felt in the Council much more to the furtherance of the ends of the College than of the great interests of the profession at large, will be diverted into a happier and more patriotic direction.

One thing touching the election, we deeply regret to learn; and it is this, that an attempt was made to elect a non-professional man—in fact, Mr. Walpole—to the chair; and, if we are rightly informed, the attempt would have been successful had not Mr. Walpole himself declined the proposed honour. Is the Medical Council blind? Does it really mean to declare to the world that there is no member of the medical profession capable of filling the office? What does Mr. Walpole know about the profession and its wants? To put in that high position, as a sort of medium between the Council and the Government—as the exponent of the medical profession, of legitimate medicine—a man who may, for all we know, employ Mr. Globule the homœopathist as his medical adviser; or have a firm belief in any one of the thousand delusions touching the cure of disease, with which the upper classes are especially tainted—would, in our opinion (we must say it), have been a most grievous and humiliating error. We much regret to note so great a want of discretion, or so great a display of jealousy, as the proceeding seems to us to indicate. However, the attempt has, we are happy to say, for a second time failed.

The appointment of Dr. Burrows creates a vacancy in the representation of the Royal College of Physicians at the Council. A successor to Dr. Burrows will, therefore, have to be found. Dr. Alderson, the Treasurer of the College, at once presents himself to our notice as having the strongest claims to the appointment; and he is undoubtedly most excellently qualified to perform its duties. His knowledge of the affairs of the College, his known devotion to its interests, and his remarkable business habits, designate him as the right man for the place.

The Medical Council will meet for dispatch—we hope not delay—of business on April 25th; and if we are not mistaken, reporters will be admitted to their meetings.

THE LATE PETER MARTIN, ESQ.

The following advertisement, inserted in the *Reigate Journal* of December 8th, 1863, has, we learn, already brought in subscriptions amounting to more than one thousand pounds.

"At a meeting of several friends of the late Peter Martin, Esq., held at the White Hart Hotel, Reigate, on the 30th ult., for the purpose of considering the

best and most effectual mode of perpetuating his memory, it was resolved, after a full discussion of the various projects submitted to the meeting, 'That as a memorial to the late Peter Martin, there shall be an exhibition founded at the Reigate Grammar School, to be called 'The Martin Exhibition'.' And also, 'That a Bust of the deceased be placed in the Reigate Public Hall.'

"The Committee, referring to the aforegoing report, beg to solicit contributions to the funds necessary for the promotion of the ends in view, so that they may be carried out in a manner worthy of the memory of him to whom Reigate and its vicinity are so much indebted, and who was so deserving of the esteem and affection in which he was held by all who had the privilege of his friendship."

As some incorrect statements have been current touching the accouchement of the Princess Alexandra, our readers may be glad of a few authentic particulars of the important event. The Princess, on the morning of the birth of her infant, had some slight indication of what happened in the evening; but it was too trifling to be considered by her as worthy of any notice. She took no exercise on the ice, beyond that of being drawn about on a sledge. To the rapid confinement we need not allude. So unexpected was it, that no preparations had been made for the coming event. It is not, however, true that no medical man was present at the birth. Mr. Brown of Windsor was there, and Dr. Sieveking arrived very shortly afterwards. The maternal knowledge of the Countess of Macclesfield stood the Princess in good service on the occasion, in the absence of the skilled nurse. The statement made in the *Times*, that the child weighed nine pounds, is utterly untrue. In the first place, the child was never weighed; and, being probably only little more than seven months old, did in reality not weigh more than about six pounds. Though prematurely born, the young Prince is, however, in excellent health, and perfectly formed in all his parts, and is said to resemble strongly his father. We may, we think (all these things being considered), rather rejoice at the prematureness of the birth; for, as every one knows, the Princess is of small and delicate frame of body, and cannot be yet considered as fully developed in her organisation. By this premature birth she may possibly have been spared much suffering.

The profession will be glad to hear that the *British Pharmacopœia* is now actually in existence as a *bound-up volume*. As such, it was laid before the Medical Council on the 13th inst. It will, therefore, immediately be presented to the profession. The introduction into the Medical Act of a clause providing for the publication of a national *Pharmacopœia* was, we believe, the result of a resolution passed nearly ten years since at a meeting of the Metropolitan Counties Branch of our Association.

Mr. Husband has resigned the office of Alderman of the City of York, which he has held for more than twenty years; the grounds of his retirement being the increase of his professional labours, whereby he felt himself unable to fulfil his aldermanic duties conscientiously. At a large meeting of the Council, great regret was expressed at the loss of Mr. Husband's services; and the following resolution was passed unanimously.

"That the letter of W. D. Husband, Esq., announcing his resignation of the office of alderman, be entered on the minutes of the day's proceedings. That whilst this Council cannot, in justice to Mr. Husband, do otherwise than yield to the force of the reasons set forth in the communication now read, and therefore reluctantly accept his resignation, they do so with sincere regret, and record the deep sense which they entertain of the able and efficient manner in which Mr. Husband has for so many years fulfilled the duties of councillor and alderman of this city. They would, at the same time, desire to convey to him their earnest hope that he may be spared for many years in the active exercise of his profession; and, while deprived of his presence and co-operation in this Council Chamber, they express their confidence that he will yet continue to give to the city, in his more private sphere, his hearty aid in every work which may promote its welfare. The Council also, feeling that it would ill become them to put in operation the bye-law exacting a penalty upon Mr. Husband's resignation, determine that such bye-law be suspended, so far as the same is applicable to such resignation; and the bye-law is hereby suspended."

A Medical Protection Society was some time since formed, for the purpose of protecting the rights of the profession, especially in reference to registration. Of this Society Mr. John Lavies was President and Treasurer, and to it he devoted his earnest attention and much time and labour. This Society is now in debt about £200; and for this sum Mr. Lavies is, it appears, legally responsible, and has been sued on account of it. Some of the late members of the Society, to their credit, are endeavouring to rescue Mr. Lavies from this most unjust position; and now call upon each member of the Society to subscribe a small sum in order to free Mr. Lavies from the liabilities referred to. It seems to us that the members of the late Society are bound in honour to come forward and close their accounts without prejudice to their President. A subscription has been already opened, and sums may be forwarded to John Lavies, Esq., 5, Great George Street, Westminster, and will be duly acknowledged in the journals.

The Pathological Society considers that the Medical and Chirurgical Society charges them too much money for the accommodation afforded at the rooms in Berners Street; and Mr. Henry Thompson, in consequence, suggests that the Pathological Society should apply to and ask of the Royal College of Surgeons the accommodation required. The College, however liberal its present intentions, will, we

fancy, scarcely venture on such a step of liberalism as this. If it do, why may not other societies equally knock for admission at its portals?

The medical men of Perth suggest, and with much reason, that it would be fair to the profession, and of benefit to the public, that the offices of surgeons and physicians to hospitals should be held in rotation by those members of the profession who live in the district where the hospital is situated, and who are duly qualified for the performance of the hospital duties. The Perth medical men make the suggestion on the occasion of the retirement of Dr. Frazer, who has held office in the county hospital for twenty-five years. The move, it is suggested, is in the right direction, because it would give all the practitioners of a town an opportunity of exhibiting their skill and scientific tendencies. We believe it would have another excellent effect; viz., that of leading to the payment of hospital physicians and surgeons; that assuredly it would enable the governors of hospitals to carry on their institutions on the provident system.

Dr. James Watson has lately tried some of the many "new remedies" which are daily being puffed into a temporary celebrity. In the January number of the *Edinburgh Monthly Journal*, he tells of *Veratrum Viride*, of *Tinctura Boleti Laricis Canadensis*, of *Sarracenia Purpurea*, and of *Carbolic Acid*. Of *Veratrum Viride* he says, that he distinctly denies it to have sedative properties. It is a drug potent in inflicting pain, but has no arterial sedative quality. Its influence on the circulation results from its painfully depressing influence over the vital powers. The *Tinctura Boleti*, etc., used in one case, was inert. *Sarracenia Purpurea*, also an American importation, has been a well-puffed article, as we all know. Its reported virtues in curing small-pox sent its price up in a few weeks from three to twenty-eight shillings a pound. The only virtue recognised in it by Dr. Watson was that of being perfectly innocuous. *Carbolic Acid*, as a local application, has been found of service in sloughing and favus; and it is an antiseptic.

M. Follin gives the following case of iridectomy. A woman, who had lost the sight of the left eye several years, consulted M. Follin for glaucoma of the right eye, supervening on a sudden chilling of the body when in a state of perspiration. The left eye was atrophied, irritable, and painful; and, as it might affect the other eye, it was in the first place removed. The right eye was as hard as marble; the pupil widely dilated; the humours not transparent; the cornea slightly dull; and the patient could scarcely see even the largest objects. On November 25th, 1861, M. Follin made a large excision into the iris; and, at the end of ten days, the patient began to see pretty clearly the window-bars. Since that time, the state of the eye has gradually improved; the ocular tension diminished; the sclerotic redness has disappeared; and the patient, on leaving Salpêtrière in February 1862, could distinctly see and read large characters. Two years after the excision, the eye could read No. 9 of Jäger, and the patient do all her work.

"As regards the treatment of diabetes," says M. Monneret, "we must be modest. We all know that experience has not justified the pretensions of chemistry, which flattered us with the assurance that it had discovered the cause and the remedy of the disease. Chemistry has usurped the place of medicine here, and has deceived us. The alkaline treatment, founded on an hypothesis, has utterly failed. The part which medicine plays is, alas! still a modest part. We know not the real cause of the disease; and must, therefore, content ourselves with treating the symptoms of it. To keep up the strength by good diet, wine, and tonics; to increase the cutaneous functions by vapour and sulphur baths, and especially by hydrotherapeia; in a word, to regulate the functions,—is our chief business in the cure of this disease. The true path of progress in therapeutics is to apply hygienic rules in the treatment of diseases. We shall never escape from the difficulties which have overwhelmed us for centuries until we have more thoroughly recognised this principle, and applied it in practice."

The Academy of Sciences has bestowed its prize for Experimental Physiology on Dr. Moreau, for his researches into the air-bladder of fishes. MM. Philipeaux and Vulpian also receive a prize for their works on the Nervous System; and M. Batailhe honourable mention. Under the Montyon foundation, M. Chassaignac takes a prize of 2,500 *francs* for his method of *écraseur linéaire;* and four mentions, with 1,500 *francs*, are accorded to MM. Debout, Gallois, Bourdon, and Cahen. Other works are recommended as worthy of the attention of the Academy. The Commission presiding over "Unhealthy Occupations" has given a prize of 2,500 *francs* to M. Grimaud for his work on *Public Waters and their Application to the Wants of Large Towns and Rural Habitations.* M. Guignet takes a similar prize for the preparation of a healthy green chrome colour, which may be used for colouring papers; and M. Bouffé 1,500 *francs* for having substituted a green, resulting from a mixture of picric acid with the green of Guignet, for the arsenical green used in artificial flowers. The Section of Organic Chemistry has given to Dr. Hoffman the Jecker prize of 5,000 *francs* for his works in organic chemistry.

RECENT OUTBREAKS OF FLESH-WORM DISEASE, OR TRICHINIASIS, IN GERMANY.

[*Communicated.*]

A FEW months ago, there was a festive celebration at Hettstädt, a small country town near the Hartz Mountains, in Germany. Upwards of one hundred persons sat down to an excellent dinner, and, having enjoyed themselves *more majorum*, separated, and went to their homes.

Of these 103 persons, mostly men in the prime of life, eighty-three are now in their graves; the majority of the twenty survivors linger with a fearful malady; and a few only walk apparently unscathed among the living, but in hourly fear of an outbreak of the disease which has carried away such numbers of their fellow-diners.

They had all eaten of a poison at that festive board, the virulence of which far surpasses the reported effects of *aqua tophana*, or of the more tangible agents described in toxicological text-books. It was not a poison dug out of the earth, extracted from plants, or prepared in the laboratory of the chemist. It was not a poison administered by design or negligence. But it was a poison unknown to all concerned; and was eaten with the meat in which it was contained, and of which it formed a living constituent.

When, about thirty years ago, the then demonstrator of anatomy at Guy's Hospital, Hilton, observed a little speck on a muscular fibre, and suspected it to contain a worm, he little dreamed that he had before his eyes the puny specimen of a race of parasites more fatal to man and animals than the virus of the blackest pestilence. When the student Paget sent to the Hunterian conservator Owen that specimen of speckled muscle taken from a body in St. Bartholomew's Hospital, he probably knew that he was sending a curiosity; but did, perhaps, not imagine that it was an example of a disease which might be carried in a living pig from Valparaiso to Hamburg and kill the entire crew of a merchant vessel. When Owen registered trichina spiralis in the Latin terms of zoology, whatever idea he had formed of the generation and life of his parasite, he certainly could not have dreamed, in the keenest flights of his imagination, that of the acute disease caused by this parasite in 103 healthy persons, eighty-three would have to die a most painful and melancholy death, and the remainder be brought into imminent danger.

When the festival at Hettstädt had been finally determined upon, and the dinner had been ordered at the hotel, the keeper of the tavern arranged his bill-of-fare. The introduction of the third course, it was settled, should consist, as usual in those parts of the country, of *Röstewurst und Gemüse*. The *Röstewurst* was, therefore, ordered at the butcher's the necessary number of days beforehand, in order to allow of its being properly smoked. The butcher, on his part, went expressly to a neighbouring proprietor, and bought one of two pigs from the steward, who had been commissioned with the transaction by his master. It appears, however, that the steward, unfortunately, sold the pig which the master had not intended to sell, as he did not deem it sufficiently fat or well-conditioned. Thus the wrong pig was sold, carried on a barrow to the butcher, killed and worked up into sausages. The sausages were duly smoked and delivered at the hotel. There they were fried and served to the guests at the dinner-table.

On the day after the festival, several persons who had participated in the dinner were attacked with irritation of the intestines, loss of appetite, great prostration, and fevers. The number of persons attacked rapidly increased; and great alarm was excited in the first instance by the apprehension of an impending epidemic of typhus fever or continued fever, with which the symptoms observed showed great similarity. But when, in some of the cases treated by the same physician, the features of the illness began to indicate at first acute peritonitis, then pneumonia of a circumscribed character, next paralysis of the intercostal muscles and the muscles in front of the neck, the hypothesis of septic fever, though sustained in other cases, had to be abandoned with respect to these particular cases. Some unknown poison was now assumed to be at the bottom of the outbreak; and an active inquiry into all the circumstances of the dinner was instituted. Every article of food and material was subjected to a most rigid examination, without any result in the first instance. But when the symptoms in some of the cases invaded the muscles of the leg, particularly the calves of some of the sufferers, the description which Zenker had given of a case of fatal trichinous disease was remembered. The remnants of sausage, and of pork employed in its manufacture, were examined with the microscope, and found to be literally swarming with encapsuled trichinæ. From the suffering muscles of several of the victims small pieces were excised, and under the microscope found charged with embryonic trichinæ in all stages of development. It could not be doubted any longer, that as many of the 103 as had partaken of *Röstewurst* had been infested with trichinous disease by eating of trichinous pork, the parasites of which had, at least in part, escaped the effects of smoking and frying.

This awful catastrophe awakened sympathy and fear throughout the whole of Germany. Most of the leading physicians were consulted in the interest of the sufferers, and some visited the neighbourhood where most of the afflicted patients remained. But none could bring relief or cure. With an obstinacy unsurpassed by any other infectious or parasitic disease, trichiniasis carried its victims to the grave. Many anthelmintics were arrayed to destroy, if not the worms already in the flesh, at least those yet remaining in the intestinal canal. Picric acid was employed until its use seemed as dangerous as the disease; benzole, which had promised well in experiments upon animals, was tried, but was unavailing. As case after case died off, and the dissection of each proved the parasites to have been quite unaffected by the agents employed, the conviction was impressed upon every mind that a man afflicted with flesh-worm is doomed to die the slow death of exhaustion from nervous irritation, fever, and loss of muscular power, in systems essential to existence.

But medical science had only just unravelled a mystery; and if it could not save the victims, it was determined, at least, to turn the occasion to the next best account. The cases were, therefore, observed with care, and chronicled with skill. All the multifarious features of the parasitic disease were registered in such a manner, that there can hereafter be no difficulty in the diagnosis of this disorder. A valuable diagnostic feature was repeatedly observed; namely, the appearance of the flesh-worm under the thin mucous membrane on the lower side of the tongue. The natural history of trichina in man was found to be the same as that in animals.

All observations led to the conviction that the trichina encapsuled in the flesh is in the condition of puberty. Brought into the stomach, the calcareous capsule is digested with the flesh, and the trichina is set free. It probably feeds upon the walls of the intestines themselves; for the irritation of the intes-

tines begins before the bringing forth of young trichinæ has taken place. Copulation is immediately effected; and within a few hours, or a short portion of days, from sixty to eighty live embryos leave the female, and begin their own career of destruction.

This consists, in the first instance, in an attempt to pierce the walls of the intestinal canal. Great inflammation of the entire surface ensues, ending not rarely in death of the villous or mucous membrane, or in the formation of masses of pus on its surface. Sometimes there are bloody stools. But these severe symptoms only ensue when much trichinous meat has been eaten. When less has been consumed, pain and uneasiness in the abdomen are produced, accompanied, however, in all instances, by wasting fever and prostration. The embryos actually pierce the intestines, and are found free in the effusion, sometimes serous, sometimes purulent, which is always poured out into the abdominal cavity. Thence they again proceed towards the periphery of the body, pierce the peritoneum, causing great irritation, and sometimes peritonitis, to the extent of gluing the intestines together to a coherent mass. They next proceed to the muscles nearest to the abdomen; arrived at the elementary muscular fibres, which, under the microscope, appear as long cylinders with many transverse striæ, they pierce the membranes, enter the fibres, eat and destroy their striated contents, consume a great part of the granular detritus, moving up and down in the fibres until grown to the size necessary for passing into the quiescent state. They then roll up in spiral or other irregular windings, the bags of the muscular fibres collapse, and only where the trichinæ lie a calcareous matter is deposited, perhaps by the trichinæ themselves, which hardens into perfect capsules round the parasites. A muscular fibre may harbour one or several parasites; but every fibre invaded by a single parasite loses its character entirely, and becomes a bag of detritus from one end to the other.

If it be remembered that one ounce of meat filled with trichinæ may form the stock from which, in a few days, three millions of worms may be bred; and that these worms will destroy in the course of a few weeks not less than two millions of striated muscular fibres—an idea of the extent of destruction produced by these parasites can be formed. We are not in a position to say to what proportion of the fifty or sixty pounds of muscle required for the performances of the human body these two millions of elementary fibres actually amount. In the muscles nearest to the abdomen, the destruction is sometimes so complete, that not a fibre free from parasites can be found. This amounts to complete paralysis. But death is not always produced by the paralysis; it is mostly the result of paralysis, peritonitis, and irritative fever combined. No case is known in which trichiniasis, after having declared itself, became arrested. All persons affected have either died, or are in such a state of prostration that their death is very probable.

Most educated people in Germany have, in consequence of the Hettstädt tragedy, adopted the law of Moses, and avoid pork in any form. To some of the large pig-breeders in Westphalia, who keep as many as two thousand pigs, the sinking of the price of pork has been a ruinous—at the least, a serious—loss. In the dining-rooms of the hotels in the neighbourhood of Hettstädt, notices are hung up announcing that pork will not be served in any form in these establishments. To counteract this panic, the farmers' club of the Hettstädt district gave a dinner at which no other meat but pork was eaten. But it has had no appreciable effect. The raw ham and sausages of Germany are doomed to extinction. The smoked and fried sausages must necessarily be avoided. What parts of the pig can be eaten in the form of sausages with any degree of safety remains to be ascertained. The Germans think not any. They have ceased to believe in roast pork, sausages, pork-cutlets, and the like; and admit pork only in the form of thoroughly cured, well-smoked, well-seasoned, tender boiled ham, and in that of long kept, well-cured, well-fried bacon. The rest is believed to be tainted with the danger of trichina. So lively is the popular panic, that when pigs are being driven through the streets, the boys shout after them: "Trichinæ! trichinæ!" This has the effect of making the drivers angry, and causing them to hit the boys if they can, and if the urchins are too quick for them, the stripes fall upon the poor pigs.

In the South of Germany, some people now say that the Hungarian pigs are most frequently affected with trichinæ. This rumour, like the famous pork dinner of the farmers' club, may, however, have been set up with the intention of quieting apprehension about the native pigs. We have already mentioned the accident which befel the crew of a merchant vessel. They shipped a pig at Valparaiso, and killed it a few days before their arrival at Hamburg. Most of the sailors ate of the pork in one form or another. Several were affected with trichinæ and died. Of those whose fate could be inquired into, one only seems to have escaped the parasites. Another outbreak in Saxony has carried away twelve persons. A fourth wholesale poisoning by trichinæ is just reported from Offenbach, the Birmingham of Hesse-Darmstadt. Of upwards of twenty persons infected, three had already died when our correspondent's letter left. Numerous sporadic cases of fever, and epidemics of inscrutable peculiarity but referred to an anomalous type of fever, are now claimed by medical authors, and with much show of reason, to have been outbreaks of trichiniasis, or flesh-worm disease. Several German physicians experimentalise with a view of finding a cure for this terrible disorder. Professor Eckhardt at Giessen, we are told, has obtained permission to try the disease and supposed remedies upon a murderer under sentence of death. We have not been told whether his reward in case of success is to be a commutation of his capital sentence; but should hope this to be the case. The experiment, even if it should not have the romantic character indicated, will probably teach some curious details of the life of these parasites.

Almost everywhere the commonest rules of cleanliness are disregarded in the rearing of pigs. Yet pigs are naturally clean animals, avoiding, like dogs and cats, all contact with ordure. Though they burrow in the earth, and in summer wallow in the mud, they abhor the heaps of excrements mixed with straw in and upon which they are frequently kept. A due regard to cleanliness will prevent trichinæ in the pig. In wild boars, of which many are eaten in the country round the Hartz Mountains, trichina has never been found. Neither has it been met with in sheep, oxen, or horses. Beef is the safest of all descriptions of meat, as no parasites have ever been discovered in it. They have also never been found in the blood, brain, or heart, of those animals in whose striated muscles they love to reside.

As it would be useful if the medical profession, as the natural guardian of public health, were to put people on their guard against eating pork in an underdone condition, and otherwise than in the form of thoroughly boiled or roasted meat, we propose to our readers to use the word *flesh-worm* for popularly designating trichina. The word seems to express, to some extent, the horrors of the disease. Lastly, we would recommend to every medical man to make him-

elf thoroughly acquainted with the symptoms and haracters of the disease; as it does not seem to be ery uncommon, but rather hitherto to have escaped bservation.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
West Somerset. [Conversazione.]	Clarke's Castle Hotel, Taunton.	Wednesday, Jan. 20th.
Midland. [Quarterly.]	Board Room of the Infirmary, Derby.	Thursday, Jan. 21st, 2 P.M.
Bath and Bristol. [Ordinary.]	York House, Bath.	Thursday, Jan. 21, 6 P.M.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, DECEMBER, 3RD.

W. ADAMS, ESQ., Vice-President, in the Chair.

Intractable Menorrhagia. Dr. GRAILY HEWITT related a case which was traced to the influence of lead poison. In 1860, Paul, of Paris, drew attention to his influence of lead in causing abortions and profuse menorrhagia. Since that time, Dr. G. Hewitt had observed one case of repeated abortions, traceable to his cause; and the following case proved its power in causing menorrhagia. A woman, aged 35, had three children by her first husband. He died, and she married a painter, by whom she had one child, four years old. For three years past she suffered from most intractable menorrhagia; the discharge appeared every fortnight and lasted from six to eight days. No disease of the uterus was found, but a blue line on the gums, slight weakness of the wrists, and pains in the abdomen all pointed to lead in the system, which she had probably received from washing her husband's clothes; on giving this up and taking mineral acids and opium, the menorrhagia ceased completely.

Dr. GREENHOW observed that there are large numbers of women in this country employed in lead, but he had no experience on the question raised by Dr. G. Hewitt. In all cases of lead-poison seen by him, the lead-line was visible on the gums. Cleanly workmen usually escape; it is the young and uncleanly who suffer most.

Mr. ERNEST HART said that Dr. Graily Hewitt's remarks tended to prove that lead is not a styptic; and his own experience led him to a similar conclusion.

Astigmatism. Mr. ZACHARIAH LAURENCE exhibited two cases of astigmatism, which he had remedied by cylindrical lenses. In the first instance, the patient had himself mistaken the case for one of progressive myopia, at last wearing concave glasses as deep as five inches. The ophthalmoscope, however, disclosed no morbid appearance of the fundus, nor refractive power of the humours, sufficient to account for so high an apparent degree of myopia. Further examination disclosed an abnormal increase of curvature in the cornea in the vertical meridian, an astigmatism of one-twentieth. With a combination of a ten-inch spherical concave with a twenty-inch cylindrical concave (axis horizontal) his vision was exactly double that obtained by his former glasses. With these a luminous point appeared as a horizontal line, vertical lines as a blurred mass; but with the above combination these appearances vanished. In the second instance, the phenomena was very similar; the case, however, presenting three peculiarities:—1. The axis of the astigmatic meridian was inclined at about thirty degrees from the vertical. 2. It was limited to the right eye. 3. The retinal veins exhibited an extraordinarily distinct and extensive pulsation.

Mr. HART observed that the discovery of this condition of the eye required much care, and, though not so commonly met with as Donders said, (one-thirteenth of all cases) it was often seen.

EVIDENCE AGAINST THE INTERNAL USE OF MERCURY IN SYPHILITIC AND OTHER DISEASES.

BY C. DRYSDALE, M.D.

The debate on this paper was resumed.

Dr. MENZIES was of opinion that, notwithstanding all that has been said by Dr. Drysdale, the cure of syphilis will frequently be promoted by the moderate use of mercury. Its good effects were best seen in the Hunterian chancre, and he also thought it would often prevent secondary symptoms. He had often perceived the value of the mineral in secondary symptoms and iritis. If a sore would not disappear with black-wash, he used mercury. In tertiary cases he used the bichloride of mercury and iodide of potassium. Mr. Syme did not object to mercury in syphilis under proper management. He (Dr. Menzies) thought mercury should be avoided in irritable habits and phagedæna.

Mr. CURGENVEN considered the evidence adduced by Dr. Drysdale perfectly satisfactory only as far as hospital practice went, because the patient's after-history could not be known so well as in private practice. He had recently seen a soldier, who had been treated without mercury in the Crimea, and had now superficial ulceration of the nostrils. This man recovered under doses of iodide of mercury. He did not believe that mercury caused disease of the bones. In another case, a man had indurated sores and gonorrhœa. No mercury was used, and he had secondary symptoms and also syphilitic children. This was a proof that syphilitic children were not due to the mercury. In acute hydrocephalus, Mr. Curgenven had found great benefit from a grain of calomel given every two hours, which had often effected a cure of this disease.

Dr. SISSON said that there were three classes; 1. Mercurialists, who said the disease could only be cured by mercury; 2. Anti-mercurialists; 3. Moderate mercurialists. The position of the first class was untenable; since it was certain that Mr. Weeden Cooke, Dr. Drysdale, and others, had cured cases of syphilis without a particle of mercury. The anti-mercurialists however, had not proved that small quantities of mercury might not prove beneficial, which he believed. It was a mistake to call Mr. Syme an anti-mercurialist. *His* attacks were levelled against the *abuse* of mercury, and he (Mr. Syme) considered mercury the grand remedy in iritis. With regard to the evils done by mercury much had also been said against the chlorate of potash. His line of treatment was to support the system and give purges, etc.; if this did not suffice, he ordered one-sixteenth of a grain of bichloride of mercury for about three weeks. He thought mercury would stand its ground against Dr. Drysdale's attack.

Dr. G. DE GORREQUER GRIFFITH said that his own experience completely corroborated the evidence brought forward by the author of the paper against mercury in syphilis. A gentleman patient of his had chancre, which was treated by mercury. Secondary symptoms appeared, and he again took mercury. As he received no benefit, he placed himself under Dr. Griffith's care, who gave him chlorate of potash and bark. The erup-

tion disappeared, and the corona veneris. During the years he had been abroad, he had never found it necessary to administer mercury for the primary or other forms of the disease, believing that the patients got more rapidly well when mercury was not admitted into the system. A brother officer had been treated by several courses of mercury, very much to the deterioration of his health. Dr. Griffith made him give up mercury, purged him, and afterwards gave chlorate of potash and bark. The eruptions faded, the ulceration soon healed, and the patient recovered perfectly, and had continued well for some years. In all the patients—and they were not a few—whom he had treated in India, China, and other tropical regions, he never saw those untoward results, which he knew too frequently arose from mercury. However, the Chinese, who take no mercury, seemed to suffer from the disease in a frightful manner. This was an interesting remark in connection with the natural history of the disease. The treatment which he adopted was to powder the ulcer with powdered chlorate of potash, and afterwards dress it with a weak solution of that drug. He then alluded to the inutility or rather inadvisability of using calomel and opium, or even the latter alone, as a prophylactic in ovariotomy; Mr. Baker Brown considered them unnecessary, as well as Mr. Spencer Wells.

Dr. Pollock believed he was only delivering the general opinions of the profession, when he said that mercury was now considered quite unnecessary in all internal inflammations, such as pleurisy, pericarditis, pneumonia, and bronchitis. When he was a student in Dublin, there was a great contest between the disciples of Colles and Carmichael, on the matter of mercury in syphilis: so that the students did not know what to think. Dr. Pollock thought that tertiary symptoms were benefited by the drug; but that none of the other symptoms required it. As to mercury in bilious attacks, it was unnecessary; as he had first remarked when in Italy, where the natives get well on low diet and lemonade.

Mr. Ernest Hart remarked, that all that had to be done by statistics on the question of the treatment of syphilis seemed to have been done already; and yet the question was not settled. But it was by observation and thoughtful interpretation of results in particular cases that the value of mercury could be best seen. He had recently had two examples of its value in syphilitic iritis. 1. A gentleman came under his care with syphilitic iritis. He had been treated by "rational" means at first, and six months afterwards with chlorate of potash, etc. Thirteen months after this he still had induration at the side of the chancre and iritis, which was cured by Mr. Hart by blue pill. This seemed a practical argument for the drug. 2. A child, the offspring of syphilitic parents, had one eye lost by iritis, and the other had commencing interstitial keratitis. He had the "notched teeth" of Hutchinson. The syphilitic nature of the disease he had to treat had not occurred to the practitioner, and one eye was lost and the other nearly sightless when he was seen. Mercurial injection acted wonderfully in arresting the corneitis and clearing the cornea, previously obscured by interstitial effusion. The child, previously sightless, now saw.

Mr. Zachariah Laurence disagreed with the views of the last speaker. He (Mr. Laurence) had treated a large number of cases of interstitial corneitis by local sedatives, counter irritation and depletion, and general tonics, without ever having found it necessary to resort to the use of mercury. He believed that there was no connection between this form of corneitis and syphilis, as asserted by a recent author, and that the occasional quasi-concurrence of the two diseases was rather a natural consequence of the prevalence of syphilis among hospital patients. In the treatment of iritis, Mr. Laurence never found it necessary to employ mercury; he had treated a great number of cases successfully by opium and belladonna, and instanced the case of a medical man, who found the greatest benefit from such a line of treatment for recurrent iritis; having formerly employed mercury fruitlessly,

Dr. Graily Hewitt thought that the action of mercury in syphilis was useful. The wife of a patient of his, an Indian officer, had two dead children, and he had suffered from sore throat, and had not been treated by mercury. He (Dr. Hewitt) administered mercury to both, but did not know the result. Here, then, were the results of the disease without mercury. As to acute hydrocephalus, his experience made him consider this a fatal disease, whatever was the treatment adopted. Mercury was of no benefit in such cases. He did not believe that mercury was of any service in puerperal peritonitis, in puerperal fever, or phlegmasia dolens.

Dr. Ballard considered the use of mercury injurious in acute hydrocephalus, which is usually seen in delicate children. The best treatment is to apply leeches and nourish the child. When coma supervened all he had seen died.

Dr. Camps thought that all the opinions he had heard pointed to the conclusion that syphilis did better without mercury in warm than in cold climates.

Dr. Drysdale replied to and commented on the remarks of the previous speakers. In conclusion, he remarked, that the result of the evidence, given by the different members who had spoken, tended to strengthen him in the course he had now followed for several years, viz., of *never* using mercury as an internal remedy, under any circumstance whatever. With regard to chlorate of potash, he had no belief in its virtues, but thought external applications and rational medication of symptoms were all that we could at present use, with propriety, for the treatment of syphilis, or, indeed, of most other diseases.

December 17, 1863.

H. W. Fuller, M.D., President, in the Chair.

IMPETIGO CONTAGIOSA.

BY W. TILBURY FOX, M.D.LOND.

The author first commenced by objecting *in toto* to the further use of the term porrigo in dermatology. It had been so variously applied at different times as to render it a matter of impossibility to disentangle out an applicability which could be accepted with any degree of satisfaction. The generic term *tinea* would be a proper substitute in the parasitic class of cases, and impetigo contagiosa in the form of scalp disease more *recently* known as porrigo (Startinii). A description was then given of the disease as it affects the different parts of the body; on the scalp as isolated, circular, flat, yellowish granular-looking scabs, without any inflammatory areola, developed as a *primary* disease from a small pustule; on the general surface as small red points isolated most usually, becoming pustular, then quasi-bullous (always umbilicated), and presenting a circular form with more or less redness around, attaining the size of a shilling or more, and then breaking out into superficial wet leather looking ulcerated surfaces. The contents of the pustules were shown to be made up of puriform material (a plastic lymph), pus, fat, epithelial cells, and parasites—animal (*steatozoon folliculorum*) and vegetable resembling the *trichophyton*, and also bodies resembling amyloid corpuscles. The parasites are only found occasionally and are accidental components of the disease. Dr. Fox then noticed certain

deviations from the normal standard. The disease is essentially and highly contagious, and the specific contagious quality resides in the secretion of the pustule, and is not parasitic, as shown by microscopic examination. Cases were quoted to show that the disease was inoculable by the introduction into the skin of a sound person of some of the discharge. Dr. Fox then proceeded to point out the similarity between cases of impetigo contagiosa and so-called "bastard vaccinia." That so-called "bastard vaccinia" was in many cases simply impetigo contagiosa; that impetigo contagiosa mostly followed vaccination, or could be traced by contagion through a series of cases to some one subject in whom the disease had followed close upon vaccination; that impetigo contagiosa of the scalp often co-existed with so-called bastard vaccinia of the surface; that inoculation produced a pustular condition closely resembling vaccinia, and Dr. Fox just touched upon the explanation of the relation of this disease to vaccination, and asked what, if any, is the modifying influence of the universal practice of vaccination upon existing disease? Some of the cases appeared to be impetigo modified by the vaccine virus. Mr. Ross's observations were referred to as illustrative of the subject. The author felt sure that vaccination had a great deal to do with the disease, and asked the members to sift carefully any evidence that might turn up. The diagnosis between this disease, ecthyma, pemphigus, rupia and eczema impetiginodes was dwelt upon in full detail. The treatment and the narration of cases followed. The author had described the disease as he had lately seen it, in a quasi epidemic form, among the patients in his department of Diseases of Women and Children at the Farringdon Dispensary.

The PRESIDENT observed that a large field of inquiry was opened out by the question of the connection between vaccination and scrofula. Vaccine matter might cause eruptions, either by constitutional irritation or by specific poison. At Southampton children that were vaccinated had had a remarkable epidemic of skin-disease, caused by the vaccination.

Dr. HILLIER thought that the author of the paper had included several diseases under one head. He was fully satisfied that impetigo was sometimes contagious, and that some of these cases appeared to have all the anatomical characters of ordinary non-contagious impetigo; whilst others had the character well described by Dr. Fox; they differ from ordinary cases in the character of the secretion and in the extension of ulcerations under the raised cuticle; the existence of inbilication was generally due to the cuticle dipping down into a sweat duct, and might be present or not. Dr. Hillier had not been able to make up his mind as to whether there was a distinct disease such as that described by Dr. Fox, or whether several skin diseases, especially impetigo, rupia and ecthyma in children, were under several conditions contagious. Pustular scabies, causing ecthyma, had been mistaken by some for porrigo; this disease may certainly attack the scalp in children. Pediculi were, in some cases, the medium by which impetigo was communicated. This term *porrigo* was an inconvenient one, on account of its having been applied to all contagious diseases of the scalp. Dr. Hillier stated that Willan and Bateman's porrigo favosa was not favus, but the contagious impetigo; whilst porrigo lupinosa answered to favus, and porrigo scutulata to *tinea tonsurans*. He had several times heard from practitioners that their supply of vaccine lymph appeared to have become impure, and vaccination had been followed by skin disease. Was this caused by lymph being taken at too late a period, or deteriorated by passing through unhealthy subjects? As to splitting of hairs, Dr. Hillier said it was by no means constantly due to parasitic growths, as he had found by experience, and as one would *à priori* conclude.

Dr. CHOWNE remarked that he thought the author's assertions with regard to the spread of disease by vaccination was a dangerous one to promulgate, and not sufficiently logically deducible from the facts observed. Boils had been very prevalent in London some years ago, and if there had been any connection drawn between them and vaccination, it would have, he thought, been a rash one; and so with the other cases mentioned by the author and the president, he considered the eruptive diseases to be merely coincident with the vaccination, not an effect of it.

In reply to a question by Dr. DRYSDALE, Dr. FOX said that his treatment of the cases mentioned consisted in application of sulphur ointment and internal administration of cod liver oil and iodide of potassium.

Dr. FOX, in reply, said that he had been very careful in drawing logical conclusions in the matter, and had avoided all "will-o'-the-wisps;" the connection of the disease with vaccination was one which deserved due consideration for the comfort of both patient and medical man. He had been obliged to admit the connection from noticing how directly and frequently it followed in the wake of vaccination; that bastard vaccinia co-existed with impetigo contagiosa of the scalp; that great similarity obtained in some instances between the disease and some cases of abnormal vaccinia; and that there appeared to be gradations as it were between the two cases. The extension of the disease though no doubt effected after the manner of epidemics generally, was nevertheless in great part due to direct contagion. Dr. Hillier thought that several diseases had been mixed together, but great care had been taken to make the diagnosis clear between pemphigus, ecthyma, impetigo (which was never on the scalp a primary disease, but secondary to eczema) and rupia. Willan's porrigo larvalis, no doubt included, among other things, impetigo contagiosa. The contagious character of ecthyma and rupia was unsupported by proof. Dr. Fox said he should like to be furnished with instances of the kind. Then as to pediculi and vegetable parasites being causes of contagion, there was direct proof to the contrary. These were altogether absent in the majority of cases. The impetigo produced by these, and also "the festering of scratches," had nothing in common with impetigo contagiosa. The splitting up of the hairs into their ultimate fibres was thought by Dr. Hillier not to be characteristic of parasitic disease, but a condition of fungus (the stromal or granular form which had been observed by Dr. Fox to develope into the typical form) capable of producing the lesion, was generally overlooked (a drawing handed to the president showed this distinctly). The umbilication in this disease was a mark of very decided significance; it was brought about not as Dr. Hillier stated (by the central part being held down, so to speak, by a sweat or sebaceous duct), but by the peculiar pathological behaviour of the diseased derma. The secretion was not free, as in pemphigus, so as to distend the bulla, but scanty, and the centrifugal enlargement of the bulla was accompanied by a secreting process forming a raised ring as it were, while the secretion diminished at the centre, which consequently became depressed.

WESTERN MEDICAL AND SURGICAL SOCIETY.

DECEMBER 4TH, 1863.

M. BAINES, M.D., Vice-President, in the Chair.

AFFECTIONS OF THE THROAT, WITH THE PRACTICAL USE OF THE LARYNGOSCOPE. BY G. D. GIBB, M.D.

Dr. GIBB descanted briefly upon the various instruments in use for examining the throat, the larynx, and

the nose; all of which were present on the table. Of the various kinds of laryngeal mirror now employed, he condemned those made of steel, as they required constant re-burnishing; and, although glass was the most convenient and the best, he occasionally made use of plated and gilt metal of a circular form.

How to proceed in examining the throat and larynx; the various parts seen in health; their colour, situation, shape, and action; the production of sound; and the appearances presented by the singing voice; were all described. The natural colour of the fauces, the parts about the upper larynx, the larynx itself, and the trachea, Dr. Gibb particularly dwelt upon; because mistakes were frequently made of confounding what was really natural with diseased conditions. The voluntary action of the muscles of the larynx, he said, he had conclusively proved by experiments made upon himself, which were pointed out in a series of diagrams, and elsewhere brought before the scientific world. The behaviour of the glottis in coughing, expectoration, choking from particles of dust or other substances, and swallowing, was explained, and the order of sequence given in which the action of the true and false vocal cords and depression of the epiglottis occurred. The proof and confirmation of what he stated in relation to these was explained by diagrams in the form of a mathematical proposition. The cartilages of Wrisberg and Santorini were particularly described; many anatomists confounded them as synonymous, and others wholly ignored the existence of the former; although he would not deny that those of Wrisberg were wholly rudimentary, and sometimes actually wanting, in man, as he had proved by some of his dissections in earlier years. The physiological part of the lecture was concluded by a description of the subglottis seen through a tracheal fistula; and of autolaryngoscopy and rhinoscopy. No aurist at the present day should be unacquainted practically with the use of the rhinoscope to determine the state of the Eustachian tubes.

Dr. Gibb now entered into a brief consideration of the various diseases of the throat and larynx, and the light thrown upon their nature and pathology by the use of the laryngeal mirror. In some cases, with urgent symptoms, the diseased condition was found not to possess the importance that the symptoms, at first sight, would have warranted; in others, again, with comparatively slight or mild symptoms, very important pathological conditions were observed. The value and importance of the laryngoscope was becoming, every hour he might say, more apparent.

The commonest form of throat-disease was, he said, the follicular affection of the mucous membrane involving sometimes the throat alone, and at others the larynx; but generally existing together, and seen in a variety of persons, not unfrequently associated with pendency of the epiglottis, and now and then with ulceration more or less extensive. The impediments offered sometimes by a pendent epiglottis were most inconvenient, and interfered much with treatment, as must be the experience of most of those accustomed to investigate the throat with the laryngoscope. Ulcerations of the larynx were, he said, most abundantly illustrated in the London museums, and showed to what a fearful extent they sometimes proceeded before destroying life. Impaired action of the vocal cords, from mechanical or other causes, hoarseness, the varieties of aphonia, modifications of the voice in speaking and in singing, were all briefly considered and explained by reference to numerous diagrams. Acute laryngitis, supra- and sub-glottic œdema, specific affections of the larynx, diphtheria, the sore-throat of the exanthemata, dyspnœa, and deformities, were likewise noticed at such length as time would permit of. The pathology of the subject was concluded by a reference to diseases of the trachea, the tongue-bone, foreign bodies, injuries, and nasal affections.

In conclusion, Dr. Gibb remarked that laryngeal affections were now much more curable than heretofore; for we were now not working in the dark, and were made aware of the exact conditions present within the larynx. He also stated that it would have been quite impossible to have described all that he had mentioned without the aid of diagrams, as they at once appealed to the eye, and quickly conveyed to the mind what he would have taken hours to mention. An autolaryngoscopic demonstration concluded the business of the evening.

Correspondence.

IRIDECTOMY.

LETTER FROM JAMES DIXON, ESQ.

SIR,—In replying to my letter, Mr. Bowman wishes, he says, to fix especial attention upon my last two paragraphs, because "they contain what he regards as a fundamental error as to a plain matter of fact." And after quoting my statement that "numberless cases of iritis, keratitis, etc., are attended by hardness of the eyeball," he goes on to say that "ordinary corneitis, iritis, choroiditis, retinitis, in fact, all the ordinary inflammations of the internal tunics are *not* characterised, as a rule, by undue tenison." I never said that "ordinary" inflammations of the tissues I named were always attended by hardness of the eyeball; but I stated, and I reaffirm, that *very many* cases are so. Of course I used the word "numberless," not in its absolute sense of innumerable, but, as we often use it in conversation, to signify very numerous. I could never be supposed to assert that increased hardness of the globe was a necessary concomitant of every simple case of inflamed iris or cornea; but inasmuch as in the severer forms of what we, for want of a better word, term iritis, and in those inflammations of the cornea where the sclerotic and other tissues are implicated, a considerable amount of hyperæmia of the globe is induced, it is impossible but that the hardness of the organ should be increased beyond its normal standard. Is not this the case with every congested organ,—with a swollen testicle or a lymphatic gland?

Mr. Bowman is anxious lest my statement with regard to the abuse of iridectomy should "lower the high reputation of English science and English humanity abroad." Really I think we need not trouble ourselves on this head. "Abroad" is a wide term and no doubt there are many foreign surgeons who are as conscientious as they are skilful; but those who have seen as much as I have of continental schools of medicine, know how frequently patients are regarded as mere illustrations of a clinique, the *corpora vili* on which experiments may fitly be made. So I think "English science and English humanity" may be safely left to defend themselves.

The "enthusiasm of his younger colleagues," (by this term of course he means his juniors in the profession generally) with which Mr. Bowman professes himself to have been so much pleased at the period of the first announcement of iridectomy,—"among whom it may be readily conceded that occasional errors of diagnosis or blemishes in the operative procedure may have occurred,"—is just an euphuistic way of saying what I, in plainer terms, asserted as to the reckless proceedings of some of the over-hasty iridectomists; and I can no more excuse "young en-

thusiasts," who, without manual skill or previous operative experience, undertake iridectomy as a means of notoriety, than I could pardon an older surgeon, should he habitually operate on cases which were either not threatened with glaucoma at all, or were already in a hopeless condition of confirmed glaucomatous blindness.

This is just the question which the public and the lookers-on of the profession are at present so anxious about, and which in fact has given rise to the present iridectomy controversy. Sufferers from failing sight exclaim—"We want, if possible, to save our eyes, not to offer them up as subjects for needless operations." They say to the surgeon, as the frogs in the fable said to the boys—"Though sport to you, this is death to us." I am, etc., JAMES DIXON.

Portman Square, Jan. 11th, 1864.

SIR,—After reading Mr. Dixon's letter on Iridectomy, published in your JOURNAL of the 6th of November, 1863, I sent to London and got his work; and judge my surprise when I read the following passage:—"The facility with which the operation of 'iridectomy,' as it has been called, can be performed, has led to its being practised in an immense number of cases; and were we contented with the array of so-called cures which have resulted, we should indeed believe the glaucoma, hitherto so helpless a disease, had been brought as much under control as cataract itself. But a careful criticism will convince us that many of the cases of acute glaucoma cured by operation were simply cases of acute inflammation of the sclerotic, implicating to a slight extent the iris and cornea, and attended with severe neuralgia and impairment of vision,—cases which would have yielded to judicious treatment if no iridectomy had been performed. A few cases, supposed to be chronic glaucoma, were probably nuclear cataract in an early stage, and the removal of a portion of the iris by exposing the still transparent periphery of the lens, improved (of course only temporarily) the patient's sight. Of other instances which have come under my own observation, where the operation has been unsuitably performed or proposed, I forbear to speak. There remains a mass of cases of glaucoma diagnosed by careful and competent surgeons, and skilfully operated upon by them, sufficiently numerous to enable them to draw their own conclusions as to the real value of the 'new operation.' For myself, I may state that, although I could not recognise as sound the theory upon which the operation was brought forward as a cure for glaucoma, I tried it in a series of carefully-selected and well-marked cases of the following forms of disease:—Amaurosis with excavated optic nerve—as Gräfe has termed a peculiar morbid condition; chronic glaucoma, where the lens had not yet lost its transparency; and in cases of acute glaucoma, characterised by sudden impairment of sight, rapidly followed by inflammation of the eyeball, dilated and fixed pupil, severe neuralgia, and total loss of vision.

"In neither of the two classes did I find, nor had I expected to find, any improvement to result. Nor in the third class was sight restored, but the inflammation seemed to be arrested, and the neuralgia was either very much lessened, or it wholly ceased. I cannot, however, attribute this result to the removal of a portion of the iris, but mainly to the evacuation of the aqueous humour through the large corneal wound."

Wishing to know what surgeons at other schools are doing with regard to iridectomy, I have been inquiring into the working of the Westminster Ophthalmic School. There I find iridectomy rejected altogether for glaucoma, etc., and incision of the ciliary muscle, which is said to be a superior operation, substituted. I find, however, that there is a division of opinions among that staff respecting the *modus operandi* of this operation.

Where on earth are we country surgeons to go to get orthodox opinions to guide us, when we find our London "pures" so much divided? I was fortunate enough, as I thought, to get a view of a paper by Gräfe on "Iridectomy" in the *Ophthalmic Hospital Reports* just published. I am puzzled more than ever by it. In the first part of this paper, which is devoted to the results of iridectomy, I find a great deal more to scare me away from the operation than to encourage me. When I come to the second part, which treats of the disadvantages of iridectomy, I am lost in fear. I had no conception that so many mishaps attended it. What, sir, do you think of such a sentence as this, when he is discussing the point as to whether iridectomy injures the other eye or not? "In a few years, however, my observations on these cases multiplied to such a degree, that I ascertained and can uphold the fact, that iridectomy, when performed upon one eye, may tend, under certain circumstances, to accelerate the process of disease in the other." He continues: "According to this we see that the second eye has been attacked quickly in more than one-fifth of the cases; this is very different to what we have observed in cases of no operation." He adds: "This agrees with the opinions of most of those of my colleagues who have directed their attention to the point in question." I might quote many extraordinary remarks from this paper, but I will only make one more abstract. "These facts need not prevent an intelligent practitioner from making use of iridectomy in cases of acute glaucoma, but only serve to recommend to him some degree of prognostic circumspection. When I operate on patients for acute glaucoma, I always inform them of the possibility of the disease speedily attacking the second eye; so that if this actually happens, they are not taken by surprise, but sometimes even welcome gladly the acceleration of the second operation, of which they have already experienced the success of the first eye."

I am, etc., A COUNTRY SURGEON.

Dec. 28th, 1863.

LETTER FROM FURNEAUX JORDAN, ESQ.

SIR,—As the correspondence at present appearing in your pages will constitute an important epoch in the history of iridectomy, it is desirable that the experience and evidence on both sides should be as ample as possible.

The degrees of severity of the inflammatory process in most tissues and organs are almost numberless. The language of pathology affords, however, in the terms acute, subacute, and chronic but three rude inadequate landmarks for the guidance of the surgical pilgrim.

From the rarity of very acute glaucoma, my experience (which at the Birmingham Eye and Ear Hospital and in private practice has not been scanty) in iridectomy has been chiefly in the more subacute and chronic forms. It has led me to the following conclusions.

1. The ophthalmoscope has rendered the diagnosis of the glaucoma more precise and the pathological conditions more comprehensive. As Mr. Bowman has observed, many affections which were formerly considered amaurotic are now recognised as glaucomatous. There is *still* no remedy for amaurosis.

2. For the first time in the history of ophthalmic surgery, a remedy has been devised for glaucoma. Many cases iridectomy cures, in many it arrests the otherwise too certain progress of this disease.

3. Where it fails to relieve, if performed with ordinary care, it does no harm. I have frequently performed the operation, in many cases with striking—in most cases with marked success. I have never known a single evil result from its use.

4. Although the manner in which the operation affords benefit is not so susceptible of explanation as in the operations for lithotomy and strangulated hernia, yet when we consider that no inconsiderable portion of a large solid structure (a structure, too, which is intimately connected with the production of one of the glands of the eyeball) is removed from a globe already too distended and tense, we may regard it, if only a mode of paracentesis, as certainly *the most permanent and efficient mode of paracentesis* which has yet being devised. On this ground simply I am well content to rest the utility of iridectomy—the more so when I find that modern experience and past history alike reveal the miserable failure of every other so-called remedial means.

I am, etc., FURNEAUX JORDAN.

16, Colmore Row, Birmingham, Jan. 5th, 1864.

LETTER FROM JOHN WOOLCOTT, ESQ.

SIR,—Considering my experience in ophthalmic diseases to be as large and extending over as long a period of practical observation as that of most of the oculists who have addressed letters to you on Iridectomy, I venture to give my opinion on the subject. I may briefly state at once, that I have seen more harm accrue from the operation than benefit; and that I consider it, as performed by the greater number of advocates in its favour, as a meddlesome proceeding. But I read the following sweeping denunciation:—

"If in a numerous class of eye-affections the vision cannot be saved except by iridectomy, those gentlemen who do not perform iridectomy must sacrifice a large number of their patients' eyes to the non-performance of it. Indeed, Mr. Bowman tells them that they do in fact, by not performing iridectomy, leave their patients thus untreated, and so subject them to irreparable loss of vision." (BRIT. MED. JOUR., Dec. 19th, 1863.)

I therefore feel, for the sake of humanity's vision, that it is my duty to investigate the subject further; and if Mr. Bowman will kindly make me the same offer as he did to Mr. Walton, viz., to show me his patients "*before* and after an iridectomy properly performed," I will promise him to go in an unbiased condition, and shall only be too glad if he can convert me to iridectomy as a cure for glaucoma, as for some time I have abandoned the operation, and if I remain unconverted, my conscience will then be easy; having satisfied myself that the patients under my care with this disease have not been consigned to blindness through my excluding them from this operation, as the advocates for iridectomy would have the profession believe that vision suffers, or is permanently lost, through the non-performance of iridectomy.

I am, etc., JOHN WOOLCOTT,
Surgeon to the Kent County Ophthalmic Hospital.

11, Brook Street, Grosvenor Square, Jan. 11th, 1864.

MR. SKEY has formally retired from the office of Surgeon to St. Bartholomew's Hospital.

LUNACY CERTIFICATES. Last week, a gentleman appeared before a magistrate in London, asking for protection against a relative who was violent. There was, it appears, no doubt of his being deranged, but the medical men who had seen him declined to give certificates of his lunacy in consequence of the actions lately brought against medical men. We recommend the above fact to the consideration of Mr. Charles Reade, and of Mr. Charles Dickens.

Medical News.

APPOINTMENTS.

*BURROWS, George, M.D., F.R.S., elected President of the Medical Council.

CLARKE, William F., Esq., elected Surgeon to the West London Hospital.

EADE, P. M.D., appointed Physician to the Jenny Lind Infirmary for Children, Norwich.

FERNANDEZ, Albert L., Esq., appointed Resident Medical Officer to the Sheffield General Dispensary.

GIBSON, Robert E., Esq., appointed Surgeon to the Jenny Lind Infirmary for Children, Norwich.

*GUY, Tom, M.D., appointed Deputy Coroner for Doncaster.

*LOGAN, David D., M.D., elected Physician to the West London Hospital.

*MAUDSLEY, Henry, M.D., elected Physician to the West London Hospital.

*PAGET, George E., M.D., appointed Physician to Addenbrooke's Hospital, Cambridge.

PATERSON, William, M.D., elected House-Surgeon to the Chorley Dispensary.

SEABROOKE, William, Esq., appointed House-Surgeon to the Brighton and Hove Lying-in Institution.

WHITE, Charles, Esq., appointed Surgeon to the Dispensary, Warrington.

POOR-LAW MEDICAL SERVICE.

CAMPBELL, Alexander, L.F.P. and S. Glasg., to the parishes of Bracadale and Durinish, Inverness-shire.

HUBBARD, John P., Esq., to the Sixth District of the Bury St. Edmund's Incorporation of the Poor.

HUGOE, William P., Esq., to the West Kenwyn and Kea Districts of the Truro Union.

MAHOOD, George, M.D., to the Workhouse and Fever Hospital of the Enniskillen Union.

MOORE, David, M.D., to the Dock Dispensary District of the Belfast Union.

ARMY.

COCKBURN, Assistant-Surgeon J. B., M.D., Royal Artillery, to be Surgeon Royal Engineers, *vice* J. Summers, M.D.

GIRAUD, Assistant-Surgeon B. T., M.D., Supernumerary 31st Foot, to be Staff-Assistant-Surgeon, *vice* C. D. Madden.

MACPHERSON, Staff-Surgeon E. M., to be Staff-Surgeon-Major, having completed 20 years' full-pay service.

MADDEN, Staff-Assistant-Surgeon C. D., to be Assistant-Surgeon Royal Artillery, *vice* J. B. Cockburn, M.D.

SUMMERS, Surgeon-Major J., M.D., Royal Engineers, to be Staff-Surgeon-Major, *vice* W. A. White, M.D.

WHITE, Staff-Surgeon W. A., M.D., to be Surgeon Royal Artillery, *vice* T. Rhys.

ROYAL NAVY.

LITTLE, John, Esq., Surgeon, to the *Duncan*.

MAXWELL, H., M.D., Assistant-Surgeon, to the *Duncan*.

MILNE, James G., Esq., Acting Assistant-Surgeon, to the *Duncan*.

NELSON, Thomas, Esq., Staff-Surgeon, to the *Wellesley*.

POTTINGER, Robert, Esq., Staff-Surgeon, to the *Formidable*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

ELY, J. J., Esq., to be Assistant-Surgeon 9th Kent R.V.

TYRER, R., Esq., to be Honorary Assistant-Surgeon 2nd Lancashire Light Horse Volunteers.

DEATHS.

ARMITAGE. On January 5th, at Upper Montagu Street, aged 10 months, James L., son of T. R. Armitage, M.D.

BROWN. On January 6th, at Rutland Street, Edinburgh, Catherine Scott, wife of John Brown, M.D.

GEORGE. On January 10th, at Bath, aged 22, Florence, daughter of *R. F. George, Esq.; and, on January 11th, aged 51, Elizabeth, his wife.

GREGORY. On January 10th, at Leigh, Kent, aged 56, Martha, wife of *C. F. Gregory, sen., Esq.

HANNAH, James L., M.D., of Brighton, on January 10.

HARMAN, Edward B., M.D., at Weeting Rectory, aged 61, on Jan. 6.

JAMES, Joseph W. W., Esq., Surgeon, at Nelson Terrace, Stoke Newington, aged 37, on January 9.

NEWBIGGING, Patrick S. K., M.D., at Edinburgh, on January 10.

PAXTON. On January 5th, at Oxford, Anne, widow of the late *James Paxton, M.D.

REEVE. On January 10th, at Brompton, aged 76, Susanna, widow of Henry Reeve, M.D., late of Norwich.

STAIG, James A., Esq., late Surgeon Bengal Medical Staff, at Clifton Terrace, Maida Hill, aged 51, on January 8.

TAPSON. On January 5th, at 35, Gloucester Gardens, Anne E., wife of Alfred J. Tapson, M.B.

An English Student. Mr. Alan Herbert has this year come out first in the *Concours* for the appointment of Dressers to the Paris Hospitals.

Royal College of Physicians. Dr. G. Johnson, during the present session, will deliver lectures at the College of Physicians on the Laryngoscope.

Ice, in Sea-Sickness. Ice is recommended as a sure remedy as well as a prophylactic against sea-sickness. (*Phil. Med. Reporter.*)

A Memorial has been presented to the Free City Hospital of Boston, by eight hundred persons of all professions, asking that a part of the hospital may be devoted to homœopathy.

Mr. Green's death has caused three vacancies in the College of Surgeons, viz.: in the Council of the College; in the Court of Examiners, and at the Dental Examining Board.

Rights of Registered Doctors of Medicine. Dr. Sumpter states that, a County Court judge has ruled that registered M.D.'s could recover for surgical as well as medical attendance.

Mortality of Publicans. The mortality betwixt the ages of 45 and 55 amongst the whole population of England is at the rate of 18 in the 1,000; while amongst publicans it is 28. (*Tweedie's Temperance Almanack.*)

Mistaken Identity. Dr. Parigot has met with what turned out to be an amusing *episode de voyage*. Travelling through Ohio he was arrested by the Provost-Marshal, and his aids, as *John Morgan*, and his two travelling companions as John Morgan's officers. The Doctor, after considerable trouble, proved his identity.

American Medical Schools. Everywhere, the medical schools of our country are entering upon a prosperous winter. There are between four and five hundred students at each of the old schools of Philadelphia, and we have a like report from the schools at New York city. The Bellevue Hospital Medical College will, we learn, have a class of about three hundred. (*Cin. Lancet and Obs.*)

The Famous Medium, Mr. Home, is, we learn, at present engaged at Rome in practising the art of the sculptor. Having, we must suppose, failed in the trade of evoking the spirits of the departed by the aid of table-rapping, or having worked the trade out, he now turns to the more rational business of attempting to evoke "living" likenesses of the present generation out of the bowels of the earth by marble-rapping. This is certainly a descent of his genius.

A Chiropodist's Business. Last week, at the Sheriff's Court, Red Lion Square, a claim for compensation was made for £4700 for the loss of the business of a "Chiropodist," in the Marylebone Road, through the obstructions caused by the Underground Railway. According to the evidence of the claimant, she made £15 a week, in the season of four months, by corn-cutting, and averaged £8 a week for the remainder of the year. For two years and more the works of the company had obstructed her business, and prevented her carriage people from coming to her house. She, in consequence, became bankrupt, and had passed through the court. The chiropodist business was carried on in the name of "Hayward," and the income had been about £800 a year. The jury retired, and on their return assessed the damages at £850.

The Battle of the Chlorodynes. Browne *v.* Freeman. In this case, on January 11th, his Honour the Vice Chancellor said that, in this case the simple question was, whether the defendant had infringed the right of the plaintiff as the inventor of a medicine well known as Dr. John Collis Browne's "Chlorodyne." It appeared that subsequently to 1844, when the plaintiff first made his medicine known, the defendant published advertisements intimating that he was selling "Freeman's Chlorodyne," on a large scale, upon which the plaintiff filed his bill, but subsequently abandoned it. The defendant afterwards advertised for sale "The Original Chlorodyne," and the plaintiff now complained that this was a clear invasion of his rights, as the medicine first became known as his (the plaintiff's) invention. His Honour said that he had very great suspicion as to the motives and views of the defendant in the course which he had adopted, but that the evidence on the part of the plaintiff was defective in many material respects. He should, under the circumstances, order the motion to stand over until the hearing of the cause.

Health of the Federal Soldiers. Statistics published by the United States, confirm the fact that no general is able to kill by the sword as many of the enemy as there will be killed by disease of his own men in a prolonged campaign. The deaths occasioned by wounds in this civil war have amounted to only 17·2 per 1000 in a year; but the rate of mortality from sickness has been 50·4 per 1000. Thus for every man killed by the enemy nearly three die of disease. If soldiers were struck down at the rate of 67 in the 1000 annually, the loss would be very far less serious than that which proceeds from sickness and wounds. The man who cannot move from his tent is, for the time, more than dead, since he requires others to wait upon him. Napoleon, perhaps, more than any other General paid the greatest attention to the health of his troops. But when his men fell sick, he would rather leave them to die than stay to treat them, once the real work of the campaign commenced. In round figures, if the United States had an army of 300,000 in the field, they may calculate upon having to doctor each man three times over during the 12 months, exclusive of the treatment needed by the wounded.

Insane Paupers. An annual return just issued by the Poor Law Board shows that on January 1st, 1863, there were in England and Wales (exclusive of seven Gilbert's incorporations making no return) 36,158 insane paupers—3·17 per cent. of the whole number of paupers—namely, 23,032 lunatics and 13,126 idiots. 15,790 were males, 20,368 females; 19,127 were in county or borough lunatic asylums, 1,418 in registered hospitals or in licensed houses, 9,208 in workhouses, 973 in lodgings or boarded out, and 5,432 were residing with their relatives. In the metropolis, out of 106,407 paupers, no less than 5,701 were insane; in the south-western counties, with a rather larger number of paupers, the insane were only 3,635; in the west midland counties, with almost precisely the same total number of paupers as in the south-western, the insane were 4,631. In Wales the insane were only 2,349 in a total of 80,547, and in the eastern counties only 2,363 in 81,279.

An Old Tale: A Child Poisoned by Mistake. At Wigan, an inquest was lately held on an infant whose death had been occasioned by a dose of laudanum administered by mistake for rhubarb. A messenger was sent to Mr. Kellett, for threepennyworth of tincture of rhubarb. A mixture was served by Mr. Kellett himself, of which half a teaspoonful was given to the deceased. Strange symptoms being manifested, a surgeon was sent for, and he discovered that the vial contained about one ounce of pure laudanum. The child died in a few hours. The druggist said he could not account for the mistake. The verdict of the jury was "that death had resulted from a dose of laudanum given in mistake, and Mr. Kellett was ex-

onerated from criminal liability;" but the foreman desired to say, in the name of the jury, that in their opinion bottles containing poisonous drugs ought, under no circumstances, to be near those containing medicines in hourly requisition. They thought, too, that labels ought to be in English, and plainly printed, so that mistakes should be less liable to occur.

Varieties.

Compound Syrup of Squill. Take of squill in moderately coarse powder, seneka in moderately fine powder, each four troyounces; tartrate of antimony potassa, forty-eight grains; sugar, in coarse powder, forty-two troyounces; diluted alcohol water, each a sufficient quantity. Mix the squill and seneka, and, having moistened the mixture with half a pint of diluted alcohol, allow it to stand for an hour. Then transfer it to a conical percolator, and pour diluted alcohol upon it until three pints of tincture have passed. Boil this for a few minutes, evaporate it by means of a water-bath to a pint, add six fluidounces of boiling water, and filter. Dissolve the sugar in the filtered liquid, and, having heated the solution to the boiling point, strain it while hot. Then dissolve the tartrate of antimony and potassa in the solution while still hot, and add sufficient boiling water, through the strainer, to make it measure three pints. Lastly, mix the whole thoroughly together. (*Amer. Pharm.*)

French Vinegar. Almost all the vinegar of the north of France being prepared at Orleans; the manufacture of that place has acquired such celebrity as to render the process worthy of a separate consideration. The Orleans casks contain nearly four hundred pints of wine. Those which have been already used are preferred. They are placed in three rows, one over the other, the upper ones having an aperture of two inches diameter kept always open. The wine for acetification is kept in adjoining casks containing beech shavings, to which the lees adhere. The wine thus clarified is drawn off to make vinegar. One hundred pints of good vinegar, boiling hot, are first poured into each cask and left there for eight days, ten pints of wine are mixed in every eight days till the vessels are full, and the vinegar is allowed to remain in this state fifteen days before it is exposed for sale. The manfacturers at Orleans prefer wine of a year old for making vinegar; but if the wine has lost its extractive matter by age, it does not readily undergo the acetous fermentation. (*Watts's Chemistry.*)

Ages of the Nobility, etc. We find from *Who's Who* in 1864 that the oldest duke is the Duke of Cleveland, aged 75; the youngest, the Duke of Norfolk, aged 16; the oldest marquis, the Marquis Westmeath, aged 78; the youngest, the Marquis of Ely, aged 14; the oldest earl (since the death of the Earl of Charlemont, on December 26th, aged 88) is the Earl of Stair, aged 87; the youngest, the Earl of Charleville, aged 11; the oldest viscount, Viscount Combermere, aged 90; the youngest, Viscount Downe, aged 19; the oldest baron is Lord Brougham, aged 85; the youngest, Lord Rossmore, aged 12; the oldest member of the Privy Council is Viscount Combermere, aged 90; the youngest, the Prince of Wales, aged 22; the oldest member of the House Commons is General the Hon. Sir Hugh Arbuthnott, member for Kincardineshire, aged 84; the youngest is the Hon. Charles R. D. H. Tracy, member for Montgomery, aged 23; the oldest judge in England is the Right Hon. Stephen Lushington, aged 81; the youngest, Sir James P. Wilde, aged 47; the oldest judge in Ireland is Chief Justice Lefroy, aged 87; the youngest, Justice Keogh, aged 46; the oldest Scotch Lord of Sessions is the Lord Justice General, aged 70; the youngest, the Lord Justice Clerk, aged 53; the oldest archbishop is the Archbishop of Canterbury, aged 69; the youngest, the Archbishop of York, aged 44; the oldest bishop is the Bishop of Exeter, aged 86; the youngest, the Bishop of Gloucester and Bristol, aged 44; the oldest colonial bishop is the Bishop of Toronto, aged 84; the youngest, the Bishop of Nassau, aged 37; the oldest baronet is Sir William W. Dalling, aged 89; the youngest, Sir George R. Sitwell, aged 3; the oldest civil or military knight is General Sir Arthur B. Clifton, aged 91; the youngest, Sir Charles T. Bright, aged 31.

The Sensation Novelist and Mad Doctors. Mr. Reade concentrates his attack upon doctors generally into an attack upon the mad doctors. Mr. Reade has facts to go upon, and we are ready to believe that cruel wrongs are sometimes committed by the incarceration as lunatics of persons who are perfectly sane. But Mr. Reade, while professing to adhere to matter of fact, cannot help generalising. Getting hold of a few facts, and putting these into the form of fiction, he so works up a story that the incautious reader is apt to imagine mad doctors to be scientific scoundrels, lunatic asylums to be a refined sort of Tophet, and the Commissioners in Lunacy and Visiting Justices to be a flock of sheep. This is the untruthful exaggeration of fact jumbled with fiction; an untruthfulness of which Mr. Reade could not be guilty if he were to state his accusations broadly in general terms. No matter on how many facts it may be founded, there is in every fiction an implication which Mr. Reade has not taken into account when he stated his facts against the private lunatic asylums in the form of fable. He has in this respect overshot his mark, and runs a risk of having his views thrust aside as the hallucinations of an eccentric genius. Our private asylums are not perfect, and the methods of admission into them require to be revised. If Mr. Reade will state his case as it ought to be stated, and will point out the remedies, the public will gladly listen to him; but a novel is a suspicious mode of agitation, and, though it may excite some inquiry, is not likely to effect any reform. (*Times.*)

Modern Medical Knowledge. "Botany, I find, has become one of the most oppressive weights on a student's mind. Indeed, the mere terminology for describing the differences of its microscopical objects has swollen into volumes of formidable dimensions. In human anatomy the expansion of ideas has been no less remarkable. Dr. Barclay used to compare modern anatomists with the stubble geese which gathered the grains left by the reapers—such as Vesalius and Fallopius, and the gleaners under whom he ranked the Hunters and Monros. But the anatomists of our day have far surpassed the stubble geese, since, not satisfied with what was found on the surface, they have turned up the soil, sifted and scrutinised it, in order to discover, if they could, how it made the corn grow. In other words, by means of their microscopes, they have opened up an entirely new field of inquiry, and thus extended their researches far beyond what the wildest imagination could have anticipated. In the practical subjects there has been a corresponding development; and while we found sufficient difficulty with our three continued fevers of synochus, synocha, and typhus, my colleague the Professor of Practical Medicine has placed in the hands of his pupils a printed list of no fewer than eight hundred fevers! All the other departments of medicine having been enlarged in a proportionate degree, it is impossible for any one mind to comprehend the whole; and no time being left for observation or reflection, the edu-

cation for our profession has become an effort of memory rather than a process of mental training." (*Mr. Syme on Medical Education.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. Spencer Watson, "On Inflammation of the Cornea, and the Influence of Morbid Secretions on the Mucous Surfaces of the Eye."

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. BADER.—We shall be glad to insert any remarks of Dr. Bader's touching iridectomy; but we cannot insert letters tainted with personalities. Above everything, we desire to keep this very important controversy in the upper regions of honourable and scientific inquiry.

MEDICAL AND SURGICAL WIT.—A well-known medical wit asked a friend: "Why did the young prince come into the world in a state of poverty?" And "answering the question which himself had asked", said: "Because he began life with only a single Brown." On hearing which, a celebrated surgeon immediately added: "Not Far(re) fetched."

OUR PROFESSION.—The following is from the *Liverpool Daily Post.* Dr. Smyth's usefulness and benevolence will be appreciated by the whole profession, we doubt not.

"*The Roscoe Street Hospital for Skin Diseases.* The annual report of Dr. Smyth, the medical officer of the above institution, and, indeed, its only support, as it is maintained at the sole cost of that gentleman, has just been issued. The report states that when the hospital was established in 1863, it was the only one in any town in England, except the metropolis, devoted to the treatment of cutaneous maladies; and the number of out-patients treated successfully during the past year, as well as the still increasing numbers of those presenting themselves weekly for treatment, attest not only to its past utility, but its further requirement. Nearly all the out door patients belonged to the labouring classes, who, were it not for this hospital, would possibly have had to relinquish their employment, and, whilst becoming chargeable to the parish, would have impoverished their families."

HIPPURIC ACID IN HUMAN URINE.—Dr. Thudichum, in a paper read to the Chemical Society on the Physiological Variations of Hippuric Acid in Human Urine, summed up his researches with the statement that, under various conditions of health and disease, the amount of hippuric acid found in man's urine furnished no pathological conclusions of any value, since the variations were influenced greatly by the kind of food taken, much more so, indeed, than by many of the abnormal circumstances, the effects of which had been studied. (*Chemical News.*)

FALSE "BARKS".—According to Mr. Howard, a fraud is now practised by bark merchants, who send to this country barks which bear a most deceptive resemblance to Calisaya, and also mix the roots of the Calisaya with Bolivian bark. These frauds, Mr. Howard says, show the importance to us of the cultivation of cinchona barks in India. (*Chemical News.*)

PRECEDENCE OF PHYSICIANS.—SIR: In the BRITISH MEDICAL JOURNAL of March 8th, 1862, I find the following statement of Dr. H. Pitman, Registrar of the College of Physicians. "No physician, as such, can properly be said to have rank or title; no claim to these being recognised by authorities treating of precedence, except as founded on the possession of an University degree." Coming from such high authority as the accomplished Registrar of the College of Physicians, the above statement has much weight, and deserves our respectful consideration; nevertheless, the rank and title of physicians are recognised by very high authorities treating of precedence. I quote from the *Encyclopædia Britannica*, last edition, as being of high authority, and the most recent one upon the subject. The articles on Heraldry, etc., I should state, are by T. W. King, Esq., F.A.S., York Herald, Herald's College.

Esquires. "The following also are reputed esquires:—Officers of the Queen's Court and Household; officers of the army and Navy, down to captains in the army, inclusive; doctors of law, etc.; sargents and counselors at law; physicians; justices of the peace, while in commission; and the sheriffs of counties for life. The heads of many families are esquires by prescription."

Upon turning to the table of precedence, I find the following order observed:—

Doctors (of the Universities).
Esquires (including physicians, barristers, etc.).
Gentlemen (including surgeons, attorneys, etc.).

December 1863. I am, etc., A PHYSICIAN.

USE OF METHYLATED SPIRIT.—The editor of the *Chemical News*, in answer to the question whether or no any harm results from the use of sweet spirit of nitre made with methylated spirit, says:—"We have already expressed a strong opinion against the use of methylated spirit for any but external applications; nevertheless, we are bound to say that we never heard of any harm resulting from the use of methylated nitre, which is employed in some of our hospitals. Methylated nitre cannot be considered an adulterated article."

COMMUNICATIONS have been received from:—Dr. JAMES WILLIAMS; Dr. A. T. H. WATERS; Mr. R. S. FOWLER; Mr. J. KENT SPENDER; Dr. C. BADER; Mr. J. DIXON; Mr. WOOLCOTT; Dr. T. GUY; Dr. W. B. MUSHET; Mr. W. A. BURROWS; Mr. WILLIAM BOWMAN; Dr. MARTIN; Dr. CHAMBERS; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. DAYMAN; Mr. HUSBAND; Dr. C. HOLMAN; Mr. BOWLES; Mr. M. B. HILL; Mr. JABEZ HOGG; and Mr. W. M. BAKER.

BOOKS RECEIVED.

1. Military Surgery. By George Williamson, M.D. London: 1863.
2. Seventeenth Report of St. Mark's Ophthalmic Hospital. Dublin: 1863.
3. Consumption: its Causes, etc. By S. Fletcher, M.D.
4. Braithwaite's Retrospect. July to December 1863.
5. Transactions of the Odontological Society of Great Britain. Vol. III. 1863.
6. The Second Step in Chemistry; or, the Student's Guide to the Higher Branches of the Science. By Robert Galloway, F.C.S. London: 1864.
7. Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. Third edition. By T. Holmes, M.A. London: 1864.
8. Observations on the Present State of Medical Education. By James Syme, F.R.S.E. Edinburgh: 1864.
9. Medical Morphology. By M. T. Masters. London: 1864.

ADVERTISEMENTS.

Prize Designs.—"As affording the most striking contrast, Mr. Benson shows with these a fresh exhibition of modern watches, with cases made from Prize designs at the South Kensington Museum, some of which are fine specimens of engraving."—*Times*, Sept. 15, 1862. Chronometer, duplex, lever, horizontal, repeaters, centre seconds, keyless, split seconds, and every description of watch, adapted to all climates. Benson's Illustrated Pamphlet on Watches (free by post for two stamps) contains a short history of watchmaking, with prices, from 3 to 200 guineas each. It serves as a guide in the purchase of a watch, and enables those who live in any part of the world, to select a watch, and have it sent safe by post. Prize Medal and Honourable Mention, Classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

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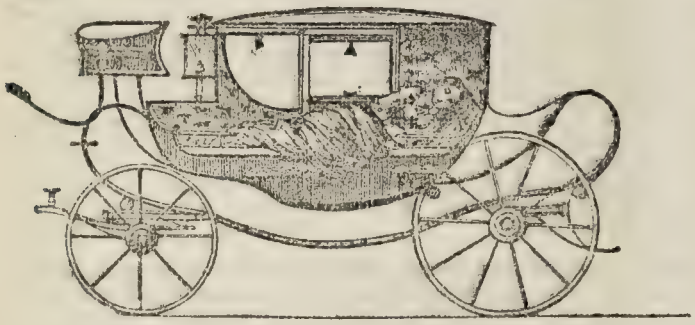
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To the Surgical and Medical Professions.—W. F. Durroch, Manu-

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NOTICE OF REMOVAL.—W. F. Durroch has removed from No. 28, St. Thomas's Street East, to No. 3, St. Thomas's Street, near the Hospitals in Southwark. Late Manufacturer to the leading Houses in the Trade.

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Clinical Lecture

ON THE

OBLITERATION OF VARICOSE VEINS.

BY

HENRY LEE, Esq.,

SURGEON TO ST. GEORGE'S HOSPITAL.

THERE is at present in the hospital a man named R. C., aged 23, who was admitted eleven months ago with varicocele of the left side. The left testis had then nearly wasted away, and the dilated veins were painful. He had for two years and a half been under the care of different medical men, and had taken large quantities of medicine without relief.

On February 5th, 1863, two needles were passed between the enlarged veins and the vas deferens, and slight pressure was applied to the veins by means of ligatures* passed over the ends of the needles. The veins, thus compressed by the ligatures, were then divided midway between the two needles by subcutaneous section.

On the day following the operation, the testis of the affected side was very tender. The next day it was swollen. The ligatures over the needles were removed.

Feb. 9th. The needles were removed. The patient was quite easy and free from pain.

Feb. 10th. A considerable amount of thickening had taken place in the scrotum on the left side.

Feb. 14th. The left testis appeared about twice as large as it was when he was admitted.

He now left the hospital, and went into the country.

Upon his re-admission, eleven months after the operation, the veins which had been then obliterated had not again enlarged; but the left testicle had nearly regained its original and natural size. He had experienced no pain in the part since leaving the hospital, and had remained without inconvenience. He had, however, within a few weeks, had some pain in the right testis. The veins on that side were somewhat enlarged, and the testis he believed had become smaller than formerly. Recognising the symptoms, as he believed, with which the atrophy of the left testis commenced, he came to town of his own accord in order to ascertain whether the disease would be arrested by the same means as had formerly been adopted on the left side.

The foregoing is one of a large number of cases of enlarged and varicose veins which have been operated upon within the last two years in this hospital; and an opportunity is now afforded to all those who are interested in the subject, of observing the results of the operation nearly a year after it was performed. My principal object, however, in the present lecture, is to review concisely the causes which have prevented this now apparently very simple operation from having been as safely practised in former times as at present; and what I have to say will apply equally to varicose veins of the leg or of the scrotum.

Sir Everard Home was at one time in the habit of applying a ligature to the vena saphena major in cases where the veins of the leg were varicose. In these operations, the skin was divided, and a silver needle with ligature was passed under the vein, and the vessel was tied. It was supposed at that time that the lining membrane of a vein when irritated would secrete lymph just as a serous membrane might, and that the opposite sides of a vessel would thus be glued together.

Mr. Travers, in his very valuable observations on wounds and ligatures of veins, has expressed the idea generally prevalent in his day in the following words:—"The inner membranes of arteries and veins are susceptible of the adhesive inflammation. In veins the inflammation extends from the point irritated towards the heart..... The lymph coats the vein like a fringe."

More accurate observation has now demonstrated the fact that the lining membrane of veins does not readily produce lymph; and that the material which was formerly described as having thus been produced, was in reality fibrine deposited from the blood, and this, although it may adhere firmly enough to one side of the vessel, will seldom obliterate its canal.

Under these circumstances, it is not surprising that the attempt made to obliterate veins by pressure was not always successful, and that in some instances it was succeeded by the most serious results. The following account, taken from Mr. Travers's work above quoted, affords a description of the effects occasionally observed in his day after the operation of placing a ligature upon a vein:

"I remember about the year 1801, when the operation of tying the saphena major vein was frequently practised for varicose ulcers of the legs, an elderly woman being the subject of this operation, which was performed in Guy's Hospital, a little above, and on the inner side of the knee. Inflammation of the vein followed, and several abscesses formed in the direction of the vessel, below the ligature, on the inner side of the calf of the leg. It was accompanied with great constitutional disorder; some of the abscesses ulcerated, others advanced with great difficulty to the surface, and the patient died, worn out by excessive irritation. In a second case, that of a man who had drunk hard, two ligatures were made upon the vein, and the vessel was divided between them. In three days the man complained of pain in the course of the vein from the place of its division to the groin; an inflammatory blush appeared upon the leg, extending from the knee to the ankle, and on the succeeding day considerable swelling. The pain above the ligature extended to the bottom of the belly, and the thigh became swollen and tender upon pressure; the constitution sympathised with the local disease, and without the formation of abscesses, as in the former case, this man died, as it appeared, from extended inflammation of the vein."

Mr. Hodgson mentions two cases in which the division of the varicose vein terminated fatally; the first on the morning of the fourth day, the second on the seventh or eighth. The same author relates a case from the practice of Mr. Freer of Birmingham, in which the ligature of a varicose vein was followed by pain in the chest, hurried and laborious breathing, and vomiting of blood four hours after the operation, which symptoms were immediately relieved by the removal of the ligature. The operation was followed by fever and vomiting, and retention of urine, when performed on another varicose vein of the same patient six weeks afterwards, although the ligature was removed immediately after its application; and, again, by similar symptoms of constitutional disorder, when repeated upon two

* Elastic bands are now used instead of ligatures.

other veins, after an interval of nine weeks, the ligatures being cut away immediately after their application. The fever went further on the latter occasion; the patient was attacked with delirium and severe vomiting on the second day; the symptoms continued on the third and fourth days; on the sixth she was slightly delirious, and her respiration much oppressed. She was repeatedly blooded. "In this case," says Mr. Hodgson, "the obliteration of the vein was the consequence of the application of a ligature, which was immediately removed."

In the fifth volume of the *Edinburgh Medical and Surgical Journal*, Mr. Oldknow, surgeon, of Nottingham, communicates the following important narrative.

"A young man, about 23 years of age, of plethoric habit, had been troubled for the last two or three years with painful ulcers about the inner ankle of the right leg, which repeatedly healed, and broke out again, so as to prevent, in a great measure, his attendance to business; he therefore became desirous, on my representation, of having the saphena vein tied, it being varicose to within a hand's-breadth of the knee. The operation was performed in the following manner. An incision three quarters of an inch long, and about one inch and a half above the distension, was made through the skin immediately over the vein, and in the direction of its course. The cellular substance was then carefully divided, the vein lying deeper than usual, until its upper surface was completely exposed. A probe armed with a double ligature was passed under the vein, taking care to include nothing with it, it being cleanly dissected from the surrounding cellular membrane upwards and downwards as far as the extent to the first incision, and then tied. The portion of the vein between the two ligatures being afterwards cut out, the lips of the wound were brought together by a suture and adhesive plaster, with a view of healing it by the first intention. The patient was then put to bed, and directed to use a cold embrocation.

"On the second day he took some opening mixture. Third day: the wound was dressed, and appeared wholly united, except when the ligatures came out. The suture was cut out, and a fresh adhesive plaster applied. On this day he complained of pain in the lower part of the limb—that is, from the lowermost ligature, along the vein down the foot; to use his own expression, as if the blood in the veins were endeavouring to overcome the obstruction caused by the ligature. This sensatiou was, however, entirely removed by applying a bandage moderately tight from the toes upwards. Fifth day: there appeared a little erythematous blush about the wound. He had a trifling epistaxis, and I thought proper to take from him sixteen ounces of blood, which was not inflamed; the purging mixture was repeated. Sixth day: he complained of a little pain on the inner side of the knee in the course of the vein; but there was no external inflammation at that part. The lips of the wound began to separate. In the evening he was suddenly seized with a violent rigor, succeeded by a hot fit and symptoms of great vascular action, and some tendency to delirium. Pulse 130, hard and full, therefore sixteen ounces of blood were taken from the arm; it gave instantaneous relief, and was followed by the sweating stage, which continued several hours, and was succeeded by a state of quietude, soon, however, interrupted by a recurrence of the same train of violent symptoms, at first about once in twenty-four hours, but gradually increasing in frequency, and diminishing in strength, till nature became exausted; death closing the scene twenty-two days from the operation.

"For the first four or five days after the rigor, the wound discharged pretty freely, and, by making strong pressure about the knee, a little matter was forced from it. The inflammation crept gradually up the vein, which was evident from its peculiar cord-like feel, and from giving pain on pressure, until it reached the groin, the inferior part getting well as the superior became bad, so that the wound was nearly healed before death, the ligatures having separated about the fourth day. There was no tumefaction of the cellular membrane, no enlargement of the glands in the groins, no superficial inflammation on the thigh. There was, it is true, a slight redness of the skin when the poultice was removed (for the thigh along the course of the vein was covered with cold poultice), which entirely vanished on exposure to the air. The medical treatment was strictly antiphlogistic; the patient was repeatedly bled (!), and with apparent relief every time, the blood being extremely sizy ever after the first rigor. Two days, however, previous to his death, the vital principle was so exhausted as to need the use of cordials"!

Mr. Abernethy believed that it was the ligature that produced the inflammation of the veins in the cases in which such serious mischief followed; and he recommended that the vein should be divided instead of being tied.

Sir Benjamin Brodie adopted Mr. Abernethy's suggestion, and, instead of tying the vena saphena, cut it across and applied a compress and bandage. The patient had venous inflammation, attended with very severe typhoid symptoms, and died within four days after the operation.

Now, in all the cases to which I have alluded, the interior of the divided veins was closed by fibrine only deposited from the blood. Such a bond of union is constantly liable to give way, and the contents of the veins are then carried into the general circulation. Coagula in veins are in this way very readily removed; and if formed from healthy blood, appear to produce very little inconvenience to the system. But if these coagula have already begun to undergo morbid changes, or if they have already become mixed with other secretions in their neighbourhood, then the most severe symptoms of blood-poisoning may be produced.

When a vein is simply divided, a certain amount of hæmorrhage necessarily follows; and the blood thus effused may undergo morbid alterations as it lies at the open mouth of the vessel; and these same diseased actions may be readily communicated to the blood still within the vein, and be thus propagated to every part of the body.

The operation of tying a vein affords no security against such accidents; for, in accordance with an observation made by Sir Benjamin Brodie, as the ductus choledochus, or the intestinal canal, will heal after the application of a ligature without the *continuity of the canal being destroyed*, so it appears to be with divided veins under certain circumstances. Whenever the circulation through a vein is thus restored, the coagula of fibrine which temporarily obstructed its canal are sooner or later carried into general circulation.

It appears to us strange in the present day, that so many centuries had elapsed before a simple mode of securing a bleeding artery was discovered. And it appears almost equally strange that, although surgeons of the highest intellect in the present generation have in successive years given their atten-

tion to the best mode of operating upon varicose veins, no method should have been adopted by them for effectually closing the vessels during and after the operation. As in former times, the actual cautery was used for the purpose of arresting hæmorrhage, so are there still in modern surgery those who prefer the actual cautery, or some form of caustic, in preference to the simple mode of closing a vein which I have described at the commencemennt of this lecture. There has very recently been in this hospital a young woman who had had, I believe, upwards of a dozen sloughs made on her leg by the actual cautery; and in a recent number of the *Lancet* the same mode of treatment is advocated by a disguished surgeon attached to one of our metropolitan hospitals.

Sir Benjamin Brodie, some years ago, applied the caustic potash over clusters of smaller veins in order to produce their obliteration ; and Mr. Mayo subsequently adopted the same treatment for varicose veins of a larger size. Sir Benjamin Brodie has left us the result of his experience in the following words: "The application was very painful; the slough took a long time to separate, and the sore took a long time to heal."

[*To be continued.*]

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

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PHYSICIAN TO THE LIVERPOOL NORTHERN HOSPITAL, ETC.

Lecture II.

Pathology in its Relations to the Practice of Medicine. On certain Pathological States as the Result of Impaired Nutrition consequent on the Imperfect Performance of Function. Diseases of Degeneration attacking the Heart, Lungs, etc. Fatty Disease of the Heart. Sudden Death in Relation to Diseases of the Heart. Emphysema of the Lungs, Phthisis, etc.

Mr. President and Gentlemen,—In a former lecture, I pointed out certain physiological principles; and I endeavoured to show their relations to pathology and the practice of medicine. I propose, in the present lecture, to confine my remarks, for the most part, to questions of pathology. As every physiological or healthy process goes on in the elementary particles of the body, so with every morbid action; and just as it is essential to the physiologist who would appreciate aright the function of any individual organ, that he should be acquainted with the minute structure of that organ, so is it alike essential to the pathologist that he should estimate the very earliest changes which diseased action produces, if he would form a correct view of the nature of that action. It is not simply necessary that he should be acquainted with the changes of structure effected by a disease when fully established, but tracking, as it were, the disease backwards, he should endeavour to seize upon its earliest manifestations. It is thus that he will be led not only to a knowledge of the morbid anatomy of the disease, but to a correct appreciation of its pathology.

It is of great importance that we should have fully before our minds the object for which we study diseased structure ; viz., that we may gain an insight into the nature of the morbid process which has given rise to it; for I think it may be fairly open to remark, that the profound and somewhat exclusive study of morbid anatomy, which characterised certain schools of medicine some years ago, led to an evil in reference to therapeutics which is perhaps only just passing away. In the examination of an organ, as it presented itself after death, the mere morbid anatomist was perhaps too apt to look upon the results of the disease as the disease itself ; and the hepatised lung, the ulcerated intestine, or the prominent lesion of the disease, may have obscured his regard as to the constitutional condition, of which the local affection was only a manifestation. This may, perhaps, have caused him to direct his attention, in the treatment of such cases, too exclusively to the implicated organ, to the neglect of the general symptoms. I think it possible also that the refinement of diagnosis, which auscultation and chemical manipulation have enabled us to arrive at, may have had, with some, an influence in a similar direction. If, however, this error did exist, and if it led to a wrong application of therapeutics, I think the physicians of this country are as little open to the reproach as any; and that, at all events at the present day, no contracted views of the nature of disease regulate our practice, or direct the application of our remedial measures.

But let me be quite understood in this respect. Do I make these remarks with the view of disparaging the efforts of the physician in the direction of accurate diagnosis, or of the morbid anatomist in his search after the changes of structure which disease produces? Far from it ; for all our hopes of advancing the science of medicine rest on our prospects of still further improving our means of detecting disease, and of being able to appreciate the exact nature of those pathological processes by which disease is produced.

We cannot, I think, expect that we shall ever discover for each specific disease a specific remedy ; I mean a remedy as specific as that with which we can cure a neuralgia, or an ague. It may be that other diseases will admit of an absolute and definite cure by the agency of some single remedy ; but the majority of diseases will probably always have to be met and relieved by treatment, and will never admit of cure.

It is, therefore, in the great mass of diseases, that a knowledge of the nature of those pathological processes from which they result is of so great importance. We may care little, and our patients may care less, what is the exact pathological process which produces a tertian ague, provided we can, by the administration of a few doses of quinine, effectually cure it ; and it would, perhaps, be an useless waste of time to endeavour to explain the *modus operandi* of that same agent when it effectually cuts short the torments of a *tic;* but, in the management of a disease which admits of no definite cure, every pathological element is important ; every symptom, whether local or constitu-

tional, has to be carefully weighed and judged; its indications have to be considered; and from all this a treatment has to be directed.

There is probably no such thing as local disease—I mean, speaking of disease in its true significance: no affection of an organ which does not result from some deep-seated pathological cause—something affecting the entire system, and impressing itself on the individual organ which is the seat of the morbid process. And if it be so, does it not teach us to take a broad and comprehensive view of all diseased action? And does it not afford us a valuable lesson in reference to the application of therapeutic measures?

The most successful practitioners will perhaps admit that, in the treatment of disease, they are in the habit of prescribing but few remedial agents; that most affections can be referred to a few principal types—types of modified physiological action, which must be met by one general plan of treatment; that, in regard to the management of the various inflammatory affections, they can recognise in each case, whatever be the individual organ attacked, a certain constitutional state which has impressed its stamp on the local disease, and which must be met by constitutional treatment.

Nor is the recognition of this principle of the pathological condition of the body of less importance to the surgeon than to the physician. Is it not true that the smallest wound will sometimes give rise to severe constitutional symptoms? and that the most trivial local affection will occasionally resist every effort that is made for its cure, until the recognition of some constitutional taint directs us in the application of our remedial measures? Have we not seen that the most simple of all operations—that of vaccination—has been rapidly followed by phlegmonous erysipelas, which has destroyed life in the course of a few days? Cases of this kind, where the slightest scratch, the smallest puncture, or the most trivial operation, is followed by erysipelas, phlebitis, or pyæmia, indicate the previous existence of certain morbid conditions of the body, and point out to us the importance of a more profound study of the symptoms by which such conditions may be recognised. They may be of so subtle a nature as long to evade our research. Depending primarily on a vitiated state of the blood, they are necessarily difficult, nay, in some cases, perhaps, impossible of recognition, unless they give rise to some structural change. But just as certain cachectic conditions of the body—the cancerous, the scrofulous, the confirmed syphilitic—may be recognised by certain peculiarities, just as there is a physiognomy of various acute diseases, so may we hope, that a more profound study of the external demonstrations of other pathological conditions will enable us to discriminate, more easily, their characteristic features.

But, passing from questions relating to these peculiar pathological conditions, let me briefly refer to some of those pathological processes which lead more directly to structural change; and let us consider how a more careful study of them is calculated to influence beneficially our therapeutics.

There are certain diseases which we recognise as diseases of degeneration, in which the tissues of an organ undergo a real transformation—a transformation from a highly organised to a less organised substance. These diseases are, for the most part, insidious in their origin, more or less chronic in their progress, and usually tend to a fatal issue, by a gradual impairment of the function of the organ which they attack.

I shall illustrate the point to which I am now directing your attention, by referring specially to two pathological conditions which partake of the nature of degeneration, attacking respectively two of the most important organs of the body; and I think it is in the more careful study of the early symptoms of these and such-like changes, and of the way in which they ensue from imperfect physiological action, that we may hope to advance the science of medicine, and extend the range of our therapeutics beyond the mere treatment of disease to the prevention of its development. And, further, it appears to me that we may learn a valuable lesson, in this respect, from a consideration of those changes which we witness as the almost constant concomitants of declining life.

It is undoubtedly true that one of the principal changes occurring in the body, and which indicates the approach of, and is more or less constantly associated with, old age, is that process of degeneration by which certain tissues become converted into fat. We know the tendency which exists in many people, as age advances, for a deposit of fat to take place, not only on the surface of the body, but also in various internal organs; and not merely this, but what is of greater importance still in a pathological point of view, the tendency of certain organs, more especially the heart and blood-vessels, to undergo fatty degeneration—for fatty matter to become deposited in the place of normal tissue. This change takes place to a considerable extent in old age, and, although not necessarily connected with it, must be looked upon as the result of the imperfect nutrition which characterises that period of life, and as the first step in that downward path which leads from life to death. This alteration of tissue is now considered essentially one of degeneration, not only because fat is mechanically useless, and of lower organisation than the tissues it replaces, but because the conditions under which it is deposited partake much of the nature of death. We find it largely, as I have said, in the tissues of the aged; and Dr. Druitt has shown that fatty degeneration of the placenta takes place towards the end of utero-gestation, at a time when the organ is becoming relatively old. We have, further, the well known fact of the conversion of dead flesh into adipocere; and, most important perhaps of all, the experimental demonstration of Dr. Quain, that if a piece of healthy muscle be placed in a jar and kept moist, without access of air, it will in a few weeks present all the appearances of fatty degeneration.

Here, then, we have evidence that, with the withdrawal of the controlling influence of life, fat replaces tissue; but we can go even further than this, and show that, during life, when the physiological action of an organ is in abeyance, the nutrition of the part is so far interfered with, that fat becomes deposited in the place of normal tissue; that, where there is an approach to that condition which is characteristic of death, there, results of a similar nature to those which follow death, take place, only to a less extent.

When a voluntary muscle—a muscle of one of the limbs—is placed in a condition of rest, it under-

goes, not simply atrophy, but fatty degeneration; and in proof of this, I mention the following fact. In April of last year, Mr. Fletcher showed at the Medical Society a knee-joint with the muscles connected with it, which joint he had removed from a patient in the Workhouse Hospital. The limb, in consequence of the joint-disease, had been fixed in one position for a considerable time. During this time, the action of the muscles of the calf had been more or less in abeyance. The gastrocnemius had all the appearance, to the naked eye, of fat. The soleus was slightly red, but in appearance somewhat fatty. I secured pieces of both muscles for microscopical examination. I found the gastrocnemius almost entirely made up of fat-globules; in fact, it was in a very advanced stage of fatty degeneration. The soleus was also fatty, but not to so great an extent as the other muscles; and this difference in the two muscles is not without its interest. The gastrocnemius, from its connections and from the flexion of the limb, was probably deprived of action altogether; whilst the soleus was still brought into play, to a certain extent, in the extension of the foot.

Now, these muscles were not dead; they were regularly supplied with blood; they were simply at rest; their physiological action was in abeyance; but yet a process went on in them by which they became converted into fat; by which their highly organised tissue was changed into one of a less complex nature, one approaching more nearly to the inorganic world, and which, instead of having a mechanical power—a power of making the limb serviceable for the purposes of active life—was utterly useless, utterly powerless; in fact, physiologically dead.

And has not a knowledge of this fact important practical bearings in reference to some of those disorders to which I have just referred? Just as the muscles of the limbs will undergo fatty degeneration, so do we know that the muscular fibres of the heart will undergo a like process; and a knowledge of the causes which give rise to the former affection, should lead us to a consideration of the means by which the latter may be averted or controlled.

All the researches which have been made into this subject of fatty degeneration, tend to show that it is the result of impaired nutrition. It is, undoubtedly, a frequent consequence of the diminished vitality, if I may use the expression, which characterises old age; but it may also result, and does very frequently result from an old age which is premature.

We know little, at present, of the question of hereditary predisposition to fatty disease; and to this point it would be well if future pathologists would direct their attention; for if we knew that a predisposition to fatty heart could be transmitted from parent to offspring, we might endeavour to anticipate the disease, to check or retard its development.

[*To be continued.*]

A Strong Man. The last lift by Dr. Windship, of America, was 2,600 lbs., which is about the weight of seventeen men of ordinary size. The strongest European we ever heard of or saw was one Becka, a porter of Mayence, who would get under a cask weighing 17 cwt. and lift it up with his back. (*American Paper.*)

Original Communications.

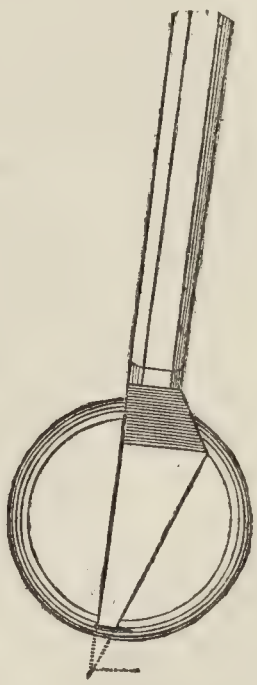
SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, Etc.

By James Vose Solomon, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[*Continued from page 579 of last volume.*]

Intraocular Myotomy. I entered upon a clinical investigation of the value of incision of the ciliary structures in certain diseases of the eye and disorders of the optical accommodation, on March 1st, 1860. During the first three months, I always pursued one method, which was as follows. The patient being seated, or in the recumbent posture, I entered a small Beer's cataract-knife (Sichel's) at the corneo-sclerotic union, and then pushed it through the pillars of the iris into the ciliary muscle, making an incision in the latter of about one-sixth of an inch, on a line parallel with an equator of the eye. (See Diagram.)

d—1860.



The employment of chloroform is not necessary; but I recommend it whenever it can be conveniently applied.

The operation should be done slowly, and the knife cautiously withdrawn, so as to avoid a sudden escape of the aqueous humour or prolapse of the iris, or the entrance of vitreous humour into the lips of the wound, which is apt to excite ciliary vascular irritation. Moreover, the more sudden the escape of the humours of the eye, the greater likelihood will there be of the occurrence of hæmorrhage from a diseased choroid or retina.

Such an incision as I have described, causes a division of some of the radial and other fibres of the ciliary muscle in a transverse direction; also of branches of the nerves which are distributed to the part from the ciliary ganglion (ciliary and third pair). It is scarcely necessary to remark, that the ciliary are vaso-motor as well as sensory nerves. And I am in-

formed by Dr. Argyll Robertson, that Dr. Struthers considers it to be highly probable they are also musculo-motor nerves.

My observations incline me to the opinion that, in some if not in all subjects, a branch of the cervical sympathetic is distributed to the ciliary region opposite the insertion of the external rectus tendon; and, therefore, section of this part should be carefully avoided.

By intraocular myotomy the anterior chamber is penetrated; and although the diagrams contained in the works of Bowman and Nunneley* do not countenance the opinion, I believe, from repeated observation, that the posterior aqueous chamber is either entered by the knife, or its outermost wall so much weakened that it ruptures, and so gains communication with the external wound.

Eckers, in his *Icones Physiologicæ*, gives a depth to the floors of the two chambers which is corroborative of my views. The relative sizes of some of the other parts in the same plate are very far from accurate. Indeed, the chief object of those who have published plates of the parts concerned in accommodation would appear to have been rather to give a magnified view of the minute structural anatomy of the tissues—especially of the cornea, sclerotic, and ciliary muscle—than an accurate representation of their comparative size and relative position.

In estimating the direction which the knife would take in the operation of *intraocular myotomy*, it should be remembered that the cornea is elastic, and, consequently, structures can be cut without difficulty in a direction which would seem impossible, if we take up one of the published diagrams and draw a perfectly straight line through the corneo-sclerotic union pillars and the iris and ciliary muscle. Those who have frequently operated for cataract will appreciate the force of this remark.

The amount of hæmorrhage, when the eye is not inflamed or the ciliary processes congested, is generally limited to a few drops. Whatever the quantity effused into the anterior chamber, it will generally make its escape upon the introduction of one of Anel's tear-probes in the line of the incision. In the same way, a prolapse of the iris—which, as with hæmorrhage, is an infrequent occurrence—may be easily reduced. When the vitreous humour has been rendered diffluent by disease, a very efficient paracentesis of it and of the aqueous may be effected by the operation under consideration.

The performance of it, when chloroform has not been used, is not painful, but only momentarily disagreeable. And if proper precautions are taken, before and afterwards, it is devoid of all danger.

Where the digestive organs are deranged, from causes quite independent of the ophthalmic disorder, or when there is evidence of constitutional syphilis, intraocular myotomy is not advisable. But if the eye be in a state of acute inflammation, the operation may be done. Upon a healthy state of the digestive organs I lay great stress.

The *after treatment* of intraocular myotomy is very simple. It consists of complete rest of the eyes and exclusion of strong light, the use of an abstemious diet, and mild aperient medicine. The operated eye should be kept closed for five or seven days with plaster, and cool with a wet linen shade. In the early period of my experience, I was induced to prescribe for the out-patients, as a preventive of inflammation, a blister behind the ear; and although I am far from believing such treatment to be an essential element of success, I am sufficiently prejudiced in its favour to advise the adoption of it as the rule rather than the exception.

In the event of ciliary vascular irritation (*cyclitis*) succeeding the operation, it must be treated as an acute iritis; and if it *become subacute* or chronic, a section of the ciliary structures at a right angle with the cornea (*phlebotomy of the choroid*) will prove curative. I consider this plan is almost a specific when the inflammation is subacute or chronic, and not the result of an escape of vitreous after a cataract extraction by a full section of the cornea. In the acute stage, it is less *certain;* and where there is extensive synechia posterior, iridectomy should be preferred, provided the patient can obtain a proper after treatment.*

Physiological Effects of Intraocular Myotomy. I have already explained my reasons for believing that one of the effects of the operation under consideration is upon the ganglionic nerves of the eye, and, therefore, need not here repeat the same arguments. The *ophthalmoscope* has shown a decrease of congestion of the veins of the retina, and an increase in the size of its arteries, to follow the operation, when performed for the relief of myopia, and glaucoma. The subsidence of red flashes and the appearance of white stars is commonly remarked upon by patients in a day or two after treatment, indicating that the choroid and retina are resuming a more healthy condition. Muscæ volitantes are also noticed to disappear or diminish, and the vision to be clearer.

An improved intraocular secretion is proved by the turbid vitreous humour regaining its transparency, and a tense globe its normal elasticity. I have never employed the operation for the relief of asthenopia or presbyopia, as has been stated in Mr. Haynes Walton's work on the *Surgical Diseases of the Eye.*

[*To be continued.*]

* I believe that the difficulty of obtaining an exact representation of the relative extent of the two chambers, arises from the cornea and off-shoots of its elastic lamina to the iris and ciliary muscle undergoing but little contraction after *post mortem* section and preparation for the microscope, while the soft tissues (iris and ciliary processes) which bound the posterior aqueous chamber must suffer considerable contraction and alteration of form.

* We possess in paracentesis of the cornea a certain amount of antiphlogistic power; the increased secretion of aqueous humour probably unloads the gorged ciliary processes; but, according to my experience, it is far less effective in *cyclitis* than *choroid phlebotomy*, and, moreover, is liable, if great care be not observed, to induce irritation by pressure of the lens on the iris, and consequently an augmentation of the ciliary congestion.

A Medical Portrait. Dr. Sampson is the very extraordinary portrait of a London physician—a Scotchman who has fought single-handed with the medical faculty, and has promulgated under the name of chronothermalism a theory of disease. Dr. Sampson speaks a strong Scotch dialect, denounces the medical profession in no mincing terms, and has written against them both in prose and verse. He is perfectly well known; it is impossible to mistake the author of the theory of chronothermalism. The doctor is a very clever man, a man of character, whom any writer of fiction would like to study for one of the personages of his tale. Mr. Reade has taken him and given him a very prominent place in *Hard Cash.* How far it was right or in good taste socially for Mr. Reade to draw such a portrait which would be instantly recognised, we do not stay to inquire. Dr. Sampson's theories may be right or wrong, but it serves no good end to make a novel the means of sustaining a medical polemic. Every profession has its quackery, and in the medical profession, which is a scientific one, quackery must be more discernible by reason of its antagonism to science than in any other. Be it so; but we are convinced that a novel is not the place in which one can best expose quack medicine. (*The Times.*)

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

TWO CASES OF SECONDARY HÆMORRHAGE: WITH REMARKS.

By WILLIAM EDDOWES, jun., Esq., House-Surgeon to the Salop Infirmary.

[*Read Oct. 27, 1863.*]

CASE I. Mary Jones, aged 43, of Chirk, was admitted under the care of Mr. Wood on June 13th, 1863. About a year and a half previously, she was seized with inflammation in the right ankle-joint, without any apparent cause, for which she was treated by an old woman in the neighbourhood for seven months, and subsequently by a surgeon, who recommended her removal to this Infirmary.

On admission, the ankle-joint was much swollen; and, on examination with a probe, the bones of the tarsus, together with the lower ends of the tibia and fibula, were found to be in a carious state. She was pale and thin, with a feeble pulse; and did not suffer much from pain or loss of appetite.

July 7th. The patient having been put under the influence of chloroform, Mr. Wood amputated the leg at the lower third.

July 15th (eighth day after the operation). Until this day the patient had progressed favourably; menorrhagia set in on the previous evening, and was very profuse. The stump appeared quite healthy; no ligature had separated. The appetite had been moderate; and the bowels were freely opened two days previously by a dose of castor oil. About nine o'clock, I was hastily called by a nurse. A great quantity of blood had flowed from the wound; the head nurse was firmly compressing the femoral artery, on relaxing which a considerable stream of blood issued from the wound. I at once applied a tourniquet on the femoral artery. The countenance was much blanched; the pulse feeble; and there was great faintness. A mixture of gallic acid, tincture of opium, and tincture of nux vomica, every four hours was ordered; and brandy with beef-tea *ad libitum*.

6 P.M. There was slight oozing for two hours after the application of the tourniquet, since which time there had been no hæmorrhage. The tourniquet was unscrewed a little, and was only partially controlling the flow of blood through the artery. The patient lay in a state of partial collapse. Pulse 120, and relapsing; tongue moist; pupils slightly dilated; and skin cool and moist.

July 16th. There had been no recurrence of the hæmorrhage; and the patient had partially recovered from the collapse. She passed a restless night, but took a fair quantity of beef-tea, and sixteen ounces of brandy in twenty-four hours. Pulse 120. The menorrhagia continued. She was ordered to have an opiate at bedtime.

July 17th. She passed a better night. There was no hæmorrhage; but a quantity of sanious pus discharged from the wound, from which the ligatures had all come away. Pulse 108.

July 18th. She was better, having slept tolerably in the night, during which the menses ceased. There was a copious discharge from the leg, but no hæmorrhage. Pulse 120.

July 19th. She was still progressing favourably, and was ordered to take half a pint of ale and four ounces of brandy daily.

July 25th. The patient was steadily improving. The bowels were opened by a purgative. There was no return of the hæmorrhage nor of the menorrhagia.

July 26th. Last night, a little bleeding commenced from the stump, but soon ceased.

July 29th. She complained of pain in the back; the wound was healing. She was ordered to continue the opium at bedtime; and to take three times a day a draught containing twenty minims of tincture of sesquichloride of iron, fifteen minims of chloric ether, and an ounce of infusion of quassia.

August 9th. The patient was much better in health. The wound was healing slowly, and had a flabby, indolent appearance.

August 27th. Two or three spicula of bone had come away, and the wound looked healthier.

October 10th. There was still a small wound over the anterior part of the lower end of the tibia, which healed very slowly; otherwise she appeared quite well, and was discharged.

CASE II. Sidney Smith, aged 23, of Ellesmere, whilst endeavouring to part two friends who were fighting, received a stab in the palm of the left hand from a knife on Sept. 17th, 1863. Cobwebs were first applied to the wound, which checked the hæmorrhage. The next morning, he went to a surgeon, who cleansed the wound and strapped it up. On the following day, it was undone, and cold wet rags were applied for three days, after which lint steeped in myrrh lotion was used for three days.

September 26th. This morning, a linseed poultice was applied. At half-past ten, bleeding commenced, but was checked by pressure and cold applications. This evening, and the next morning, bleeding again came on, and was now checked by means of a compress and bandage. An incision was also made into the middle finger, to give exit to pus.

September 28th. Bleeding having again come on, a compress and splint were bound on the palm of the hand, by means of tape passed across the back.

September 29th. He was admitted as an in-patient. There being no hæmorrhage, the hand was raised on a pillow in bed; and the patient ordered to take five grains of gallic acid three times a day, and five grains of soap and opium pill every night. There was tubercular deposit in the left lung.

September 30th. The splint was taken off, but the pads of lint were left on, and cold water applied. In the evening, bleeding having recommenced, a pad was bandaged in the bend of the flexed elbow, which checked it. Pulse 108.

October 1st. Hot fomentations were applied. There was no hæmorrhage.

October 3rd. The bandage was removed from the elbow. Slight hæmorrhage from the gums had been lately observed.

October 4th. This evening, severe hæmorrhage recurred. As it could neither be controlled by pressure on the radial artery, nor by a pad bandaged in the elbow when well flexed, I bound a compress tightly on the wound, and applied a tourniquet to the brachial artery. Half a drachm of sedative solution of opium was ordered to be taken immediately.

October 5th. No hæmorrhage having occurred during the night, I relaxed the tourniquet. At ten o'clock, bleeding having again come on, Mr. Harries proceeded to cut down on the bleeding vessel. The incision made by the stab extended from a point a little internal to the angle formed by the thumb and index finger to near the base of the third finger. The vessel from which the blood was oozing being deeply seated between the third and fourth metacarpal bones, and the tendons of the middle finger being in a sloughy condition, they were first divided, and then the middle finger was amputated. The bleeding arteries were then easily ligatured; and lint, saturated with a solution of gallic acid, was applied to the wound. He was then placed in bed, and ordered half

a drachm of sedative solution of opium immediately and at bedtime, and beef-tea and milk *ad libitum*.

October 6th. He looked much better, and had passed a tolerable night. The tongue was clean and dry.

October 7th. Pulse 114. He was ordered to take twenty minims of tincture of sesquichloride of iron in an ounce of water three times a day. The hæmorrhage from the hand had ceased, but continued from the gums.

October 9th. His appetite was better, and he was allowed to have an egg daily. The gallic acid solution was still occasionally applied to the dressing.

October 12th. The wound, having been exposed, was found to be suppurating and granulating healthily. There had not been the least hæmorrhage since the operation. His health was much improving; but he complained of slight cough.

October 16th. There being slight ulceration of the wound, balsam of Peru was applied.

October 20th. The wound was healing, and his health improving.

October 27th. He had gone on improving, and the wound had nearly healed, until this evening, when he was seized with a severe shivering fit.

October 27th. Erysipelas had shown itself in two fingers of the injured hand.

October 31st. He was discharged cured.

Remarks. The two cases I have just read present features of special interest. In the first—that of amputation of the leg—there was secondary hæmorrhage, with menorrhagia; and to this complication, as no ligatures had been disturbed and no ulceration was apparent in the wound, I think, we must assign the hæmorrhage. For, owing partly to the patient's past state of debility, and also to the occurrence of menorrhagia, I imagine that some change or deterioration of the blood took place, in consequence of which the formation of a coagulum was arrested, and that already formed broken down by the impulse of the blood. The question may suggest itself, why did not the hæmorrhage so caused recur? The answer, I think, is, that, owing to the stimulants, nutriment, and astringents given, the blood, on the cessation of the menorrhagia, became more fibrinous and of better quality; and that, therefore, a firm coagulum was formed in the artery when compressed by the tourniquet, and this, in due time, became organised owing to the improved nutrition of the body.

It is seldom, indeed, that so fortunate a termination may be expected in secondary hæmorrhage from the simple application of the tourniquet; and *apropos*, I may mention that this is the second case of the kind that has been so cured in this Infirmary during the last few months. In these cases, the tourniquet was occasionally relaxed, so that pressure on the artery was not constant, and so sloughing was avoided.

In the second case, the situation of the wound lends it more than ordinary interest, seeing that in the hand conservative surgery is carried to its utmost extent. From the position of the wound, it was evident that the deep palmar arch could not be implicated. All the means used to arrest the hæmorrhage having failed to be beneficial, it was deemed expedient to cut down on the bleeding point; in doing this, it was found to be impossible to secure the vessel until the middle finger had been amputated (the tendons of which being in a sloughy condition made this a matter of no moment), after which the bleeding points were easily secured.

At one time, this case assumed an alarming aspect; for, in addition to the existence of tubercle in the lungs, and hæmoptysis having occurred more than once, there existed before admission, and has been since, hæmorrhage from the gums; notwithstanding which the patient's hand has nearly healed, and his health is much improved.

The erysipelas which had appeared two days before this meeting has since left him, and he was discharged on Oct. 31st.

Progress of Medical Science.

SURGERY.

Quinine as a Local Antiseptic. Dr. R. Gieseler has been led to adopt the use of quinine as a local antiseptic. From experiments which he made, he found that the preservative property exerted on fresh meat by pure quinine (not the sulphate only) was greater than that of many other substances, including even cinchona. He therefore determined to apply quinine in surgical cases; and his first case was one of extensive carbuncular inflammation in a man aged 25. The whole of the lower half of the left calf, including the upper third of the tendo Achillis, was in a gangrenous state, which threatened to extend round the limb. At the upper part, the soft structures were destroyed to the depth of about an inch; and the tendinous portions of the gastrocnemius were being thrown off in shreds, with ichorous discharge. The fibres of the tendo Achillis, where diseased, appeared as if macerated; and the edges of the whole tendon were undermined. The leg was much enlarged; its skin had a bluish red colour; and the soft parts were indurated. The diseased parts exhaled a most offensive smell, filling the small room in which the patient lay. He kept the knee flexed, so that the leg rested on the thigh; and it was scarcely possible to bring the limb even to a right angle. The patient suffered continuous pain in the whole leg, and especially in the foot; he had loss of appetite, fever, and profuse sweats. The disease had commenced four weeks previously as a very tender black spot on the skin, and had been treated, by the practitioner called to the case, by warm applications, and, after the separation of the slough, by ointment of nitrate of silver, and subsequently by oil of turpentine and by myrrh ointment. The gangrene, however, spread in depth and in circumference. Dr. Gieseler first endeavoured to improve the patient's health by tonics, especially cinchona; and, as applications to the limb, he employed affusions and bandages soaked in a strong decoction of poppy-heads with opium. As no improvement was produced by the continuance of this treatment during eight days, he determined, as a last resource before performing amputation, to try the effect of the local application of quinine. Accordingly, a solution of this substance was applied in compresses over the entire gangrenous parts, the whole being covered in with warm poultices. During the first week, the internal remedies were continued. In the course of the first day, the pain abated, and the patient passed a tolerably quiet night. A change in the appearance of the parts could not naturally be at once expected; but the separation of the dead parts took place very gradually. At the end of three weeks, the separation was complete at the upper part, and healthy granulation was commencing; the diseased portions of the tendo Achillis were not thrown off until a later period. The process of cicatrisation went on favourably, and was complete three months after the patient first came under Dr. Gieseler's care. The man ultimately recovered the perfect use of his leg. Dr. Gieseler says that on several occasions, for the sake of experiment, he omitted the quinine, and used warm applications

only; the result always was, that the pain was renewed.

The next case related is one of noma, occurring in a child three years old. Dr. Gieseler was called to this patient on account of an ulcer at the right corner of the mouth; this was, however, found to be connected with gangrenous disease of the cheek, which was much infiltrated, and, although the skin was unaffected, gave on examination signs of being destroyed in its entire thickness. When Dr. Gieseler attempted to raise the lip carefully, for the purpose of examining its inner surface, laceration of it near its middle and of the right ala nasi took place without hæmorrhage, and shewed these parts, as well as the external surface of the alveolar border of the upper jaw, to have been changed into a gangrenous mass, having an offensive smell. The thickly infiltrated gangrenous parts were removed by incisions made from the laceration already described upwards to the infraorbital process, and thence obliquely downwards and to the right. No hæmorrhage took place. To the exposed dirty grey anterior surface of the upper jaw, in which no trace of organisation was apparent, Dr. Gieseler applied a sponge soaked in solution of sulphate of quinine, over which he laid some wadding, and secured the whole with a bandage. The right nostril was kept open by means of a piece of sponge, also soaked in quinine solution. On the next day, a dark brown border, a line in width, had formed at the inner and upper part (near the canine fossa) where it was found the sponge had not rested; but there was no extension of the gangrene elsewhere. The applications were renewed every few hours, the parts being carefully cleansed by affusion on each occasion. Healthy granulations appeared at the edges of the wound on the second day. Even at this time, when the process of separation first commenced at the centre of the exposed surface, the offensive smell had ceased; and neither then, nor subsequently, did the child appear depressed, but took its food readily and played as usual, although confined to bed. No internal remedies were given except an occasional mild aperient, when indicated. The child was first seen on October 9th; and on November 11th the process of cicatrisation was complete, leaving the parts in so satisfactory a state that a trifling plastic operation alone was required to remedy the defect that remained.

Dr. Gieseler has used in some cases of bed-sores, an ointment of quinine (the sulphate being first dissolved in a few drops of water and then mixed with lard); and has found a quinine gargle useful in some cases of diphtheritic throat-ulcer. In young children, the remedy must be applied by means of a camel's hair brush: and the use of the same means of application is also indicated for other parts, such as the cornea and uterus.

Quinine is also useful as a local application in the after-treatment of plastic operations, which sometimes fail through death of the transplanted parts. It is, however, perhaps advisable to scarify these, so as to allow of the action of the quinine. The following case is given. On June 27th, Dr. Gieseler saw a little girl aged 6 years, who had undergone a remarkable injury of the left hand in attempting to swing herself to a loaded cart. The nature of the injury was such that the integument was stripped from the entire palm of the hand, from the wrist to the fingers; and the flap remained connected at the finger-joints. The flap was replaced; and, to keep it properly extended, sutures were applied; the limb was laid in a lukewarm water-bath, and was subsequently dressed with solution of quinine. On July 4th, the corners of the flap—making altogether about one-third—had become separated, but without any gangrenous odour. The remaining part spontaneously divided into three strips. On July 17th, these had become firmly adherent; and the hand was placed in the extended position on a splint. At the end of this month the wound was entirely healed; there was but slight contraction of the cicatrix, and the child recovered the perfect use of her hand.

In caries and necrosis also, Dr. Gieseler, after performing the necessary operations, applies quinine locally, and believes it to be useful. This, however, he says, is open to further inquiry, as the successful result in many cases may be dependent on the constitution of the patient. It is suggested also, that the local application of quinine may be useful in the sloughing of malignant tumours. Dr. Gieseler, however, has no experience to bring forward on this point. (*Archiv für Klin. Chirurg*, Band iv, Heft 3.)

Subpubic Puncture of the Bladder. To avoid the danger of peritonitis, which sometimes follows the operation of puncturing the bladder above the pubes, M. Voillemier has devised the following operation. The patient is placed on his back, with the legs slightly separated; the pelvis is raised by a thick cushion, so as to bring the pubes forward, and to prevent the distended bladder from embarrassing the operator. An assistant, standing at the left side of the patient, draws the penis downwards and backwards. Sitting at the patient's right side, the surgeon feels with his right fore-finger for the suspensory ligament, and with his left hand he introduces by the side of this ligament a trocar, curved so as to pass round the pubic bone. During this stage of the operation, the instrument is carefully supported and guided by the right hand, lest the trocar should turn too suddenly and come into contact with the bone. The cannula having entered the bladder, the trocar is withdrawn. The operation was successfully performed by M. Voillemier, in the Hospital St. Louis, on October 14th. The cicatrisation of the wound was complete in forty-eight hours; and, at the time of reporting, no trace of the operation remained, beyond a fibrous cord indicating the passage of the instrument. (*Gaz. Méd. de Paris*, 14 Nov., 1863.)

Polypus of the Urethra in Man. M. Beyran, having had under his care a case of urethral polypus in a man aged twenty-six, has collected the few recorded instances of this kind, and has communicated the results of his investigations in a memoir read before the Surgical Society of Paris. Urethral polypi, he finds, are most commonly seated at the commencement of the canal, in the navicular fossa; they may, however, occupy partly also the spongy portion, and sometimes even the entire length of the urethra. They are almost always met with on the lower part of the canal. The causes producing them are obscure. The ages of the patients have varied from fifteen to thirty years: but old age does not appear to be altogether exempt. The development of the tumours does not appear to be favoured by acute or chronic gonorrhœa, nor by syphilis; but M. Beyran thinks that chronic inflammation of the urethral mucous membrane, together with masturbation, are not altogether foreign to their production. The commencement of urethral polypi is not characterised by any remarkable symptoms; but, as they increase in size and invade the urethral canal, one of the first morbid signs which attracts the patient's attention, is that the flow of urine is affected, much in the same way as in ordinary stricture. This symptom is soon accompanied by heat, pain, and swelling of the penis during micturition; and blood is discharged, either pure or mixed with urine. Coitus is painful, and the discharge of semen is impeded. The bladder is incompletely emptied; there are frequent desire to pass

urine, and tenesmus of the neck of the bladder and of the rectum, as in diseases of the prostate and bladder. Excrescences of this kind may, unless properly treated, produce perforation and fistula of the urethra. In the cases hitherto observed, urethral polypi in man have presented themselves in the form of small tumours varying in size from a grain of barley to a pea. They have been fleshy, soft, and of a bright red colour; being very vascular, they have bled readily. Sometimes they have a broad base, sometimes are elongated or pedunculated. The urethra may contain several of them, seated in its inferior wall from the meatus to a distance of two-fifths or four-fifths of an inch from this orifice. The diagnosis is easy when the tumours project and can be seen; but while they are small, and especially if they be far back in the urethra, and the symptoms resemble those of stricture, mistakes are easily made. The diagnosis, however, may be essentially aided by observation of the phenomena produced during micturition, by the extreme readiness with which a discharge of blood is produced, and by a careful exploration of the urethra. The prognosis is not unfavourable, when the polypi are recognised early, and properly treated. But, left to themselves, they produce various accidents, and may even give rise to perforation of the canal. When the tumours are within reach, excision, followed by several applications of nitrate of silver, is preferable to avulsion or to ligature. Bougies, at first flexible and afterwards metallic, should be introduced, so as to repress any tendency to a reproduction of the polypi; and M. Beyran believes that it is useful to cover the bougie, before its introduction, with a layer of an ointment of calomel and savine. If perforation have occurred, the urine must be removed by a catheter, so as to allow the fistula to become healed. (*Gaz. Méd. de Paris*, 21 Nov., 1863.)

Inguinal Hernia: Reduction into an Artificial Cavity. A man, aged thirty-six, was admitted into the Hôtel Dieu at Lyons under M. Desgranges. During about eight years, he had had inguinal hernia on the left side; it had not, however, passed beyond the fold of the groin. He was admitted into hospital with symptoms of strangulation which had come on after exertion; and the hernia was found to have descended into the scrotum. The taxis was employed; the hernia was reduced; and, three days afterwards, the patient was, at the morning visit, found sufficiently recovered to be allowed to leave the hospital on the following day. At eleven a.m., however, having eaten more than was allowed in the hospital diet, he had colic; on his attempting to evacuate his bowels, the hernia again descended, and was again apparently reduced by the taxis: a portion, however, of the intestine showed a tendency to return. Symptoms of strangulation, however, persisted and became more severe, and the patient died on the fourth day after the last-mentioned operation. On *post mortem* examination, no trace of peritonitis was found. The strangulation was produced by the inner inguinal ring; the hernial sac was folded on itself, and not inflamed. At its posterior part, was a laceration of about five *centimètres* in length, leading into a large cavity formed by the separation of the peritoneum from the anterior part of the pelvis and from a part of the left iliac fossa. The cavity contained the empty bladder, and the whole of the hernia, which consisted entirely of about three feet of the small intestine. The intestine was found to be congested, but not gangrenous; it had not contracted any adhesions at the point of strangulation. (*Gaz. Méd. de Lyon*, 16 Nov. 1863.)

Rebiews and Notices.

Life: its Nature, Varieties, and Phenomena. By Leo H. Grindon, Lecturer on Botany at the Royal School of Medicine, Manchester, etc. Third Edition. Pp. 407. London: 1863.

Commentary on such a work as this, in its entirety, since it includes chapters which would form material for discussion by the theologian or the metaphysician, scarcely comes within the province of a medical journal, devoted mainly to the dissemination of information having a bearing on the practice of medicine. Yet, while the book treats of subjects in which medical men have a common interest with all mankind, there are in it topics to which the nature of our profession gives a special interest; and on one or two of these a few words may not be out of place.

The title of the book will no doubt have suggested to our readers the inquiry—How does Mr. Grindon define "Life"? His ideas on this point are not indeed original; for similar views have been held by Carus, Hufeland, Oersted, Coleridge, and others; but they are certainly different from what most of us have been taught and believe. Life, with Mr. Grindon,

"Is the name of the sustaining principle by which every thing out of the Creator subsists, whether worlds, metals, minerals, trees, animals, mankind, angels, or devils, together with all thought and feeling. Nothing is absolutely lifeless, though many things are relatively so; and it is simply a conventional restriction of the term, which makes life signify no more than the vital energy of an organised material body, or the phenomenon in which that energy is exhibited."

As to the intimate nature of life, Mr. Grindon says we are and must remain ignorant. It is useless to seek it in matter, or in the adoption of such hypotheses as "vital force." "Nowhere," in our investigations of material forces, "do we find the power itself, but only the continent of the power; perhaps merely the sensible effects by which its presence is indicated." Life is, in Mr. Grindon's view, as far as we can gather, a continuous exercise of the creative power of the Divine Being. All the manifestations of life—the "laws of nature"—are constant expressions of the Divine volition. Not that God and nature are to be confounded.

"Intimately connected with each other, yet they are absolutely distinct. Nature is an utterance of the divine mind, clothed in material configurations and phenomena—flowing from it as words from the underlying thought, or the deeds of friendship from its sentiment."

With this idea of life before him, Mr. Grindon proceeds to consider it as presented in two principal modes—physical and spiritual. Physical life, again, is expressed in the inorganic and in the organic departments of creation. And the author goes on to comment in several chapters on the manifestations of organic life. Of the intimate nature of these, he offers no explanation; and at the same time objects to all the definitions of it which have been attempted by Bichat, Fletcher, Richerand, Spencer, etc., regarding them as amounting to nothing more than statements that "life consists in being able to

live," or in mere enumerations of the circumstances attending life.

Passing over the author's remarks on food (in which he makes some observations which vegetarians would do well to consult), and on respiration, the material relations of animals and vegetables, etc., and also a chapter the import of which is apparent from its title—"Motion the Universal Sign of Life"; we come to a part of the book in which he attempts to define *death*.

The tenure of life—the "lease of existence", as the author calls it—varies greatly, as is elaborately demonstrated in a subsequent part of the book; but to all death—that is, a discontinuance of life—comes at some time. Death, according to Mr. Grindon, is no accident of nature, nor the result of a punitive sentence of the Creator—a something superadded on the original constitution of things; but

"It is an essential and benevolent part of the very idea of material existence, bound up with the original scheme and method of creation as completely as granulation is..... Birth, growth, and arriving at maturity, as completely imply decay and death as the source of a river implies the termination of it, or as spring and summer imply corn-fields and reaping."

The author, admitting that death was brought into the world by Adam, combats the idea that it was *physical* death; he believes that, even if the first man had not fallen, he and his posterity would have died, not by disease, but by an *euthanasia*—a process resembling "an easy and gentle slumber." He refers to the teachings of geology, and argues further that the command to be "fruitful and multiply" in itself implied the removal of successive races by death; and that the supposition that our first parents were exempt from physical death, requires the assumption that they were invulnerable to injuries capable of producing death.

In the course of the work, we find chapters on the Spiritual Basis of Nature; the Correspondence of Nature and Mind; the Nature and Seat of the Soul; Soul, Spirit, and Ghost; True Idea of Youth and Age; Love of Nature; The Intellectual Faculties in Relation to Life; the Religious Element of Life; Life realised by Activity; Death in Relation to the Spiritual Life; Rejuvenescence; Health and Disease; Mortality and Immortality; The Resurrection and the Future Life; The Analogies of Nature; The Chain of Nature; The Unity of Nature; Man the Epitome of Nature; Instinct and Reason; and Inspiration.

As we have stated in the commencement of this notice, many of the topics discussed by Mr. Grindon are somewhat beyond the province of this JOURNAL; simply for this reason that the range of subjects of which we can take proper cognisance is necessarily limited. The enumeration which we have given, will, however, demonstrate that the author has treated of matters which are eminently worthy of study by every intelligent man. While there are points on which we are not prepared to go altogether with Mr. Grindon, we cordially recommend his book to our readers. They will without question find in its perusal pleasure and instruction; we have found such, and expect to find even more in its re-perusal. It shews the author to be a learned and reflecting man, and an elegant writer.

ON LIFE AND DEATH: Four Lectures delivered at the Royal Institution of Great Britain. By WILLIAM S. SAVORY, F.R.S., Assistant-Surgeon to and Lecturer on Anatomy and Physiology at St. Bartholomew's Hospital. Pp. 203. London: 1863.

IN the preceding review, we have seen the author of a thoughtful and elaborate book starting on his work with the idea of the universality of life; and here we have an essay, consisting of four lectures by a man of scientific distinction, in which life is studied in its ordinary acceptation, as the distinctive characteristic of the organic world. Yet, with this difference in groundwork, Mr. SAVORY approaches Mr. Grindon at several points. Thus, in the first lecture—after introducing his subject, and speaking of types of organisation, grades of development, fundamental unity of structure, and the necessity of studying life in *all* its forms, and interpreting man by comparison with the simpler forms of life—he ends the lecture by a few words on the common phrase, "Laws of Nature"; and in this phrase he recognises the expression of our idea of the plan of creation—of the existence of a constantly sustaining power.

"If the universe owes its creation to His will and power, on that will and power its continued existence must depend..... No one can for a moment imagine that the Creator is bound by any law; but in recognising the Divine plan to have been throughout perfect and complete, we understand why it is immutable. The term Law of Nature, then, is only an expression of the 'uniformity observed by the philosopher in the phenomena of the universe.' The Law of Nature is the Will of God."

In the second lecture, Mr. Savory describes the Essential Features of Life when reduced to its simplest terms. He attempts a definition of life; and it is this; that life is

"Essentially a state of dynamical equilibrium, consisting fundamentally and universally in a definite relation between destruction and renewal—in a regulated adjustment between waste and repair, whereby the condition is maintained notwithstanding its constant change."

Here, again, his ideas are to a certain extent the same as those of the previous author; but Mr. Savory differs from him, in that he holds the process of repair which takes place in inorganic bodies, as crystals, not to be a vital phenomenon, while Mr. Grindon would probably regard it as a proof of the universality of life.

In the third lecture, Mr. Savory speaks of the Conditions of Life, and on Vital Force. The doctrine of the existence of a distinct "vital force" does not find favour with him; nor can it well do so with any scientific thinking man.

"'Vital principle', 'organic agent', and other like terms, when employed in physiology, are even at the best empirical ones, and equivalent to nothing more than the final letters of the alphabet in an algebraical formula; for they are, when used in their least objectionable sense, mere expressions of something unknown. But the assumption of such an agent or principle, however designated, annihilating or suspending the operation of forces acting elsewhere, has not proved altogether harmless in its influence upon the progress of knowledge. By referring all vital actions to this obscure agency, while nothing was thereby explained, inquiry was to a great extent and for a long while checked. The final purpose was dis-

cerned, an efficient cause was forthwith assumed. Physiology fell idly back upon a vital principle.

"Unfortunately, much prejudice has been mixed up with these doctrines. To explain any of the phenomena of life by the operation of the physical forces, has been stigmatised as irreverent, as an attempt to defame the highest and noblest of the Creator's works. But is not such a charge as this altogether false and scandalous? The result being given—Life, it surely more exalts our feeble and imperfect conception of infinite intelligence and power to understand that the wonderful and mysterious phenomena of vitality have been evolved from the materials and forces around us, rather than by the introduction of distinct and peculiar agents."

The fourth lecture is on Death. This the author regards in general as "that altered condition of an organic body in which it is no longer the subject of certain processes which constituted its life". He speaks separately, as regards the higher animals, of the general cessation of vital functions, that condition which is commonly called death; and of the partial or molecular death of parts, as muscles, in which vital actions have continued after the apparent departure of life. In the course of his remarks, he refers to Vulpian's discovery, that the severed tails of tadpoles manifest vital phenomena for several days—even undergoing cicatrisation—and apparently dying only when a necessity arises for the establishment of blood-vessels. In this lecture, too, he speaks of the modes of death, and of decomposition, the loss of temperature, and *rigor mortis*.

As the title shows, these lectures were delivered before a non-professional audience, and are therefore expressed in popular, or rather in plainly scientific, language. We commend the book to our associates, who will not only themselves be interested and instructed by its perusal, but will find themselves justified in placing it in the hands of their families and friends.

British Medical Journal.

SATURDAY, JANUARY 23RD, 1864.

THE "BRITISH PHARMACOPŒIA."

THE *British Pharmacopœia* will for some time to come be the *bête noir* of the practitioner of medicine and the pharmaceutist. All of us will have to go to school again, in a certain degree, in the matter of prescribing; and, doubtless, many will be the errors into which we shall fall in this matter of drug-prescribing. Happily, between us and our patients will stand the druggist with his *Pharmacopœia* in hand, letters and figures, to correct us. The Council, indeed, anticipate our difficulties; for they

"Caution all medical practitioners, whether at home, or in the colonies, or in the public services, that, in order to exercise their profession safely, it is incumbent on them to make themselves familiar with the changes effected by the present work."

Happy the homœopathist, some will exclaim on reading this, who has only one sovereign remedy, globules of sugar of milk, and infinite dilutions, to trouble his prescribing powers!

The Medical Council has already put us to some expense; and now it calls upon us to pay 10s. 6d. for this large, and handsome, and 444 pages containing octavo volume. We may, if we like, wait until the smaller and cheaper edition is forthcoming; but then we shall have to wait a long time; for the Council will hardly bring out the smaller until the larger one has "gone off." Many practitioners will think that they ought to have been supplied gratis with this national document as a sort of set-off for their registration-fee. But then it must be remembered that the Medical Council is a most expensive piece of machinery to work; and that its smallest acts cost large sums of money. It would be curious, for example, to learn how much money was paid the other day for the election of a president.

The *Pharmacopœia* has, we may be sure, cost some £6000 or £7000; and we need not be surprised at this when we recollect the high kind of intellect and the length of time which has been bestowed upon its elaboration. The Council, in the preface, say that the production of this work has been the most serious and anxious of their labours; and doubtless the task was severe enough—to combine three somewhat rival pharmacopœias into one—to satisfy three national susceptibilities, chemical and pharmaceutical—in a word, to amalgamate the English, the Scotch, and the Irish, into one consistent and harmonious whole. Causes enough of delay of its publication are given. Endless researches in chemistry, pharmacy, etc., had to be made, and the value of old as well as new remedies tested, and all this by inquirers living in distant cities. Then, again, the Medical Council had to go to Parliament for a copyright in their *Pharmacopœia* and to get authority for its issue. And, lastly, the system of weights which had been adopted by the *Pharmacopœia* Committee had to be altered in accordance with the general wish of the profession.

The *Pharmacopœia* is considered to be published when its existence has been duly announced in the *Gazette*, and when published,

"It shall, for all purposes, be deemed to be substituted throughout Great Britain and Ireland for the several above-mentioned *Pharmacopœias*, and any Act of Parliament, Order in Council, or custom relating to any such last-mentioned *Pharmacopœias*, shall be deemed, after the publication of the *British Pharmacopœia*, to refer to such *Pharmacopœia*."

And all apothecaries and pharmaceutists are warned that it will thereon be necessary for them "to alter or destroy all pharmaceutical preparations made according to previous and now altered formulæ." Will they really make the *auto-da-fe?*

The *British Pharmacopœia* is given in English; but each article is designated by its Latin name. The *Pharmacopœia* consists of two parts and an appendix. The first part consists of the Materia Me-

dica; the second, of the Preparations and Compounds; and the appendix, of articles which are employed for the chemical processes in the second part, but are not themselves used in medical practice. As regards the doses of dangerous medicine, the Council say:

"The alterations which have occasioned most anxiety to the Council are those which affect the strength, and therefore the doses, of dangerous medicines. Three measures have been adopted for securing the public against the risks which might arise from such changes. In the first place, important changes in the strength of dangerous preparations have been carefully noted. Secondly, when change was inevitable, the weaker form has been preferred to the stronger. Thirdly, an attempt has been made to assimilate the strength of preparations of the same pharmaceutic form, in order that they may be prescribed in similar doses."

As regards weights and measures, the Council observe:

"The Council, in resolving to adopt for pharmacy the imperial ounce and pound, could not assimilate the subdivision of the ounce to that of the fluid-ounce, without substituting a new medical grain for the troy grain, hitherto the medical as well as the standard grain of the kingdom. This alteration they did not consider advisable; it has, therefore, appeared to them a necessary consequence, that the drachm and the scruple, the old denominations of weight between the ounce and grain of pharmacy must be abandoned, since they can no longer exist as both simple multiples of the latter and integral parts of the former. Accordingly, all who prescribe and dispense medicines, are recommended to discontinue henceforth the use of the drachm and scruple weights.

"The weights and measures of the *British Pharmacopœia*, with their symbols, will now stand as follows:—

"Weights.

1 pound.....lb.....	=	16 ounces	= 7000 grains.
1 ounce.....oz. ...	=	...	= 437·5 grains.
1 grain .....gr. ...	=	...	= 1 grain.

"Measures.

1 gallon.....C.....	=	8 pints .....O. viij.
1 pint.....O. ...	=	20 fluid-ounces...fl. oz. xx.
1 fluid-ounce...fl. oz.	=	8 fluid-drachms fl. dr. viij.
1 fluid-drachm fl. dr.	=	60 minims.....min. lx.
1 minim.....min.	=	1 minim .....min. j."

A CURE FOR CORPULENCE.

Mr. William Banting, of St. James's Street, a gentleman well known for his philanthropic exertions in behalf of several of our metropolitan hospitals, has lately dedicated a pamphlet to the public on the subject of corpulence. He has, he tells us, long been the victim of obesity, which was to him, in fact, a positive affliction. He could not tie his shoes, nor attend to the little offices humanity requires, without much pain and difficulty; he was forced to go down stairs backwards and slowly, to save jars upon his knee and ankle joints; he puffed and blowed on the slightest exertion. To be rid of this misery, he consulted all our great physicians, and spared neither pains nor money; but all in vain. "The cure of obesity", he naturally concluded, "seemed little understood by the faculty and the public generally." At length the day of deliverance came for him. He met with one whom he deems "the author of his redemption from the calamity"; and it is to let others share in his felicity that he now goes into print. He shall describe himself what he was and what he is in a ponderable sense. "I am now nearly 66 years of age, about 5 feet 5 inches high, and in August of 1862 weighed 202 lbs. I now (May 1863) weigh 167 lbs., and hope that a few weeks more will fully accomplish the object for which I have for the last thirty years laboured in vain."

Our readers and all obese individuals, of course, will like to know how this change was effected—the change which so many of our great doctors had failed to bring about. Mr. Banting was put on regimen. He was ordered to abstain as much as possible from bread, butter, milk, sugar, beer, and potatoes. And he gives his bill of fare, which is not an untoothsome one. For breakfast, four or five ounces of beef, mutton kidneys, boiled fish, bacon, or cold meat of any kind except pork, a large cup of tea (without milk or sugar), a little biscuit, and one ounce of dry toast. For dinner, five or six ounces of any fish but salmon, any meat except pork, any vegetable except potatoes, one ounce of dry toast, fruit out of pudding, game or poultry; two or three glasses of claret, sherry, or Madeira, but neither champagne, port, nor beer. For tea, two or three ounces of fruit, a rusk, and a cup of tea without milk or sugar. For supper, three or four ounces of meat or fish (as above), and a glass or two of claret; and, if required, a tumbler of grog for a "nightcap", or another glass or two of claret or sherry. (Soak the rusk in spirits, if you please.) In fact, avoid sugar-containing foods.

Mr. Banting considers his regeneration almost miraculous. He never lived so well—on such an excellent diet; and has improved mentally and bodily. His failing sight is restored, and his hearing improved; an umbilical hernia is greatly ameliorated; he can go down or up stairs like other people with perfect ease, and take exercise without inconvenience; has not been so well for twenty years, and has suffered no kind of inconvenience through his trial of the regimen referred to. The modesty of the medical friend who gave him the excellent advice, he says, alone keeps him from publishing his name to the world. But no doubt the name is already well known to all interested in the art of how to be made thin.

A new edition of Mr. Banting's pamphlet has just been published, and from it we learn that eight months' further experience have not diminished his estimate of the value of the diet adopted and the cure effected. On August 26th, 1862, his weight was 202 lbs.; it gradually diminished each month up to

August 1863, when it was 156 lbs. His girth round the waist has been reduced 12¼ inches. We may add that in his third edition, Mr. Banting, in self-defence, informs the public that the name of his medical benefactor is Mr. Harvey, the aurist.

GEORGE TOWNLEY.

THE last revelations which have been made touching the case of George Townley are more strange than the first. It is now placed beyond doubt, that in the opinion of all the authorities concerned in the administration of the law, Townley was duly and properly condemned, and, according to law, ought to have been hanged. He has escaped purely by a legal fluke; and thanks to the happy interposition of Dr. Winslow. Baron Martin was moved by Dr. Winslow's evidence to call upon Sir G. Grey for an inquiry into Townley's state of mind at the time of the trial. Sir George Grey grants the inquiry; but regrets that it was not called for at the proper time—*i. e.*, before the trial; and at the same time hints that he cannot see the necessity for any such inquiry. The Lunacy Commissioners thereupon visit Townley; have long interviews with him; and, admitting that he is not of sound mind, they nevertheless come to the conclusion "that the prisoner is now in the same mental state as when he committed the murder and underwent his trial; and that applying the law as laid down by Mr. Baron Martin to this case, the prisoner G. V. Townley was justly convicted." Hence, then, there was not a shadow of an excuse legally for his escape from the gallows; the crotchet existing in Baron Martin's mind by Dr. Winslow's evidence about a delusion, and which led to the further inquiry, having been entirely removed by the Commissioners' report. But, pending this inquiry, other causes came into operation; and all the world has been astonished to learn that the certificate of two medical men and two justices of the peace of the insanity of a murderer have force enough to rescue him from the hands of judge, jury, Secretary of State, and Calcraft. Under this strange clause of an Act of Parliament, and while Secretary of State, and Judge, and Commissioners were in full correspondence, did Townley quietly slip through the fingers of the law and escape hanging. We suppose we may say he has escaped; but we believe that the law has the power still, if it have the will, again to try conclusions with him and hang him, should he be caught in a lucid interval. And it is certain, that the Derbyshire magistrates are still occupied in the attempt of forcing upon Sir George Grey a further inquiry into his state of mind.

We have already said, and we again repeat it, that we believe the results of this trial have given a great blow to capital punishments. Sure it is that men's minds—we mean the minds of the community—are not yet prepared for such a change in our laws as would involve the abolition of capital punishment; but it is impossible that doubts should not be increased in the minds of many thinking people of its propriety from the facts here laid before them. We have it, for example, here proved, on the most indisputable evidence, that Townley was not of sound mind, although of sufficiently sound mind to entitle him to be hanged according to law. But who is there of mortals who can strip aside the veil of the human springs of action, and who can decide how far the man of unsound mind is actually responsible for the sins he commits? Can a man be of unsound mind in part? Can we blind, erring mortals judge of the degree of unsoundness of mind in a man, which shall decide his fitness for hanging?

THE following announcement appeared in the *London Gazette* of the 15th instant:—His Royal Highness the Prince of Wales has been pleased to appoint Arthur Farre, M.D., F.R.S., and George Thompson Gream, M.D., Physician-Accoucheurs to Her Royal Highness the Princess of Wales.

THE appeal for subscriptions towards a memorial of the late Mr. Peter Martin has, as is shown by an advertisement which appears in this day's JOURNAL, been liberally responded to by many of his friends both within and outside of the profession; and the total amount has reached £1056. The form which it has been decided that the testimonial shall take—that of a "Martin Exhibition" in the Reigate school, together with a bust in the public hall of the town—is obviously intended as a mark of respect to his general as well as to his professional character, and to perpetuate among his fellow-townsmen that respect for him which he so well earned. The Committee, however, are desirous that the opportunity of doing honour to his memory should not be confined to his local friends, but that it should be extended to those members of the medical profession, wherever located, who enjoyed and valued his friendship. We would call the attention of such to the advertisement of the Committee, and remind them that it is intended to close the subscription-lists at the end of the present month.

THE necessity for the formation of a national *Pharmacopœia* had no doubt been for many years felt by practitioners who removed from one part of the kingdom to practise in another; but the merit of bringing about a legal provision for the production of such a work is due to the Metropolitan Counties Branch of our Association. At a meeting of that Branch, held on April 24th, 1854, for the purpose of discussing the Bill which had been drawn up by the

Reform Committee of the Association, the following proceedings took place, as reported in the Association Medical Journal for April 28th of that year. The subject of the *Pharmacopœia* was brought forward by Dr. B. W. Richardson.

"He remarked that throughout the discussion on medical reform, the question of the *Pharmacopœia* had never been entered on. It was well known that up to this time every attempt to make a national *Pharmacopœia* had completely failed, while at the same time the differences of the various *Pharmacopœias* were so great, that it was impossible for an English physician to practise in Ireland or Scotland without learning a new prescription-alphabet. More than this, accidents sometimes occurred from this anomaly. But, in the formation of the new Bill, an excellent opportunity occurred for providing for a national and uniform *Pharmacopœia*, as well as for an uniform system of education, without in any way exciting the jealousies of those corporate institutions which have as yet edited the *Pharmacopœias*. He would therefore propose—

"'That as it is expedient that there should be only one British *Pharmacopœia*, this meeting suggests to the Reform Committee that a clause should be introduced into the Medical Reform Bill making it a duty of the Triennial Congress to form and remodel from time to time a national *Pharmacopœia* for the United Kingdom.'

"Dr. Cormack seconded the proposition. The question was important, as it involved the safety of the public as much as the convenience of the medical man. He thought that the three Colleges of Physicians would not throw obstacles in the way of a reform so urgently demanded by the public; and, in fact, that they would be glad to be freed from a duty which they had to delegate to others.

"The resolution was carried."

A clause providing for the publication of a British *Pharmacopœia* first appeared in the Bill of the Association, printed in the Association Journal for September 8th, 1854; and it formed a part of at least most of the Bills subsequently introduced into Parliament up to the passing of the Medical Act in 1858.

Our readers will remember that this Journal (we believe alone of all the medical press) has on several occasions prominently brought into question before the profession the right of the King and Queen's College of Physicians in Ireland to grant the title of Doctor of Medicine. This right is now on trial before the Court of Queen's Bench in Ireland. We shall duly apprise our readers of the verdict given by the learned judges. We may remark, that already does the College appear to have collapsed from the right assumed by it in 1860 to grant the title of Doctor of Medicine to its Licentiates; for we find that the College now pretends to have modified the right, and only goes in for the power of being able to confer the title of M.D. As, however, he who affixes M.D. to his name clearly thereby indicates to the public that he is a Doctor of Medicine, it is hard to understand wherein the distinction lies. All this the judges will put right for us. We think the British Medical Journal may claim no little merit in having assisted in forcing this important question to such a legal conclusion.

The following would indicate that things are going badly with the health of the French troops in Mexico.

"The Port-Admiral at Toulon has received orders from the Minister of Marine to send as many surgeons of the first class to Cherbourg as he can dispose of. As these orders received by the telegraph were not accompanied by any explanation, and as, on the other hand, the ports of Brest, Cherbourg, Rochefort, and l'Orient had already received an additional number of surgeons, the demand for more had created, if not uneasiness, a certain surprise."

The chief subject of medical gossip in Paris just now attaches to the resignation by M. Rayer of his deanship of the Faculty. Who will be his successor is the question.

Dr. Crosilhes of Cressy, in Valois, has been killed by falling into his well while drawing water therefrom.

The French Academy of Medicine has, we learn, been this year most auspiciously opened under the presidency of M. Grisolle, who, on taking the chair, delivered himself of a discourse "noble, elevated, and distinguished." The following gentlemen were proposed as foreign members—Stromeyer, Porta, and Chelius; and Stromeyer was elected. Thereupon again commenced the interminable discussion on small-pox and vaccination. M. Guérin led off, and was in happy vein, "his argumentation being firm, vivid, and concentrated; his mode of discussion clear and penetrating; his doctrinal exposition most lucid, etc." M. Guérin opposes M. Bouley's views, and leaves vaccination where it is at present. M. Bouley, our readers may remember, was for going back to inoculation.

We recommend the following to the consideration of the deans of our medical schools:—"At the corner of the Boulevard de Sébastopol and the Rue des Ecoles has been erected an immense and magnificent building. On its front are engraved the words—"Grand Hôtel des Ecoles." Within is a court forming a charming garden, wherein plays a fountain. Around open a large reading-room, billiard-rooms, a grand *salle-à-manger*, kitchens, etc. Above run long corridors, well ventilated, and having plenty of light, and opening into well-furnished rooms, each of which is heated by hot air. There is also a hospital-ward attached. In this building are received students only; and here, on most moderate terms they can obtain what may be called luxury compared with the old Hôtel Garnis of the Quartier Latin. Here they are lodged and fed, have fuel, food, and amusements for the moderate sum of 100 *francs* a month.

M. Bleynie, the *Procureur Impériale* at Angoulême, while engaged in investigating a case of supposed infanticide in the house of a perfumer and photographer, appears to have touched some of the poisonous articles lying about, having a small wound on his finger. The wound became poisoned, and in five days death ensued.

FRANCIS BOOTT, M.D.,

VICE-PRESIDENT OF THE LINNÆAN SOCIETY.

The estimable and accomplished subject of the following brief notice was a native of North America, having been born in Boston, Massachusetts, in September 1792. His father, however, was an Englishman by birth; his mother a native of Scotland; and, his scientific education having been conducted in this country, we feel inclined to lay claim to the nationality of one of whose parentage any country may be proud.

Dr. Boott's early education was acquired at Harvard University; but whether this was one of early promise, or not, we are unaware; though rumours have reached us, perhaps from himself, of rustication for some schoolboy act of rebellion. When only seventeen years old, he was sent over to his father's connexions in England, and formed many acquaintances and friends in this country, especially amongst scientific and literary men. English literature seems at this time to have divided his time and attention with botany; his bias, however, being so far stronger towards the latter, that he gave himself up for some time to the active pursuit of it. Shortly after coming to London, he was introduced to Sir Joseph Banks, then the Mæcenas of science; and to Sir James Smith, the most active of British botanists, and founder of the Linnæan Society. His early intercourse with these men seems to have influenced Dr. Boott towards selecting the medical profession; and, after making several visits to America, and marrying an English lady comparatively early in life, he commenced the study of medicine in London in 1820, under Dr. Armstrong, then an eminent physician, and one for whose professional ability and moral worth young Boott had the highest estimation. From London he proceeded to Edinburgh, and took his doctor's degree there in 1824.

In 1825, he commenced practice in London; and, being already well known in the best quarters for his scientific acquirements, many accomplishments, and engaging disposition and manners, he rapidly rose to eminence, and realised a good income. He did not, however, continue long in practice; and, having an income independent of his profession, he retired early, and devoted himself to literary pursuits, scientific society, and the study of botany; still, however, so far keeping up his connexion with medicine, that he continued an active member of the Council and Senate of University College, on which he served for upwards of a quarter of a century, latterly as President of the Council. The only other salient points in his professional career were, his treatment of fever, in which he followed Dr. Armstrong, and was thus one of the pioneers of the system of allowing a free circulation of air in the sick-room; and his discarding the professional costume of black garments, knee-breeches, and silk stockings, and adopting the blue coat, gilt buttons, and yellow vest, which was the non-professional garb of the day; thus showing that contempt for professional peculiarity which was always a marked feature in his character. Beyond lecturing for two sessions on botany at the Webb Street School of Medicine, he held no chair; and his only publications on medical science are two lectures on materia medica, and the life of his friend Dr. Armstrong, which work contains an account of the fevers of North America and of Europe, and an elaborate history of the plague as it appeared in England, Holland, France, Italy, Syria, and Egypt. This part of his work displays a remarkable amount of erudition, and much skill in reconciling apparently discordant phenomena, or more probably the distorted accounts of the same phenomenon. The result of his inquiry was to refer plague to the category of periodic fevers; and to show that its type was modified, but not changed, by the temperatures of the countries in which it successively appeared.

As a botanist, Dr. Boott was far more widely known of late years than as a medical man; both for his devoted attention to the Linnæan Society, in which he held successively the distinguished offices of secretary, treasurer, and vice-president; and for his great work on the genus *Carex*, a monument of laborious research, distinguished alike for its most accurate descriptive matter and admirable illustrations. It consists of two folio volumes, containing 411 plates, executed under his own eye, at his own cost, and published at his own expense. Amongst botanists, this work is held in very high estimation. Dr. Boott's liberality did not stop here; for he distributed it very extensively to his scientific brethren and public institutions, both in this country and abroad.

Liberality of sentiment and breadth of sympathy were, however, dominant features of his character in every relation of life; and these, being accompanied with the utmost refinement of mind, extensive literary and classical acquirements, and a ready flow of language, rendered him one of the most attractive of men in conversation. In matters of taste, Dr. Boott had much knowledge, excellent judgment, and an absolute freedom of all pedantry and affectation of connoisseurship. He had a considerable collection of pictures, selected with admirable discrimination as to subject and colouring, and indifference to name; of his library, the same may be said; and he took a great interest in the histories of authors and of their works. Thus, on hearing that no monument existed to the memory of the poet Kirke White, he himself caused a tablet to be put up in Cambridge, employing Chantrey to execute a medallion portrait for the purpose. The orginal of the latter, he presented to the National Portrait Gallery; and it is the first piece of sculpture ever accepted by that institution.

In person, Dr. Boott was very tall, slim, and almost fragile-looking; his profile was strikingly refined; his expression benevolent; and his whole address singularly attractive. Habited in a blue coat and bright buttons, he had the gait and air of the polished gentleman of the old school, which went well with his most courteous manners, rather retiring disposition, and singularly melodious voice.

Dr. Boott's frame was never robust; and he suffered severely from an attack of pneumonia in middle life, which seriously injured his constitution. In Midsummer of last year, he had another attack of the lung-disease, from which he never recovered; and he died on Christmas-day 1863, in his 72nd year, retaining to the last his faculties and all the traits of his most consistent and amiable life.

Association Intelligence.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

An ordinary meeting of the above Branch was held in the Medical Department of the Birmingham Library, January 14th, 1864; Alfred Baker, Esq., President, in the Chair. There were also present fifteen members.

Papers. The following papers were read.

1. Prolapsus Uteri: its Treatment by Operation and Mechanical Means. By Redfern Davies, Esq.
2. A Successful Case of Ovariotomy: with Observations. By John Clay, Esq.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

January 6th, 1864.

H. Oldham, M.D., President, in the Chair.

Ten gentlemen were elected Fellows.

Lesion (Rupture?) of the Placenta. By H. Madge, M.D. The accident occurred in a patient who aborted two or three days after falling downstairs. She was four months and a half pregnant. She was carrying a pitcher of water upstairs, and fell forwards, the bone of her stays coming with great force against the lower part of the abdomen. The placenta contained a clot of blood, which Dr. Madge was inclined to believe was the result of rupture of the placenta at the time of the accident.

Dr. Oldham and Dr. Druitt doubted the correctness of the view expressed by Dr. Madge.

Extra-Uterine Fœtation, and Induction of Premature Labour. By E. Day, M.D. A specimen was exhibited consisting of the uterus of a woman in whom premature labour had been induced, together with an old extra-uterine fœtation. She was attended at King's College Hospital in her sixth labour in 1859, when a tumour was felt behind the uterus; this was pushed up, and labour proceeded well. In January 1861, Dr. A. Farre induced premature labour at the eighth month, the tumour still existing. In August 1862, she was delivered of a seven months' child, the tumour being still present. She became pregnant in January following, and came again under notice in May. Labour was induced at seven months and a half by an air caoutchouc dilator. The membranes were subsequently ruptured, turning performed, and a dead child extracted. The woman died two days after from flooding. The *post mortem* examination showed that the tumour felt behind the uterus in the recto-vaginal pouch, which was during life of the size of a goose-egg, consisted of a fœtus of the size of one from three to four months old, enclosed in a thin cyst, attached to the peritoneum on the right side of the rectum. The right Fallopian tube contained a tumour, apparently the remains of an organised clot, and remains of decidual membrane.

The Guide-Hook: A New Obstetric Instrument. By S. Newham, Esq. The instrument is simply a blunt hook, with the addition of a prow or guide on the convex side. The addition of the guide is to favour the adjustment of the hook into many positions in which a hook is required, to assist in breaking up the base of the skull, and in sundry other manipulations.

Adhesions. Dr. Day exhibited a specimen of Adhesions between the Uterus and Rectum, dragging down the fundus; and inquired of the Society as to the possibility of stretching such adhesions by treatment.

ANNUAL MEETING.

The Report of the Auditors of the Accounts of the Society was first read. The balance-sheet showed a balance in the hands of the Treasurer of £255 : 12 : 3; while, in addition to this, there was invested in consols the sum of £550, of which latter sum £150 had been invested in the course of the last year. The amount of subscriptions received during the year was £474 : 12. The sale of the *Transactions* during the year had realised £55 : 17 : 1.

It was moved by Dr. Routh, seconded by Dr. Cleveland, and carried;—"That the Report of the Auditors be received and entered in the Minutes."

Mr. Bryant and Dr. Tilbury Fox moved and seconded a vote of thanks to the President and Officers of the Society for their valuable services during the past year.

Dr. Oldham and Dr. Graily Hewitt returned thanks.

The list of Donations during the year having been read, the President announced the result of the ballot for Officers for 1864 to be as follows:—*Hon. President:* Sir Charles Locock, Bart., M.D.—*President:* H. Oldham, M.D.—*Vice-Presidents:* R. Druitt, M.R.C.P.; G. T. Gream, M.D.; R. Greenhalgh, M.D.; R. Hardey, Esq. (Hull); J. G. Swayne, M.D. (Bristol); T. H. Tanner, M.D.—*Treasurer:* R. Barnes, M.D.—*Honorary Secretaries:* Graily Hewitt, M.D.; J. B. Hicks, M.D.—*Other Members of Council:* C. Clay, M.D. (Manchester); W. F. Cleveland, M.D.; J. Hall Davis, M.D.; C. Drage, M.D. (Hatfield); H. Gervis, M.D.; A. Hall, M.D. (Brighton); I. Harrinson, Esq. (Reading); J. C. Langmore, M.B.; A. Meadows, M.D.; H. Madge, M.D.; J. T. Mitchell, Esq.; G. C. P. Murray, M.D.; E. Ray, Esq.; S. Richards, M.D.; Tyler Smith, M.D.; F. Symonds, Esq. (Oxford); A. J. Tapson, M.D.; J. G. Wilson, M.D. (Glasgow.)

ANNUAL ADDRESS. BY H. OLDHAM, M.D., PRESIDENT.

During the past year, 41 new Fellows had joined the Society, making the present number of Fellows 535. Amongst these were gentlemen from the most distant colonies. The character of the debates, the authority of its judgment on disputed points, the large sale of the Society's *Transactions*, all showed its popularity, and the estimation in which it was held by the profession. He doubted whether those who still withheld their presence from the Society rightly measured the great interest felt by practitioners in all relating to obstetric practice. The independent and

efficient organisation of this Society was required to do for obstetrics what the previously existing Societies had failed to effect.

The financial state of the Society was highly satisfactory. There were £550 invested in the funds, and a balance of £255 at the banker's. The Society possessed nearly nine hundred volumes of works relating to obstetrics. During the past year the Council had considered the possibility of making this library available for use by the Fellows. On the whole, it was considered advisable to wait, more especially as there had been reason to think that accommodation might be had in the present location of the Society.

Six additional Honorary Fellows had been elected during the year—Professors Faye (Christiania), Braun (Vienna), Depaul (Paris), Martin (Berlin), Dr. Beatty (Dublin), and Dr. Pagan (Glasgow). From Professor Scanzoni, one of the first Honorary Fellows, the Society had received the gratifying compliment of the dedication of his work *On Chronic Metritis*, in recognition of the manner in which it had advanced gynæcology.

Four volumes of *Transactions* had been published, and a fifth would appear in the course of a few weeks. It was quite unnecessary for him (the President) to remark on the value of the contents of these volumes. They formed an important part of existing obstetric literature. To certain of the papers therein contained the profession was indebted, amongst other things, for the establishment of the operation of ovariotomy as rational and legitimate. He had often wished that the discussions before the Society had embraced a revision of the precepts for the management of the puerperal state. No subject was more important, involving as it did the comfort and health of thousands. It involved another point of interest: What was the length of attendance included in the midwifery fee? In a court of justice he had recently been asked this question, and his reply was that a week was enough for ordinary convalescence. He had found that many still acquiesced in the old notion of a puerperal "month," during which attendance was, they considered, obligatory. There should be some uniformity on this point. He contended that the limit should be, not a puerperal month, but a puerperal week. He could only understand the need of medical care for a month on the supposition that the precepts which are laid down in some of our midwifery books steadily induce a debility in the first fortnight, which requires a drawling convalescence in the next two weeks to overcome. Parturition and its immediate effects should be divorced from disease, and not made to wear its likeness. A puerperal month, under the guidance of a monthly nurse, was easily drawn out. He knew no reason why, if a woman was confined early in the morning, she should not have her breakfast of tea and toast at nine, luncheon of some digestible meat at one, her cup of tea at five, her dinner with chicken at seven, and her tea at nine; or the equivalent according to her habits of living. Common sense must guide in the selection of articles of food. Excess and stimulants must be avoided; so also gruel and slops. Such had been his practice for the last twenty years, and by it he could affirm that the process of involution was greatly assisted, and various disorders prevented. The patient should be removed to the sofa in two or three days. He would not now pursue the subject further.

In conclusion, the President stated that during the year three Fellows had been lost to the Society by death. He begged to congratulate the Society on its present prosperity, and trusted it would increase.

A vote of thanks to the President for his interesting address, proposed by Dr. Druitt, and seconded by Dr. Greenhalgh, was carried by acclamation. The Society then adjourned.

Correspondence.

IRIDECTOMY.

Letter from Wm. Bowman, Esq., F.R.S.

Sir,—The opening sentences of Mr. Walton's letter (*ante*, pp. 20-21) demand of me a few words as to the spirit in which I have desired to take part in promoting the adoption of iridectomy in the treatment of glaucoma. I feel deeply the responsibility incurred by any one having large opportunities of observation on such a subject; and I would jealously guard myself from the imputation, there implied rather than expressed, that in endeavouring to further to the utmost of my power what I have been led to regard as a grand advance in our means of overcoming a most disastrous disease, I have been betrayed into discourtesy towards any of my brethren who may not have arrived at the same conclusions as myself. My object has been to meet argument by argument, without personalities, and without attributing any but upright and worthy motives to those from whom I, unfortunately, differ; and if anything that has fallen from me have, from the expressions used, and contrary to my intention, given pain, I sincerely wish it had been couched in other terms. My desire has always been to convince others, and to afford them every aid in my power towards arriving at the same conclusions as myself. But, in furtherance of my main purpose and duty, I must on no account shrink from sifting the arguments employed on the opposite side, or from examining how far statements deriving apparent weight from the authority of eminent names are really entitled to influence the judgment of the profession. To that impartial judgment I must leave the very subordinate, but to me important, question of the temper in which I have borne my own share in the discussion; and for forming a right decision on that head, every one has full materials in your own pages.

I now pass to the substance of Mr. Walton's letter. He has entered much more at large into the subject than any other opponent of iridectomy, and has, indeed, treated it so discursively, that I find a difficulty in following him into all the details of his objections. Such of them as may require it I shall speak of *seriatim;* but at first it will be more convenient for my object to show that we are at issue on some points of primary importance; and that, until these are disposed of, it will be idle to branch off into subordinate matters, which would only distract attention and lead us from the main subject. I find, in fact, that Mr. Walton is of opinion that *the diagnosis of glaucoma is difficult and obscure;* that some of the signs on which others rely as of cardinal value are altogether discredited by him, while others are not alluded to as possessing any weight. If I establish this as his view, and show, on the other hand, that the diagnostic signs are real, and in most cases clearly definable, it will follow that *his remarks on the use of iridectomy, as compared with other modes of treatment, have been made under an imperfect discrimination of the diseased conditions, and therefore are deficient in practical value.*

Speaking of Mr. Wardrop's useful operation of *paracentesis corneæ*, Mr. Walton says (the italics are chiefly my own): "I have the most thorough conviction that by this system of tapping, combined with general treatment, is to be secured the highest attainable success in *inflammatory diseases of the eyeball.* I use the expression *inflammatory diseases*, because I wish *to avoid the nice distinctions of ophthalmic nomenclature.* There is *sure to be a difference of opinion*

among those addressing you on this point; and, indeed, *I know no greater ophthalmic puzzle than to point out practically the distinctive differences between what is called acute glaucoma, choroiditis, and arthritic iritis. There is a deal of confusion here for future investigators to simplify. Many of the cases of so-called glaucoma that I have seen operated on I should describe as choroiditis.* Again, I find one of your correspondents of great reputation defining glaucoma to be 'the whole course and several varieties of disease leading to *that last hopeless stage of extinguished sight and disorganised tissues*'. There can be *no more comprehensive description than this:* it will take in *every ophthalmic inflammation;* and still more, this gentleman goes even further, and in his several writings speaks of 'glaucomatous complications' and 'glaucomatous element', *conditions that I, as a man practised in eye-diseases, fail to comprehend.*"

All this is saying, in effect, that we *have no sufficient means at present of distinguishing glaucomatous inflammations from other inflammations of the internal tunics;* at all events, that *he himself does not know how to distinguish them.* But, before proceeding further with my analysis of his views, let me point out that he appears to have imperfectly comprehended my meaning in the above quotation from a former letter of mine (last vol., p. 484). Detached from their context, my words would bear the indefinite meaning, or rather absence of meaning, attributed to them by Mr. Walton. But the context shows that by "that last hopeless stage," etc., I mean the old characteristic glaucomatous eye; and my point is, that the various forms of disease *that lead to this* are now better understood than formerly, and are accordingly included, by those who have studied them accurately, under the term glaucoma, formerly applied chiefly to *that last hopeless stage.* Let me also offer an easy example in illustration of the meaning of the terms "glaucomatous complication" and "glaucomatous element" above quoted, and which Mr. Walton *fails to comprehend.* A patient has incipient marginal cataract, but otherwise the eye is perfectly natural in appearance and tension. At a later period, he sees rainbow colours round a candle at night; the field of vision becomes contracted on the nasal and upper margins; there are pains in the brow; the ciliary vessels are overfull; the optic disc, still visible, exhibits spontaneous pulsation of the artery; and also, after a time, the condition known as glaucomatous cupping, with displacement of the vessels. *The globe is hard now,* which *it was not before.* A "glaucomatous complication" has thus arisen. The case has a *cataractous element* and a *glaucomatous element;* and he who would treat the patient successfully must carefully distinguish the one from the other. On this much more might be said, and other plain examples given.

But Mr. Walton's opinions *as to the doubtfulness of the diagnosis of glaucoma* come into prominent relief when we follow him into his remarks concerning *"cupping" of the optic disc,* and concerning *tension.* I will take these in succession.

Cupping of the Optic Disc. He says: "I find *this 'cupping' apart from glaucoma,* and even when the eyeball is *not hard.*"

Answer. Much has been written, especially abroad, upon the subject of cupping of the optic disc. It has been most accurately examined, in consequence of its great and acknowledged interest as a diagnostic test, and in connexion with the *rationale* of the sequence of symptoms in glaucoma. A *physiological* cupping is recognised, *not the result of pressure;* a cupping from *atrophy of the nerve* is also recognised, *not the result of pressure;* while that sort of cupping which is so *highly characteristic of glaucoma* is *quite distinguishable* from these other forms, by its *abruptness,* by the *margin* of the cup being *undermined,* by the *peculiar displacement of the vessels* passing over its margin to the retina, by the *parallax,* so admirably proving not merely that the area of the disc is depressed, but how much it is depressed, how deep the cup is, when the lens of the ophthalmoscope is made to act as a prism, and to move across the line of sight: quite distinguishable also in the most elegant manner *stereoscopically,* by the binocular ophthalmoscope. These are points of minute observation certainly, but of a perfectly positive nature, and of a kind that competent observers do not dispute about.

Mr. Walton then says: "I am perfectly sure that it" (the cupping) "is not to be seen in many of the cases of acute glaucoma, when the fundus of the eye can be examined."

Answer. On this point all would be agreed. *Pressure must have time to produce the condition of cupping;* so that in acute glaucoma no cupping is to be found, even if the fundus is visible, *unless there have been antecedent pressure in a premonitory period sufficiently protracted to occasion it,* or unless some weeks of pressure, unrelieved by an iridectomy, have elapsed subsequent to the acute attack.

Mr. Walton says: "It more commonly exists in the eyes that have long been blind."

Answer. Just so, when the intraocular pressure has long acted on the intraocular end of the optic nerve.

What next follows seems to me even more confused and inexact. "There" (where?) "it appears, I suspect, that the nerve-tissue has been primarily invaded by disease, or coincidently with the implication of other parts. I regard pressure, if it have any influence at all, as acting secondarily."

Answer. What kind of nerve-change, or disease of the tissue of the optic nerve, is here meant? If inflammatory, the signs of inflammation in simple glaucoma are wanting. The capillaries are too empty, rather than too full; and they finally waste. There are no inflammatory effusions visible, but the absence of them. There is no swelling, but the reverse. We are familiar with the appearances of inflammation, of overfulness of the blood-vessels of the optic nerve, and they do not lead to cupping. Nor does cupping follow atrophy of the nerve the consequence either of inflammation of the nerve itself, or of disease behind the eye pressing on the nerve or otherwise impairing its function. *Pressure-cupping* is a term perfectly well understood by those practically familiar with this subject; and *this cupping,* seen by the ophthalmoscope, is, I may say, uniformly found to concur with *other evidences of augmented tension,* either existing at an earlier period, or still detectable.

Mr. Walton says: "When this nerve-change exists, by which the eye has been more or less spoiled, I do not believe that any treatment is available."

Answer. It is by no means uncommon to find an eye, in which pressure-cupping is well-marked, and in which there is also manifestly too much whiteness of the optic disc (betokening partial atrophy of the nerve. If tension is removed in such a case by the performance of iridectomy, the degree of sight existing at the time of the operation will be usually preserved, and there may be even partial restoration of that which had been lost.

Mr. Walton. "To say that the cupping becomes less is to admit the generation or reproduction of nerve-tissue."

Answer. Not at all so, but only that, on the pressure being relaxed, the elasticity of the displaced extremity of the nerve has to some extent restored it towards its original position. But even if we were to suppose some regeneration of nerve-tissue in the

course of time, when a previous morbid compression of the tissues has been long withdrawn, we should not be going beyond the analogies of disease. How long does the repair after the damage done by an apoplectic clot sometimes go on? For months, and even years.

Mr. Walton. "And how could it be proved that the cupping is less?"

Answer. By the abundant and conclusive ophthalmoscopic tests already referred to.

Mr. Walton. "And if it could be demonstrated, would a fractional change be of any advantage, when the least cupping is known to be associated with damaged sight?"

Answer. If a lessening of the cupped condition is demonstrated, it is an evidence of lessened tension. This lessened tension is a restoration of the natural elasticity of the eye, or a near approach to it; and implies a restored equilibrium of the circulation, the mitigation of the previously destructive conditions, and the renewed capacity of repair in the previously compressed tissues; results all of them attested by the most unequivocal physical proofs in numerous cases. The slackening of tension will be of advantage to sight in proportion to the amount of the antecedent structural damage done; and this is usually proportioned to the intensity or the long continuance of the pressure which the iridectomy has relieved.

Finally, in this division of the important subject of the diagnosis of glaucoma, I find no allusion in Mr. Walton's letter to *the spontaneous pulsation of the arteries* of the disc, to the *generally characteristic manner in which the visual field becomes restricted*, or to the *iridizations*, which are often remarkable and striking. As diagnostic signs, these are all of value.

But more important still, if possible, is the subject of the *tension of the eye as ascertained by touch;* and it is here that I am most at a loss to account for the wide difference which I find to exist between Mr. Walton and myself, and feel a surprise which is rather increased than diminished by the circumstance commented on in my last letter, viz., that his opinions are shared by others among my most respected colleagues. Mr. Walton, however, writes more at length upon the point than they do,* and places it in a stronger light. I will italicise those of his words which most emphatically express his views.

"In glaucoma, *as in every other acute inflammatory ophthalmic disease, the eyeball is tense;* it is hardest of all in long-standing glaucoma, and this can only be by an increase of its fluid contents. The choroid and the iris hold very nearly all the blood that is in the eye; and there is an increase in the size and perhaps even in the number of blood-vessels. It is likely, too, that exudation from the vessels tends to the augmented overfulness. *Now all this takes place in every case of severe inflammation of the eyeball, whether it be from purulent ophthalmia, from wounds, from mechanical injuries of all kinds, from gout, rheumatism, syphilis; and who ever heard of the optic disc being cupped from this pressure?*" *Answer.* Precisely so, who indeed? for, as I shall show, the pressure itself does not exist.

"*The same may be said when the eye is pressed on from without by tumours. Sight may be lost for a time; but if the pressure be removed, the patient sees again, and the ophthalmoscope shows a perfect eye.*" *Answer.* If the eye is removed from its place by a slowly acting external cause, as by a tumour, *not involving its interior structure*, it may suffer in sight *by elongation of the optic nerve;* and, after restoration to its place, the sight may sometimes be recovered, particularly if the nerve have not been too long stretched, so as to have undergone wasting. But in all such cases that I have seen, where an eye retaining its natural appearance is only *displaced* by pressure, *it has not been at all harder than natural*, so that no resulting cupping of the optic disc would be expected.

"*Too much stress has been laid on the tension of the eyeball.* When there is the increased volume in the eye *from inflammation, tension must of course always exist.*" *Answer. When* the *total volume* of the eye-contents *is* increased, *of course* there *is* increased tension; but I say that it is only *glaucomatous inflammations* which exhibit this increased total volume and consequent repletion and distension, and that the other varieties of inflammation, whether idiopathic or traumatic, are not characterised by an increase of tension, which is usually normal, or may be below the normal standard. Thus, the *absence or presence of tension* distinguishes the two types of disease. But what if, while certain vessels contain more blood, others contain less, or the aqueous humour be in diminished volume? That the eye is reddened is no proof whatever that its *whole contents* are augmented in volume.

"It will not do to say that there is a difference in the *kind* of tension between *that arising from glaucoma* and *that from other inflammations.*" *Answer.* I at least have not said this, but the contrary (see British Medical Journal, Oct. 11th, 1862, p. 378), as follows: "Whatever the essential nature of the glaucomatous state, we as practitioners are chiefly concerned with the *augmented tension of the eyeball* which attends it. This we have to distinguish at the earliest stage, and towards the mitigation of this our treatment is to be directed. As a practitioner, having to relieve disease, I call *all undue tension* of the eye *glaucomatous tension.* The object of treatment is to reduce this within natural limits; for, if it continue, the result is inevitable, however delayed."

I must now advert to *some ordinary facts relating to eye-tension*, in order to bear out what I have advanced in opposition to some of my colleagues, last week and now; and I shall for this purpose beg to quote here what I stated in the pages of this Journal more than a year ago (Oct. 11th, 1862, p. 378).

"A person unused to close and accurate examination of the physical condition of the eyeball, even though he be seeing eye-diseases frequently, may readily fall into error on this important matter of *the state of the globe as regards tension.* He may suppose that the increased tension may depend simply on the degree of fulness of vessels, or on the amount of effused fluids within the eye. *No mistake could be greater. It cannot be too strongly impressed on all who may have to discriminate between glaucomatous and other diseases, that the depth of redness of the eye, or the presence of more or less of effused blood, or serum, or lymph, or pus within it, has no connexion whatever with the question of tension, since all or any of these may be present in a high degree without any glaucomatous disease, any increase of tension, and therefore without the indication such tension gives for its relief by iridectomy.*

"In various congestive or inflammatory states, whether of cornea, sclerotica, choroid, iris, or retina, or of some or all of these, the disease may be of more or less intensity, may run its course more or less rapidly, and may do permanent damage to the structures involved, without our detecting any augmented tension of the coats at any period. Intraocular hæmorrhages, as a rule, even when considerable, are not attended by a higher tension; often, indeed, by a diminished size of the globe-contents, and an unnatural softness of the eye. Subretinal effusions of blood or serum are, in the great majority of cases, unmarked by any increase of tension.

* Mr. Dixon's second letter shall be noticed by me in due course. (Jan. 20.)

"On the other hand, exalted (or glaucomatous) tension may occur, intermittently or persistently, in eyes which afford no indication whatever of inflammation, where there has never been any pain or vascular excitement, and where there is still an absence of inflammatory effusions. Such augmented tension, though slight in degree, may effect by long continuance, and without any intercurrent inflammatory complication, what a pressure more intense will effect in a much shorter time, especially if, as then usually occurs, it becomes complicated with subacute or acute inflammatory action.

"I must add, however, to avoid the risk of misconception, that various affections of the eyes, not glaucomatous in their origin, may present in their course glaucomatous complications—*i. e.*, become combined with an augmented tension of the eye, and with the secondary results of pressure; and hence that it is of the highest importance, in practice, to distinguish accurately whether, and when, such complication has arisen, since, under several contingencies, it may need the application of iridectomy.

"Thus the idea of inflammation must be dissociated from that of glaucoma and glaucomatous tension. Though often combined, and the combination then of the greatest importance, yet their coexistence is not essential to the presence of either; and, as a matter of fact, they occur independently of each other every day."

There is in connection with this subject an obvious source of fallacy, only needing to be mentioned to be admitted. It is this, that a *sense* of fulness, a *sense* of tension or hardness, *experienced by the patient* is *no proof whatever that the eye is hard*, and that the blood is circulating within it under unnatural conditions of pressure on its channels. And yet it is surprising that this distinction seems to have been habitually overlooked by very able men in former years. Nor, of course, does the *amount of pain* in an eye, either with or without inflammation, afford any indication at all as to whether the eye is *harder* or not. An eye, for example, suffering tortures from non-glaucomatous *neuralgia*, retains its natural elasticity; and this whether the neuralgia be associated or not with rheumatic, or gouty, or syphilitic, or traumatic inflammation. If, in such painful states, the eyeball *be found harder than natural*, the surgeon should carefully take note of it, for it is a new *glaucomatous complication* of primary import in practice. If, indeed, the hardness be slight and of recent origin, and if it appear that but little dimness of sight is attributable to it, it may simply be reserved as a symptom to be watched, since it may possibly subside under a continuance of judicious treatment. But *if it be considerable, or if it persist long, with a corresponding and increasing defect of vision*, it probably demands immediate and prompt *local* relief.

But Mr. Walton, not unnaturally, having thus overlooked some of the most obvious facts in regard to eye-tension, and (as I am led to conclude) not having really as yet very accurately studied this all-important subject, "*will not allow that such pressure admits of being recognisable under several degrees—seven, it is said.* Without weight and measure, how can such estimates be conveyed from one mind to another?" He adds an illustration "to show how differently persons estimate things by the sense of touch"; and no doubt they do, but the touch is a sense eminently capable of improvement by education, and by being attentively and habitually exercised on special and minute subjects. I have long been so convinced of the feasibility of what Mr. Walton thus regards as impossible, that I have been led, as is well known to many, to mark by definite signs *certain degrees of undue hardness* as well as of *undue softness* of the eyeball; and after having for some years tested the practical value of these signs as aids to observation, and seen them successfully adopted by others, I gave an account of them to the meeting of our Association in August 1862. This account I here reproduce; and I have only to add that my friend Professor Donders has lately been endeavouring to carry the determination of the degrees of tension to a higher standard of exactness by the invention of an instrument, which I regret I have not yet seen; nor do I know whether he proposes it for the use of the practitioner, or only as an aid to accurate scientific research. No one certainly is more competent than himself to master the delicate mechanical problem. Meanwhile, I think it would tend to a better understanding of cases in which tension has to be studied and recorded, if these signs were more generally adopted. I still find them of the greatest value in preserving an accurate record of cases. The account of them is as follows (see British Medical Journal, October 11th, 1862, pp. 378-9):

"It is now my constant practice, when defective vision is complained of, to ascertain almost at the first instant the state of tension of the eye. To do so strikes at once home to the diagnosis. If undue tension exist, there are also its great and peculiar risks; and the question of its relief by a surgical proceeding at once arises in the mind. Though it does not necessarily follow that this must be performed, the scope of inquiry is greatly narrowed. The use of the ophthalmoscope probably soon decides in a positive manner the cause of the blindness, and the details of the case are speedily filled in.

"It is easy enough to estimate the tension of an eye, though there is a right and a wrong way of doing even so simple a thing. I may, therefore, explain that *both forefingers* should be used together through the upper lid, which is to be gently closed. One finger steadies the eye by pressing against it with a suitable degree of force, while the other estimates the tension; or rather both together estimate it, when thus used in concert. I tell the patient to *close the eyes gently, as if asleep;* and the fingers are then applied to the upper part of the globe, behind the corneal region. If the patient *forcibly* compress the lids, the mere action of his muscles may cause a momentary tension of the eyeball as well as interrupt the examination. If the eyeballs are deep-set or small, the determination of the tension is less easy.* With medical men, the touch is already an educated sense, and very little practice will suffice to apply it successfully to the eye.

"I have long paid special attention to the subject of tension of the globe,† and particularly since it has assumed so much additional importance in the last few years. I have found it possible and practically useful to distinguish nine degrees of tension; and, for convenience and accuracy in note-taking, have designated them by special signs. The degrees may be thus exhibited.‡

"T represents *tension* ("t" being commonly used for "tangent", the capital T is to be preferred.) Tn, *tension normal*. The interrogative, ?, marks a *doubt*, which in such matters we must often be content with. The numerals following the letter T, on the same line, indicate the *degree of increased tension*; or, if the T be preceded by —, of *diminished tension*, as further explained below. Thus:

* Also, if the lids or the conjunctiva be œdematous, there is more difficulty.

† "See my Lectures on the Parts concerned in the Operations on the Eye, etc., delivered at Moorfields in 1847."

‡ "Since this paper was read, I have simplified the signs, with the concurrence of my friend Professor Donders, in order to adapt them for general use. The simplified form has been substituted above."

"T 3. *Third* degree, or *extreme tension*. The fingers cannot dimple the eye by firm pressure.

"T 2. *Second* degree, or *considerable tension*. The finger can slightly impress the coats.

"T 1. *First* degree. *Slight* but *positive increase of tension*.

"T 1? Doubtful if tension increased.

"Tn. Tension normal.

"— T 1? Doubtful if tension be less than natural.

"— T 1. First degree of reduced tension. Slight but positive reduction of tension.

"— T 2 } Successive degrees of reduced tension,
"— T 3 } short of such considerable softness of the eye as allows the finger to sink in the coats. It is less easy to define these by words.

"In common practice, some of these may be regarded as refinements; but in accurate note-taking, where the nature and course of various diseases of the globe are under investigation, I have found them highly serviceable, and they have as much precision as perhaps is attainable or desirable.

"It is also to be borne in mind that the normal tension has a certain range or variety in persons of different age, build, or temperament; and according to varying temporary states of system as regards emptiness or repletion. Experience will make every one aware of these varieties, which do not encroach on the above abnormal grades of tension. Medical men may understand how important is this matter of the *degree of tension*, by considering how priceless would be the power of accurately estimating it *by the touch* in the case of various *head affections*."

In the above *scale of signs of tension for note-taking*, I have introduced the sign of *normal tension*, Tn, and those of *lessened tension*, or in other words, of *unnatural softness*, — T, *minus tension* or *negative tension*, as being useful not only in other than glaucomatous diseases, but also often in these also (especially the signs Tn and — T 1) as terms of comparison, *after iridectomy*, with the *positive tension signs*, T 1, T 2, or T 3, which marked the previous degree of hardness.

I will now ask, what amount of weight in the present discussion is to be accorded to the following remarks of Mr. Walton—"When there is the increased volume in the eye from inflammation" [and he means *any acute or severe inflammation, not glaucomatous*] "*tension must of course always exist; and if it be made a signal for iridectomy*" [but by whom would it be so, who *felt* the eye, and *ascertained that such tension was imaginary?*] "I can only say that *the surgeon in ophthalmic practice who so regards it, and acts*, will always have a large stock of cases ready for his knife; and in proportion as he multiplies his operative surgery, so will he decrease the eyesight of his patients. *It is through such examples that we get the astounding records of wonders*" [!!] "Mrs. A. is blind today, as she might indeed be, from rheumatic inflammation, etc. She is 'iridectomised', and in a week she can, with spectacles, and while looking through a pin-hole, read No. 10 of Gräfe's type." [What is Gräfe's type?] "The poor woman would have read No. 6 without any appliance, if her iris had not been trimmed, and if general treatment only had been used. *I rejoice to think that in private practice I have saved many cases like Mrs. A.'s from damage*"! This is certainly a "damaging" account of the practice of "iridectomists", and of the escapes their unhappy patients fortunately meet with, through the advice of those who know better than the "iridectomists" *what are the niceties in the diagnosis of glaucoma, and what is meant by eye-tension;* and it might be amusing, were it not so serious.

Lest I should appear tedious, I must defer my remaining observations on Mr. Walton's views until next week.

I am, etc.,
W. Bowman.

5, Clifford Street, January 13th, 1864.

[This letter would have appeared last week, had there been space. Editor.]

Letter from James Dixon, Esq.

Sir,—An author's opinion on any given subject should be judged of from his latest publication; and if our friend, the "Country Surgeon," had referred to my essay on Diseases of the Eye, in Holmes's *System of Surgery* (vol. ii, p. 855, 1861), he would have found that, in relating my own experience of iridectomy in acute glaucoma, I said: "As regards vision, the results have varied; in some cases *the improvement has been very great.*" I might have used a still stronger expression in reference to the favourable results of the more successful cases; just as, in the passage which the "Country Surgeon" quotes from my earlier work (1859): "Nor in the third class (cases of acute glaucoma) was sight restored." I might more fitly have written "completely restored." But most exaggerated accounts had been given of the success of iridectomy as a cure for glaucoma, before the necessary time had elapsed for testing the real value of the operation, and its applicability to certain cases, that I laid most stress on the abuses of the operation, and rather understated than overstated the benefit which, in my own practice, I had seen to follow its performance.

I am, etc., James Dixon.

Portman Square, Jan. 19th, 1864.

Letter from Jabez Hogg, Esq.

Sir,—Permit me to correct a slight mistake which has crept into the communication of a "Country Surgeon", at p. 81 of last week's Journal. Your correspondent writes: "Wishing to know what surgeons at other schools are doing with regard to iridectomy, I have been inquiring into the working of the Westminster Ophthalmic School. There I find iridectomy rejected altogether for glaucoma, etc.; and incision of the ciliary muscle, which is said to be a superior operation, substituted." This is not quite the fact regarding our hospital; and, for my own part, I must beg leave to disclaim the "Country Surgeon's" statement. I do not *altogether reject iridectomy;* but, on the contrary, I—I may say *we*—employ it whenever I think that by so doing I can benefit my patient. It is true, the casual visitor to our hospital may not have seen this operation resorted to so frequently as at some other institutions for the treatment of eye-diseases; but this in part arises, or apparently so to myself, from the glaucomatous disease falling less frequently under our observation and care than it would appear to do elsewhere; and also from another circumstance, that if I see the case at the onset of the attack—in the acute stage, when it is nearly always accompanied with pain and increased tension of the eyeball—I confess I have so much confidence in the simpler and safer operation of my colleague Mr. Hancock, that I immediately resort to section of the ciliary muscle; and this is generally attended with so much relief to the more urgent symptoms, that the after-treatment becomes a matter of little or no anxiety as to the ultimate condition of vision. But, in the more advanced stages of this disorder, I have no hesitation whatever in saying, so far as I have been able to form an opinion, that iridectomy appears to me to be the operation which holds out the best chance for the patient.

I may add that, as a rule, I more frequently resort to iridectomy in *irido-choroiditis;* for the relief of

which, indeed, Desmarres, the originator of the operation, so successfully employed it.* This affection appears to ensue as a consequence of the inflammatory action extending from the choroid to the iris, and ultimately to the retina. Such cases, in the early stage, very much resemble glaucoma, and quickly run on to closure of the pupil or total destruction of vision. It is, therefore, incumbent upon us to make a free iridectomy. The details of Desmarres's method of performing this operation will be found at page 263, last edition of my *Manual of Ophthalmoscopic Surgery*.

I am, etc., JABEZ HOGG,
Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

1, Bedford Square, January 18th, 1864.

* Von Gräfe has been so constantly referred to as the originator of iridectomy, that it is well I should remind the profession that the eminent French oculist Desmarres devised and practised the operation for the relief of *irido-choroiditis*, long before the first-named surgeon took it up.

Medical News.

APOTHECARIES' HALL. On January 14th, the following Licentiates were admitted :—

Reeve, Frederick Joseph, Holbrook, Ipswich
Ryley, James Bredin Beresford, Rectory, Myshal, co. Carlow

APPOINTMENTS.

*BURROWS, George, M.D., F.R.S., appointed Honorary Consulting-Physician to St. Bartholomew's Hospital.
MALCOLM, Robert B., M.D., appointed Physician to the Fettes College, Edinburgh.

THE PRINCE OF WALES'S HOUSEHOLD. His Royal Highness the Prince of Wales has been pleased to make the following appointments.

FARRE, Arthur, M.D., F.R.S. } to be Physician-Accoucheurs to
*GREAM, George T., M.D. } H.R.H. the Princess of Wales.

POOR-LAW MEDICAL SERVICE.

BRADSHAW, Samuel, Esq., to the Halford District of the Shipston-on-Stour Union, Worcestershire.
HUGHES, David, Esq., to the Eastern District of the Corwen Union, Merionethshire and Denbighshire.
MACKENZIE, George W., Esq., to the Croxton District and the Workhouse of the Thetford Union, Norfolk.
NELSON, Samuel, jun., Esq., to the Acomb District of the Great Ouseburn Union, Yorkshire.
PRIEST, William, Esq., to the Colsterworth District of the Grantham Union, Lincolnshire.
RAYNER, Alfred P., Esq., to the Shawbury District of the Wem Union, Shropshire.

ARMY.

BARCLAY, Staff-Surgeon A., M.D., having completed 20 years' full-pay service, to be Surgeon-Major.
CAROLAN, Assistant-Surgeon G. McG., 72nd Foot, to be Staff-Assistant-Surgeon, *vice* T. R. Williams, M.B.
DAVIDSON, Staff-Assistant-Surgeon P., M.D., to be Staff-Surgeon.
GOOD, Assistant-Surgeon J., 43rd Foot, to be Staff-Assistant-Surgeon, *vice* H. Crump, M.D.
GRANT, Assistant-Surgeon R. A. P., to be Staff-Assistant-Surgeon, *vice* W. Holmes.
HENRY, Assistant-Surgeon R., 91st Foot, to be Staff-Assistant-Surgeon, *vice* P. Davidson, M.D.
MORIARTY, T., Esq., to be Staff-Assistant-Surgeon.
WILLIAMS, Staff-Assistant-Surgeon T. R., M.B., to be Staff-Surgeon, *vice* F. L. Fitzgerald.

INDIAN ARMY.

COWPER, Assistant-Surgeon J., Madras Army, to be Surgeon.
DIXON, Assistant-Surgeon E., Madras Army, to be Surgeon.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

BAINES, M., M.D., to be Assistant-Surgeon 1st Middlesex Engineer Volunteers.
DOUGLAS, W. T., Esq., to be Honorary Assistant-Surgeon 1st Oxfordshire Light Horse Volunteers.
DUCE, J., Esq., to be Honorary Assistant-Surgeon 54th Staffordshire R.V.
FINCH, R., M.D., to be Assistant-Surgeon 1st Administrative Battalion Kent R.V.
JONES, G. J., Esq., to be Assistant-Surgeon 7th Essex R.V.
PHELPS, W. H. G., M.D., to be Honorary Assistant-Surgeon 4th Somersetshire R.V.
PROPERT, John L., Esq., to be Surgeon City of London R.V. Battalion.

DEATHS.

DUNCAN, Alexander, Esq., formerly Superintending Surgeon, Bombay Army, at Ladbroke Villas, Notting Hill, on January 13.
HARDWICK, Robert G., M.D., at Leeds, aged 30, on January 19.
HARRISON. On January 17th, at Manchester, aged 5, George M., eldest son of *G. M. Harrison, Esq.
KELSON. On January 14th, at Sevenoaks, aged 25, Frederick M., third son of *George Kelson, Esq.
SLEIGH. On January 16th, at Bayswater, Sarah, widow of William W. Sleigh, M.D.
SYMONS. On January 12th, at St. Colme Street, Edinburgh, Harriet, widow of the late John Symons, M.D., Dumfries.
VANCE. On January 9th, at St. Saviour's, Jersey, aged 76, Julia, widow of Richard Y. Vance, M.D., late Surgeon to the Forces.
WHITTLE, Edward H., Esq., surgeon, at Brenchly, Kent, aged 44 on January 15.

M. TARDIEU has been appointed Dean of the Paris Faculty of Medicine in the place M. of Rayer.

THE HEREFORD COUNTY LUNATIC ASYLUM is about to be enlarged.

DR. BURROWS has been elected Honorary Consulting Physician to St. Bartholomew's Hospital.

THE SURGICAL SOCIETY OF PARIS has elected Mr. Paget, Mr. Hodgson of London, and Mr. R. Adams of Dublin, foreign associates.

THE MEDICAL COUNCIL. Dr. Quain has been appointed one of the treasurers of the Medical Council, in place of Dr. Burrows. Dr. Sharpey is his colleague.

THE LEEDS HOSPITAL FOR WOMEN AND CHILDREN. An alteration has been made in the laws of this hospital, whereby the addition of an assistant-surgeon is to be made to the staff.

THE OBSTETRICAL SOCIETY has now existed for five years; and is in a flourishing condition. Its income has yearly increased, having been £336 in 1860, and £546 in 1863. Its progress has, we should imagine, exceeded even the expectation of its originators.

THE FRASER AND ANDREWS DEFENCE FUND. We are glad to be able to announce that about £350 of subscriptions have been received or promised towards the payment of the legal expenses of the above named gentlemen.

DEATH OF THE VICE-PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF IRELAND. It is with great regret we announce the death of this inestimable and esteemed member of our profession. Dr. Smyly was apparently in the enjoyment of excellent health until a few days ago, when he was seized with a severe attack of pneumonia which rapidly proceeded to a fatal issue, and on the 19th inst., deprived us of an admirable surgeon, an excellent and upright man; and the College of Surgeons of one of its most distinguished officers. (*Dub. Med. Press.*)

THE DIRECTOR-GENERAL OF THE NAVY. We lately announced that the health of director-general of the medical department of the navy, Sir John Liddell, C.B., had been in a very indifferent state, but that he was convalescent. It now seems that Sir John was desirous of obtaining three months leave of absence for the purpose of proceeding abroad to recruit, and made application to that effect to the Admiralty, but the indulgence was refused to him, and it was suggested that, as he had reached an advanced period of life, he should resign an appointment which requires very close attention to master its details. The suggestion will naturally be adopted. No successor to Sir John Liddell has been as yet, we believe, definitively fixed upon; but the names of Dr. Hilditch, Dr. Deas, and Dr. Bryson, have been mentioned. (*Army and Navy Gazette.*)

Death of Dr. Henry Hobart. It is with the most unaffected sorrow we announce the death of Dr. Henry Hobart, who has fallen a victim to disease contracted in the discharge of his duty as dispensary physician in this city. He was attacked by malignant typhus fever, against which he struggled for more than a fortnight. Dr. Hobart is the second medical man who has been sacrificed to the duties of dispensary physician in his district of the city within the last two years—Dr. Bernard, while acting as his *locum tenens* during his temporary absence, having contracted a fatal typhus fever. (*Cork Examiner.*)

Clerical, Medical, and General Assurance Society. The following arrangements, rendered necessary by the lamented death of the late Chairman, Joseph Henry Green, Esq., D.C.L., F.R.S., have been made in the direction of this Society. The Right Hon. J. R. Mowbray, M.P., has been appointed Chairman; William Bowman, Esq., F.R.S. and Sir Charles Locock, Bart., Deputy Chairmen; and James Paget, Esq., F.R.S., has been elected to fill the vacant seat at the Board. The other Medical Directors who, with the three last named, make up the number required by the Deed of Constitution, are H. W. Acland, M.D., F.R.S,, Patrick Black, M.D., James Dunlop, M.D., Arthur Farre, M.D., F.R.S., and Alexander J. Sutherland, M.D., F.R.S.

Royal Institution. The following lectures are appointed for delivery:—January 26th and 28th, Professor Tyndall, F.R.S., "On Experimental Optics;" January 29th, W. R. Grove, Esq., "On Boiling Water;" January 30th, John Lubbock, Esq., F.R.S., "On the Antiquity of Man." The following are the probable arrangements for the Friday evening meetings before Easter 1864:—Jan. 22nd, W. R. Grove, Esq., "On Boiling Water; Jan. 29th, Professor Frankland, "On the Glacial Epoch;" Feb. 5th, J. A. Froude, Esq., "On the Science of History;" Feb. 12th, Professor Wankyln, "On the Synthesis of Organic Bodies;" Feb. 19th, W. S. Savory, Esq., "On Dreaming and Somnambulism, in their relation to the Functions of certain Nerve-centres;" Feb. 26th, J. Prestwich, Esq., "On the Quaternary Flint Implements of Abbeville, Amiens, Hoxne, etc., their Geological Position and History;" March 4th. Professor Stokes, "On the Discrimination of Organic Bodies by their Optical Properties;" March 11th, The Rev. W. H. Brookfield, M.A., "On the Use of Books." (*Chemical News.*)

Treatment of Army-Surgeons in America. The *American Medical Times* gives the following account of the treatment of army doctors in a model republic. "We regret to add that there has not only been no advance of the army medical department in the favour of government, but that its position is to-day more anomolous and humiliating than ever. The Surgeon-General is an exile from his official seat without known cause; and all the affairs of the department are, without preparation or consultation, intrusted to other hands. Medical directors still occupy most subordinate positions. Their rank is most inferior, and they have only advisory powers. The regimental surgeon, still more isolated, faithfully follows his command to the field of conflict, participates in all its dangers and hardships, but without the slightest encouragement of being rewarded by promotion. He sees inferior officers of the line rise from position to position for meritorious services, but no such distinction ever awaits him, though he spend a lifetime in the army, and serve on a thousand battle-fields."

Royal College of Surgeons. The annual course of lectures will be commenced in the theatre of this institution on Tuesday, the 2nd proximo, by Professor Huxley, who will deliver twenty-four lectures on the Structure and Classification of the Mammalia. At the conclusion of this course, Professor Fergusson will deliver his lectures on Human Anatomy and Surgery. The lectures, as usual, will be delivered on Tuesdays, Thursdays, and Saturdays, at four o'clock. No Hunterian Oration will be delivered in February; this is now a biennial affair. It is stated that, at the examinations on Anatomy and Physiology during the past week, no fewer than ten out of thirty-nine candidates were rejected the first day, and seven out of thirty-four the second day. The election of an examiner in the vacancy occasioned by the decease of Mr. Green, was to take place yesterday (Friday), when it was generally expected that the choice would fall upon Mr. Hilton, in which case a vacancy will occur in the Examining Board of the University of London.

The Irish Candidate and the English Examiner. At a recent examination for army commissions, "the candidate was an Irishman, and the examiner, I believe, Professor Paget. *Examiner*—Well, now. Infantine syphilis in a very delicate child; how would you treat that? *Candidate*—Treat that! Shure, I'd give it mercury. *Examiner*—But how would you give mercury to an infant two months old? *Candidate*—Oh, I'd salivate a she-goat and give it the milk. *Examiner*—Well, I never heard of that before. *Candidate*—Didn't you? Why, we do it every day in Dublin. The candidate obtained his commission, for he was evidently an original thinking man." (*Dublin Medical Press.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Mr. Walter J. Coulson, "On Lithotrity."

Tuesday. Royal Medical and Chirurgical Society, 8 P.M. Dr. Habershon, "On Effects of Implication of the Pneumogastric Nerve in Aneurismal Tumours (conclusion); Dr. John Harley, "On the Endemic Hæmaturia of the Cape of Good Hope"; Mr. Callender, "Account of Amputations at St Bartholomew's Hospital, 1853-63."

Wednesday. Royal College of Physicians, 5 P.M. Dr. Garrod, "The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease."

Friday. Royal College of Physicians, 5 P.M. Dr. Garrod, "The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease."

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

In the British Medical Journal of November 21st, 1863, we stated that the attorney for the plaintiff in the action brought against Dr. Philbrick, at Leamington, had been struck off the rolls. We inserted the remark on the strength of information the truth of which we had no reason to doubt. We now, however, find that our information was wholly untrue, and therefore at once hasten to contradict the statement, and to say that we deeply regret having given insertion to it, and having thus been unwittingly led into injuring the feelings of Mr. Overell of Leamington, the gentleman referred to; whose character, we are glad to learn, stands too well in his own town to have sustained any injury from the mistake.—Editor of the British Medical Journal.

Erratum.—In Mr. F. Jordan's letter in last week's Journal, page 82, column 1, line 12, for "*glands* of the eyeball", read "*fluids* of the eyeball".

Poor-Law Guardians and Bone-Setters.—A correspondent calls our attention to the following order for payment, which appears in a country paper under the head "The Board of Guardians of Peterborough". We recommend the item to the attention of the Poor-Law Board. "A claim of £1:4 from Mr. Mason, Wisbech, for bone-setting, was presented, and ordered to be paid."

Erratum.—Dr. H. G. Wright, of Somerset Street, Portman Square, is the Treasurer of the Fund to be applied to the liquidation of the debts of the Medical Registration Society, and not Mr. Lavies.

Iridectomy.—We beg to state, in reference to numerous letters which we have received on this subject, that, considering the purely scientific character of the discussion, we can in future insert no letters to which the names of the writers are not appended.

T. S.—*Pogonotrophy* means, we suppose, the cultivation of the beard. Dr. Belcher lately delivered a lecture at the Association of the College of Physicians in Dublin, on "The Hygienic Aspect of Pogonotrophy." We, of course, applaud the use of such terms, because they attract attention, and strike awe into the mind of the public. Who would listen to a lecture "On the Uses of the Beard?"

F. S.—Medical journalists are not omniscient, and some of them less stuffed with correct information than others. The journal in question made a complete error, and did the College an injustice. The right under which Dr. Gibbon claimed his fee was not, as the journal said, a bye-law of the College of Physicians; the right was obtained under the Medical Act, which gave to all registered medical practitioners the legal power of obtaining their fees. But the Medical Act also gave Colleges of Physicians the power of passing a bye-law whereby they could restrain their fellows and members from availing themselves of the privilege. Of this permission, the London College availed itself, so far as regards its fellows. It is therefore a simple error to say, that "this right arises from a bye-law of the College, and that it is likely to lower the status of the physician in the eyes of the public." We hope the journal referred to will put itself right with the College and the profession by correcting its error.

Anenkephalous Monster.—Sir: Some little time ago, I was engaged by a woman in this locality to attend her in her approaching confinement. She told me that she had suffered very severely in this her fourth pregnancy. She was very large; much larger, she said, than on any previous occasion. She had two children living, both tolerably healthy; at one confinement, the child died a few hours after birth, and she afterwards suffered from phlegmasia dolens.

On the evening of December 29th, 1863, I was called to her; I found that she had been in labour some time; that the os was fully dilated, and the membranes unbroken; they, however, were ruptured at the commencement of my examination, and the floor was immediately flooded by an enormous quantity of liquor amnii. On resuming my examination, I found the child's head very low down, but of a most extraordinary shape—only by the ears and nose could I identify it. A very few pains were sufficient to expel the child, and then I found it to be a complete female specimen of the anenkephalous monster. The eyes were exceedingly prominent; the skull running back from the superciliary ridge; the back part of the head and the base of the skull covered by a dark red membrane, continuous with the integument; the body in every other respect was well developed.

Should you think this case worthy of publication, I shall be obliged to you for the space it will take up in your Journal.

I am, etc., W. Robert Roberts, M.R.C.S.Eng.

Barnetby, Lincolnshire, January 2nd, 1864.

Ice in Medicine.—Sir: As I have for some years employed ice as a prophylactic in medicine and surgery, and have noticed the practice of others, and the writings thereon by some celebrated men, it appears to me that the absence of abundant supply of the article in this kingdom in our fresh-water reservoirs is too evident, and that the assistance of mercantile enterprise would justly be invited to supply the present inadequate supply. The principle of medicine is evidently vastly altered within my experience of thirty-five years; consequently, substitutes have been offered for bleeding, opium, and mercury, in the uses of belladonna, tin splints, and ice, which are now fairly proposed for public examination.

I am, etc., William Parker, M.R.C.S., L.A.C.

Bath, January 15th, 1864.

P.S. The tin splints are now in the Museum of Patents amongst originals; and notice of them is made in the first catalogue of this national establishment; consequently, they will live beyond the age of any child living; and they are daily in use by myself on any and every part of the body.

The Druggist's Complaint.—Sir: Seeing an extract from a "druggist's complaint" in your Journal of January 2nd, may I ask if the medical profession is wholly free from blame in this matter? None can doubt but that the druggist's duty is as dispenser, seller of drugs and other etc.; then why do medical men do so much of this shop-work, or any, seeing respectable and educated chemists are now to be found all over England? Practitioners in Scotland, I believe, prescribe for their patients, and leave to the druggist the compounding of the drugs. Can this not be done south of the Tweed? Even men holding underpaid public appointments, union or other, may make a very satisfactory arrangement with the chemist. Of course, a better class practice would well cover its expenses, and the best would pay its own druggist's bill.

I cannot help feeling that it is in vain to expect the chemist to act honestly towards us, unless we act honestly towards him. "Do as we would be done by," here again should be our rule.

I am, etc., Percy Leslie, M.D.

8, Windsor Terrace, Eastbourne, Sussex, Jan. 15, 1864.

COMMUNICATIONS have been received from:—Mr. Oliver Pemberton; Mr. Dayman; Dr. A. T. H. Waters; Mr. William Copney; Mr. F. Jordan; Dr. Malcolm; Mr. Sproule; Mr. Henry Lee; Dr. C. Holman; The Registrar of the Medical Society of London; Dr. Routh; Mr. Bowles; B. W.; Mr. William Bowman; G. D. R. M'C.; Dr. Bader; Mr. Dixon; Mr. Cutcliffe; Dr. W. H. Day; Dr. Addison; Mr. Pyle; Mr. Jabez Hogg; Dr. Latham; Dr. Maudsley; The Hon. Secretary of the Royal Medical and Chirurgical Society; Mr. William Eddowes, jun.; Mr. T. F. Edwards; Mr. W. Parker; Dr. P. Leslie; Mr. Nunneley; Dr. Gillibrand; Dr. Kidd; Mr. T. M. Stone; Dr. S. Browne; Mr. Solomon; and Dr. E. C. Seaton.

ADVERTISEMENTS.

Just published, Third Edition, price 6d., demy 8vo,

Letter on Corpulence,

Addressed to the Public. By WILLIAM BANTING.

London: Harrison, 59, Pall Mall, Bookseller to Her Majesty and H.R.H. the Prince of Wales.

University of St. Andrew's.—The Degree of DOCTOR of MEDICINE will, under the new Regulations be conferred annually on TEN Registered Medical Practitioners, above the age of forty years, whose professional position and experience are such as, in the estimation of the University, to entitle them to that Degree, and who shall, on examination, satisfy the Medical Examiners of the sufficiency of their professional knowledge. Details, regarding the nature and extent of the Examinations, which will be held during the last week of April, may be obtained on application to Dr. Bell, Professor of Medicine.

By order of the Senatus Academicus,

ALEXANDER MUIR, Secretary.

St. Andrew's, January 14th, 1864.

University of St. Andrew's.—The EXAMINATIONS for the Degree of BACHELOR of MEDICINE and MASTER in SURGERY will be held on the last week of April.

Students who have completed their second year may offer themselves for Examinations in Chemistry, Botany, Anatomy, and Materia Medica.

No one will be admitted to either of the above Degrees who has not spent two of his four Winter Sessions at one or more of the following Universities, viz., St. Andrew's, Glasgow, Aberdeen, Edinburgh, Oxford, Cambridge, and Dublin, or at one or more of the Queen's Colleges, Ireland.

By order of the Senatus Academicus,

ALEXANDER MUIR, Secretary.

St. Andrew's, January 14th, 1864.

Shortly will appear.

British Pharmacopœia.—Published under the direction of the General Council of Medical Education and Registration of the United Kingdom, pursuant to the Medical Act (1858).

Price (as directed by the Lords Commissioners of Her Majesty's Treasury), Demy 8vo edition, cloth boards, 10s. 6d. Double-Crown 32mo edition, cloth boards, 6s.

The work will be sold to Booksellers only, on application personally or by letter to the Registrar of the Medical Council, 32, Soho Square, London, W.

Price's Glycerine, its Uses and Purity. See "De la Glycerine, de ses Applications à la Chirurgie et à la Médecine," by the eminent French Surgeon, M. Demarquay. pp. 240. Paris: P. Asselin. 1863. Or, "On Glycerine, and its Uses in Medicine, Surgery, and Pharmacy." By Dr. W. Abbotts Smith. London: H. K. Lewis.

Surgical Instruments.—Arnold & SONS continue to supply Instruments of the best workmanship at moderate prices, manufactured on the premises under their own superintendence.

ARNOLD & SONS, 35 and 36, West Smithfield, E.C.
Established 1819.

MARTIN TESTIMONIAL.

At a Meeting of several Friends of the late PETER MARTIN, ESQ., held at the "White Hart" Hotel, Reigate, on the 30th November, for the purpose of considering the best and most effectual mode of perpetuating his memory. It was resolved, after a full discussion of the various projects submitted to the Meeting, that, as a Memorial to the late Peter Martin, there shall be an Exhibition founded at the Reigate Grammar School, to be called "The Martin Exhibition;" and, also, that a Bust of the deceased be placed in the Reigate Public Hall, and the undermentioned were appointed a Committee to carry the same into effect:—

WILLIAM PHILLIPPS, ESQ., Chairman and Honorary Treasurer.

CHARLES FREEMAN, ESQ. | G. G. RICHARDSON, ESQ. | GEORGE BAKER, ESQ.
THOMAS NORTH, ESQ. | G. F. YOUNG, ESQ. | MR. THOS. HART, Reigate, Hon. Sec.

The Subscriptions already received amount to £1086 : 3 : 0, as shown below.

SUBSCRIPTIONS.

J. R. Jaffray, Esq., and Mr. and Mrs. Arthur Jaffray, Betchworth House	£60	0	0
Earl Somers	55	0	0
William Phillipps, Esq.	55	0	0
Charles Freeman, Esq.	55	0	0
Mrs. Price	55	0	0
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W. F. Saunders, Esq.	10	10	0
Thomas Somers Cocks, Esq.	10	10	0
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The Rev. J. C. Wynter	10	0	0
Henry Clutton, Esq.	10	0	0
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G. W. Bremner, Esq.	6	6	0
Thomas North, Esq.	5	5	0
Frederick King, Esq.	5	5	0
The Rev. J. N. Harrison	5	5	0
W. A. Gilman, Esq.	5	5	0
R. Hesketh, Esq.	5	5	0
Dr. Williams	5	5	0
Mr. and Mrs. Sterry, Nutfield	5	5	0
G. C. Morrison, Esq.	£5	5	0
The Rev. C. T. Smith	5	5	0
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Mrs. A. Saunders	3	3	0
Mrs. Wheeler	2	10	0
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Rev. A. Cazenove	2	2	0
Rev. George Adeney	2	2	0
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Mr. Edward Larmer	2	2	0
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S. Solly, Esq.	1	1	0
Frederick Pawle, Esq.	1	1	0
Thomas Hughes, Esq.	1	0	0
Mr. C. Constable	1	0	0

The Committee beg to solicit the support and liberal contribution of Mr. Martin's professional friends to the Funds necessary for the promotion of the ends in view, so that they may be carried out in a manner worthy of the memory of him to whom Reigate and its vicinity are so much indebted, and who was so deserving of the esteem and affection in which he was held by all who had the privilege of his friendship. Subscriptions will be thankfully received by any Member of the Committee, or may be paid into the Reigate Branch of the London and County Bank, to the credit of the "Martin Memorial Fund." It is the wish of the Committee that the lists should be closed on the 31st instant.

Reigate, 16th January, 1864.

THOMAS HART, *Hon. Secretary.*

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture VII.
ON CURVATURES OF THE SPINE.
(*Continued.*)

Pathological Anatomy.

The *intervertebral cartilages* are compressed unequally, and consequently they become wedge-shaped, the thin edge of the wedge corresponding to the concavity of the curve.

It was shown in the first lecture that the physiological spinal curves do not exist at birth, but that they are due to the erect position; and it was moreover shown that thinning of the intervertebral cartilages is due to unequal pressure in the endeavour to maintain equilibrium. This compression is so great, that a man of middle stature who has been in the upright position during the whole day loses nearly one inch in height. Such is the case with the normal—antero-posterior—curves. And, when lateral curvature takes place, a somewhat similar course is observed. A slight lateral curve is first formed: one shoulder sinks below the level of the other. The curve is not yet persistent, however, but it is again effaced after the horizontal position has been for some hours maintained; just as in the antero-posterior curves the height is restored after the recumbent position has been observed for some hours. At length, however, the lateral curve becomes permanent, the intervertebral cartilages remain compressed, and rotation of the vertebræ begins to take place.

Rotation of the vertebræ on their vertical axes commences so soon as curvature becomes permanent, and it gives rise to a very curious formation of curves, the pathological characters of which have been for the most part overlooked. The posterior curves—those formed by the spinous processes, and the anterior curves, or those which are formed by the bodies of the vertebræ, are wholly different. Thus, in the specimen before us, from which Fig. 20 is taken, the curve may be said to commence at the seventh dorsal vertebra, and to terminate with the first lumbar, and it appears to be, judging from the spinous processes, a single curve. Fig. 21 represents, however, the view of the bodies of the vertebræ from the same specimen. Here will be seen three well marked curves; namely,

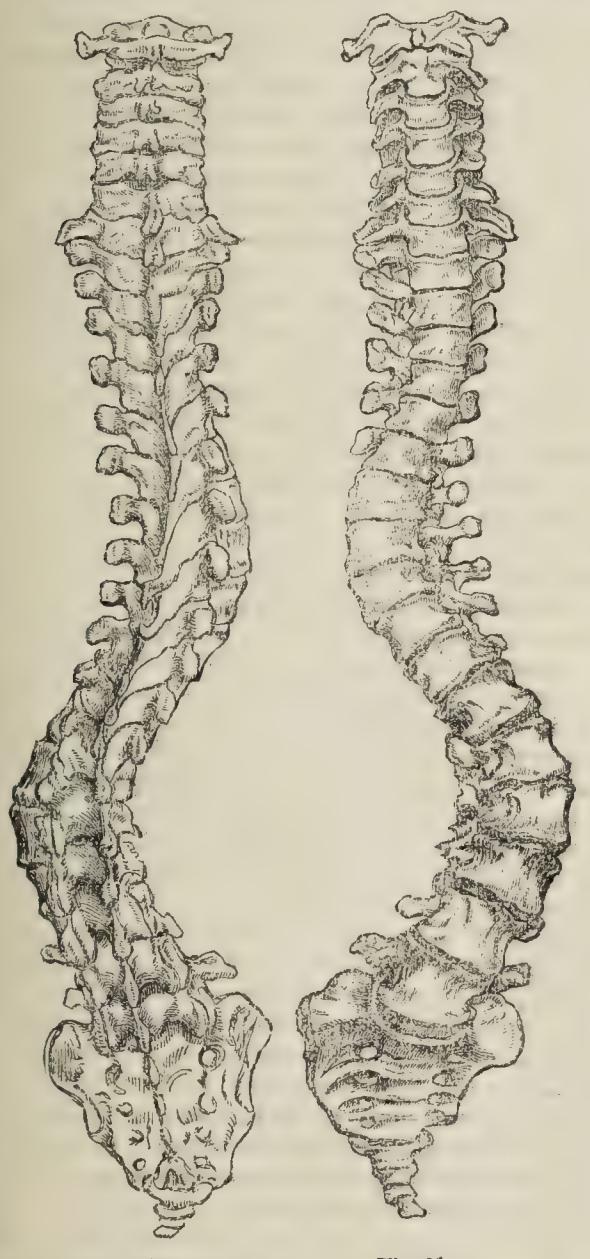


Fig. 20.

Fig. 21.



Fig. 22.

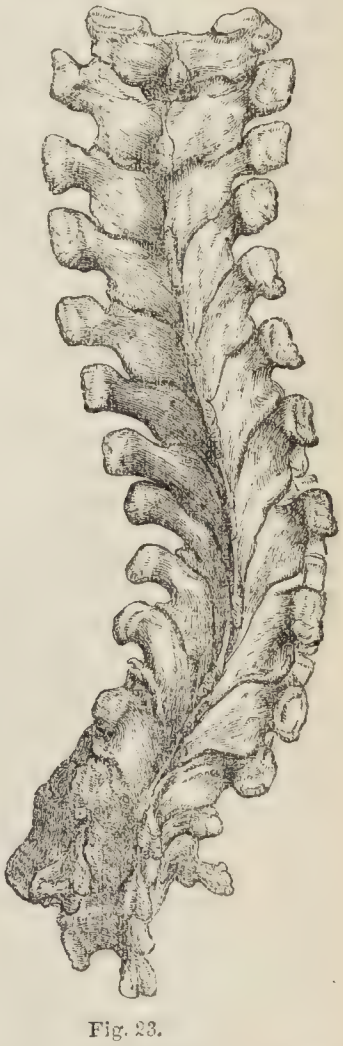


Fig. 23.

lumbar, lower dorsal, and upper dorsal. And in a second specimen, for which, equally with the former, I am indebted to my friend Mr. Wheeler of Bexley, the difference between the anterior and the posterior curves is yet more remarkable. In contrast to these, I have to show an articulated spine (Figs. 22 and 23), where the anterior and the posterior surfaces agree perfectly; where the vertebræ are piled one above another with great care after the fancy of the constructor, and without the slightest regard for truth. And such is the manner in which the articulated spines are invariably put together. Thus, there is not, in the museum of the College of Surgeons even, an articulated spine where the characters of the distortion are preserved. It is only fair to say that, the vertebræ having been taken asunder, and the intervertebral cartilages having been removed, it is no ordinary puzzle to put the several parts together again as they had grown.

In the specimens which are now presented, it will be seen how the bodies of the vertebræ are rotated towards the convexity of the curve, and how in the concavity the bodies through pressure become wedge-shaped; that vertebra which is the most central is also the most compressed—it may lose more than half of its thickness. Also, through pressure, the cancellous structure of the vertebræ becomes somewhat consolidated, and the outer surface of the bone is thickened and rendered more dense. It will further be seen that the spinous processes are not curved in the same manner as the bodies of the vertebræ; and that even in the lumbar region they describe a straight line, while the bodies themselves are immensely curved.

This rotation of the vertebræ is a fact of the greatest importance; it is not generally acknowledged; and the manner in which curved spines are articulated in our museums tends to perpetuate an error. Rotation has been spoken of by many, as Dods, Guérin, Brodie, and others; but it is not understood that spinal curvature can exist without the apices of the spinous processes also describing a curve. Thus, many become hopelessly deformed through inattention to commencing distortion, and to the modes of formation of spinal curves.

This unequal pressure which is caused by rotation, produces at length absorption of the intervertebral cartilages, as well as partial absorption of the bodies of the vertebræ. Anchylosis then takes place, and an immovable and solid condition of that portion of the spine results.

It is clear, from the previous statements, that, in defining a spinal curve, we should not be too rigidly guided by the spinous processes; but that the condition of the entire trunk should be considered. The line of the spinous processes is often such, that, if they alone be considered, the diagnosis as well as the prognosis of the affection must be wrong.

The *transverse processes* of the lumbar vertebræ on the side of the convexity of the curve are rendered prominent, causing the erector spinæ to project; while, on the opposite side, the processes cannot be felt. And through rotation of the vertebræ, the articulating processes become partially absorbed by undue pressure, and their articular facets are lengthened.

But the most important result to the skeleton of torsion of the spine is the changed form and direction of the ribs.

The *ribs* necessarily follow in the altered direction of the vertebræ; they undergo, therefore, a movement of rotation backwards on the side of the convexity of the curve; their angles are rendered sharper, and the intercostal spaces become somewhat wider; while, on the side of the concavity, the ribs are carried forward; they are depressed and flattened; and some of the intercostal spaces may in advanced, distortion be effaced, and the ribs may overlap one another. The capacity of the thorax is thus materially diminished.

The scapulæ follow the course of the ribs; being raised on the side of the convexity, and depressed on the side of the concavity.

The *pelvis* is always rendered oblique by a lumbar curve. This is the chief distortion of the pelvis consequent on lateral curvature of the spine. Other distortions of the pelvis are induced by rachitis; but obliquity is that which is especially observed together with scoliosis.

When, however, distortion of the spine is excessive, and it has been of long duration, slight flattening of the pelvis ensues, probably in consequence of the unequal transmission of the superincumbent weight. Thus, the ischium and os pubis become somewhat flattened on that side on which the weight of the body is most thrown. This differs according to circumstances. Where both extremities are of the same length, in a straight line from the trochanter to the heel, the flattening will be found on that side on which the ilium is the highest—on the side of the concavity of the lumbar curve; but when difference in length of the extremities has given rise to curvature, such difference as is occasioned, for instance, by a rickety femur or tibia, by genu valgum or any other such cause, flattening will probably take place on the side of the shortest limb—the convexity of the lumbar curve. This flattening which occurs, except in a rickety pelvis, is slight; and, as far as the performance of functions is concerned, it is unimportant.

In addition to cervical, dorsal, and lumbar curves, the sacrum may be curved in a sense the reverse of the lumbar curve; and the ilium on the side of the sacral concavity is then carried forwards. The anterior superior spinous process of the ilium is thus inclined inwards and forwards, and the ischium and pubic bone of the same side are inclined inwards and backwards. These changes induce a slight narrowing of the pelvis. Also, through these changes, together with the torsion of the spine which has occurred, the promontory of the sacrum encroaches slightly on the pelvic cavity.

Distortion of the spine is never stationary, but it is always advancing slowly; until, at length, anchylosis takes place between the bodies of the vertebræ, and also between the articulating processes. Anchylosis may ensue after absorption of the cartilages, or it may occur through deposition of bone along the bodies of the vertebræ, in riband-like masses or in the form of nodosities—stud-like masses, connecting two or more vertebræ, without the previous removal of the intervertebral cartilages.

A Female Phenomenon. The *North British Review* contains a memoir by Dr. J. Brown, author of *Horæ Subsecivæ;* it gives an account of a female phenomenon of six years old, whose genius was much admired by Sir W. Scott.

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

A. T. H. WATERS, M.D., M.R.C.P.,

PHYSICIAN TO THE LIVERPOOL NORTHERN HOSPITAL, ETC.

Lecture II. (*Continued.*)

Pathology in its Relations to the Practice of Medicine. On certain Pathological States as the Result of Impaired Nutrition consequent on the Imperfect Performance of Function. Diseases of Degeneration attacking the Heart, Lungs, etc. Fatty Disease of the Heart. Sudden Death in Relation to Diseases of the Heart. Emphysema of the Lungs, Phthisis, etc.

There are two conditions in which fatty degeneration shows itself, which have a special importance to us, and perhaps a close relation to each other; I mean fatty degeneration of the heart, and atheromatous deposit in the blood-vessels; and I think we have sufficient evidence that both these diseases are the result of impaired nutrition.

Let us take for examination the cardiac disease. We meet with it especially in old age; but we meet with it also in adult life, and that by no means infrequently.

There are two forms of fatty heart, between which we should draw a well-marked line of distinction: 1. Fatty deposit on the heart; and 2. Fatty degeneration of its muscular fibres. It is the second form which comes more especially under the pathological head to which I am now referring.

The first form has, however, undoubtedly, a tendency to run into the second. It—*i.e.*, the first form—is associated with that condition of the body which we so frequently meet with towards the middle or close of adult life—when, from inactive habits, the function of respiration is not carried on energetically, and the carbonaceous elements of the food become deposited in the shape of fat, especially about the abdomen and on the surface of the heart.

This condition, the result of inactivity, predisposes to further inactivity, and thus tends to increase existing obesity and favour muscular degeneration; and we find a very important illustration of this, in the fatty degeneration which has been shown to take place in animals fattened for the purposes of exhibition. These animals, indeed, afford a very remarkable instance of the effects produced by simple rest, combined with abundant diet.

Now, just as we see that fatty degeneration of a voluntary muscle may take place when it no longer performs its function, so may we fairly anticipate that a like process will follow with regard to the heart, under circumstances of a similar nature; and it must be borne in mind that, although from an early period of embryonic existence to the moment of dissolution, the heart's function is never arrested, yet it may be but imperfectly performed; and that comparative inactivity, such as must result from a sedentary life, bears the same relation to an organ like the heart, which ought to be, not only constantly, but, at all events, from time to time, vigorously, acting, as does absolute rest, for a long period, to a muscle, whose function it is, to be only occasionally brought into play. Thus, a heart which is underworked may be fairly supposed to be undernourished, and a degeneration of its tissue may ensue.

But in questions of this kind we must not be exclusive; and, no doubt, in these cases of degeneration, there are various concurring causes which assist in producing the result. Amongst these must be mentioned numerous circumstances which impair the nutrition of the body, as exposure, want of proper food, intemperance in alcoholic fluids, exhaustion consequent on severe mental labour, etc.; but such conditions do not exist in a large number of persons in whom we meet with these diseases of degeneration, and I do not wish now to refer to them more particularly. Again, in all classes of individuals, we must not forget the influence which moral causes may exert. The anxieties of mind consequent on the occupations in which men engage, the engrossing nature of these occupations, the sorrows and troubles of life, are amongst the causes which tend to diminish the nervous energy which should be directed to the nutrition of the body, and predispose to the various forms of degeneration.

But, setting aside these causes of impaired nutrition, I think the experience of those whom I am addressing will confirm me in the remarks I have made, on that point to which I wish more especially to refer; viz., *the effect produced on the heart by the imperfect performance of its function.* I can call to mind several cases which would tend to illustrate these views; but I prefer to direct your attention to some statistical tables which were drawn up by Dr. Quain.

Of a series of twenty-four cases of fatty heart, ascertained by *post mortem* examination, collected by Dr. Quain, in which he was able to learn the habits of the individuals during life, he found that *two only* were of active habits; the remaining twenty-two were of sedentary habits.

Facts of this kind, coupled with the observations I have referred to, seem to indicate one great cause as an important element in the production of this disease, and point in a remarkable manner to the means which should be resorted to, to prevent its origin and retard its progress; as we know that, by maintaining the physiological action of a muscle, we can prevent its being converted into fatty matter, so we may hope that, by adopting a like process with regard to the heart, a similar result will follow.

It is in the earlier stages of this disease that the use of remedial measures will be most successful; and, therefore, is it necessary to study, more carefully than has yet been done, those early manifestations of it, which assuredly exist, although they have been hitherto overlooked.

And here I would remark as to the value of a phenomenon, to which attention has been much directed as a symptom of fatty degeneration of the heart; I mean the "arcus senilis," a fatty degeneration of the cornea.

The study of a phenomenon of this kind is quite in accordance with the direction which I think our inquiries should take, and to which I have alluded in the beginning of this lecture—the endeavour to re-

cognise an early external demonstration of a deep-seated disease. With reference to the value of this particular condition as a symptom of fatty degeneration of the heart, it is by no means of certain import. Its existence does not necessarily show that the heart is fattily degenerated—for it may be consequent on some local affection of the eye; nor, on the other hand, does its absence prove that no degeneration of the heart exists. Setting aside, however, these exceptional cases, it is, perhaps, the most valuable symptom we are at present acquainted with, of a tendency to general fatty degeneration; and it is, undoubtedly, a phenomenon which we shall do well to study carefully. And I would observe that the absence of this arcus must not be hastily assumed; for many persons who, at first sight, may appear to have no signs of it, are yet found, when the cornea is fairly exposed, to have the upper portion more or less marked.

But there is another pathological point to which I would briefly refer. It has been observed that, in cases of arcus senilis, and fatty degeneration of the heart, ossification of the cartilages of the larynx, of the rings of the trachea, and of the cartilages of the ribs, is frequently found. And it appears by no means improbable that this ossific degeneration bears a close relation to the fatty disease. I have frequently noticed that the cartilages of the ribs have become hardened, and in part ossified, at a somewhat early period of life; and, contrary to the expressed opinion of some pathologists, I have pointed out elsewhere, that the rings of the trachea often have ossific deposit in them long before the approach of old age. I cannot say, from my own observation, that this degeneration of the costal and tracheal cartilages, is associated with general fatty disease; but I believe the degeneration is of an allied nature, and that the two affections bear a close relationship to each other.*

It seems to be the opinion of some, that the particular form of cardiac disease, to which I have been referring, is more prevalent than formerly, and that sudden death more frequently occurs. I am unable to decide whether this is the case; but certainly, I think I may safely say, that our diagnosis of the disease is much more accurate than it was; and, further, that in consequence of the use of the microscope in the examination of the tissue of the heart, many cases are now ascertained to be cases of fatty degeneration in its early stages, which, if we had to depend on the naked eye alone, we might pronounce free from disease.

And here I would remark, that we should receive with extreme caution all statements, as to the non-existence of fatty disease of the heart, not verified by microscopical examination; and, especially, should we insist on such investigation being made, when we have symptoms of the affection, in the cornea or elsewhere.

We occasionally hear of persons dying suddenly of this disease, in an advanced stage, as proved by *post mortem* examination, without, as it is said, any previous symptoms having occurred. One remarkable instance of this kind in a late eminent judge is fresh in our memory. I must be allowed to express a doubt whether such cases ever occur. I mean whether the disease ever advances to such a condition, as to cause sudden death, without symptoms having existed which would have been intelligible to the physician. It is no doubt true that patients will go on, in various chronic ailments, disregarding certain symptoms, and imagining themselves in a state of perfect health. Are we not often called to cases, where perhaps some sudden acute symptom has come on, and we find evidence of long-standing organic disease, which has never been suspected by the patient; but which has been gradually undermining the health? And do we not often find, on careful cross-examination, that symptoms, which would have been unequivocal to us, have occurred? And so it is, I believe, with this cardiac disease.

And in reference to the general bearings of the subject we are considering, and the way in which pathological effects are produced by the imperfect performance of function, it may not be without interest to consider what condition of the heart is most liable to terminate in sudden death. The question is one which must be decided by a direct appeal to statistics; and I think we have sufficient evidence to enable us to answer it. The practical importance of the question will be obvious to all. How often does it happen, when patients are suffering from some cardiac disease, that they wish to know from us what are their chances as regards the termination of their lives; whether the probabilities are that their life will suddenly cease, or that death will gradually come on, from the secondary results of the original malady? The question resolves itself into this: *Is sudden death more likely to ensue from a diseased condition of the muscular substance of the heart, or of its valves?*

The results of my own observations, with regard to this question, are, that fatty disease of the heart is the affection which, more frequently than any other, terminates in sudden death. And, in confirmation of this opinion, I would again refer to the statistics of Dr. Quain. Of eighty-three cases of fatty heart collected by him, sixty-eight died suddenly—an enormous percentage—a percentage which far exceeds that of valvular disease. For in the latter, we have, in almost every case, sooner or later, those symptoms of impeded circulation through the lungs, and general dropsy, with which we are all so familiar. In these cases, the transition from life to death is usually protracted. The secondary consequences of the disease incapacitate the patient for violent exertion, and ultimately cause his death. When, however, there is disease of the muscular substance of the heart, we have a gradual obliteration of its contractile elements, a gradual diminution of its contractile power, until at length some sudden movement paralyses its action or even gives rise to rupture of its walls. And this very frequently takes place without the occurrence of any of those symptoms which mark the progress of valvular disease. Although we have indications of a feeble heart from the dyspnœa and partial syncope, which occasionally come

* Since the foregoing was written, a case has come under my notice which shows the relation between fatty degeneration of the heart, atheroma of the arteries, and osseous deposit in the cartilages of the ribs. A man was admitted under my care into the Liverpool Northern Hospital, with severe hæmoptysis, and died in the course of an hour. At the autopsy, a large quantity of blood was found in the left pleura and in the lungs. There was an aneurism of the thoracic aorta, which had burst into the left lung and pleura. The aorta was very atheromatous. The muscular fibres of the heart, although to the naked eye they appeared tolerably healthy, had undergone fatty degeneration to a considerable extent; and there was osseous deposit along the centre of most of the costal cartilages.

on, there is yet no evidence of impeded circulation such as we meet with where there are contracted orifices or incompetent valves. And it is a circumstance of no little interest that, even when fatty degeneration of the heart exists to a considerable extent, we occasionally find the pulse by no means small and sometimes even moderately full. I have known instances where this condition of the pulse has misled as to the nature of the disease. I have observed it myself, especially in patients who have been very fat, and who may perhaps be designated as full-blooded—*i. e.*, whose blood-vessels were well filled. In these persons, even a feeble contraction of the heart gives rise to the sensation of a moderately full pulse.

But there is a further point of great practical importance in reference to this subject; viz., the probabilities of sudden death in valvular disease of the heart, and the particular valvular affection which is most likely to terminate in this manner.

In the first place, I think it may be safely stated that, speaking generally of valvular disease, the proportion of cases which terminate suddenly is very small. Of a series of seventy-nine deaths collected by Dr. Barclay from the records of St. George's Hospital, where there was valvular disease of the heart, I find that only *two* are mentioned as having been sudden. In all the others there was dropsy, or some other diseased condition which produced slow death. This small percentage of sudden deaths, however, must not, I think, be taken as the usual one. In my own more limited experience, I could show a much larger percentage, but still far less than that which we find in fatty disease.

As to the particular kind of valvular disease which is most likely to terminate suddenly, our knowledge of the physiology of the heart enables us to arrive at certain theoretical conclusions which, I think, are borne out by practical experience.

Setting aside the diseases of the right side of the heart, with which we rarely meet, the question resolves itself into this: *Is sudden death more likely to occur in disease of the aortic valves or disease of the mitral valves?*

In disease of the aortic valves, these structures become sooner or later incompetent for their function, and they then allow of regurgitation of blood from the aorta into the left ventricle. This, in course of time, is followed by hypertrophy with dilatation of the ventricle, by which the cavity is enabled to hold a larger quantity of blood than in health, and at the same time to contract with greater power, so as to expel its contents. The consequence on the arterial tubes is, that they get well distended by each ventricular systole—in fact, they receive more blood than in a normal state; but, in consequence of the imperfect closure of the semilunar valves, they lose a portion of this blood; and hence the sudden collapse of the arteries after their diastole, which gives so peculiar a character to the pulse in aortic disease attended with regurgitation. Now, as the structures of the body get well supplied with blood so long as the ventricle retains its vigour, there is but little element of syncope, and less probability of sudden death than when the mitral valve is alone diseased; for, when this valve is so affected as not to close perfectly, a portion of the blood which ought to go to fill the arteries passes back into the left auricle. Hence these cases are characterised by a small pulse—a pulse of little volume. If the amount of the regurgitation be large, the quantity of blood passing into the systemic blood-vessels must necessarily be small; and, under any circumstances of a more than ordinary character, the elements of syncope existing, sudden death may ensue.

In considering this question, I have been obliged to isolate the two forms of disease; but, practically, we often have to deal with both together.

Of the 79 cases I have already alluded to, collected by Dr. Barclay, the proportion in which the different valves were diseased was as follows:—In 36 cases, both valves were diseased, or 45 per cent.; in 26 cases, the aortic valves were diseased, or 33 per cent.; in 17 cases, the mitral valves were diseased, or 21 per cent. And the same proportion, as nearly as possible, is maintained in a larger series of nearly 200 cases. Now these statistics show that, in a very large proportion of cases where death takes place as a consequence of valvular disease, both the mitral and aortic valves are affected; but I believe it will be found that in many of such cases, whether of acute or chronic origin, the aortic valves are the first to become involved, and that the mitral disease is a secondary one.

I have looked over 31 cases of valvular disease of which I have preserved notes. In some, the state of the valves was ascertained by *post mortem* examination; but in others, it was inferred from the symptoms and physical signs during life. Of these 31 cases, there was disease of both valves in 9; of the aortic valves alone, in 16; and of the mitral valve alone, in 6. Probably in some of the cases of aortic disease, the mitral valve will sooner or later become implicated.

Now, I have remarked that I believe there is less liability to sudden death in aortic, than in mitral, disease; and I will further add, that I believe the value of life, and the chances of its being prolonged, are greater in the same affection; for there is in it a compensating action set up, which does not and cannot exist in mitral disease.

And in reference to all cases of valvular disease, although we can never hope to remove the morbid deposit, yet that, even when the disease is somewhat extensive, life may be, not only prolonged to a considerable extent, but that little suffering may be felt, must have been observed by all who have had any experience in such cases; and, although it is our duty to warn our patients of the accidents to which they are liable, and the possibility of sudden death, yet it is equally our duty not to depress them with unnecessary alarm.

And in regard to treatment, one of the main points we should have in view is to prevent muscular degeneration, in addition to attempting to check further deposit in the valves.

[*To be continued.*]

Unnecessary Caustics. In a paper in the *Glasgow Medical Journal*, Mr. Morton dilates very sensibly on the abuses made of caustics. "But though the scope of this paper has," he writes, "of necessity been limited, it may serve to show that caustics, as employed by many, are frequently unnecessary; when so, they are generally injurious; and that there are cogent reasons for the belief, that in some instances they aggravate the morbid condition already in existence, and hasten, if they do not cause, a fatal termination."

Clinical Lecture

ON THE

OBLITERATION OF VARICOSE VEINS.

BY

HENRY LEE, Esq.,

SURGEON TO ST. GEORGE'S HOSPITAL.

[*Concluded from p.* 89.]

When a ligature is applied to an artery, the inner non-vascular coats are divided, and the vascular external coat is brought into contact from the opposite side. The union that follows is produced by lymph effused from the cellular coat, which lymph becomes organised and permanently seals the vessel. When a ligature is applied to a vein, on the other hand, the internal coat is not divided; and as this membrane will not secrete lymph, the only bond of union between the opposed sides of the vessel is fibrine deposited from the blood. By the time that a ligature has ulcerated its way through a vein, cell-development may have commenced in this fibrine; and, if it become softened, there is nothing to prevent its entrance into the general circulation. In the operation which I have advocated and performed now for several years, the veins are effectually closed, so as to prevent hæmorrhage on the one hand, and the absorption of any morbid products on the other. The adhesive action, or union by first intention, begins at once; the process is not interfered with by bleeding; and no ulceration or suppuration need occur.

As the lining membrane of veins cannot be made to adhere, the vessels intended to be obliterated are completely divided, so as to allow the surrounding vascular parts to furnish material for that permanent and vascular obstruction which the lining membrane of the veins cannot produce. The pressure made by the needles placed above and below the divided part prevents any hæmorrhage at the time of the operation, and the veins between the two needles are left empty, and their divided extremities are probably separated to a certain extent.

In two or three days, the interval becomes filled with organised lymph, and the vessels are permanently sealed. Until this is accomplished, any absorption through the veins is effectually prevented by the pressure of the needles.

That the serious results to which I have alluded in the first part of this lecture, really depend upon the passage of diseased secretions through the veins; and that pressure upon the vein in the mode which I have described will prevent such absorption, is illustrated by the following case.

William Kintleton, aged 38, was admitted into St. George's Hospital on September 23rd, 1863, for hæmorrhage from the internal saphena vein, which had given way at the junction of the middle and lower third of the thigh. The parts around the opening in the vein were much thickened, in consequence of which the course of the vein could not be clearly distinguished.

On September 24th, an attempt was made to pass two needles under the vein, at three-quarters of an inch apart, and to divide the vein subcutaneously between the needles. Some blood escaped through the punctures made by the needles; and from the great thickening of the parts, it could not be ascertained that the intended operation had been satisfactorily accomplished. A considerable amount of local inflammation followed the operation, and the skin over the needles showed a disposition to slough.

On the 28th, the needles were removed, and some blood flowed from the apertures. From this it became evident that one or more veins had been punctured by the needles.

On the 30th, two distinct and severe rigors occurred. The pulse rose to 146, and the inflammation was extending from the seat of the operation up the thigh in the course of the saphena vein.

Mr. Pick, the house-surgeon, now sent me an account of the state of the patient; and, conceiving that no time was to be lost, I went to the hospital the same afternoon, and having selected a portion of the saphena vein above the inflamed part, and which was not involved in any surrounding thickening, I passed a needle fairly under the vessel, and made pressure on it by a figure-of-8 ligature passed over the ends of the needle. The part thus compressed was about four inches above the point at which the former operation had been performed.

On the following day, the pulse had sunk to 100. The local inflammation had increased; but all the constitutional symptoms were improved in a marked degree.

Oct. 2nd. Pulse 92. In the course of the saphena vein, about two inches below the insertion of the last needle, the skin presented a bright red patch, the colour gradually fading, towards the circumference, to that of the surrounding skin.

Oct. 3rd. An abscess had formed in the situation of the red patch which appeared yesterday.

Oct. 4th. The abscess burst.

Oct. 5th. A second abscess was forming in the course of the saphena vein, above the insertion of the last needle, which was allowed to remain. Pulse 92. Tongue slightly furred. He had no appetite; slept tolerably well. There was a slight herpetic eruption upon the upper lip.

Oct. 8th. The upper abscess was opened.

Oct. 13th. Pulse 100, soft, compressible. He felt quite comfortable; had slept well. His countenance was free from anxiety.

Oct. 17th. The needle was removed.

Oct. 24th. Pulse 104. Tongue clean. He had a good appetite, and had slept well.

This patient was kept in the hospital to see if any further symptoms would present themselves; but none having occurred, he was discharged well on November 5th.

Another case, almost exactly similar to the above, occurred in St. George's Hospital in the beginning of the year 1862. In that instance, the saphena vein was accidentally punctured during an operation for varicose veins. Severe constitutional symptoms followed; but were arrested as soon as the vein was properly compressed by a fresh needle inserted between the seat of the local mischief and the centre of the circulation. The patient's name was John Brood. He was admitted into the hospital on Jan. 8th, and discharged on the 25th of the same month.

A third case has lately presented itself, where the disease in the vein arose from another cause, and in which the same mode of treatment appeared to have been very beneficial.

Ellen Jackson, aged 39, was admitted into St. George's Hospital on October 14th, 1863, with an ill-conditioned ulcer on the lower part of the right leg. The saphena vein, from this part to the groin, was

distended with coagula. The vessel could be seen and felt throughout its whole course. To the touch it felt knotted and cord-like. When about three months pregnant, the vein had burst. She had been confined seven weeks before her admission. She stated that the series of knots had appeared in the course of the vein about three weeks ago, and that the vein again burst at that time in the situation of the present ulcer.

Upon her admission, both legs were œdematous; and there was apparently some fluid in the peritoneal cavity.

Oct. 16th. She had slept well. Her appetite was good. The urine was very dark-coloured, containing albumen, blood-globules, and a few casts. She had a cough, which had come on the previous afternoon; she was hoarse, complaining at the same time of pain in breathing.

Oct. 17th. At 10 P.M. last night she had a kind of fit. At 4 A.M. this morning she was quite insensible, and was reported to be dying. The breathing was laboured and short. There were twitchings of the muscles of the arms and chest at each inspiration. The muscles of the lips had lost their tone, and flapped to and fro with each breath. There appeared much congestion about the head. The swelling of the right leg had greatly subsided, and the saphena vein was not nearly so much distended.

Oct. 18th. She had partially regained her consciousness.

Oct. 19th. She was much better and quite conscious. She said that she did not recollect coming into the hospital. There was cough and pain in the chest and diarrhœa. The urine now was free from blood, and contained only a trace of albumen.

From the sudden accession of the symptoms at the time when the distension of the saphena vein and the swelling of the leg subsided, I regarded this case as one in which the blood had been poisoned by a portion of the previously stagnant contents of the vein having been poured into the general circulation. The simultaneous affection of the head, chest, and abdominal organs, appeared to confirm this view; and in order to prevent the remaining contents of the saphena vein from passing in quantity and suddenly into the circulation, I passed a needle under the upper part of the vessel, and compressed the vein by a figure-of-8 ligature passed over its extremities.

Oct. 20th. She had slept well. The urine again contained much blood. She was ordered fifteen grains of the phosphite of lime three times a day.

Oct. 22nd. The urine still contained blood. The pain and oppression about the chest continued. The needle which had produced a considerable amount of thickening and inflammation around that part of the vein under which it had been placed, was now removed.

Oct. 24th. There was some increase of the inflammation in the thigh where the needle was inserted. The pulse had again risen, and she complained of pain in the head. She had a cold sensation, but no rigor.

Oct. 27th. The skin was dry; the pulse quick; and tongue furred. She had a slight shivering this morning.

Oct. 31st. She complained of great oppression in the head. The urine now again contained no blood, and only a trace of albumen and a few casts.

Nov. 2nd. She had much improved, and was sitting up in bed.

Nov. 9th. The urine again contained some blood. She complained of pain in the head and loins.

Nov. 10th. The pain in the loins continued. There was also pain on breathing, especially at night.

Nov. 12th. She complained of a sensation of singing in the ears. There was still a small quantity of blood in the water.

Nov. 16th. She got up yesterday. There was still some oppression in the head, and a sense of throbbing over the right temple, pain in the loins, and a feeling of sickness.

Nov. 17th. She left the hospital of her own accord.

The favourable result in this case, in which the transmission of morbid matter to the central circulatory organs was apparently checked, may be contrasted with much interest with the following case, in which there were no means of preventing the continued flow of the diseased secretion into the circulation. The cerebral symptoms in the two cases will also admit of an interesting comparison.

William Stubbs, aged 30, of a swarthy complexion and emaciated appearance, was admitted into St. George's Hospital, December 25th, 1844. A year previously, he had suffered from pain in the head, and nausea. Three months before his admission, the pain in the head had become very severe, and was accompanied by frequent rigors, occasional vomiting, pain in the epigastrium and region of the heart. The throbbing pain in the head was occasionally so severe, that he would frequently say that "all the disease was in the head".

He continued in the same state, with occasional rigors, till the 31st, when he vomited incessantly.

A soft pulpy tumour on the neck now attracted attention, which, he said, had existed since the beginning of October, when the previous symptoms had become so much aggravated. It was of the size of a small walnut, situated immediately over the carotid artery; pulsating, but not expanding with impulse. He sank into a semicomatose state, and died on January 9th, 1845.

This tumour, upon examination by Mr. P. Hewett, was found to be a small, perfectly circumscribed abscess, bounded on all sides by condensed cellular tissue. It contained a darkish coloured pus, and corresponded to the middle of the jugular vein. The cavity of the abscess here communicated with the vein by an opening of the size of a pea; and a probe could be passed through the opening into the cavity of the vessel. When first examined, the opening was partly blocked up by a thin coagulum. The internal coat of the vein presented its usual smooth and polished surface, and was but slightly discoloured, except in the neighbourhood of the opening. Here it was somewhat injected, and presented some yellow spots, apparently of pus, on the surface of the inner membrane. The outer covering of the vein was in this situation thickened and partially destroyed; the vein itself contained no blood. A very small loose clot, presenting anything but the appearance of blood, was found in the right auricle. It was of a brown rusty colour, mixed with streaks of a yellow hue. Examined by the microscope by Dr. Bence Jones, it was found to contain a remarkably small quantity of blood-globules; but there existed a great number of large granular cells, the microscopic characters of which did not identify their nature.

It is remarkable in this case, that, although the contents of the abscess must from time to time have partially emptied themselves into the vein, yet, not being detained in it, they excited little or no local irritation.

In concluding this lecture, I may mention that, out of the very considerable number of cases of varicose veins that have been operated upon during

the last two years at this hospital, no constitutional symptoms have in any instance showed themselves, with the two exceptions above mentioned; and that in these the symptoms were completely arrested by acupressure upon the vein, so as to close its canal above the seat of the operation.

Original Communications.

CASE OF EPIGLOTTITIS, OR ACUTE INFLAMMATION AND ENLARGEMENT OF THE EPIGLOTTIS: WITH REMARKS.

By John Windsor, F.R.C.S.E., Senior Surgeon of the Manchester Eye Hospital.

[*Read before the Manchester Medical Society, November 4th*, 1863.]

I have been induced to present a report of this case to the Society, partly from the rarity of the affection, the great suffering and even danger to life which it involves, and partly on account of the satisfactory result of the treatment which was adopted.

On August 21st, 1863, I was requested early in the morning to visit Thomas Shanley, aged about 35, a warp-sizer by trade. He complained of very great difficulty of deglutition, or rather of a total inability of effecting it. He had very little cough, but occasionally hawked up a little mucous secretion. He had not much feverishness, either as to temperature, thirst, or quickened pulse, the last being 88 in a minute. On inspecting the internal fauces, there was not much appearance of inflammation. The tonsils were only slightly enlarged; but, on passing my finger to ascertain the state of the epiglottis, it was felt to be much enlarged, in the form of a roundish solid ball, apparently filling up the passage from the pharynx to the œsophagus. There was no particular fulness about the external fauces, which had been rubbed with a stimulating liniment, and afterwards poulticed. He had used a gargle of sage-tea and vinegar, and his bowels had been purged by medicine. He had first felt the difficulty of swallowing about two days previously, but had attended to his occupation up to the preceding evening. He could ascribe no cause for his complaint, except, perhaps, taking cold after working amongst steam. I prescribed for him three grains of calomel to be placed upon his tongue every three hours.

He was seen again in the forenoon, and appeared to be much in the same state. This continuing in the afternoon, I then punctured the swollen epiglottis in two or three places with a long needle, broad and flattened towards the extremity, guiding it with one hand, whilst a finger of the other was placed on the part affected. This needle, I may remark, was one which I had used some years previously for passing a seton through an immense bronchocele; and on both occasions it answered the purpose well. I repeated the puncturing late in the evening; and the subsequent bleeding each time, although to no great extent, somewhat relieved him, at least for a time.

August 22nd. He had passed a sleepless night. His power of deglutition was little if any better. In other respects, he was about the same as yesterday. The tumid epiglottis, which presented to the finger, as above remarked, the sensation of a hard smooth ball, was again freely punctured, and bled moderately.

In the evening, he was rather better; had slept awhile during the day; and had been able to swallow a very small quantity of beef-tea. He had now taken five of the calomel powders. The pulse was 88 in the minute; bowels regular; urine scanty, but clear, and not very high coloured; respiration not noisy, nor difficult; and no particular sounds could be heard in the chest.

August 23rd. He passed a tolerably good night, hawking up occasionally some discoloured bloody mucus. He could now speak rather better; his speech previously having been an almost inaudible kind of whisper. He had been able this morning to swallow about half a cupful of tea. The swelling of the epiglottis being still considerable, I punctured it again, which was followed, as before, by some bloody hawking. He still continued to take the calomel powders.

In the evening, I found him down stairs. He had been able during the day to swallow a little egg-milk, some beef-tea, and common tea.

August 24th. He passed a rather restless night, principally from headache. The tongue was covered with a whitish fur; his breath exhaled a fœtid odour; and his gums were a little tender. The bowels were regular, but he had no appetite. Deglutition was still painful and difficult. He frequently hawked up some discoloured mucus. The swelling of the epiglottis being still considerable, I again punctured it, which was followed, as usual, by some bloody discharge and sensible relief. He was ordered to omit the calomel powders, and to take every two or three hours one tablespoonful of a simple saline mixture.

August 25th. He passed a rather uneasy night; but was not worse, although his swallowing was still much obstructed by the enlarged epiglottis. Pulse about 88; bowels regular; tongue less furred; and breath less fœtid. The breathing was easy; the percussion-sound over the chest and the respiratory murmur were natural. At his own request, the puncturing was repeated. The saline mixture was continued.

August 26th. He was in much the same state as he was yesterday. He was prescribed an acidulated weak solution of sulphate of magnesia.

August 27th. He had passed a tolerable night, and seemed decidedly better. Pulse 84. His tongue was cleaner, and the fœtor of the breath was scarcely perceived. The bowels were regular. He could now swallow at once a middle-sized cupful of liquid; but he had no appetite for food. He still hawked up frequently some mucus or muco-purulent fluid; and in the night he expectorated a semi-solid substance (probably inspissated mucus), of about the bulk of the last joint of his forefinger. He now articulated audibly, instead of as heretofore, in a sort of whisper. I thought it best to puncture once more the still somewhat enlarged epiglottis, as he had always felt relieved by the bloody discharge following it. The acidulated cathartic mixture was repeated.

August 28th. He was now down stairs dressed, having passed a tolerably good night, only disturbed now and then by the expectoration. His deglutition was better; and, on examining the epiglottis with my finger, I found that its bulk was diminished, and that it was somewhat resuming its flattened form. A little bloody hawking followed this slight digital examination.

August 29th. He was going on favourably, but had no appetite for solid food, living so far chiefly on tea, broth, and egg-milk. I prescribed him the following mixture:—Iodide of potassium, gr. xxv; tincture of orange-peel, tincture of calumba, of each ʒij; water, ʒviiss. Two tablespoonfuls to be taken three times a day.

August 30th. The epiglottis was still more reduced

in bulk, and was flattening, being restored to nearly its natural size and form. He had a rather free discharge from his throat, of a muco-sanguineous fluid. He could now swallow some bread and milk.

September 7th. For the last few days he had gradually improved, both as to the local affection and his general health. He had still a little expectoration, or rather hawking up of secretion; but that was not now discolored or offensive. He still felt a slight impediment to deglutition, but he could take bread and a little animal food. The mixture was continued.

September 15th. He was still going on well. His appetite was now tolerably good, and his deglutition easy, although a slight roughness or inequality could be felt on the right half of the epiglottis. In other respects, this organ appeared restored to its natural state, both as to form and size. He had no cough nor expectoration; he walked out; and had partly resumed his occupation.

September 27th. He continued free from complaint.

Remarks. Although I have detailed perhaps too minutely the history of the above case, I wish to make a few additional remarks on the subject.

As to the treatment adopted—which, indeed, has been my chief motive in drawing up this report—I think it may be justly admitted that, although some beneficial effect may perhaps be ascribed to the agency of the mercurial prescribed in the first instance, and which was discontinued as soon as the gums had become sensibly affected, yet that the principal agent in combating and ultimately subduing the morbid process was the repeated scarification of the affected part. This mode of attempting to relieve the great swelling and congestion of the epiglottis, with its attendant inability of deglutition, was resorted to on the first day of my attendance; and appearing to afford some relief, although only a limited one in the first instance, it was regularly repeated for some days; and each time the patient expressed his assent to it, and his opinion that it had a good effect. It was, therefore, continued until the tumefaction was decidedly diminished, and his ability to swallow satisfactorily restored; from which time there was no interruption to his gradual convalescence.

Whilst I was attending this case, I did not remember to have attended a quite similar one, although some two or three cases of slighter enlargement of the epiglottis have occurred to me; but they were of a more chronic character, and did not present so formidable an obstacle to deglutition. Acute inflammation of the epiglottis seems to be of comparatively rare occurrence. Since the above case came under my observation, I have referred to a considerable number of standard works, both English and French, without finding any description of it. My son, Thomas Windsor, who has zealously cultivated medical literature, has since directed my attention to some few articles on the subject, which I may now refer to.

In the *Medical Gazette* for May 22nd, 1830, a paper is referred to as read before the College of Physicians on May 17th, on Acute Inflammation of the Epiglottis. Dr. Burne, the author of the paper, remarked that acute inflammation affecting the epiglottis, without extending to the contiguous parts, was so rare a disease that but few examples of it were to be found on record. Dr. Burne, however, had met with two cases, which he relates in his paper. The first patient recovered, but the second perished at the end of four days. In both, the most remarkable symptom consisted, as in my case, in the extreme difficulty or impossibility of swallowing, while the throat did not exhibit any appearance of tumefaction. In the first case, occurring in a journeyman aged about 50, and which seems to have been extremely similar to mine, before Dr. Burne saw him, he had been bled to syncope; leeches had been applied to the throat; and he had been purged. The leeches were repeated; tartar emetic was given in pills; and mercurial ointment was rubbed in. On the fourth day, the fever (which had not been considerable) and the inflammation had subsided; but the epiglottis continued so much swollen as to render the introduction of nourishment extremely difficult. Next day, however, he was able to swallow fluids, and ultimately did well. The second case occurred in a lady far advanced in pregnancy. The symptoms were very similar to those in the former case. Bleeding, both general and local, was had recourse to; but the issue was unfavourable. On a *post mortem* examination, the epiglottis was found stiff and thickened, with traces of pus. The surrounding parts of the larynx were sound; the lungs infiltrated with serous effusion. Dr. Cholmeley and Mr. Stanley also attended the second case; and the former, it seems, suggested scarification of the epiglottis; thus proposing a measure which was actually, though unaware of his suggestion, adopted in my case.

In the *Medical Gazette* for 1849, p. 761, Mr. W. B. Kesteven published a short paper on Epiglottitis, and expressed his surprise that writers on systematic medicine should have passed it over in silence. He is, however, perhaps in error himself in stating that it only occurs as the result of inflammation of the larynx, tonsils, or fauces; thus making it only a secondary, whereas mine and some other cases seem to indicate that it is, occasionally at least, a primary affection. Mr. Kesteven relates two cases. In the first, ten days elapsed before the patient was able to swallow; nutrient injections being, in the meantime, employed in order to support the strength. In the second case, early relief seems to have been afforded by the application of a strong solution of argenti nitras. Both his cases seem to have been more of the complicated than of the simple form, into which two forms I would class this affection; for in some cases the epiglottis is primarily and solely, or nearly so, in others, I believe, secondarily, affected.

In the thirteenth volume of the *Dublin Medical Journal*, there is a paper by Dr., afterwards Sir Henry Marsh, read before the College of Physicians, entitled "Cases of Acute Inflammation confined to the Epiglottis". He relates three cases as having occurred to him, all attended with great suffering and danger, but all ultimately recovering, after the use of bleeding, mercurials, etc., and, in one of the cases, the application of argenti nitras in solution. Sir Henry Marsh well remarks, that the loose attachment of the mucous membrane to the anterior (or superior) surface of the epiglottis explains the great extent of the tumefaction, the distension being thus situated on the lingual rather than on the laryngeal aspect of the organ; and hence the somewhat rugose state of the membrane, as was felt in my patient, when the enlargement produced by the inflammation had subsided.

Sir Henry Marsh refers to some recorded cases of the affection. Thus, in the first volume of *Medical Facts and Observations* for the year 1791, Mr. Mainwaring related a case of it occurring in a gentleman 40 years of age, who recovered.

In the third volume of the *Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge* (1808), Sir E. Home relates three cases of the affection; and all, I believe, recovered. They appear to have been of the uncomplicated form. Sir E. Home remarks, that this affection of the epiglottis was so rare, that none of his medical friends had met with it.

Lastly, Sir H. Marsh alludes to a case of what he calls acute œdema of the lingual surface of the epi-

glottis, apparently not quite uncomplicated. The patient recovered. The particulars of this case were communicated to him by Dr. Fleming.

Abroad, and somewhat recently, this affection has attracted some notice. In Schmidt's *Jahrbücher* for 1852, there is a notice of it by Professor Larsen, at p. 315. He states that he had had an opportunity of treating three cases of acute and one of chronic epiglottitis. In two of the former, the inflammation of the epiglottis was primary; in the other, it commenced as tonsillitis, and involved the epiglottis afterwards in a few days. In two of the cases, he says that the enlargement of the epiglottis was confined to the left half of it, as far as the middle line. The case of chronic epiglottitis he refers to as of syphilitic origin, and the symptoms were of a less urgent character. The epiglottis in this case formed a very indurated roundish lump; it was deeply furrowed at its centre, and was sensitive to the touch. A cure was effected by the use of calomel until it produced ptyalism. In two of the acute cases, besides general and local bleeding, with antiphlogistic treatment, he had recourse to repeated scarification, as was employed so satisfactorily in my patient; and it was followed, he says, by great relief. The scarification in his case was effected by a sharp-pointed bistoury covered with lint to near its point.

In Wunderlich's *Handbuch der Pathologie und Therapie* for 1856, p. 110, the subject of epiglottitis is noticed shortly, and chiefly as described by English authorities, without any additional personal observations.

In conclusion, I believe we are warranted in stating that epiglottitis occasionally occurs as a primary affection, and may be recognised both by the eye on depressing the tongue, and by passing a finger to examine its bulk and form. As to its treatment, I am not aware of having omitted anything essential in the case recorded above.

The affection, although primarily and principally attaching itself to the epiglottis, may, and doubtless does, sometimes extend downwards to the larynx; or, *vice versâ*, commencing primarily in the larynx, it may sometimes extend upwards to the epiglottis. If the power of deglutition be much impeded, or altogether obstructed, the epiglottis is probably the organ chiefly involved. If the respiration be materially affected, with a croupy sound and barking cough, the most active treatment for laryngitis is indicated; and, in very threatening cases, an operation may be necessary for the preservation of life.

In some cases, simple inflammation of the tonsils at the commencement may extend downwards to the epiglottis, or even further to the larynx; and, as we see daily in the membranes of the eye, the inflammation will not be likely to be long confined to one point.

Whenever the voice becomes hoarse or whispering, we may infer that the larynx is, at least in some degree, the seat of disease; but the milder forms of inflammation will doubtless be amenable generally to mild and simple treatment.

Medical Candidates for the United States Army. The Army Medical Board examined forty-two candidates. Of this number six withdrew before completion of examination. Six were non-graduates, and consequently were not eligible; three were rejected for physical disqualifications; four were found qualified, and recommended for the appointment of surgeon, have been appointed, and are now on duty. Six were found qualified for appointment as assistant-surgeons; five of whom have been appointed, and are now on duty. (*American Medical Times.*)

Progress of Medical Science.

MEDICINE.

Endemic Catalepsy. According to Dr. Vogt, catalepsy is endemic at Billingshausen, a village about four miles from Würzburg. The place lies in the neck of land formed by the northerly bending of the Maine, between Karlstadt and Marktsheidenfeld. It contains 103 families, with 356 individuals, who are in good circumstances: "there is no poverty—the poorest man in the place is the minister." The inhabitants are Protestants, although living among Catholic neighbours. Intermarriages are very frequant; and there are, with few exceptions, but five family names in the village. Goître and cretinism is rare; but Dr. Vogt found two men suffering severely from shaking palsy. In spite of their favourable social conditions, the people are small, feeble, and plain-featured; in mental powers, they are on a par with their neighbours. The system of intermarriages, Dr. Vogt remarks, may be a cause of the disease, but nothing is known as to its true mode of origin; from the symptoms, however, he is disposed to attribute it to a periodic interruption of innervation in the spinal system.

The disorder is characterised by the following phenomena. Without any premonitory symptoms, the patient suddenly falls down in the place where he happens to be. The aspect is death-like; the face is pale; the eyes are fixedly directed to one point, with their axes converging; the lips are closed and protruded; the fingers are semiflexed. A slight trembling movement may, by careful examination, be detected in the pupils and hands. Attempts to speak result only in the utterance of unintelligible short broken sounds. The muscular system alone is affected; the senses and intellect remain entire. An attack of this kind lasts from one to five minutes; it appears to commence with formication in the arms and legs, and the patients feel the rigid contraction of the muscles. There is no pain in the back nor in the limbs. The paroxysm seems to be especially favoured by exposure to cold; it attacks people who have removed their garments when at work in the fields, or in church; but it also occurs in persons engaged in their domestic occupations, or in towns. (*Würzburg. Medicin. Zeitschr.*, Band iv, Heft 3.)

Ergot in Hooping-Cough. A little boy, aged 6, while suffering from hooping-cough, was seized with symptoms of ergotism, which was then prevalent in the district. From this time, the paroxysms of cough disappeared, and replaced by simple whistling inspirations. When the ergotism was cured, the patient was found to be also relieved of his hooping-cough, which had had a much shorter duration than ordinary. M. Griepenkerl, under whose care the child was, hereupon administered ergot to five other children who had had hooping-cough, some during three or four weeks, and one even during a year. In all, recovery was perfect at the end of eight days. In 1861, during an epidemic of hooping-cough, M. Griepenkerl treated two hundred patients with ergot; nearly all with succes. The preparation which he uses is a decoction made of one *gramme* and a half or two *grammes* (or three-fourths of a *gramme* in very young children) of coarsely powdered ergot, sufficient water being added to make up thirty-two *grammes*, to which are added forty-eight *grammes* of powdered white sugar. The dose, for a child from five to seven years old, is a teaspoonful every two hours. During the treatment., all articles containing tannin should be avoided. The

medicine should not be given until after the third week, when all complications have ceased; the paroxysms of cough are often aggravated during the first few days, after which they rapidly diminish and disappear. (*Deutsche Klinik*, and *Bull. Génér. de Thér.*, 15 Octobre, 1863.)

Albuminous Nephritis Treated by the Hot-air Bath. M. Kuss of Strasburg considers the employment of baths of hot dry air a valuable remedy in the acute stage of albuminous nephritis; and his belief in the efficacy of this means is supported by the narration of more than ten cases which were cured by its adoption. The patient is placed in a chair, with a blanket fitting closely round his neck, and covering in an apparatus in which a little alcohol is burned. The blanket is raised from time to time to allow the escape of carbonic acid and water-vapour, and the admission of air. (*Journ. de Méd. de Bruxelles*, and *Bull. Génér. de Ther.*, 30 Dec. 1863.)

Epileptiform Neuralgia. Under this name, M. Trousseau lately described in a clinical lecture a condition which he, in common with others, had long confounded with ordinary facial neuralgia. It differs from the latter in the suddenness of its appearance, in the intensity of the suffering, in the cessation of all pain after a short and constant period of duration, and in the incurability of the attacks, which come on at intervals varying from ten seconds to two hours, or more. In one of his wards in the Hôtel Dieu, there was a man who had thirty of these paroxysms in an hour. He could neither eat, drink, nor sleep; and this state had continued during two months. This special form of neuralgia, which attacks the trifacial nerve alone, never yields completely or lastingly to treatment. M. Trousseau does not in such cases prohibit division of the painful nerve; but does not recognise it as producing a durable effect. The application of morphia to a blistered surface, hypodermic injections, etc., are all useless. The only remedy which can be truly said to act as a palliative, is opium in very large doses. In the case of an old lady at Antwerp, who had epileptiform neuralgia, the pain was removed by the use of enormous quantities of opiate medicines. The attacks in her case lasted from a few seconds to three minutes. They commenced sometimes in the infraorbital nerve, sometimes in the mental, sometimes in the supraorbital nerve. The disease rapidly spread to the three branches of the nerve; and when the paroxysm was at its height, the muscles of the face were thrown into convulsive contortions. The patient had often twenty attacks in an hour. Sometimes the disease disappeared during eight, fifteen, or twenty days, or more, to return with fresh severity. In this case, M. Trousseau first gave sulphate of morphia in doses of from fifteen to twenty *centigrammes* daily; he then gradually increased the daily quantity to four *grammes* (one drachm). The relief was most remarkable. On account of the expense of the morphia, M. Trousseau procured some opium, of which the patient took from ten to twenty *grammes* (two drachms and half to five drachms) daily, always with good effect on the neuralgia, and without disturbance of the digestive functions. The tolerance of opium in such cases is remarkable; but the medicine should be commenced in ordinary doses and gradually increased. (*Journ. de Méd. et de Chir. Prat.*, Jan. 1864.)

Santonine in the Uric Acid Diathesis. M. J. Caméra says that he has found that patients suffering from the lithic acid diathesis, and tormented from time to time by violent nephritic colic, have experienced remarkable relief under the continued use of santonine. He has given to such patients, twice weekly during a month, a dose of from twenty-five to thirty *centigrammes* (about four to four grains and a half) of santonine in the morning before taking food; and some castor oil on the following day. This treatment may be continued without inconvenience during several months. According to M. Caméra, under the use of santonine, patients who had been tortured by nephritic colic, due to the presence of uric acid concretions in the urinary passages, have been entirely relieved. Santonine acts energetically on the nervous and circulatory system, and hence must have great influence on the process of nutrition. It seems to prevent the excessive formation of uric acid. (*Il Morgagni*, and *Répert. de Pharmacie*, Nov. 1863.)

Treatment of Scabies. Metzel of Cracow has been very successful in the treatment of scabies with oil of phosphorus. The oil is prepared by introducing two drachms of phosphorus into about sixteen fluid-ounces of olive oil, and subjecting it to a temperature of 212° Fahr. in a vapour bath. The oil is to be rubbed in over the diseased skin. Dr. Metzel reports eighty cases, in all of which a complete cure resulted, without any relapse. In the majority of the cases, three or four frictions sufficed to effect the cure.

Treatment of Favus. The following is the treatment of favus practised by Professor Hebra of Vienna. The crusts are first completely impregnated and softened with cod-liver oil, and in this state are detached with a wooden spatula. After this, the head is washed with soap, and cold wet cloths are constantly applied while the diseased hairs, which are easily recognised from their opaque, non-glistening character, from being brittle, and from appearing to the naked eye covered with fine dust (an appearance which, under the microscope, is found to be due to the presence of minute fungi), are carefully extracted as fast as they show themselves.

Treatment of Rheumatism with Sulphur. Tendinous rheumatism, according to Dr. Renard, differs from acute rheumatism by the absence of the general symptoms, and from the chronic by the presence of local inflammatory symptoms. Dr. Renard suffered from this complaint himself after an attack of acute rheumatism, for which he was copiously bled. The parts affected were the tendons of the hamstring muscles, and no improvement resulted after a long course of diaphoretics, camphor, terebinthinate, and other liniments, and the administration of the solanaceæ. At last Dr. Renard saw a passage in an English medical journal, stating that persons suffering from rheumatism in the legs had only to dust the inside of their stockings with sulphur. He immediately employed this simple remedy, the sulphur being the commercial flowers of brimstone, which contain some sulphurous acid. The curative effect was very well marked, for Dr. Renard walked in the evening, then renewed the sulphur in the stockings before sleeping in them, found himself very much relieved the next morning, and nearly quite cured on the morning after. A few days later, he left off the brimstone, and the pain reappeared in the soles of the feet, but yielded very soon to the reapplication of sulphur. Since the year 1857, when he was first attacked, the same experiment was repeated every winter when he was suffering from chronic tenodynia, either in the hams, the heels, or the elbows. He felt, under the influence of the contact of the flowers of brimstone, the skin becoming hotter, slightly excited, and more disposed to sweating; and as soon as this effect was produced, the relief of the pain seemed to be immediately marked. Whatever may be the explanation o

the manner in which sulphur exerts its curative agency, Dr. Renard affirms that it has a beneficial effect upon the rheumatic pains of the tendons, and that this action is the more rapid and certain in proportion as the tendons are more superficial and the sulphur is kept more closely over the painful parts. (*British and Foreign Medico-Chirurgical Review.*)

Reviews and Notices.

A Practical Treatise on the Diseases and Infirmities of Advanced Life. By Daniel Maclachlan, M.D., Fellow of the Royal College of Physicians of London; late Physician and Principal Medical Officer to Chelsea Hospital, etc. Pp. 718. London: 1863.

The diseases to which the old are liable, and the modifications which ordinary maladies undergo in attacking such subjects, have hitherto received comparatively little attention from English medical writers. The few exceptions, to which Dr. Maclachlan alludes in his preface, of authors who have in this country treated of the diseases of advanced life, serve indeed to show that, while much merit is to be conceded to such writers as Day, Rogers, Symonds, and Copland, there has been as yet wanting a treatise which should bear some such relation to the maladies and infirmities of the old as the treatises of West, Churchill, etc., do to the diseases of children.

This want Dr. Maclachlan has undertaken to supply; and the official position which he has for a long period held must be regarded as having peculiarly fitted him for its performance.

"Placed for the last twenty-three years in an admirable position for studying the diseases and infirmities of the old, having, as physician and senior medical officer of Chelsea Hospital, upwards of five hundred aged people constantly under my eye, nearly all of whom are invalids in the strictest sense, very few below fifty-five years of age, and most of them varying from sixty to ninety and upwards, and having from among this number always daily between 60 and 70, oftener between 70 and 80, actually under medical treatment, the mortality of the whole establishment averaging above 13 *per cent. per annum*, the means I have enjoyed of investigating and treating the diseases of advanced life have been far from inconsiderable."

In addition to his personal experience obtained from so rich a source, the author has availed himself of the observations of others, whenever he could "do so with propriety and advantage." His object, he informs us, has not been to put himself forward altogether as an original writer; but

"To present in an accessible form, blended with my own experience and observation, the scattered information, the floating knowledge, oral and written, the common property of our liberal profession."

The book consists of nine parts.

In the first, or Introductory Part, Dr. Maclachlan discusses in three chapters, the Anatomy, Physiology, and Psychology of Advanced Life; the Diseases of Advanced Life, and their Treatment; and Climacteric Disease and Decay of Nature.

In the second of these chapters, at p. 31, we find a statement of the causes of death in 845 deaths occurring in Chelsea Hospital during the thirteen years ending 1859: in each instance, the diagnosis was verified by *post mortem* examination.

"Bronchitis gave 166; phthisis pulmonalis, 145; apoplexy, 58; pneumonia, 51; cancer, including scirrhus, of different internal organs, 47; diarrhœa, 36; empyema, 27; hemiplegia, 25; pericarditis, 24; cholera, 23; softening of the brain, 21; diseases of the heart, hypertrophy, dilatation, and vascular lesions, 21; albuminuria, 17; diseases of the bladder, cystorrhœa, etc., 17; general paralysis, 11; dry gangrene, 10; paraplegia, 7; erysipelas, 7; sloughing of the nates, 7; purpura and scurvy, 5; old age, 3 (all 82 years old). Including two cases of death by angina pectoris, and one by gout, the remainder are scattered; but these constitute the chief numbers. The reader will not fail to remark the large number of phthisical cases."

Now the question raises itself, both with respect to these statistics and to those of the Registrar-General, how far the record of *deaths* from various diseases at different ages represents the actual *proclivity* to the respective diseases at these ages. The proclivity to disease, with the exception of those which are peculiar to infancy, or occur usually only once during life, *appears* to increase with age: but this, Dr. Maclachlan justly observes, is only partially correct. He points out that, beyond the age of thirty or forty at least, such statistics lose their value; because "the relative mortality in all acute or dangerous diseases is greater as life advances; and diseases of a chronic nature, commencing in earlier age, and slowly progressing towards their termination, deceptively swell the list at the more advanced epochs."

In some succeeding sections, Dr. Maclachlan speaks of the general characters of disease in old age. There is a virtual exemption from the acute diseases of earlier life, such as fevers, rheumatism, gout, and strumous and tubercular affections; and acute inflammations in general are rare. The ordinary character of disease in old age is that of a subacute or chronic and asthenic type; and, in acute inflammations, the tendency is towards rapid structural change, with, as a general but not absolute rule, little pain or constitutional disturbance; the inflammation having a congestive character, with a tendency to unhealthy effusions, œdema, and gangrene.

In the diagnosis of diseases of old age, difficulties often arise; partly from the complicated nature of disease at this period; partly from the gradual failure and modification of the different functions. The nervous system especially, having lost the readiness with which in earlier life it responded to causes of irritation, now passes these by, and thus the development both of local symptoms and of constitutional reaction is hindered and modified, if not altogether prevented. What Dr. Maclachlan calls "the isolation of the different organs in disease" in advanced life is a fact which should be borne in mind; for it is possible that most serious disease may be making progress in some organ, without producing any of that constitutional disturbance which would attend it in earlier life. Of this, the author gives some instances which have come under his notice.

"On more than one occasion I have known old men sitting at the fireside, or moving about, apparently in their usual health, with acute pneumonic

consolidation, and even suppuration of the lung. Some time ago an old man died in Chelsea Hospital three or four hours after working in his garden, in whom nearly the whole of one lung was in this condition. In another instance, occurring on the verge of sixty, empyema existed to such an extent as to displace the heart to the opposite side—and yet the man was following his vocation as groom and coachman, though the disease had existed several weeks. These and like cases are of every day occurrence, and are particularly rife in aged, broken-down, bedridden subjects, in whom new disease, in every shape, declares itself in the faintest manner, and often with the least possible change in the state of the patient, though a keen observer may generally perceive additional prostration in the absence of other symptoms, when a diligent search may discover the cause. These sufferers frequently die unexpectedly, and as it were accidentally from rapid exhaustion, and their deaths appear in public returns as 'sudden', or more commonly as caused by 'old age'." (Pp. 36-7.)

In the section on the Principles of Medical Treatment in Advanced Life, Dr. Maclachlan first makes some general observations to the effect that, while the ordinary tendency of disease in the old towards a chronic or asthenic form demands a corresponding modification in treatment, cases are still numerous of persons sixty or seventy years of age, in whom active treatment is not only well borne but is beneficial. He then speaks of the important topic of blood-letting; and, having noticed the discrepancy of opinion which prevails as to the use or disuse of this means in old age, he gives his own views on the subject in the following words.

"Bleeding may generally be employed when the danger or urgency of the symptoms calls for it; where the individual, however far advanced in years, still possesses some of the attributes of maturity, the pulse at the wrist and in the other larger arteries being firm and equable, the action of the heart regular, and the constitution, though perchance debilitated by natural decay, unbroken by pre-existing chronic disease. General bleeding is contraindicated when the pulse is irregular in strength and frequency, but more especially in the former state; where the impulse of the heart is feeble and intermittent, and its sounds obscure or inaudible; and in all cases where the general health has suffered from privation, insufficient nourishment, or long continued exhausting maladies. In practice, the cases in reality are comparatively few in which the abstraction of blood from the arm more than once or twice is necessary." (Pp. 44-5.)

Dr. Maclachlan goes on to describe the cautions which are necessary in performing blood-letting on old people. One important preliminary, both to a first and to repeated bleedings, is to ascertain the state of the circulation; and for this purpose, Dr. Maclachlan observes, the pulse at the wrist is not so safe a guide in old people as the action and impulse of the heart. The radial pulse, as Bizot has pointed out, is often stronger in the old than in the young, and may present a deceptive hardness. "We hardly ever," says the author, "bleed old people by the lancet without first laying our hand on the cardiac region, and, if need be, applying the ear to the chest."

The other remedial agents regarding which Dr. Maclachlan expresses his opinion as to their utility or tolerability in the diseases of old age, are purgatives, mercury, antimonials, emetics, narcotics, diuretics, tonics, chloroform, iodide of potassium, arsenic, hydrocyanic acid, revulsives, and balsamic remedies. On each of these, he offers some valuable practical remarks, which we commend to the notice of our readers.

The chapter on treatment is concluded with a brief but practical section on hygiene in its applications to old age; and the first part ends with a chapter on Climacteric Disease.

In the second part, Dr. Maclachlan describes the Diseases of the Nervous System, speaking, in ten chapters, of, 1. Senile Anatomical Characters of the Brain, etc., and General Observations on Diseases of the Nervous System; 2. Meningitis; 3. Hydrocephalus Senilis—Œdema of the Brain; 4. Vertigo; 5. Epilepsy; 6. Apoplexy; 7. Meningeal Apoplexy; 8. Softening of the Brain; 9. Paralysis; 10. Tremor Senilis—Paralysis Agitans.

The third part—on Diseases of the Respiratory Organs—is opened with a chapter on Anatomical and Physiological Characteristics of these organs; after which the author treats of Acute and Chronic Bronchitis, Bronchorrhœa, Pneumonia, in its Acute and Chronic forms, Pleurisy, Consumption, and Asthma. The chapter on consumption is a very interesting one, showing that tuberculous disease of the lung is a more common cause of death among the aged than is ordinarily supposed. The prevalence of this idea of the non-frequency of phthisis in the old appears partly due to a misunderstanding of the opinion of Hippocrates, which has come down to our time, "that the age most liable to the disease is from eighteen to thirty-five;" and partly to the circumstance, which is fully pointed out in its details by Dr. Maclachlan, that (in accordance with the general observations to which we have already referred) the symptoms and signs of pulmonary tubercle in the aged do not present that distinctness which they possess in earlier life. The occasional occurrence of phthisis in old persons has indeed, as Dr. Maclachlan points out, been recognised by Laennec, Louis, Williams, etc.; but the tendency of Dr. Maclachlan's remarks is to show that it may be regarded as even considerably more frequent than is generally supposed.

The fourth part comprises Diseases of the Organs of Circulation; and here, after an introductory anatomical and physiological chapter, we find descriptions of Pericarditis; Endocarditis; Organic Disease of the Heart; Softening and Fatty Diseases; and Angina Pectoris.

In the fifth part, the author describes diseases of the Digestive Organs in chapters: viz., 1. General Anatomical Characters; 2. Diseases of the Mouth and Gullet; 3. Catarrhal Gastritis; 4. Acute Atomic Dyspepsia; 5. Functional or Chronic Atomic Dyspepsia; 6. Varieties of Functional Dyspepsia; 7. Cancer of the Stomach; 8. Hypertrophy of the Stomach; 9. Functional and Organic Disease of the Intestines; 10. Diarrhœa; 11. Constipation; 12. Colic and Ileus, including Mechanical Obstruction; 13. Diseases of the Rectum.

The sixth part contains remarks on Diseases of the Biliary Organs. The seventh treats of Diseases of the Urinary Organs; the eighth of the Skin and its Appendages—including chapters on Pityriasis, Prurigo Senilis, Eczema, and Erythema and Erysipelas; and in the ninth and last part the author treats of Constitutional or Blood-Diseases, under which head

he includes Rheumatism in its various forms, Gout, Rheumatic Gout, Senile Gangrene, Senile Purpura, and Scurvy.

We feel confident that this work of Dr. Maclachlan will take the first place among British practitioners, as an authority to be consulted on the Diseases of Advanced Life. The author has given, in plain language, the results of his own large experience, mixed with the fruits of the study of the literature of the subject on which he has written; and he has, while leaving to others the determination of the worth of modern scientific discoveries and doctrines, produced a volume of which the practical value is marked from its beginning to its end. We regret to learn, from some remarks in the preface, that the production of the book has not taken place under the most favourable circumstances, but that its editing, for the most part, has been carried on by the author during the intervals between the relapses of a severe illness; so that "it was often a hard task, the pursuit of literature under a load of difficulties, enough to crush any one less determined to accomplish the purpose." He has our best wishes for a restoration of his health, and for a long life, during which he may witness the good fruits of his past labour, and, it may be, make further contributions to the subject which he has already so well treated.

British Medical Journal.

SATURDAY, JANUARY 30TH, 1864.

THE PLEA OF INSANITY

[*Communicated.*]

When Dr. Johnson, in speaking of David Hume's contempt of death, said that to hold a pistol to his breast and threaten to kill him would soon shew that he had as great a desire to live as other people, he probably suggested a test which may hereafter, under certain modifications, be found of essential service in determining the existence of impulsive insanity. Dryden's aphorism, that "great wit is nearly allied to madness", and the observation of Seneca, "Nullum magnum ingenium sine misturâ dementiæ," bid fair in these days to find terrible exponents in the murderer and suicide. The convict Townley, and the author of the recent cab murder, who, on being discovered, immediately committed suicide, were men of no ordinary attainments. The excellent *Manual of Psychological Medicine*, published by Drs. Bucknill and Tuke, contains many examples of destructive insanity combined with great intellectual acumen and power. Sixty cases of homicidal mania are recorded, of which thirty-five exhibited no positive derangement of reason; from which it may be fairly inferred that a perversion of the moral sense, when it amounts to insanity, is found associated with mental delusions in less than 50 per cent. of the cases observed.

This is a subject for serious consideration to the public generally, and particularly so to those who will hereafter have to amend the legal definition of moral responsibility. As the question now stands, the judges, who are merely the interpreters of the existing law, are compelled to ignore the comparatively modern doctrine of volitional insanity, and to confine their directions, in speaking of madness at all, to those cases in which the knowledge of right and wrong has been defective. It must, however, be manifest to all thinking men that a much wider field is being opened to the consideration of the legislature. Not only must we apparently recognise the fact that incorrigible vice may be the only evidence of moral insanity, but we shall have by and bye to define legally the limits of controllable violence and of irresponsible impulse. To settle some of the most important points of common law has generally required no great strength of the human intellect, because the subject-matter, which relates chiefly to the contrast between what is just and what is unjust, renders the task particularly easy; but when we propose to deal with the subtilties of the human understanding, and to explain the inner workings of the human soul, there are difficulties to be surmounted which, apart from all circumstances affecting immediately the person concerned, are of the utmost consequence to society at large, and must tax the ingenuity of our law-makers beyond the powers they are usually called upon to exercise.

It is far from improbable that before long we shall have to reconsider and revise the principles which now govern our conduct in reference to the insane. Our knowledge of the pathology of mental disease is so imperfect, our treatment so purely empirical and so slavishly hampered by the sickly sentimentalism of the age, that madness, in its pathological aspect, is scarcely capable of holding a place by the side of disease in general. Here learned ignorance appears to be the highest philosophy; and the expert, who would guard his opinion against the severe logic of the judge in a court of law, must abstractedly screen himself behind a position of which the law as yet can take no cognisance. Moreover, we are treading on very delicate metaphysical ground when we pronounce absolutely on the existence of an insanity which has no connexion with the faculty of reasoning. To divorce moral liberty from intelligence while it still is united to personality, is to advance a problem for solution which may find advocates in the school of M. Cousin's speculative theology, but is not likely to be held of much value in the deliberations of sober Englishmen. We are far from questioning the honesty of those psychologists who have established to their own satisfaction the possibility of such a separation existing between moral impulse and the use of reason; yet we desire to see the whole question more thoroughly fathomed, and the phenomena at issue more explicitly handled.

We are not so sure that Locke's fundamental definition does not equally hold good in moral as in rational insanity; namely, "that madmen put wrong ideas together, and so make wrong propositions, but argue and reason right from them." The murderer who conceives the idea that his victim is his property, and that he may dispose of it as he pleases, reasons correctly from false premises.

We shall get no true explanation of these mysterious perversions of the human intellect until a tribunal is set up to try the validity of the plea, very different from the one now established. In the meantime, let us hold ourselves on our guard, and remember that, in all great changes that affect the liberty of the subject, we are bound to be as tenacious for the security of the public as we are tender over the persons of the accused. We have seen, within the last few years, grievous evils resulting to society from our adopting a mistaken leniency towards felons; and so great has been the pressure of public opinion on this head, that a wider margin of punishment has been entrusted to the discretion of the judges. We have now to approach the subject of moral insanity and its consequences very much in the same spirit in which we have been compelled to regard the criminal. We have seen that personal assaults with great violence, which are the results of uncontrolled temper, are capable of being dealt with by a suitable chastisement on the body of the offender, who, according to the theory of some alienist physicians, might well put in the plea of *ira furor brevis.*

Here, then, we have to define what are the distinctive characters which mark the difference between the madness of impulse and the ungoverned rage of the wretch who is taken up for beating his wife to a mummy. We do not for one moment mean to say such nice distinctions do not exist, and may be demonstrated; but we venture to affirm that an uninformed public, in the present state of the law, might reasonably suggest that, as the very acts committed by the impulsive madman partake of the character in some degree of those perpetrated by the infuriated felon, the treatment of the former should be made in its degree to resemble that which is adopted in the case of the latter. Such notions may in these days horrify the susceptibilities of a second-rate novelist, but they will be found very difficult to upset while we consent to be guided by the policy of justice and the canons of sound reasoning. If, as we suspect in the majority of cases, an element of impaired intellect be at the bottom of the impulsive outburst, the patient can no longer be held to be in the category of the morally responsible. If, on the other hand, there be no such element of distorted judgment, and the insanity is represented as belonging purely to the will, it remains for science to point out the difference between those vicious propensities over which the possessor has no command, and those which, if indulged in, would make him amenable to the penal laws of his country. It will be the province also of science to suggest, if not to dictate, those measures of treatment which shall on the one hand protect society, and on the other afford the best chance of recovery to the patient.

Our own conviction is, that a middle path will be found the most politic; that those who are entrusted with the direction of these affairs will find themselves embarrassed by prejudices that have taken a deep and lasting root in the public mind; and that they will have to steer between the alternative of absolute penal coercion and the negative proceedings of a mere moral reformatory. That such a *via media* may be consistently followed in this intricate undertaking, we have no doubt; it is the rule of common sense, which never forsakes the intentions of the English reformer when he is endeavouring to adjust the nicest state questions.

We have yet one word to say on the kind of persons which, in our judgment, would be best calculated to contend with and overcome the difficulties we have been considering. The monopoly of authority is, we conceive, at all times an unmixed evil; it has a tendency to cripple the executive, and unduly to resist the healthy pressure from without. That commissions and commissioners, appointed according to the established forms of the government, have, in spite of their exclusive leaning, generally executed their duties faithfully and well, we are ready to admit; but the exigencies of the case before us are such as to defy the penetration of all ordinary commissions. The foundation of a commission intended to grapple with the hidden things of human thought must be composed of men not only deeply versed in the principles of general pathology and physiology, but in the subtle power of dialectic skill. One of their principal duties would consist in appointing special commissions to gather evidence in particular cases. Let us for one moment consider a case in point. A man, in a fit of jealousy, commits a murder; and for his defence the plea of insanity is set up, although apparently the deed has been accomplished with the deliberate purpose of preconceived malice. We are much mistaken if one of the first acts of a scientific commission would not be to examine the medical men who had known the murderer from his youth, and to rest their decision mainly on the testimony afforded by such an examination. A commission thus constituted might well be permitted to sit by the side of the judge who tried the case. We should then have no secret court of appeal trying the case over again; and we might then hope to see a trial affecting the life or liberty of the subject conducted by men who have no fear of being considered either inconsistent or unmerciful.

THE ROYAL COLLEGE OF PHYSICIANS.

The Royal College of Physicians, on the 26th instant, elected Dr. Alderson as their representative at the Medical Council in the place of Dr. Burrows, who has been elevated to the high position of President of the Council. Dr. Alderson was elected for the full legal period of five years. The College of Physicians influence at the Council has of late been markedly on the increase, just as has been markedly on the decline the influence of the College of Surgeons. The College of Physicians merits this reward. It has always endeavoured to carry out in the matter of education the injunctions of the Medical Council, and in this respect contrasts favourably with the College of Surgeons. In some slight particulars it appears that the College of Physicians, in the matter of their educational curriculum, is not in accordance with the Medical Council; the Fellows have therefore determined so to alter their regulations and by-laws as to bring them into complete unison with the Medical Council's present programme of Medical Education.

THE ROYAL COLLEGE OF SURGEONS.

The Council of the Royal College of Surgeons will have prepared a surprise for many of their friends and enemies (if they have any). Mr. Partridge has been elected by them to the Examinership vacant through the death of Mr. Green. The prophets, who are wise in anticipation on occasions of this sort, had given the desirable or eagerly desired appointment to Mr. Hilton; but prophets fail sometimes, like other less wise people. The claims of the different candidates (if we may so designate them) for office have been measured in the eye of the Council by the following figures. Mr. Partridge received 13 votes, Mr. Hilton 7 votes, and Mr. Gulliver 1 vote. We regret to hear that, as a result of this election, one of the body has thought it right to retire from his seat in the Council. This latter incident will, of course, awake expectations in the bosom of some new aspirant for a seat at the Board. Our readers, no doubt, know well by this time, that the office of Councillor is not a lucrative office, that in fact the Councillor pays almost as much in entrance fees as he gets for attendance in Council; but then it is a stepping-stone to a very lucrative affair, viz., to an Examinership—at least the Council have hitherto always made it such a stepping-stone. They have never yet elected (as the new Charter permitted or enjoined them to do) an Examiner from the body of Fellows at large, that is, out of those Fellows not on the Council. They have always hitherto made it a sort of *intra* affair—electing their Examiners from out of their own Council-circle. But even this attention to their own wishes and interests does not (it would appear) enable the Council to suppress the rise of animosities and jealousies within the circle. We would, therefore, recommend to the Council to consider whether it would not be well—in order to prevent all intestinal feuds—to come to a resolution, that in future they will elect all Examiners from the Fellows not on the Council. Several advantages would result therefrom. They could carry into effect the principles of their reformed Charter; they would prevent all intestine animosities within the Council's bosom; they would have a larger and younger field from which to gather their Examiners; and, lastly, they would at once put an end to all exciting and unseemly canvassing and fighting for the office of Councillor. Those Fellows who then aspired to the office of Examiner would be the last to offer themselves for the office of Councillor; and the Council would then become what it ought to be—a steady and select assembly of *Patres Conscripti*, whose business it would be to regulate by their gray-haired experience the affairs of the College—leaving to the energy of modern scientific surgical and anatomical skill (in the full force of its life and bloom) the duty of examining; at the same time, however, modifying that energy by a due admixture of the long experience of the practical surgeon. Above all, such a method of electing Examiners would for ever put an end to all that subserviency which the non-Examiners on the Council, who have the Examinership in their eye, naturally pay to those greater men on the Council who are Examiners as well as Councillors. In other words, the Examiners will no longer override and rule the Council; and every Councillor will be able to speak and act solely in behalf of the interests of the College and of the profession at large, and not with the ever-present dread of giving offence to those who may at a future day reject him as unworthy of the Examinership, because he has made himself what the old Tories would call "troublesome"—*i. e.*, has done his duty. In conclusion, we would suggest these questions to the College: Why need Examiners be members of Council? Would not the interests of the College be better served if the Examiners were not members of Council?

CATTLE-BREEDING RENOVATED.

M. Marc Thury, Professor of the Academy of Geneva, has issued a rather surprising statement; and a statement which, if eventually confirmed as correct, is one of great practical importance to cattle- and other breeders. He has made the discovery that "cattle-breeders are enabled henceforth to obtain, according to their wishes, male or female animals"; and he now offers the secret of the discovery to the public, having already tested its accuracy by two years' experiments.

Arguing from certain facts observable in plants

and in the lower animals, M. Thury came to the conclusion, that the ovum is not fully developed—has not arrived at maturity—at the first moment of its passage from the ovary; and that if it be impregnated soon after its escape from the ovum—*i.e.*, in this immatured state—a female will be produced; but if impregnated when mature, a male. From this, we suppose, it follows that woman is the immature development of a man.

This theory M. Thury put to the test of experience; having had an excellent opportunity for doing so "at the well-managed farm of M. George Cornaz at Montet." M. Cornaz, in a letter, corroborates the fact stated by M. Thury. He availed himself, he says, of the information given him under secrecy by M. Thury, and "has at once, and without the least difficulty, obtained all the expected results." *Imprimis*, in twenty-two successive experiments, he tried to procure heifers, his cows being of the Swiss breed and his bull a thorough-bred Durham, and "in every single instance," he says, "I obtained the wished-for result." He afterwards bought a thorough-bred Durham cow; and being desirous to obtain a thorough-bred Durham bull, "I operated according to Professor Thury's instructions, and the event once more confirmed the truth of the process imparted to me." Besides obtaining this pure Durham bull, he obtained also six other half-breeds—Durham-Swiss bulls. And to sum up, he tells us, "I have made in all twenty-nine experiments conformably to the new process; in not one single case has it failed me." And adds, "I look upon Professor Thury's system as true and perfectly safe; and I trust that he will soon enable all cattle-breeders and farmers to take advantage of a discovery which will regenerate the business of cattle-breeding."

This hope of M. Cornaz is now fulfilled by M. Thury, who publishes for the benefit of the world the method of carrying into practice his scientific discovery, which had been imparted as a secret to M. Cornaz. The following are the "Practical Instructions" laid down by M. Thury "for obtaining at will animals belonging to the one or to the other sex in cattle of the bovine race.

"1. The course, character, indications, and duration of rut-appearances should be previously observed in the cow upon which it is proposed to experiment, as they vary a little according to each animal. It is a well-known fact, for instance, that the duration of the rut varies in different cows from twenty-four to forty-eight and even a greater number of hours.

"2. When, according to instruction No. 1, the experimenter knows well the cow he intends to experiment upon, he is to operate as follows:

"To procure an heifer, have the cow served at the first indications of rut.

"To procure a bull, have the cow served at the end of rut time.

"3. Those animals in which the indications of rut are loose and uncertain, as is frequently the case with fattened or shut-up cows, should be excluded from the trial. Animals living in the open air should be selected in preference. Sound animals and such as are in regular conditions should be chosen.

"4. The same experiments may be tried upon horses, asses, sheep, goats, etc. Although hitherto untested as regards those animals, our theory promises with them the same results as have been obtained with cows."

SHAM NOMINATIONS.

Our readers will be surprised to learn that the Royal College of Physicians a few days ago recommended to the Board of Governors Sir Henry Holland and Dr. Copland as fit and proper persons to fill the office of Physician to St. Bartholomew's Hospital, vacant through the resignation of Dr. Burrows. Why such an incident should occur we will explain to the curious in such matters.

A property was left by Dr. Hamey many years ago (see Roll of the College, p. 198) to the College, from the proceeds of which a sum of £40 *per annum* was to be paid to a physician of St. Bartholomew's, *provided the hospital appointed one of two candidates nominated by the "elects" of the College.* The candidates were to be Fellows of the College, and the object of the bequest was evidently to vest in the College the privilege of appointing physicians to the hospital. As the governors of the hospital never accepted the nomination of the College, and are certainly now prevented from doing so by their system of the regular succession to the office by the assistant-physicians, the meaning of the bequest is obsolete. The sham at present consists in the request on the part of the hospital, who have no intention whatever of accepting the dictation of the College of Physicians, and have, therefore, no claim whatever to any payment under the deed.

It may be remarked, that at the time the deed was executed, there was only one physician to St. Bartholomew's Hospital.

Surgeon Turnbull, as our readers may have noticed, has been attacked by the Commander-in-Chief in the following terms:

"Surgeon Turnbull, in like manner, has laid himself open to the gravest censure. His conduct with reference to the entries in the hospital records will become the subject of further inquiry, and, should his explanations not prove satisfactory, most serious notice must necessarily be taken of his proceedings; but, at all events, his continuance in the Inniskilling Dragoons has become impossible."

In consequence of this inculpation, a special inquiry into the circumstances alluded to has been made; and we are glad to learn, as a result of the inquiry, that the inuendoes of the aforesaid Commander-in-Chief fall harmless to the ground. Surgeon Turnbull has been honourably acquitted of the charge of having made erroneous entries in the hospital registers, and of having in any way acted dishonourably.

DR. GARROD'S LECTURES

ON THE

BRITISH PHARMACOPŒIA,

Delivered at the Royal College of Physicians.

THE first of a course of five lectures on "the *British Pharmacopœia;* its Construction, its Comparison with the *London Pharmacopœia,* and the Value of its New Remedies in the Treatment of Disease"—was delivered at the College of Physicians by Dr. Garrod, on Wednesday last, January 27th.

The lecturer commenced by observing that thirty years ago an attempt was made to effect an union between the three Pharmacopœias of London, Edinburgh, and Dublin; but that, after correspondence on the subject had been carried on during two years, the scheme was abandoned, it being found impossible to reconcile the differences which existed, and which were adhered to by the representatives of the Colleges. The reconciliation, then ineffectually sought, has at length been accomplished by the means of an Act of Parliament, rendering the formation of a National Pharmacopœia obligatory on the Medical Council.

That the new Pharmacopœia will prove satisfactory to all, he would not assert. In the course of his duties as one of the compilers of the work, he had had opportunity of hearing many and very various opinions as to its proper character. Some considered that the number of medicines to be enumerated in it should be as small as possible; and one physician—a man of some authority in the profession—had even suggested to him that twenty-five only should be retained as necessary for the treatment of disease. Others, again, would have the list enlarged. A third class were desirous that the Pharmacopœia should contain a list of merely the best known drugs and their simplest preparations; while the opinion of a fourth class was, that the work should contain a list of all the known medicines, and of all the formulæ into which they entered.

The Committee entrusted with the formation of the Pharmacopœia followed a middle course; introducing medicinal substances whose reputation was well established, and formulæ the utility of which had the support of experience. Some may, no doubt, consider that many medicines have been omitted which should have found a place in the book. But it was necessary to make allowance for prejudices for and against the use of certain medicines; and it must also be remembered that the Pharmacopœia Committee was necessarily composed of twenty members, to whose desires and convictions it was necessary to pay some respect.

Irrespectively of the contents of the book itself, an important work, the lecturer said, had been accomplished in the formation of a single British Pharmacopœia in the place of the three hitherto existing—a Pharmacopœia intended not only for use within the United Kingdom, but in all parts of the British dominions. Dr. Garrod here adverted to the great change of opinion which has taken place in recent years in reference to the efficacy of medicines. This change of opinion, although at present it may produce in the minds of some an unhealthy scepticism, will doubtless ultimately prove of great importance and value. It may be, he said, some consolation to the medical profession to remember that it is not among the votaries of medicine alone that such convulsions—such unsettling of faith—takes place; but it is one of the changes which from time to time occur in men's minds. Our real knowledge of therapeutics—of the influence of medicines over disease—is confessedly behind that of other branches of medicine, as diagnosis and pathology; and hence there is a great field open for the study of the treatment of disease, which, though difficult, and demanding the exercise of much patience and the abandonment of all prejudices, must be, on account of its ultimate object, a matter of the highest interest. More labourers in this field are required; and it offers the widest opening for research. But, in all such researches, we must not overlook the tendency of diseases to run a natural course. The neglect of this has led to great discrepancies as to the efficacy of various modes of treatment. Statistics have been appealed to in favour of certain remedies; other statistics, again, have been brought forward in disparagement of the same medicines; and this discrepancy, Dr. Garrod believed, has arisen from the fact being overlooked, that in both series of trials the disease has probably been following its own course, uninfluenced in either direction by the medicine administered. Yet there are medicines with regard to the influence of which there can be no question. Who can doubt the effect of certain agents in removing or alleviating pain, inflammation, or intermittent fever; in producing sleep, etc.? There is, then, a groundwork existing, on which future researches can be based.

Returning to the immediate subject of his lecture, Dr. Garrod next gave a sketch of the origin of the British Pharmacopœia; and read the clauses of the Medical Act of 1858, and of the supplemental Act, in which provision was made for such a work. The duty of its formation was placed in the hands of the Medical Council, who appointed from among their own members a Pharmacopœia Committee, with power to add to their numbers, and with directions to request the three Colleges of Physicians and the Pharmaceutical Society to co-operate with them, and to send delegates to the Committee. The London College of Physicians appointed Dr. Frederick Farre and Dr. Garrod as delegates; and Dr. Garrod observed, that Dr. Farre's extensive knowledge, derived from previous experience in such matters, of the manner of constructing a Pharmacopœia, his logical thought, and his untiring perseverance, had rendered him an invaluable coadjutor to the other members of the Committee.

Dr. Garrod then proceeded to speak of certain points in the new Pharmacopœia which would attract attention. The first of these to be noticed was the

language in which it has been written. Many of the learned and erudite members of the profession would probably regret the change which had taken place, in the abandonment of the Latin language, and the publication of the work in English. They must, however, call to mind the fact that both the Edinburgh and the Dublin Pharmacopœias have been published in English. But, indeed, the question of language never came under the Pharmacopœia Committee; it having been already decided by a resolution of the Medical Council (on the motion of Mr. Lawrence, seconded by Mr. Teale) that the English language should be used, the Latin names of the medicines being appended.

In regard to the *measures* used in the new Pharmacopœia, no change has been made; that is to say, they remain the same as they were in the last edition of the London Pharmacopœia. In the *weights*, however, there have been important alterations. The troy or apothecaries' pound of 5760 grains has been abandoned; and in its place the avoirdupois pound of 7000 grains, divided into 16 ounces, has been adopted. The reasons for this alteration were explained. In the Dublin Pharmacopœia of 1850, avoirdupois weights were introduced; and, in the preface of the last edition of the Edinburgh Pharmacopœia, the College of Physicians of that city gave evidence of a disposition towards a similar change. The Pharmacopœia Committee contained representatives from the three Colleges in nearly equal numbers; and hence a majority was in favour of the adoption of the avoirdupois system. But then a difficulty arose, as to how the avoirdupois ounce should be divided; seeing that it contains 437.5 grains, whereas the apothecaries' or troy ounce contained 480. The avoirdupois drachm (16 making the ounce) was unfitted for adoption, as it was merely a nominal weight, and differed greatly in value from the other well known weight of the same name. Again, it was considered whether it would be possible to adopt the plan of the Dublin College, which had divided the avoirdupois ounce into 8 drachms, each containing 3 scruples. In this case, the drachm would have contained about 54 grains, and the scruple 18 grains. At length, Dr. Charles Wilson, one of the Edinburgh members, proposed an alteration of the value of the grain; that is, that the avoirdupois ounce, in place of containing 437.5, should contain 480 grains, and should then be divided into drachms and scruples; the new grain bearing, therefore, the ratio of 175:192 to the old one. This proposition was carried at the first conference of the Pharmacopœia Committee, and the manuscript of the new Pharmacopœia was prepared in accordance with Dr. Wilson's plan. The lecturer considered that the change proposed would have been on the whole convenient; the difference in the grain being too small to have any important effect. When, however, it became noised abroad that a new grain was to be employed, many grave objections were urged against it. The chief of these objections was the alteration of the value of the grain—the adoption, under the same name, of a weight different from that which was the standard starting point of all the recognised weights in the kingdom. On further deliberation, the Committee, acted on by pressure from without, finally determined to retain the avoirdupois pound, ounce, and grain, rejecting all intermediate weights. This plan, Dr. Garrod observed, has both advantages and inconveniences. The first of the advantages is, the abolition of a system of weights used for a special purpose only; and not always employed even in pharmacy, the avoirdupois weights being frequently used in the preparation of substances on a large scale. Again, the weights used in medicine are now brought into direct relation with those ordinarily used in business. The greatest inconvenience arising from the new plan appears to be, the necessity for using large numbers in writing prescriptions. No doubt this is a great inconvenience; but Dr. Garrod suggested that it may be overcome by prescribing medicines in single doses, and directing a number of such to be made up. With regard to the proposal for the adoption of the metrical system, Dr. Garrod said that this was impracticable. The Pharmacopœia was published under the provisions of an Act of Parliament; and a system of weights could not have been introduced which had not received legal sanction. To have introduced the ordinary and the metrical systems side by side would only have led to confusion in a work intended for practical use in medicine. In a purely scientific work, the case would be different.

The lecturer then proceeded to notice the *construction* of the Pharmacopœia. The volume is divided into two parts and a series of appendices. The first part contains a list of the materia medica; the second, the details of the processes for making pharmaceutical preparations and chemical substances. Of the appendices, he would speak hereafter.

The *first part*, that containing the Materia Medica, differs from the corresponding section of the last London Pharmacopœia in several points. It has about three times the extent, as far as the number of pages (difference of type being allowed for) is concerned. The augmentation, however, has not arisen from the number of new agents introduced, but from the manner in which the subject has been treated. In the last London Pharmacopœia, the materia medica list contained the names of various substances for the preparation of which no directions were given in the other part of the work; while those substances the formation of which was described were omitted from the list of materia medica. But, in the British Pharmacopœia, all ordinary medicinal substances, whether obtained in trade or prepared by certain processes, are introduced into the first part; so that the list is complete. For instance, in the London Pharmacopœia, calomel, corrosive sublimate, and tartar emetic, for the preparation of which directions are given in the second part, are omitted from the materia medica; while in the British Pharmacopœia they all appear in the first part.

The materia medica list of the London Pharmacopœia contained many articles not used in medicine, but in making pharmaceutical preparations. In the British Pharmacopœia, all such substances are omitted from the first part, and placed in an appendix.

The manner in which the articles contained in the materia medica are treated in the British Pharmacopœia differs from that in the London Pharmacopœia. In the latter, indeed, many tests, etc., are appended; but the introduction of such matter is the exception rather than the rule. In the British Pharmacopœia, on the other hand, much information is given. The English and the Latin names of each substance are given; then follows a definition; its symbol, if it be a chemical substance; if a vegetable, its botanical name and source, and a reference to some good figure of the plant. There are also given tests by which its strength and purity can be ascertained; and a list of the preparations into the composition of which it enters. Dr. Garrod gave, as illustrations of the plan followed, the descriptions of Oxide of Silver (*Argenti Oxidum*); Bael (*Bela*); and Santonine (*Santonina*). The matter appended to each of these is simple; but, with regard to more important articles, a large amount of information is given; so much, indeed, that the Pharmacopœia contains probably all that is essentially useful to be known by practitioners regarding the action of the medicines.

Dr. Garrod said that he now proposed to describe the remedies that had been newly introduced; all of which had been used in medicine, and some of which had been already introduced into the Edinburgh Pharmacopœia. He would not attempt to enter into details as to their composition, preparation, etc.; but would endeavour to give such information regarding them as would enable their physiological and therapeutical actions to be further investigated with advantage. He would in the first place pass in review the first part of the Pharmacopœia; that which contains the list of the materia medica, selecting the most important remedies for consideration; then he would notice the series of preparations contained in the second part; and lastly, if time allowed, he would make some observations on the appendices.

The first preparations that demanded notice were the *acids*.

Under the head of *acetic acid*, British vinegar has been omitted, and French vinegar substituted, as being more pure. The acetum destillatum of the London Pharmacopœia has been omitted. The percentage strength of acetic acid is somewhat reduced in the new work; and dilute acetic acid is directed to be made by mixing the stronger acid with seven times its volume of water. Glacial acetic acid (*Acidum Aceticum Glaciale*) has been introduced. This is an acetate of water. The value of acetic acid is partly chemical and partly therapeutic. But in the Pharmacopœia it is almost entirely used as an external agent. It is a counterirritant—a powerful caustic and escharotic. It dissolves cantharidine. The sore produced by acetic acid is severe, the action of the acid extending deeply. Dr. Garrod had sometimes employed acetic acid as a counterirritant in cases where the absorption of cantharides would be hurtful.

Sulphurous acid (*Acidum Sulphurosum*) has been introduced, in the form of a solution of the gas in water, as an external agent. In the appendix, also, hyposulphite and sulphite of soda will be found, and are sometimes employed. When sulphurous acid is used, the gas is rapidly evolved; when sulphite of soda or hyposulphite of soda is used, the evolution is less rapid, and in the case of the latter salt is accompanied by the disengagement of some sulphur, from which, however, no disadvantage arises. Sulphurous acid possesses peculiar chemical properties; it is a powerful deoxidising, bleaching, and disinfectant agent, and destroys vegetable life. It has been chiefly used as an external application in cryptogamic skin-diseases; and a good mode of employing it is by means of a mixture of the solution of sulphurous acid with glycerine. Some inconvenience arises from its liability to ready decomposition and the escape of the gas; and hence preference is generally given to the hyposulphites or sulphites, with the addition of a little acetic acid. When these are used, the sulphurous acid is evolved slowly, but continuously. It has been suggested that the acetic acid is here the real remedial agent. To determine this point, Dr. Garrod has treated cases of skin-disease—of pityriasis versicolor, for example—by applying solution of hyposulphite of soda (with acetic acid) to one side of the body, and a lotion of dilute acetic acid alone to the other side. In all cases, the advantage has decidedly been with the hyposulphite. Internally, hyposulphite and sulphite of soda have appeared useful in cases of chronic vomiting accompanied by sarcina.

Among the *strong acids*, the only alteration of importance has been an increase of the strength of nitric acid.

Among the *dilute acids*, the strength of dilute hydrochloric acid has been slightly increased; that of dilute phosphoric acid rather more so; dilute sulphuric acid remains of about the same strength as before; while the strength of dilute nitric acid is slightly varied. The differences in strength, however, are not such as produce any difficulty in prescribing the acids. An aromatic sulphuric acid has been introduced; also a dilute nitro-hydrochloric acid.

Dr. Garrod now proceeded to speak of *arnica*. The dried root forms an article of the new materia medica; and directions are given for preparing a tincture. It appears to be a powerful irritant, and in smaller doses a stimulant; and is regarded as an excitant of the nervous system. Dr. Garrod's own observations of the internal use of arnica have not been very numerous nor definite; but it has been recommended for cases in which strychnia is ordinarily employed—to which alkaloid it bears some resemblance in action. Externally, it is well known as a remedy for sprains, bruises, lacerations, etc.; and the tincture of arnica, used as a liniment or lotion, is supposed to aid the reparative powers. Dr. Garrod has endeavoured to put this to the test. He stated that for this purpose, he had performed a series of experiments on patients in whom dry cupping had been performed, so as to produce ecchymosis. The action of arnica lotion, tincture of arnica, spirit lotion, and spirit, had been tested; the result being to shew that the application of spirit to a bruise is decidedly of advantage; and that the addition of arnica is not attended with an increase of the benefit. He had, however, made his experiments

with tincture of the flowers of arnica, whereas tincture of the root is directed in the Pharmacopœia; but this could not, he thought, be a valid objection, as the same active principles are contained both in the flowers and in the root of the plant.

THE BRITISH PHARMACOPŒIA.

The following notice appears in the *London Gazette* of January 26th, 1864:

Notice is hereby given, that the *British Pharmacopœia* has been published, under the direction of the General Council of Medical Education and Registration of the United Kingdom, and that the same has been printed by Messrs. Spottiswoode and Company, of New Street Square, in the City of London, printers, under the authority of the said Council. Dated the 25th January, 1864.

Francis Hawkins,
Registrar of the General Council.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thursday, Feb. 18, 7 P.M.

SOUTH-EASTERN BRANCH: THE LATE PETER MARTIN, ESQ.

To the Members of the South-Eastern Branch of the British Medical Association.

Gentlemen,—I beg to inform you that the question of a testimonial to the memory of our late much-esteemed secretary, Mr. Peter Martin, of Reigate, is deferred for consideration to the next annual meeting at Brighton. I am, gentlemen,

Your obedient servant,
J. Armstrong,
President of the South-Eastern Branch.

Gravesend, January 27th, 1864.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary meeting of this Branch was held at the York, House, Bath, on Thursday, January 21st; the President, F. K. Fox, M.D., in the Chair. There were also present thirty members and two visitors.

New Members. The following gentlemen were elected members of the Branch:—John Roberts, Esq., Bath Mineral Water Hospital; Edwin Bush, Esq., Frome; A. Haviland, Esq., Bridgewater; R. Tilton, Esq., Stonehouse, Gloucestershire; T. W. Fryer, Esq., Kingswood, Bristol.

The following gentlemen have also joined the Branch since the commencement of the year:—J. Ramsay Brush, M.D.; H. Hensley, M.D.; J. W. Teale, M.A.

Papers. The following papers were read and discussed.

1. Operation for Artificial Anus. By G. Corbould, Esq.
2. Instance of Recovery from Leucocythæmia. By S. Martyn, M.D.
3. On Hospital Dietaries. By J. Beddoe, M.D.
4. Case of Tetanus. By R. W. Falconer, M.D.
5. Spasmodic Affections of Children. No. 3. Chorea. By E. L. Fox, M.D.

Correspondence.

IRIDECTOMY.

Letter from Wm. Bowman, Esq., F.R.S.

Sir,—I now proceed with my reply to Mr. Walton. He requires to know the *modus operandi* of iridectomy before adopting it. But if the *facts* of its promoters are correct, we may pursue the inquiry into the explanation of them at our leisure, without in the meanwhile withholding the operation from the patients who now stand in need of relief. We know that in glaucoma *the globe is hard*, and that after iridectomy (and by iridectomy I always mean the operation *as performed for glaucoma, and properly performed*), *the hardness is reduced, and the equilibrium of the circulation restored.* When further research shall have explained *the rationale of the hardness*, we may hope to be nearer than we seem to be at present to the explanation of the *mode* in which iridectomy *reduces the hardness.* Meanwhile the most philosophical course is to apply the remedy for the sake of its proved benefit, rather than to discredit it, or decline to adopt it, because we cannot explain its whole mode of acting.

Several very interesting suggestions have, indeed, been made on this head, though none can hitherto be said to be more than plausible conjectures. Von Gräfe himself, with the candour and scientific spirit which distinguish him, does not, or did not lately, profess to explain it fully; and a view which I myself, at an early period, thought to have some probability, has been ably criticised by Donders, and shewn to be untenable, at all events in the form then given to it. But surely all such discussions as to the *rationale*, highly as they must interest the minds of those who are continually witnessing the actual reduction of tension by the operation, should not weigh for one moment against its performance when a patient whose eye is hard stands in present need of our help. Were Mr. Walton once convinced of the reality of the remedy, he would, I am sure, himself lay aside such an objection from mere motives of humanity.

Mr. Walton argues at length in favour of *paracentesis corneæ*, as doing all for the relief of hardness that iridectomy can do. "At once I say, that benefit is to be got, not through any direct effect on the iris, but solely in consequence of the evacuation of the aqueous humour. It is not, then, the iridectomy that does this; but that which takes place as an inevitable step of the operation, as a preliminary measure—namely, the *paracentesis corneæ*."

And then we have a long reference to Mr. Wardrop's excellent paper written half a century ago, and a profession of Mr. Walton's "greatest faith in the remedial efficacy of tapping the eye *in all inflammatory affections, and even under other states of disease*; and he has often found the repetition to tell, when a single operation has given but little or no result, and in very severe cases he has occasionally repeated the proceeding even several consecutive days. Yet he does not exalt the measure beyond the limit the originator modestly claimed for it." He goes on in the same vague general phrases: "It would not serve my purpose to do more at present than merely to state general results, for details" [*sic*]. "Again and again, I have seen dispelled by the corneal tapping, *the premonitory symptoms of what would be now called glaucoma.*" [Yet he presently takes pains to explain that those symptoms which are really of dia-

gnostic value are, in his opinion, valueless; and that he does not feel able to diagnosticate glaucoma except in its last old-fashioned stage, as I shewed last week.] "I have repeatedly given relief by discharging the aqueous humour in *many stages of ocular disorganisation*, when nothing else" [Was iridectomy tried?] "would relieve." However, he has his reservations. "I am anxious to prevent any young surgeon from supposing that tapping the eye is a *perfect panacea*. It is not so; neither is any other operation a *perfect cure for all idiopathic inflammatory affections*." He then, at length, does speak definitely of tapping in the disease which he recognises as glaucoma, "the bad old-fashioned disease called glaucoma, as understood by me, and by my teachers, Lawrence, Tyrrell, Dalrymple, and expressed by Mackenzie in his works. According to my experience, it is a very rare disease; each attack of which, each paroxysm, inflicts a definite damage. The eye may be destroyed at once; or it may retain some amount of sight after several periods of renewed activity." Here, I presume, he has in view the inflammatory glaucoma, the acute, and perhaps the subacute, forms. Now, let us carefully mark what is his own experience of tapping in these, where his diagnosis shall not be questioned. "Tapping will often relieve, and so will iridectomy as a means of tapping." [He does not say that he has himself tried iridectomy in such cases while there was still some sight to be saved.] "Pain will be lessened, and perhaps the period of attack shortened. *I speak cautiously about the amount of substantial benefit to the eye, because I have so often seen all operations*" [Iridectomy in his own hands?] "*and treatment fail, and the eye perish.*"

Tapping, in fact, as I understand him, moderates the course and intensity of the disease, but nothing is said of its *arresting* it, of its *permanently relieving the tension* which destroys sight, nothing of any *recovery of sight*, or saving from ultimate disorganisation what he calls in another place "the wonderful mechanism of the glorious and precious eye."

The question here raised may appear to persons unacquainted with the recent literature of glaucoma to have much importance. Certainly, if *one tapping* of the aqueous chamber would *permanently* reduce tension in glaucoma, iridectomy would be at once superseded; though if the tappings to be efficacious are *to be repeated*, iridectomy might still have advantages. But unhappily no such permanent result follows; and I think more ample experience only is needed, *together with a more exact discrimination of the glaucomatous condition*, to convince him that *paracentesis corneæ* is at best but a very transient means of reducing eye-tension in glaucoma. The puncture heals in the course of a few hours, and then the intraocular cause of exalted tension (whatever it be) remaining unredressed, the tension is immediately reproduced. For nothing is more remarkable than the rapidity with which the aqueous humour is secreted, and the orifice being closed, the *whole eye contents* are almost immediately restored to their former excessive bulk, and the globe is hard again. If, indeed, *with glaucomatous tension, there co-exist more or less active inflammation*, with all its secondary consequences and aggravated risks (acute glaucoma or the higher varieties of the subacute), one or several frequently repeated tappings of the cornea may often serve as a temporising measure to abate the inflammatory symptoms and reduce the severity of the attack; but the hardness will be found to remain, and with the hardness the certainty of eventual blindness at an earlier or later period.*

Thus iridectomy would still be necessary, while the delay the tappings would involve would probably much diminish the ultimate amount of sight saved.

Mr. Walton, in his work (*Surgical Diseases of the Eye*, 2nd edit., 1861, chap. xxvi), refers to Von Gräfe's memoirs on *Glaucoma* (translated in the Sydenham Society's volume for 1859, published in 1860, by Mr. Windsor of Manchester, one who perfectly understands the subject), in such a way as to show that he has perused them. Let me also quote from the same most competent authority a passage on this question of tapping the eye in glaucoma, which has apparently escaped Mr. Walton's attention, to show that this practice has been long ago considered, largely tried, and effectively condemned.

"Another year (says Von Gräfe in 1858) has passed since I wrote my essay on *Iridectomy in Glaucoma*, for the third volume of the *Archiv*. I have had many fresh cases, and I have operated on them at most different periods of the disease. So far as was possible, I have kept in view all the cases on which I had previously operated, for although the immediate improvement was clear enough, there was yet the possibility of its not being permanent. To my own observations have been added those of many of my colleagues, and now, when I have again to consider critically the question of treatment, I can at once and with pleasure declare, that I have not the least to retract of what I formerly advanced in favour of iridectomy. Some of the cases, indeed, have ultimately been more favourable than I had expected." (*Windsor's Translation*, p. 359.) "The uncertainty of the result [of iridectomy] in the later stages of acute glaucoma, especially as regards duration, are so directly opposed to its completeness and durability in the acute period, that the advice *to operate immediately and without hesitation*, cannot be too urgent. I must *most decidedly reject the recommendation to try first paracentesis*,—advice which has been urged from unfounded ideas of caution. Three years' extensive experience has taught me, that the results of paracentesis are, in the infinite majority of cases, temporary only. It is true that when methodically employed, it removes the acute character of the disease, and palliates the symptoms; it does not, however, prevent gradual deterioration of vision. Within from three to four months, this was almost invariably found to be the case, on a careful examination of the field of vision. When with these results we compare those of iridectomy, *there can be no reasonable cause for hesitation*. By such trials of paracentesis, the time is lost for radical treatment; for the degree of recovery essentially depends on the length of time the eye has been already affected, and not simply on the condition of the symptoms. Besides, we may reasonably fear that the repeated disturbances of the ocular circulation—and every change of pressure must be considered as such—may render the case less amenable to a treatment, the value of which has been actually proved. My clinic presents a considerable number of cases, where one eye has been treated by paracentesis in former years, the other by iridectomy. In other cases, where the treatment had been commenced with paracentesis, iridectomy was ultimately performed on the same eye, owing to the deterioration of vision, and to our having become acquainted with its beneficial action. *Only a glance at the fate of these different eyes is needed, to induce the abandonment of all other treatment in glaucoma than that of the immediate performance of iridectomy.*" (*Id.* pp. 363-4.)

It will hardly be suspected that I should not have put the same practice to the test on some of the numerous occasions that have been afforded me of doing so, when at various stages of various forms of *typical glaucoma*, for one reason or another, iridectomy could

* See Hulke, On the Surgical Treatment of Glaucoma (*Medical Times and Gazette*, March 27th, 1858, p. 318), where there is a full reference to this practice and its failure in glaucoma. Also my paper in the BRITISH MEDICAL JOURNAL, Oct. 11th, 1862.

not be opportunely performed, or would not be at once acceded to by the patient. I may state that I have been *uniformly disappointed* as to any *permanent* result, or any saving of sight by this method, with very few exceptions indeed, the phenomena of which only served to support the general conclusion.

Let it not be supposed, however, that *paracentesis corneæ* is an operation of which the value *in proper cases* is undervalued by me. I esteem highly the debt we owe to its eminent proposer* Mr. Wardrop, still happily among us, only I reject it in *typical glaucoma* as a permanent remedy; reserving it for certain cases of the glaucomatous class in which tension arises intercurrently in conditions not originally glaucomatous, and when the cause of tension appears to be so far temporary, that if relieved once, or sometimes even a few times consecutively, by puncture, it ceases to recur; and yet where, if unrelieved by the local outlet, it persists with all its usual ulterior consequences; only yielding to surgical relief. I have particularly found this puncture useful in the tension that sometimes follows needle operations for clearing the pupil after extraction of cataract, and I would earnestly counsel surgeons in any such case, even when the operation has been in itself of the slightest character, to watch narrowly for the occurrence of tension. The pain that is apt to come on from the second to the eighth day often originates in tension, and a timely puncture (perhaps repeated once or twice if necessary), carried also once or twice through the iris if it bulges, will generally allay it in a very satisfactory manner.†

I also need hardly say that I employ the useful little operation of tapping the aqueous chamber in some of those cases of *non-glaucomatous* inflammation of the cornea, anterior chamber, and iris, in which Mr. Wardrop recommended it. Here it sometimes, *though there be no actual tension*, sets forward the eye on a course of recovery, where the symptoms had previously been tedious or threatening. Very much might be written on the various conditions here alluded to, were this the place for doing so.

I must add, however, some remarks on the operation of *paracentesis corneæ*, lest it should be thought by any to be a proceeding unattended with danger. In fact, it is often a very delicate and critical proceeding, and it is never free from those risks which belong to every penetration of the aqueous chamber, especially when shallow, by an instrument. If it is to be repeatedly performed, these risks are repeatedly incurred. They have not been disguised by Mr. Wardrop, who says, "The chief difficulty arises from the pain occasioned by the pressure on the eyeball, necessary to keep open the eyelids; for until a sufficient portion of cornea is brought into view, and the movements of the eyeball completely under the management of the operator, the introduction of the knife should not be attempted."

And after describing the mode of holding the eye, and the share "the assistant" must take in the proceedings, he says very truly, that the patient is very apt to start when he finds the instrument coming in contact with his eye. I may add, that he is very apt to start also while the instrument is turned on its axis, and held stationary in the wound (as very properly advised by Mr. Wardrop, as well as by Mr. Walton), in order to favour the escape of the aqueous humour. And when the fluid is thus escaping, and the iris and lens are falling more forwards towards the cornea, the severe pain often felt is very apt to cause instinctive movements of the patient's head or eye, very dangerous to the lens, especially if the cornea be at all cloudy, so that the point of the needle is obscured from view. In glaucoma, also, the anterior chamber is so frequently very shallow, that, if *paracentesis corneæ* be attempted, the risk to the lens is much increased, even on the first entrance of the instrument, especially if the eye be also inflamed, and the patient rendered more acutely alive to the pain by having undergone the same treatment on previous occasions. Mr. Walton himself says of paracentesis (*Surgical Diseases of the Eye*, 2nd edition, 1861), "I believe that this evacuation is seldom practised in the present day, and that for many years it has been discontinued. Mr. Lawrence writes forcibly against it, prefacing his objections with the statement, that he has tried it in some instances, but with so little benefit, that he has not been induced to insist on the practice," p. 48; and again, "Should chloroform not be used, considerable difficulty will be found in exposing and steadying the globe of the eye; *when the patient is insensible*, the operation is very simple," p. 49. Compare this, by the way, with the following objection to iridectomy in Mr. Walton's recent letter: "Iridectomy is an operation that demands very considerable nicety in its execution, and is done better under the influence of chloroform. This is not in itself objectionable, but it has significance in my argument. There are many frequent unavoidable dangers attendant on it" [whether on the use of chloroform or iridectomy is not clear], "immediate and remote, of which the profession are ignorant, and they have been kept in the background." Mr. Walton says of paracentesis: "Common care will save the iris from injury, and the lens will be spared if the points of the instrument be kept forwards," p. 49. It may be said with equal propriety of iridectomy, that common care will save the patient from all the operative risks, provided that the eye is made quiet by chloroform, and the operator is well acquainted with the exact anatomy of the parts he is dealing with. Now, if chloroform is to be given whether paracentesis or iridectomy be performed, most patients would prefer that which has to be done but once, with a prospect of permanent benefit, to that which would probably have to be repeated on several successive occasions, without the surgeon even then being able to promise a real arrest of the disease. And this particularly applies to the subjects of glaucomatous disease, often weakly, nervous, or elderly persons, already depressed by pain and the dread of blindness.

It may not be out of place also to note here from one of the most eminent authorities, Dr. Jacob, a passage relating to the operation of tapping the eye for staphyloma (the eye distended by glaucomatous tension), and which I find in Mr. Walton's work, p. 333: "All you want is to let out all the aqueous humour that will flow, and to leave an opening likely to heal by first intention, until you see how your patient bears injury; mind that, for I can tell you that a very small matter sets up awful inflammation in some people. I have not seen either afford the least benefit, except temporary relief from pain. In a few days or weeks there has been a re-accumulation of fluid, and a return of the symptoms. In one case, after the second tapping, acute inflammation with suppuration followed." Mr. Walton thus quotes Dr. Jacob *apropos* of a case, under his own care, of staphylomatous distension of the whole eye, evidently of glaucomatous type. Mr. Walton tried this plan of repeated tappings, with external pressure, and *ultimately performed "abscission."* Probably, a timely iridectomy would have allayed pain and saved the blind globe from abscission.

* In recent times, for the operation is itself at least as old as the seventeenth century.

† I lately mentioned this method to my friend Mr. Teale, jun., of Leeds, and a few days after he sent me an account of an instance in which he had adopted my suggestion, and which was so interesting, that he may, perhaps, be induced to send you a short account of it.

I by no means think, indeed, that one not habituated to operations on the eye can always safely undertake either paracentesis or iridectomy. In itself, no doubt, paracentesis is the simpler. The question, however, is not which is the simpler, but which is the *more effectual for the permanent relief of tension.*

If in the passage above quoted Mr. Walton means that the risks *of the operation of iridectomy* have been kept in the background, I venture to differ from him. I think it is not so. They are well understood, and have been repeatedly stated. It is easy on paper to magnify these risks; no doubt much will depend on the operator's skill and delicacy of hand, and something on the individual peculiarities of the case. I have no wish to underrate the difficulties; rather I would describe them in order to explain how they may best be overcome. I believe they may be, in a very great degree, obviated, or, at least, reduced within very narrow limits. But were they much greater than they are, they would, in most cases, be wisely and cheerfully encountered, under the alternative of impending blindness. I am, etc.,

W. Bowman.

5, Clifford Street, January 26th, 1864.

[Want of space obliges us to defer the remaining part of the letter until next week. Editor]

Letter from S. Browne, L.K.Q.C.P.

Sir,—I now proceed to redeem the promise which I made some time back, when you did me the honour to solicit my views on the much debated question of "iridectomy as a 'cure' for glaucoma". I beg, however, before I enter upon any discussion of the subject, to tender to you my individual thanks for having brought this important matter before the public in the Journal, and for the very temperate and impartial tone which has characterised your leading articles upon this *quæstio vexata*. I feel satisfied that our profession will award to you unqualified praise for the high reasoning powers which have pervaded these articles, and for the candid manner in which you have directed the controversy.

For several years—indeed, ever since the subject of iridectomy in connexion with the treatment of glaucoma came to be spoken of in the medical press of this country—I have devoted considerable time and attention to learn, if possible, the *exact* nature of the disease of the eye named "glaucoma" by the iridectomists, and to comprehend the *rationale* of the operation said to be so successful in restoring vision which had been injured or nearly lost through that affection. Well, the result of my inquiries and experience is, that the so-called glaucoma has not yet been accurately defined; nor has the operation for its "cure" been based upon the recognised principles of scientific surgery. It is true that various writers upon the subject have endeavoured to enunciate the one and to explain the other; but these gentlemen have differed so widely both in the pathology of the affection and in the *rationale* of the operation, it must be obvious to an unprejudiced observer—which I claim to be considered—that, in the school of the iridectomists, there is not even *now* any settled understanding; there are no determinate principles upon which its disciples fully agree! To these points I shall presently more specially refer.

My individual experience of glaucoma and iridectomy may be summed up very briefly. During the last four years, I have carefully observed every case of eye-disease, more than five thousand in number, that has come before me; and I have not been able to recognise more than one per cent. which I could classify as glaucoma; namely, deep-seated inflammation of the tissues of the eyeball; dilated pupil; probable effusion within its structure; and tension of the entire globe; severe pain, with impairment or almost complete loss of sight; the disease at the same time running a more or less rapidly destructive course, and not being controllable by medical treatment. But I have seen, within the same period, a large number of cases of acute inflammation of the deep tissues of the eye—with the symptoms of effusion; namely, dimness of vision, in several degrees—and appreciable tension of the globe. These were cases of choroiditis, or chronic iritis; were perfectly manageable; and in them, under proper treatment, the eyes were restored either to tolerably good or to unimpaired sight.

In some of the cases referred to as glaucomatous, I performed, with all the care I could exercise, the operation of removing a portion of the iris, amounting to about one-sixth of its bulk; and although by the step I have alleviated, in some instances only temporarily, the sufferings of the patient, I regret that I have not in any case been able to restore the sight to a more perfect condition than has followed after constitutional treatment and the evacuation of the aqueous humour; and that, too, in cases with analogous symptoms.

By these remarks it will be seen that, in this country, acute or chronic glaucoma is a disease fortunately of rare occurrence; and that my personal experience of iridectomy for its treatment has not created in me any sanguine hopes of its efficacy. But here I must guard myself from being misunderstood. I simply refer to the operation of iridectomy as applicable to the treatment of the so-called glaucomatous affections of the eye; as, in common with every ophthalmic surgeon, I have found the formation of an artificial pupil by incision and removal of a portion of the iris—in fact, by iridectomy—in suitable cases, frequently successful in restoring very useful sight. I may likewise remark, that I have found iridectomy a good operation in cases of cataract with synechia posterior, which I have extracted by linear section.

My own experience of iridectomy in the treatment of glaucoma having only afforded me negative results, I naturally felt anxious to read the correspondence which has appeared in your Journal, hoping that I might receive important information, and possibly have my views either changed or modified; but, alas! after all the ink that has been shed in the controversy, I find that I am not much better informed upon the subject; and that I cannot consistently alter the opinions which I had already formed, founded upon my personal observations and on my independent judgment. And certainly I now feel myself not only justified in thus holding by my former views, but also in publishing them before the profession; for I maintain that it is the bounden duty of every man, who practises general or special surgery, to investigate the principles of every novel proposition touching his art, and to adopt or reject it manfully, according as his reason and experience may guide him.

I have already stated my reasons, based on personal observation, for rejecting iridectomy as applicable to the treatment—I dislike the term "cure", it is not nicely professional—to the treatment of glaucoma; and I shall now briefly state why it is that I still reject it, even after the lengthened, I cannot say learned, correspondence which has taken place regarding the operation.

In the first place, then, I find that its advocates are at variance relative to the pathology of glaucoma. Several of them, indeed, appear to ignore every pathological consideration; and there are others who really do not seem to comprehend the matter under discus-

ion, though strongly advocating the operation of ridectomy as the "cure" in certain undefined conditions of the eye; while, at the same time, they forget very principle of surgery in their haste to vote upon he question!

The second consideration suggested by the correpondence, is the vast numbers of cases of the so-alled glaucoma, that appear "as thick as leaves in 'allombrosa" in and about London! Well, not having een them, I cannot say that such did not and do not xist; but I may be allowed to entertain a shrewd uspicion that many of the cases which on this side he Channel we regard as simple though severe inammation of the deep structures of the eye, are ressed into the service of the iridectomists, the dmirers of the "new" and "brilliant" operation.)therwise, how is it that, while we have here the sual amount of cases of choroidal, corneal, and iritic isease, we see so very few of those dire affections hat can only be cut short by cutting up the iris? I naintain that we have the usual proportion of severe nflammation of the deep structures of the eye, and hat these are quite amenable to treatment without ridectomy; and I likewise maintain, after more than wenty years' experience in an ophthalmic institution and in a general hospital, that I have not seen wo per cent. of acute or chronic glaucoma, as I unerstand that disease, which I have already defined -cases, in fact, which were not controllable and conrolled by suitable medical and surgical interference; ridectomy not forming a part of the treatment.

Then, as regards "tension" of the eyeball, which *ow* seems to be the great point, the one index to uide the ophthalmic surgeon in selecting the cases or iridectomy, I unhesitatingly affirm that, if any urgeon will presume to operate upon every eye in hich there is failing vision, and in which he thinks e discerns undue tension of the globe, he will take a ost unjustifiable step, and will act in violation of ound pathological principles. And I say this the ore readily, as the iridectomists have not failed to ffirm that the opponents of the operation are doing vast amount of wrong in not adopting it. But why o I say so? Simply because I have, over and over gain, treated cases, and have under my observaion at this moment patients, where the eyes, sufering from acute choroidal, corneal, and iritic inflamation, have or had the symptoms that have been ssigned to glaucoma, failing sight and tension of the yeball being prominent signs; and yet, by proper reatment, iridectomy not forming any part of that reatment, the eyes have recovered, or are recovering, ith useful or good sight; and that is as much as the ridectomists can claim for their most brilliant opeation! Nay more, I have lately had a patient with oître under my care, in whom the eyes were promient and *tense*, with impaired powers of sight; yet ust as the enlarged gland diminished in volume, so id the abnormal condition of the eyes recede also. Would any man in his senses, and with a just regard o the honour of our noble profession, operate in such case because he had discovered that dimness of ght and tension of the eyeball were present?

Before I bring these observations to a close, I cant but allude to a certain tone which has more or ss pervaded the letters of the iridectomists, but ore especially of one who is the leader of the school. refer to the patronising air, the offended dignity, nt more particularly to the denunciatory terms in hich his opponents have been threatened with loss name and fame, and, by consequence, of practice. uch a course, permit me to tell the writer, is wrong. o surgeon has the right to stand up among his quals—his peers—and thus denounce any of his ethren. I contend, on the contrary, that any educated and conscientious surgeon has not only the right to express his opinions, but to maintain them, too, by legitimate argument and conduct, without being denounced before the profession and the public as perpetrating a grievous wrong because he will not adopt the course pursued by others, when his experience and conscience tell him that he is following the path of rectitude and honour.

After all these observations, I may be told, as others have been, that I am incapable of recognising a truly glaucomatous condition of the eye; and that hence I cannot appreciate the *nice* principles of iridectomy! Still it will be time enough for me to cry *peccavi* when the iridectomists have settled among themselves—*non nostrum tantas componere lites*—what *their* glaucoma really is, and when they shall have agreed to lay before the profession their views based upon easily understood principles, thus giving a *reason* for the faith that is in them.

I am, etc., S. Browne.

9, Donegall Square, Belfast, January 19th, 1864.

MEDICAL EDUCATION.

Sir,—I think the profession is much indebted to you for your bold disregard of existing interests in taking up the subject of the "diluted omniscience" now required of medical students. The difficulty under which the licensing bodies lie is this—they desire to encourage the prosecution by the students of some scientific studies not necessary to the mere practice of their art; partly to keep up their status as educated men, partly to give them logical habits of classification, partly to promote the general interests of the individual sciences so learnt; and they at present see no means of accomplishing their objects without requiring all these studies to be entered upon by all. My card enclosed will show you that I have been for some years a lecturer on the Practice of Medicine, and that I have been an examiner of candidates for two licensing bodies, so that I may claim to know something of students; and my experience is, that the plan adopted results in a general contempt by the pupil for those branches of learning of which he is required to have a smattering.

What I should like to see is this—not the obliteration from the schedule of these courses of lectures, but the requirement of attendance on only one or other of them, to be selected voluntarily by the pupil himself. I would demand, for instance, a better acquaintance than is now expected, of *either* natural philosophy, *or* mechanics, *or* botany, *or* materia medica (natural history of drugs), *or* zoology, *or* comparative anatomy, *or* medical jurisprudence; but I would not allow boards to admit the pupil to examination to more than one, or to require attendance in more than one branch.

The Educational Committee of Privy Council have long adopted this principle, and have found it most efficacious in discouraging smattering and encouraging real knowledge.

Irrespectively of the relief to the candidates, this plan would be a great advantage to examiners; as it would enable them without false shame to call in assessors in the collateral branches. I have a painful recollection of the ridiculous position in which I found myself, when, on two occasions, I was called upon to set papers on botany—not because I knew more about it than my colleagues, for we were all equally ignorant; but because I chanced to be junior or "pony." Of course, if we required a knowledge of it from all candidates, we could not but profess all to be acquainted with it, and were ashamed to delegate our duties to any expert, however much we felt the expediency of so doing.

I have a decided opinion as to other modes of diminishing the burdens laid on the shoulders of our budding Galens; but am anxious not to provoke differences by proposing too trenchant a reform all at once, or to lengthen this letter, and therefore merely add my hope that you will continue to agitate the question till some relief is given to your obliged servant, A London Lecturer.

Medical News.

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on January 26th.

Bennett, Thomas Graham, Brighton
Blanchet, Jean Baptiste, Quebec
Carr, Charles, Newcastle
Colden, Edward, Wandsworth Road
Coulter, John Gordon, Belfast
Dalley, Charles Thomas, Markfield, Leicestershire
Eastes, George, Folkestone
Eddison, John Edwin, Leeds
Hughes, Richard, Llanddeniolen, Carmarthenshire
Ireland, John Roaf, Kingswinford
Leach, Samuel Forest, Mile End
Low, Alexander James, Jersey
Lucey, William Cubitt, Bermondsey
Pearless, Charles Durrant, East Grinstead
Phillips, John James, Towyn, North Wales
Power, William Henry, Queen's Square, Bloomsbury
Ross, David Palmer, Penang, East Indies
Shannon, George, Magherafell, co. Derry
Waters, John George, Cheshunt
Watson, George Henry, Jersey
Wigmore, William, Oswestry
Worger, Thomas Hewlett, Chiswell Street, Finsbury

Apothecaries' Hall. On January 21st, the following Licentiates were admitted:—

Atkinson, Warner, Harrington Square
M'Nair, Frederick, Guy's Hospital

APPOINTMENTS.

Baylis, Charles C., M.D., appointed Medical Officer of Health for Birkenhead.
Cavanagh, James W., Esq., elected Honorary Medical Officer to the North Dispensary, Liverpool, in the room of L. E. Desmond, Esq., resigned.
Cock, Frederick, M.D., elected Consulting-Physician to the Farringdon General Dispensary.
Connor, William, M.D., appointed Medical Officer to the Royal Victoria Patriotic Asylum, in the room of J. J. Paul, M.D., resigned.
Langdon, Thomas C., Esq., elected Surgeon to the Hants County Hospital, in the room of H. G. Lyford, M.D., resigned.
Oxley, William, Esq., appointed a Medical Officer of the Rotherham Dispensary, in the room of H. Wilkinson, Esq.
Robinson, Edward, Esq., appointed a Medical Officer of the Rotherham Dispensary, in the room of the late B. Robinson, M.D.
Watts, Frederick H., Esq., appointed Resident Apothecary to the Middlesex Hospital, in the room of D. Devereux, Esq., resigned.

Poor-Law Medical Service.

Allan, Christopher J., M.D., to the North Alton or No. 1 District of the Alton Union.
Angus, James A., Esq., to District No. 7 of the Newcastle-upon-Tyne Union.
Collyer, James, Esq., to the Town District and the Workhouse of the Edmonton Union.
Dalgleish, Jonathan, Esq., to District No. 5 of the Newcastle-upon Tyne Union.
Dukes, Charles M., L.R.C.P., to the Highway District of the Edmonton Union.
Godson, Charles, Esq., to the Mill-corner and Cockfoster's District of the Edmonton Union.
Jones, John T., Esq., to the Llanfihangel District of the Festiniog Union, Merionethshire.
Joynson, George T., L.F.P.S.Glasg., L.S.A.Lond., to the First Division of the Northwich District of the Northwich Union.
Mackley, Herbert, L.F.P.S.Glasg., to the Wilsden District of the North Brierley Union.
Permewan, John, Esq., to the Parishes of Gwennap and Stithians, in the Redruth Union.
Ringrose, John, Esq., to the Cooper's Lane District of the Edmonton Union.
Sandford, Horace V., M.D., to the Bentley or No. 3 District of the Alton Union.
Sykes, Benjamin C., M.D., to the Cleckheaton and Hunsworth District of the North Brierley Union, Yorkshire.
Webb, Thomas W., L.F.P. & S.Glasg., to the Kilpatrick Dispensary District of the Cashel Union.
Wilson, Thomas, M.D., to the South Alton or No. 2 District of the Alton Union.

Royal Navy.

Anderson, William, Esq. (*b*), Assistant-Surgeon, to the *Hector*.
Butler, Edward J., Esq., Assistant-Surgeon, to the *Royal Adelaide*.
Elliott, George F., M.B., Assistant-Surgeon, to the *Hogue*.
Fenn, Edward, Esq., Assistant-Surgeon, to the *Victory*.
McKenna, Arthur, M.D., Assistant-Surgeon, to the *Prince Consort*.
Ward, Cornelius, Esq., Acting Assist.-Surgeon, to the *Mæander*.

DEATHS.

Anderson. On January 24th, at King Street, Whitehall, Mary, wife of C. Anderson, Esq., Surgeon.
Dennison. On January 20th, at Margate, aged 73, Mary, widow of R. B. Dennison, M.D.
Honeywood, James, Esq., Surgeon, at Blackfriars Road, aged 45, on January 20.
*Lye, John Bleeck, M.D., at Hereford, aged 76, on January 17.
Mackenzie. On January 20th, at 11, Chester Place, Hyde Park Gardens, Mary, wife of F. W. Mackenzie, M.D.
Macpherson. On December 9th, 1863, at Cape Town, Mary Jane, wife of E. M. Macpherson, Esq., Staff Surgeon-Major.
Rees, David, M.D., at New Cross, aged 87, on January 20th.
Rind, M. McNeilll, Esq., Deputy Inspector-General of Hospitals, at Saugor, Central India, on December 17th, 1863.
Wickham, William John, Esq., Consulting-Surgeon to the Hampshire County Hospital, at Winchester, on January 19.

Imprisonment for Inoculation. A woman has been sentenced at Cashel in Ireland to two months' imprisonment for inoculating two children with the small-pox.

Death of Dr. Bleeck Lye. We regret to have to announce this week the death of Dr. Bleeck Lye of Hereford. The crowded state of our columns prevents us this week alluding more fully to the event.

St. Bartholomew's Hospital. Mr. Holmes Coote resigns his assistant-surgeoncy to the Orthopædic Hospital, Mr. Coote succeeds Mr. Skey at St. Bartholomew's, and Dr. Kirkes takes the physicianship vacant through the resignation of Dr. Burrows.

Deaths in London. In the week ending January 16th, 2,427 deaths are recorded in the Register of Deaths for the Metropolis, being 877 above the average. "These persons," says the Registrar, "were killed almost suddenly by the cold wave of the atmosphere."

The Conspiracy against the French Emperor. The poniards seized on the four Italians engaged in the plot against the Emperor's life have been confided to Dr. Reveil for an analysis of the substance with which the blades had been poisoned.

The London Hospital. The publication is announced of Clinical Lectures and Reports by the medical and surgical staff of the London Hospital. This volume will be published under the editorship of Dr Andrew Clark, Dr. Down, Mr. Hutchinson, and Mr Maunder. It is hoped it will be ready in June next.

A Rare Verdict. On the 24th inst., an inquest was held at Kingsland on a girl, aged 19, who died from the effects of a shock she received by another young woman dressing up as a ghost. Deceased instantly fell back screaming into the arms of the governess. Blood gushed from her nostrils, and she was carried downstairs insensible. A doctor was sent for, servants sat up with her all night, and everything possible was done for her, but she never recovered from the shock. The jury returned a verdict of "Death from obscure disease of the brain and hysteria, accelerated by a fright, and that the said death was caused by misfortune."

Royal College of Surgeons. At a meeting of the Council on the 22nd inst., Professor Partridge, F.R.S,, of King's College, was elected a member of the Court of Examiners, and Mr. John Flint South a member of the Dental Board, in the vacancies occasioned by the lamented decease of Mr. Joseph Henry Green. The vacant seat in the Council will not be filled up until the annual meeting of the Fellows in July next.

The Mortality in London. The state of mortality in the metropolis was lower last week than the previous one, but is still very high. The deaths last week amounted to 2180, which is 247 lower than last week, but was 651 higher than the corrected average for the last ten years. There were 2076 children born; which is less than the deaths by 104. It is very rarely that the births do not more than make up for the deaths of the week.

The Queen and Mr. Brown. Her Majesty has planted an evergreen oak in the grounds of Frogmore House, to commemorate the happy event of the birth of the young Prince, and before leaving Windsor Her Majesty expressed her high appreciation of Mr. Brown's skill and attention, and as a proof of which Her Majesty has been graciously pleased to present to that gentleman a very valuable garnet ring, set with diamonds, in acknowledgment of his services in connection with the event. (*Court Journal.*)

Odontological Society. At the annual general meeting held on January 4th, the following gentlemen were duly elected officers and councillors for the year 1864:—*President:* Edwin Saunders, Esq.—*Vice-Presidents (Resident):* T. A. Rogers, Esq.; W. A. N. Catlin, Esq.; W. Imrie, Esq.; W. Perkins, Esq.; G. A. Ibbetson, Esq.; (*Non-Resident*): C. S. Bate, Esq. (Plymouth); W. K. Bridgman, Esq. (Norwich); S. Tibbs, Esq. (Cheltenham); W. A. Roberts, M.D. (Edinburgh).—*Treasurer:* Arnold Rogers, Esq.—*Librarian:* J. B. Fletcher, Esq.—*Honorary Secretaries (Ordinary):* Alfred Coleman, Esq.; Charles Vasey, Esq.; (*For Foreign Correspondence*): Thomas Underwood, Esq.—*Councillors: (Resident):* W. D. Saunders, Esq.; I. Sheffield, Esq.; W. A. Harrison, Esq.; C. J. Fox, Esq.; H. T. Kempton, Esq.; R. T. Hulme, Esq.; J. Tomes, Esq.; W. M. Bigg, Esq.; F. W. Rogers, Esq.; G. Owen, Esq.; A. Hill, Esq.; *(Non-Resident):* D. Hepburn, Esq. (Edinburgh); C. D. Rogers, Esq. (Newbury); S. L. Rymer, Esq. (Croydon); G. Buchanan, Esq. (Glasgow); E. P. Parkinson, Esq. (Brighton); W. Hunt, Esq. (Yeovil). The President in his address, congratulated the members on the present satisfactory condition of the Society, evinced by its numerical strength of 319 members, and the balance of £546:8:8 in the hands of the Treasurer at the end of the last session.

Sergeant *v.* the General Council of Medical Registration. This case raised an important question, under the Medical Act, 1858, affecting the medical profession. The applicant was qualified and registered at the time of the passing of the Act; but the usual annual letter having been since sent to him, addressed to his last place of residence, it had received no answer within the six months (owing to a change of address), and the Council proceeded to strike out his name. In Trinity Term last he applied for a *mandamus* to the Council to restore his name under their general power to do so, "if they should think fit;" but the Court doubted if this raised a legal duty to do so, so as to render them liable to a *mandamus*. They, however, granted a rule *nisi* under another section of the statute, to hear and determine on his application to be registered *de novo* on due proof of his possession of the requisite legal qualification. The Lord Chief Justice put the case of a practitioner whose name was struck off through mere *laches* or neglect on his part in not answering the usual letter. Surely he was not to be excluded for ever from the practice of his profession? The Court, without calling on Mr. James to support the rule *nisi*, made it absolute for a *mandamus*.

Death of Mr. Wickham of Winchester. We regret to record the death of Mr. Wickham of Winchester, one of the consulting surgeons to the Hampshire County Hospital. Mr. Wickham and his ancestors have occupied a high position in surgery at Winchester, for above a century; and have left a name and reputation, as honourable and lasting as the venerable city itself. Mr. Wickham was educated at the Borough Schools, and subsequently studied at Edinburgh and Paris. He passed the College of Surgeons in 1815, and became honorary Fellow in 1843. Mr. Wickham had been out of health for some months; but latterly, repeated attacks of epilepsy terminated his useful life. He had been for more than forty years connected with the Hampshire County Hospital, and during that lengthened period conducted a very extensive private practice. His contributions to medical literature were a *Treatise on Diseases of the Joints*, with various papers on surgical subjects in the journals of the day. As an operator and lithotomist, he was very successful, and his operations were extended to various parts of the county, and elsewhere.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Mr. Streatfeild's letter shall appear next week.

We shall defer any further notice of the suit touching the King and Queen's College of Physicians' power to grant the title or degree of Doctor of Medice, until judgment had been delivered in the case.

The Late Mr. Peter Martin.—Sir: I have read with the utmost satisfaction the remarkable list of subscriptions towards a testimonial to the late Mr. Peter Martin; but I beg permission to say one word as to the appeal to the profession. Members of the South-Eastern Branch who, like myself, are anxious to do honour to the memory of that good man, who worked for us for so many years with a constancy that ended only with his death, are desirous to have a memorial by that Branch alone, and only await the official movement to send our contributions. I trust this will speedily be arranged, and a treasurer appointed.

I am, etc., An Ex-President.

[Our correspondent will find a letter on this subject from the President of the South-Eastern Branch, at p. 133. Editor.]

Midwifery Statistics.—Sir: It will oblige me if some member of the profession will inform me what, throughout Great Britain, has been the average number of deaths in obstetric practice to the mothers, during the last five, seven, or ten years; viz., cases fatal before delivery; within twelve hours of delivery; and at a later date, but consequent on delivery. I am, etc.,

A Midwifery Practitioner of Fifty Years' Standing.

COMMUNICATIONS have been received from:—Mr. Henry Lee; Dr. A. T. H. Waters; Mr. Brodhurst; The Secretaries of the Epidemiological Society; Shamrock; Dr. Kelly; J. W.; Dr. S. Fletcher; Mr. Kidgell; Dr. H. Marshall; The Secretary of the Western Medical and Surgical Society of London; Mr. R. S. Fowler; Dr. Swayne; The Secretary of the Odontological Society; Mr. G. E. Forman; The Registrar of the Medical Council; Dr. Routh; Mr. William Bowman; Mr. T. Francis Edwards; The Registrar of the Medical Society of London; Dr. S. Martyn; Mr. Jonathan Hutchinson; Mr. T. M. Stone; Dr. S. H. Agar; The Honorary Secretary of the Obstetrical Society of London; Mr. John Windsor; An Ex-President; Dr. J. Armstrong; Mr. William Copney; and Mr. Curgenven.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Clinical Discussion.—Epidemiological Society, 8 P.M. Dr. Camps, "On the Hygiene and Epidemiology of the Indian Army, based on the Report of the Royal Commission."—Odontological.

WEDNESDAY. Royal College of Physicians, 5 P.M. Dr. Garrod, "The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease."—Obstetrical Society of London, 8 P.M. Mr. Baker Brown, "On Fibrous Tumours of the Uterus treated by Surgical Means"; Mr. Bryant, "Ten Cases of Ovariotomy, with Remarks"; Dr. Tyler Smith, "Additional Cases of Ovariotomy."

THURSDAY. Harveian Society of London, 8 P.M. Mr. W. Adams, "On the Pathology and Treatment of Fracture of the Patella."

FRIDAY. Royal College of Physicians, 5 P.M. Dr. Garrod, "The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease."—Western Medical and Surgical Society of London, 8 P.M. Mr. J. R. Lane, "Sequel of a Case of Vesico-Uterine Fistula, in which Pregnancy occurred after Closure of the Os Uteri by Operation."

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

THOMAS W. WILLIAMS, *General Secretary.*

Birmingham, January 1864.

ADVERTISEMENTS.

Clock Making.—"Benson's great piece of Clock Work is certainly a marvellous achievement in clock-making, both as regards the workmanship, and its capacity under difficult circumstances for time measuring." —*Mechanics' Magazine*, Sept. 15, 1862. Clocks by the first artists of the day for the drawing room, dining room, bed room, library, hall, staircase, bracket, carriage, church, turret, railways, warehouse, counting house, musical, and astronomical. Church and turret clocks specially estimated for. Benson's illustrated pamphlet on clocks (free by post for two stamps) with descriptions and prices, enables those who live in any part of the world, to select a clock. Also a short pamphlet on Cathedral and public clocks, free for one stamp. Prize Medal and honourable mention in classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

Watch and Clock Maker by Special Warrant of Appointment to H.R.H. The Prince of Wales.

Price's Glycerine, its Uses and Purity. See "De la Glycerine, de ses Applications à la Chirurgie et à la Médecine," by the eminent French Surgeon, M. Demarquay. pp. 240. Paris: P. Asselin. 1863. Or, "On Glycerine and its Uses in Medicine. Surgery, and Pharmacy." By Dr. W. Abbotts Smith. London: H. K. Lewis.

Surgical Instruments.—Arnold & SONS continue to supply Instruments of the best workmanship at moderate prices, manufactured on the premises under their own superintendence.

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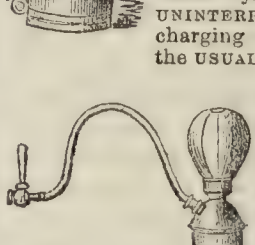
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TESTIMONIALS.



"TWINBERROW'S 'DOUBLE-ACTION (Syphon) SYRINGE' is the most generally useful Instrument of the kind with which I am acquainted. For the more ordinary purposes it is especially well fitted, being COMPACT, PORTABLE, and NOT LIABLE TO GET OUT OF ORDER. By a very simple arrangement the Instrument may be rendered available as an EYE DOUCHE, an EAR SYRINGE, and for WASHING OUT THE BLADDER. For these purposes it is peculiarly well adapted, being continuous in its action.—JOHN ERICHSEN Professor of Surgery at University College and Surgeon to the Hospital."

"I have seen and made use of your DOUBLE-ACTION SYRINGE, and think very highly of it.—WM. FERGUSSON, Professor of Surgery at King's College, and Surgeon to the Hospital."



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(Testimonials from the First Oculists.)

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A Word or Two ON MEDICAL EDUCATION: AND A HINT OR TWO FOR THOSE WHO THINK IT NEEDS REFORMING.

BY

P. M. LATHAM, M.D.

"Science is his forte, omniscience is his foible." This was spoken by one well able to instruct mankind; and with such a lucky way of doing it, that he could wrap up wisdom in a witticism. And this was one of the wisest and wittiest things he ever said. He aimed it at some individual, and perhaps hit him and made him smart. Had he aimed it at our profession, would he have hit it? Perhaps he would; and if he had, we should only have laughed at it. For crowds keep one another in countenance where individuals feel sharply.

The Profession of Medicine, in itself and in the things pertaining to it, is running over with knowledge. The studies proper, preparatory, and collateral to it, are enormous. There are given us things to see which for their minuteness make our eyes crack; and things to understand which for their vastness and infinitude, as they come pouring in upon our minds, make us cry out, "Hold, enough!" Well may they, small and great, all so generously forced upon us in the way of educational culture, turn us poor physicians to sadness, when we think of the return the world may expect at our hands. "Beneficia eousque læta sunt dum videntur exsolvi posse; ubi multum antevenêre pro gratiâ odium redditur." (*Tacit. Ann.*, iv, 18.) Benefits give pleasure as long as they seem within the possibility of repayment; when they have gone much beyond it, dislike takes the place of gratitude. Is not the medical profession at this day accumulating scientific obligations upon itself, which it can never repay in any tangible current coin of usefulness either to itself or to the world?

Having been a good long time physician to a large hospital, I was in the way to see how medical men might be made or marred in the training. So noting or fancying some extravagances in the course of their education laid down by authority, and thinking they boded some harm to the profession, I presumed to bear my moderate testimony against them. This was more than a quarter of a century ago. But my voice was a feeble one. It was no match at all for the edicts of halls, colleges, and institutions, new and old, which were rivalling one another in the ruinous amount of taxation they levied upon the time and thought of medical students, with their hundreds and hundreds of lectures sentenced and inflicted upon them without mercy. At length, however, I am told that our rulers are going to revise their taxation papers, and make their educational imposts with some regard to what their subjects can bear and can afford. Some public bodies, upon a retrospect of this quarter of a century or more, have come to find out and proclaim their error, and are honestly bent upon repairing it. And they shall not want my voice, though now much more feeble than ever, for their encouragement and congratulation.

There is no doubt whatever that the grievance has been a real and serious one, and that the more thoughtful students and the best and more experienced teachers and practitioners of medicine and surgery have been convinced in their own minds that it was so, even for more than a quarter of a century.

It is now two and twenty years since I ceased to be physician to St. Bartholomew's Hospital, and it was a few years before that time, that I had a most interesting conversation with two medical students. They possessed the better order of minds, and had devoted to their professional education at St. Bartholomew's three years with great applause. The day for the annual award of prizes was just passed, and they had swept away between them all of any account and credit. On the following day, they came to me both together, begging to be told how they were to learn their profession. This was the simple way in which they put the question to me. There was no mock humility in it. Their look and manner were much too serious for me to suspect anything of the kind. Thus the matter stood with them upon their own shewing. During three whole years they had been hard at work upon all that lectures and museums could teach them. And verily they had thus far their reward. But they had utterly neglected the wards of the hospital. This was their own honest confession and regret. Their avowed temptation and excuse were the *éclat* that awaited them, when they returned into the country, from the distinctions they had gained.

Here are two right headed, accomplished, students, in the hour of their triumph, convinced that thus far they had not gone the right way to work for making themselves good practitioners.

Ten or a dozen years ago, I was present at the annual celebration of one of our medical schools. The distribution of the prizes had already begun, when an eminent member of our profession came in, and, finding a place vacant near me, he took it and sat down, and looked over the printed list of successful candidates which I held in my hand. Whereupon he exclaimed, "Fifty distinguished students! why, they will all be ruined!" He to whom I allude was then our best living example of science and practical experience combined in their just proportions. In him they had done all that they could do for professional success, and he was looked upon by the world as well deserving the high position which he held. He held it without envy. Moreover, he had been a teacher. Now his words need not be taken at the full of what their literal force will bear. But at least they meant this: that the system under which the fifty medical students had gained their present credit was a wrong system in itself, and that so they would find it in the long run.

Take, then, Sir Benjamin Brodie—for he was the man to whom I allude—to represent the best and most experienced of teachers and practitioners, and take the two students who have been mentioned to represent the more thoughtful of their class, and we have the sober judgment of learners, teachers, and

practitioners, that there has been something radically unsound in the medical education prescribed by authority for more than a quarter of a century.

I often think of my profession and its fortunes as of a poor man with a crowd of rich and noble relations. He thinks surely they must help him in the world. And so he cultivates them assiduously; and perhaps they are well enough disposed towards him. But then they are not constantly taking him by the hand, and lifting him over the rough places of life; and simply because they cannot. The truth is, they do not understand his daily objects; and if they were to meddle with them, they would only mar them. Perhaps, however, they may render the poor fellow good service every now and then by chance. Besides he has always the credit of belonging to them; and that is something as the world goes. But let him beware of that very common evil among us, the vanity of large acquaintance; of having, or affecting to have, an intimacy with everybody worth knowing. It is a vanity not fit for all men to indulge in. All cannot afford the expense of time and trouble required to keep it up.

Now here are real truths signified, whether my parabolical mode of putting them be wise or foolish; truths in which our profession is concerned, and would do well to consider. There is nothing honest or of good report in the whole world, nothing of scientific truth or of high speculation, morally and mentally, with which medicine does not claim legitimate kindred. But then there are cunning genealogists among us who would make out the links of kindred to be surer and closer than they are, and the rest of us acquiesce for the glory of the thing.

There is not a more difficult problem in the world than the education for a particular profession. In universities, so that the things taught be good in themselves, education may be as miscellaneous and omnifarious and even as redundant as you please. The object is to rouse the mind and let it make acquaintance with its powers and inclinations, so that it may judge of its own natural fitness by what it is able to do the best. In universities, education is for all professions and for all callings. But when you come to the particular profession or calling, whatever it may be, and seek to educate for it, you must draw to a point, and become discriminate and eclectic, and, above all, very fearful and suspicious of redundance and excess, especially if it be the medical profession with which you have to do.

Now what is this medical profession? It is the art how to treat, cure, and minister all possible relief to men, women, and children, when they have come to harm from disease, accident, or any other adversity. This is the core and kernel of the whole matter. And with this strictly and restrictively in view, a sort of magistracy was given to certain bodies over medical education for the public good. It was empowered to settle, first, the course of training indispensable for all who would practise medicine and surgery; secondly, to test by sufficient examination, one by one, the competency of all, before they enter it: to tell them how they are to fit themselves, and then tell the world who are fit.

Here are two about as delicate and ticklish problems as can well be conceived; and one can plainly see that in both of them the temptation would be to err on the side of excess and in things extrinsic: an error which, of all professions in the world, ours would least bear with impunity.

For the first are instituted lectures on Anatomy, not a few, but by hundreds; lectures on the Principles and Practice of Medicine, lectures on the Principles and Practice of Surgery, on both not a few, but by hundreds; lectures on Forensic Medicine, including Toxicology and Toxicological Analysis; lectures on Materia Medica. Every one of these things, by the very names they bear, claim or seem to claim their right of place in medical education.

Then there are lectures on Chemistry as a science, lectures on Botany as a science.

But Physiology remains to be mentioned, which, in the hands of a powerful, accomplished, and popular teacher, may be made everything of, and so win the student's mind away from all other teaching. The subject itself is infinite. The difficulty must always be to keep it within bounds, and make it the subject of a separate course. There are physiologies animal and vegetable, and physiologies *de aere, aquis et locis*—physiologies that may be made to comprise the whole world within us and the whole world without us.

On most of these subjects, it is not thought enough to specify the number of lectures to be attended: prizes are offered annually to stimulate competition, and are given to the most proficient in all of them. The sum of the knowledge which they contain implies a respectable start on the way to omniscience; and the student who, with thus much in his head, can still find room for a trifle of medicine and surgery, may be almost said to know a little of everything. Now I am convinced that none are helped to become good practitioners by this discipline; that the majority are hindered by it; and those who, having gone through it, turn out good practitioners nevertheless, become such in spite of it.

But where is the excess? What are the things extrinsic that can be pared off? Many a great chemist, a great botanist, or a great master of analysis, may be found to contend that what he has to teach is indispensable to the medical student; that the principles of his science are at the root of all rational practice. But beware of great authorities. They have a tyrannous way with them. They make common sense afraid to stand up and say what it knows to be right. Believe them, and they would commit the student to the whole circle of the sciences, and make him unhappy because he finds himself unable to follow his leaders. Surely there must be some shorter and easier way than theirs of making physicians and surgeons, and yet a safe way withal, or it will fare badly with mankind.

Now I have my own little suggestion to offer. It is a humble one, but not unbecoming wise men to adopt: a humble one, but bringing no loss of glory to the profession in the end. Have a very great care, then, of your medical student, and how you guide him at starting. Now especially is the time for good advice, if you have any to give. Take him now into the wards of the hospital at once; fit or unfit, as people reckon fitness, thither take him. He may have learnt all sorts of things already, or he may scarcely have learnt anything at all. But as soon as you have become his masters, thither take him, and there let him remain and make it for the present his sole field of observation and thought, or

curiosity, and have a guard that the best things from without do not reach him there, to his hindrance or destruction.

When you would teach a man to read, you do not begin with the history of letters; where and by whom letters were first invented, and where and by whom the printing-press; but you leap over a century or two without remorse, and put a dainty alphabet into his hand, and tell him something about vowels and consonants. But about labials, dentals, and gutturals, the less said the better. Lips, teeth, and throat make their own division of labour, and settle matters for themselves wonderfully. People do not come to read by being taught the philosophy of reading, but simply by doing the thing itself, simply by reading. So, if you would teach a man medicine and its practice, you must not begin with half a dozen philosophies, or with any philosophy at all, but you must put, as it were, his alphabet into his hand at once, and bid him learn its simple characters one by one, and then help him to join them together and make the best sense of them he can.

Well! but your student in the wards of the hospital is considered to be making acquaintance with diseases, specialising them, learning their right names, discerning between this and that, and getting up his diagnostics and nosologies. Verily this is a good deal more than learning his alphabet, and a good deal beyond it. For technical names and diagnostics and nosologies import the finish and last polish of his perfect work; yet great stress is laid upon them, enough to imply that the common run of individual cases can be finished and polished off in this fashion. But go into hospitals, and see the facts how they stand. There you find diseases mature and complete; and there diseases (and plenty of them) immature and incomplete, and scarcely deserving the names they bear: diseases in their embryo, their travail, their gestation, now coming to the birth, now ending in abortions—their course broken in upon, and their events determined by accident. Truly there are things in these hospital wards better worth learning than the diseases themselves—more simple, more primitive, more alphabetical (if you please), and yet more profound—things which are a key to the very diseases and their agreements and discordances; a key to their remedies, too, their successes, and their failures, and to discrepancies of their effects inexplicable without them; which tell why pneumonia (so called) is now cured by bleeding, and now by brandy. These primitive, simpler, and more profound truths are now what they have been always. They are the common ground upon which the great physicians of distant times, Sydenham, Heberden, and the President of the College that now is, would be found to think and act alike, and upon which (were it possible) they could meet and consult together to-morrow, and treat, as well as they could be treated, most of the great emergencies of diseases. But what are the things? They are pains; they are heat and cold, and sleep and wakefulness; and they are the pulse: all easily read, but all vital in their details, and vital comprehensively, including the sentient energy of the nerves and vital motive energy of the blood-vessels throughout the body. In a word, they are the immaterialism of disease, with which a man can only gain acquaintance by constant and familiar converse.

So unlike all other things in the world are medicine and the practice of it, that indications of treatment (simple things, but great mysteries) need to be pointed out to the most intelligent student with the care and patience that you would teach his letters to a child. But, in order to this, you must have the right men for physicians to hospitals, and they must choose the right men for their clinical clerks. And thus there will be gradations of clinical teaching and learning, free and unforced, which every man will look back upon in life as the best and soundest part of his professional education.

Now your student, who is to begin in the wards of the hospital, must continue to frequent them with the mind of a learner during all the years of his pupilage.

But lectures, courses of lectures on medicine or surgery (for of these only would I venture to speak), when are they to come? Not too soon. Not until the student, from such experience as he has, can exercise some judgment upon the subject matter of what he hears. Unquestionably, there is great profit to be had from lectures, if they come in at their proper place, and are properly used. Still, mixed with their good, there is some hazard of evil. They are a temptation to the more contemplative mind to learn diseases by the study of models, rather than of the things themselves. They tend to divorce him from the workshop and the chips and fragments and rude designs that lie about within it, and introduce him into a room swept and garnished and hung round with masterpieces for his contemplation. This may be all very well for gentlemen who patronise the arts; but this is not the way to make the artist.

Here I must stop. The whole subject of medical education is far too large and difficult for me, and I confess myself not up to it; but it is exciting at the present moment a just and serious and painful interest, and presses hard upon the wisdom of those who, fully aware of its past mistakes, are expected to decide what henceforth it shall be. There is one part, however, of medical education in which I was once actively engaged, and had come to hold strong beliefs. Upon it, at least, I thought I might venture to touch. But what I had to say must be said quickly, and now or never. I must strike while the iron is hot, while the interest of the subject is at its glow. Let this be my excuse for meddling with the subject at all, and plead my pardon if the "word or two" and "hint or two" which I have presumed to give my betters should be wide of the mark.

University of London. The certificates of the Norwich Hospital for hospital practice and instruction in chemistry, will in future be received by the University of London, for the degree in medicine.

To Distinguish Artificially Coloured Wines. Blume gives the following simple test. Saturate a piece of bread crumb with the wine to be tested, and place it in a plate full of water. If the wine be artificially coloured, the water very soon becomes coloured reddish violet, but if the colouring matter is natural, the water, after a quarter or half an hour, is but very little coloured, and a slight opalescence only is perceptible. The test depends upon the difficult solubility of the real colouring matters of wine in water free from tartaric acid. (*Elsner's Chem. Techn. Mittheilungen*, 1862-1863.)

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

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Lecture II. (*Concluded.*)

Pathology in its Relations to the Practice of Medicine. On certain Pathological States as the Result of Impaired Nutrition consequent on the Imperfect Performance of Function. Diseases of Degeneration attacking the Heart, Lungs, etc. Fatty Disease of the Heart. Sudden Death in Relation to Diseases of the Heart. Emphysema of the Lungs, Phthisis, etc.

Having referred at greater length than I originally intended to the subject of degeneration as attacking the heart, and the questions which incidentally arose out of it, I shall be obliged to pass over the other fatty diseases, as atheroma of the arteries, and its relations to aneurism, and atheroma of the capillaries of the brain in its relations to apoplexy and cerebral softening, in order that I may refer to that second example of degeneration to which I have alluded, affecting the lungs. There is no pathological condition to which the lungs are subject which is identical with fatty disease; and, although an atheromatous state of the blood-vessels of the lungs is occasionally met with, a deposit of fat in the air-sacs is, as far as my observations go, an exceptional thing. There is, however, a disease of the lungs which, I believe, partakes very much of the nature of fatty degeneration; I mean emphysema. Whether in consequence of the difficulty which attends all investigations into the morbid changes which take place in the ultimate pulmonary tissue, or from the imperfect knowledge which long prevailed of the mere anatomy of the lungs, the pathology of emphysema has been exceedingly obscure, and its therapeutics unsatisfactory. Considered by many as a mere secondary affection, the result of mechanical distension, and consequent on bronchitic inflammation, its real pathology has received but little notice, as a substantive disease it has been almost overlooked, and, under the impression that the structural changes which characterise it admit of little or no relief from the application of therapeutic measures, practitioners have contented themselves with the treatment of the bronchitic and asthmatic symptoms so constantly associated with it, and have neglected the use of those remedies which have been found beneficial in other diseases of degeneration.

It is unnecessary that I should insist on the importance of a correct knowledge of the minute structure of an organ of so mechanical a nature as the lungs, if we would wish to understand the morbid anatomy and pathology of its diseases. With reference to this particular affection, there is perhaps no other which shews more fully the important mutual relations of anatomy, pathology, and therapeutics; for by an examination of the structural changes which occur in the different stages of the disease, and by watching the steps which mark its progress, we have the strongest possible indications of its pathology, of the causes of the symptoms it produces, and of the therapeutics by which its advances should be met.

The most important question to all who are investigating the nature of the disease, is, whether there is any degeneration of the pulmonary tissue preceding or attending it; for clearly this lies at the base of all measures intended for its relief.

My own observations have led me to conclude that all cases of emphysema cannot be included, either with reference to their pathology or determining cause, under the same head. Where the disease is partial, and situated, as is then usually the case, along the margins and at the apex of the lung, and is associated with, or has followed, some other pulmonary affection,—as, for instance, chronic bronchitis, or, in fact, any disease which has been attended with long-standing or violent cough,—I believe the morbid changes may have been brought about mainly by mechanical violence, without there having been any pre-existing affection of the lung-tissue.

But the case is far otherwise with that more general affection which is denominated lobar, where the whole of one lung, or of both lungs, is involved in the disease. That this form differs very materially in its pathology from the partial emphysema I have alluded to, will, I think, be admitted by all who will give a careful attention to the subject. The insidious manner in which the disease sometimes comes on; the almost entire absence of cough frequently observed, as well as of all other symptoms, except a gradually increasing dyspnœa, and, as the patients often describe it, a "smothering in the chest"; the occasional rapidity with which the affection progresses; the secondary consequences which ensue; and the general cachexia which often supervenes,—all point to the grave character of the malady, and, I believe, to its constitutional origin in some degeneration of the pulmonary tissue.

But the question arises as to the exact nature of this degeneration.

As I have elsewhere entered fully into the consideration of this question (*Researches on the Nature, Pathology, and Treatment of Emphysema of the Lungs*, 1862), I will merely remark here, that with the view of determining the point, I have examined a large number of specimens of emphysematous lungs; and although I have, in a few instances, found globules of fat interspersed over the air-sacs, yet in the large majority of cases I have found no indications of fat whatever; and I consider its presence as an accidental, and not a necessary, element in the disease. I cannot therefore agree with these who consider the disease due to fatty degeneration. I have occasionally found atheroma in the blood-vessels of emphysematous lungs, but then it has always been present in the general arterial system as well; and, from its absence from the pulmonary vessels as a general rule in emphysema, this disease cannot be considered as essentially connected with fatty degeneration of those vessels.

Although, therefore, we must conclude that the disease is not one of fatty degeneration, yet from the mode of its production, and from the morbid changes it gives rise to, I cannot entertain the slightest doubt that it is one of a closely allied nature; that,

in its severe forms, *it is essentially a constitutional disease; and that one of its most important features, and probably the primary step in it, is a malnutrition of the pulmonary tissue—of the walls of the air-sacs, in fact.* This malnutrition affects either the basement membrane or the elastic tissue, or more probably both; this leads to loss of elasticity, subsequent distension, and atrophy. And this view which I have taken of the constitutional nature of the disease receives a strong confirmation from the fact, apparently well established, of its hereditary character.

Thus, then, we may be led, in this and other diseases, from a consideration of the changes which occur in the anatomical arrangement of an organ, to appreciate the nature of those pathological processes by which the changes are produced, and on the conclusions we may thus draw, to found a rational system of therapeutics. For, although we cannot say that the morbid condition of the lung points to any particular perversion of its function as the cause of emphysema, yet it shows the existence of a depraved nutrition, and indicates the principles on which the affection should be treated.

On the other hand, the special points to which I have referred in connection with fatty disease of the heart, show us the importance, not only of a study of morbid anatomy, but of the nature of those perverted functions of individual organs under which morbid deposits occur.

And in reference to the general treatment of these diseases, as with fatty degeneration of the heart, we know that by improving the nutrition of the organ, we can check or retard the progress of the malady, so with emphysema of the lungs. From a careful observation of numerous cases of the disease for several years past, I am convinced that the affection is one that should be treated on the same principles, *mutatis mutandis*, as guide us in the treatment of other diseases of degeneration, such as Bright's disease of the kidneys, fatty disease of the heart, etc.; and that with reference to the administration of remedies in the affection, there are none so valuable as the various tonics, and especially the different preparations of iron.

And is it not the case with regard to another affection of the lungs, that we can trace a close relation between the activity of their function and their healthy condition, and between the interference with their function and the supervention of impaired nutrition and disease? Can we not promote the development of tubercle in a healthy animal, by confining it in a close and ill-ventilated chamber? and is not pulmonary consumption in man essentially a disease connected with conditions of a like character? Is it not the disease of all others which attacks the close confined artisan, the sempstress who rarely brings her lungs into free action, the inhabitants of our crowded and ill-ventilated alleys? In fine, is it not especially the disease of great cities? And may we not sum up its main causes in the short sentence of Dr. Christison: "A conjunction of defective exercise and exclusion from the open air."

The latest statistics we have on this subject are those of the president of the section of Public Health of the Social Science Association. The facts which he has brought forward are not new to the profession; but they are of vast importance to the public. With only one point I shall trouble you, showing the influence of town life, and country life—or shall I say of activity, or inactivity, of the respiratory process?—in the development of tubercular phthisis. Taking the mainland of Scotland, Dr. Christison found that the mortality from all diseases, in town districts and country districts, was as 4 to 3; but the mortality from consumption was in the proportion of 333 for towns, to 186 for the country—in fact, it was nearly double in the towns.

Now, as I have remarked, facts of this kind have been long recognised by the profession; and to our more intimate acquaintance with the conditions under which tubercle is deposited, must be attributed the improvement in our treatment of pulmonary consumption.

And in reference to the question of climate as influencing the development of phthisis, a remarkable fact was stated by Dr. Christison, viz., that, of all the inhabitants of Scotland, those who are least liable to the disease are the Western Islanders; and that in the Isles of Lewis and Mull the affection is one of very rare occurrence amongst the natives of the place.

I must refer you to Dr. Christison's address for the details of his statistics; but the fact to which I have referred, of the exemption of the inhabitants of the wet, cold, and stormy Western Islands, is of great interest in a pathological point of view, and in relation to the manner in which the defective performance of function is productive of disease.

A Testimony to our Climate. *The Times* of the 20th ult., chronicles the death of eight persons between 70 and 80, of five between 80 and 90, and of four over 90; the united ages of these seventeen persons giving an average of 82 years for each. On the 21st, we read of fifteen dying between 70 and 80, of eight between 80 and 90, and one over 90; the average of these twenty-four being very nearly 76 years a piece. On the 22nd there appeared two over 90, six between 80 and 90, and ten between 70 and 80; the average here being nearly 79. On the 23rd, thirteen between 70 and 80, seven between 80 and 90, and one over 90, making an average of 79½ each. We suppose our American cousins would say, if these 80 individuals, whose longevity we have noticed, had lived anywhere else but in our own land of fogs and changeable weather, they would never have died at all. (*Notes and Queries.*)

Naked Arms. A distinguished physician who died some years since in Paris, declared: "I believe that during the twenty-six years that I have practised my profession in this city, *twenty thousand children* have been carried to the cemeteries a sacrifice to the absurd custom of exposing their arms naked." Put the bulb of a thermometer into a baby's mouth, the mercury rises 90°. Now carry the same to its little hand; if the arm be bare and the evening cool, the mercury will sink to 40° Of course all the blood that flows through those arms must fall from 20 to 40° below the temperature of the heart. Need I say, when these currents of blood flow back into the chest the child's vitality must be more or less compromised? And need I add that we ought not to be surprised at its frequent recurring affection of the tongue, throat, or stomach! I have seen more than one child with habitual cough and hoarseness, choking with mucus, entirely and permanently relieved by simply keeping the hands and arms warm. Every observing and progressive physician has daily opportunities of witnessing the same cure. (*Phil. Med. and Sur. Reporter.*)

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

CLINICAL ILLUSTRATIONS OF AMAUROSIS.

(Communicated by JONATHAN HUTCHINSON, Esq.)

CASE I. *Loss of Sight in one Eye, with Symptoms of Cerebral Congestion: Climacteric Period.* Mrs. D., aged 48, rather pale, and moderately stout. The catamenia were regular until six months ago, since which they had not occurred. She was liable to palpitation. Pulse strong, 90. She had been liable to headaches occasionally, but not unusually so; and they had never been restricted to the forehead. Six weeks ago, she had a violent bleeding from the nose, from the right nostril. To this she was previously quite unaccustomed. The bleeding recurred every night for a week. She was under medical treatment for a week, and was told that it had saved her from apoplexy. There had been no giddiness, but since then she felt giddy. Her mother died aged 72, "of apoplexy".

Mrs. D. had good sight until after the attack of epistaxis. About a fortnight after it, she found that she could not see to do needlework by candlelight. She had before enjoyed good sight, and never needed glasses; had earned her livelihood at waistcoat-making. She then found that the right eye was by very much the worse; it was almost blind. She believed that it became blind suddenly. At any rate, one evening it was dull; and the next morning, on closing the other, she found herself in darkness. She could now only just see to count fingers with the right eye. With the other she could read minion.

Ophthalmoscope. The retina about the optic disc looked a little hazy, but not much so.

CASE II. *Unsymmetrical Amaurosis: Detachment of the Retina in the Affected Eye.* Mr. C., aged 59, was sent to me by Mr. Wright of Clapton Square. He was in great alarm about a sudden failure in sight in the right eye. About a fortnight previously, he had, after having been exposed to cold on the top of an omnibus, perceived first a bright star moving about before the eye, and subsequently a black speck, which he frequently mistook for a spider hanging from his hat-brim. The eye rapidly became worse; and when he came to me, he was only able to perceive light. The pupils were of equal size. The right dilated well with atropine; and I then found that the retina was detached in its lower half, floating as a light grey veil, with vessels coursing over it. It moved about in different positions of the eye. I could not bring the optic disc into view. There had been no pain in the eye, but a dull heavy aching on the inner side of the nose.

Mr. C. told me that, until within the last year, he had enjoyed excellent sight, as proved by the fact that he had gained several prizes for rifle-shooting. During the last eight months, however, he had been becoming so rapidly short-sighted with his right eye, that he had been obliged to give up rifle-practice altogether.

This gentleman remained under my treatment for two or three months, during which he much improved in general health. No alteration occurred as regards the state of his eye. He was a tall, rather thin man; and had, for some time previously to the attack, been subjected to much mental anxiety. His urine did not contain albumen.

CASE III. *Severe Frontal Neuralgic Pain, with so-called Rheumatic Pain in the Limbs generally; Temporary Failure in Muscular Power in the Lower Extremities; Photopsia and White Atrophy of the Optic Nerves; Symmetrical Amaurosis (incomplete).* Samuel C., aged 41, was admitted June 2nd, 1862. He was a navvy from Dover, of large body, great muscular development, and with a small head. He first noticed a fog before his eyes last Christmas—"a dirty fog". Just before that, he had "rheumatics in his head", with great pain over the right eye. The "rheumatics" began in October, and the pain was such that it kept him awake night and day. It affected all his limbs but he had no swelling of the joints. His limbs came to tremble, and he could walk with difficulty. His right side was the worse. He could now walk well but was not strong, and could not see well enough to walk boldly.

A month or two ago, he used to see sparks of fire before his eyes. These had now diminished, and he often passed a day without seeing them. The pupils were of normal and equal size, rather large, sluggish. He could not make out the largest letter. "There was a fog over everything." He never saw muscæ. He was now robust-looking and florid. The tongue was nearly clean. He smoked moderately; drank freely, probably very freely, rum and beer—"ten to twelve or sixteen pints of beer a day". The left was the better eye.

June 2nd. The conditions were similar in both eyes. The media were clear. The optic disc was sharply defined, very flat, bluish white, but not in an extreme degree. The arteries were small; the veins of full size. The choroidal vessels were readily distinguished; the retina was transparent. He was ordered iodide of potassium five grains, and solution of bichloride of mercury twenty minims, three times a day; and a blister to the nape of the neck.

July 24th. He had continued the medicine regularly, and had two large blisters to the nape. He now stated there was much "less dulness before his eyes". He could spell out No. 16. There was less heaviness in the back of the head. He could tell the time by the clock. He thought he could walk better than he did. The pupils were of normal size, and fairly mobile (very much more active than six weeks previously). The medicine was repeated.

August 18th. He was worse to-day. He could only just see the letters of No. 20. He had been a fortnight at Dover, and thought that the glare of the sun and of the white cliffs did not agree with his eyes. There was not much headache. He slept well, but was not sleepy in the day. He was ordered to take three times daily an ounce of a mixture containing five grains of extract of belladonna in twenty-four ounces of water.

CASE IV. *Paralysis of Left Arm and Leg, with great Pain in the Shoulder and Hip: Symmetrical Amaurosis, with Intense Pain in the Scalp, coming on about Two Years after the Paralysis: Amaurosis total in Six Months: Grey Atrophy of Optic Nerves.* Mary Collins, aged 42, was admitted in August 1862. She had perfect sight until the previous Christmas. She first noticed that her eyes were failing, and she was getting dark. She then had "the cruellest pain in her forehead, as if there was something between the skin and the bone." She had had ten children, five of whom were living. She always had good health before her present illness, and was never subject to headache. Two years ago, one hot summer day, she

walked seventeen miles, and then drank some cold water. She slept very badly the following night; and, a fortnight later, "pins and needles came in her left arm". She had afterwards great pain in the left shoulder and left hip, and then "the pain went to the crown of her head". Her husband and she differed as to whether it was two or four years since she became paralysed, but both agreed that it followed the occurrence referred to, and came on gradually. She had only been two months blind; and it was a remarkable point, that sometimes her sight had greatly improved, and then again wholly failed. Although now quite unable to perceive light, she still asserted that even yesterday "for a few moments she could see into the yard, but she could not keep it".*

The pupils were of large size, and quite motionless; the aspect was amaurotic. She was quite paralysed in her left arm and leg, which hung useless. She could feel in the hand, but only very imperfectly. With great difficulty I got a glimpse of the optic disc in the right eye. It was not white, but of a mottled grey specked with black, very ill defined. The arteries were small; the veins of moderate size; the choroid normal; the pupils were widely dilated.

There can be little doubt that in this case all the symptoms—the loss of sensation, loss of motion, neuralgic attacks, and final symmetrical failure of sight—are due to some central cause.

Case v. *History of Temporary Paresis of Sensation in the Right Fifth Nerve: Sudden Failure of Left Eye, rapidly passing into Total Blindness: no Disease in the Eyeball itself: Diagnosis, Effusion of Blood into Left Optic Nerve-Sheath.* Mrs. U., aged 54, was admitted July 1862. She was healthy-looking, and had never been ill before—"never in bed a day". She was not liable to giddiness, but now and then to a little swimming. All of a sudden, six or seven weeks ago, she had numbness of the right side of the upper lip, cheek, and side of the nose. The skin felt dead. When she went into the air, it felt as if she put her whole face into ice. This troubled her so much, that she used to cover her face with her handkerchief when she went out. At this time she had great difficulty in keeping her hands warm; they were always cold. Her feet were not cold. At present, she has quite lost these symptoms, and her hands are warm. Her legs then swelled; they had never done so before, and the swelling was gone when she was admitted. Suddenly, a week ago, whilst sitting at work one afternoon, she noticed a sort of dimness before her eyes. In trying them, she found that the dimness was before the left only. In the course of a few hours, the dimness had advanced to total blindness of the left, and she had no perception of light. There was no giddiness, sickness, or other cerebral symptom. Her appetite was good. She was active, and always rose at five.

When admitted, she could not with the left eye see the sun or distinguish the window. The other eye was perfect. The left pupil was a little larger than the other, and quite motionless; it dilated to thrice the size of the other when the other was covered, and remained quite fixed; contracting immediately on light being admitted to the other. Under atropine, the left pupil dilated well. The media were clear; the vessels of the retina were seen clearly; the veins were rather large; the arteries small. The optic disc was round, and of normal colour; the central white portion very white and circular; the yellow spot was normal.

My conjecture in this interesting case was, that either there was effusion of blood into the optic sheath, or else an intracranial aneurism pressing on the nerve.

* Probably this was an effort of imagination.

Transactions of Branches.

NORTH WALES BRANCH.

CASE OF PROLAPSED UTERUS: REMOVAL OF THE ENTIRE ORGAN.

By T. Francis Edwards, Esq., Denbigh, Surgeon to the Denbighshire Infirmary.

[*Read at Rhyl, July 7th*, 1863.]

Dr. West, in his able and interesting *Lectures on the Diseases of Women*, has, in reference to the descent of the womb, divided it into three stages of displacement, viz: the first, second, and third degree of prolapse.

The *first* degree is a simple relaxation of the organ within the pelvic cavity, but still preserving its normal situation.

In the *second* stage, there is a partial loss of position; the uterus being placed with its fundus directed backwards, and the os and cervix forwards, so that its long diameter corresponds to that of the pelvic outlet.

The *third* degree, or *procidentia uteri*, is said to exist where there is complete prolapsus with protrusion of the uterus beyond the vulva. It often follows the internal prolapse, and generally—perhaps almost invariably—takes place gradually; except in these very rare instances where the womb has been protruded at once externally; an example of which occurred in my own practice, in a girl of 14, a few years ago.

The causes which operate in producing these uterine lesions are doubtless so well known to you all, that I will not occupy your time with any further allusion to them; but will confine my remarks to the third and severest form of uterine prolapse—the womb in a procident state—bearing direct reference to a case which has come under my special notice for many years, and which progressed into a condition of irreducible prolapse, necessitating extirpation of the entire organ.

The history of this case, which I will deal with as succinctly as the facts which it embodies will allow me, is as follows. My patient is at present 74 years of age; and about twenty years ago, first experienced the distressing symptoms of uterine displacement.

She went on becoming gradually worse for five years; when, the symptoms being much aggravated, she was obliged to obtain professional assistance and advice. The gentleman to whom she applied (a surgeon of great experience and intelligence) examined her, found the uterus protruding externally, and recommended her to wear a ball-pessary; which he inserted, after reducing the uterus into the cavity of the vagina. The introduction, however, of this foreign body caused so much pain and uneasiness, that she was unable to bear its presence more than a week or nine days; when it was with much difficulty removed (by the same gentleman) by the aid of instruments, in consequence of the string having broken off.

She was afterwards ordered to wear an uterine bandage, which was supplied to her from the Denbigh Infirmary. This she was also unable to endure, as the mechanical pressure of the pad on the perinæum caused so much irritation, that she was in a short time obliged to discontinue its use. The only appliance that she could tolerate with any degree of comfort was a sponge dipped in oil, and inserted into the vaginal passage.

During the last eight or nine years, I have been called upon (not unfrequently during that period) to replace the uterus; and each time found it lying pendulous between her thighs; as complete a specimen of external prolapse as ever existed. The organ for

this length of time presented the appearance of a womb somewhat similar to a natural one, excepting that it was much hypertrophied, of a redder colour than usual, with superficial ulcerations on its surface; but with os, cervix, and fundus, distinctly preserved.

She has stated to me that she has not suffered from lingering or instrumental labour—the fruitful source of prolapsed uteri; that she has never had laceration of the vagina or perinæum; that she is the mother of four children, and has had two miscarriages. She does not attribute the occurrence, which for so many years made her life miserable, to any neglect or mismanagement of the labour; but recovered well after each child-birth. She experienced at times difficulty in passing urine; but neither pain nor difficulty in going to stool. There was present (but not persistently so), a discharge of a leucorrhœal character; and occasionally there was hæmorrhage, but never to any alarming extent.

Within the last twelve or fourteen months, I have been summoned three times to replace the uterus of this woman within the vagina; and found that there was more difficulty in reducing the mass each time, and that the ulcerations on the surface were somewhat increased. I therefore strictly charged her to send for me immediately the womb came down.

On April 7th last, I was called to her for the purpose of replacing the womb, which had again become externally protruded. I went directly, but found that, instead of sending for me as soon after the protrusion had occurred, as I had strictly enjoined her to do, the uterus had been down two days, and was then much engorged and enlarged in size. I, of course, endeavoured to replace it; and a considerable portion of that day and the next was spent in persevering, but unavailing attempts at reduction.

Finding, therefore, that matters were assuming so serious an aspect; that all my efforts at replacement were unsuccessful; and that the uterus was passing into a state of sphacelation, I at once determined, before proceeding any further, to seek the advice of my medical friends, and consult with them as to the propriety of immediate operation, as the only means of saving the woman's life.

The following gentlemen, viz.: Drs. Turnour, Jones, Hughes, E. P. Williams, and my friend, Mr. Vaughan Jones of Festiniog, who happened to be in Denbigh at the time, met on April 9th, for the first time. After a consultation, in which the subject was thoroughly canvassed, they coincided in opinion as to the nature of the case; and resolved upon the immediate application of a ligature upon the already corrupting mass, on the ground that to leave my patient in her present condition, would be to abandon her to a state which must prove inevitably and rapidly fatal. I accordingly, in their presence, applied a strong whip-cord ligature upon the neck of the tumour, with the view of allowing nature to complete its detachment. I gave her an opiate, and she passed a tolerably easy day. I saw her the first thing in the morning; and, though she had passed a rather sleepless, restless night, she did not complain of much pain. The pulse was quick, but of moderate power, and compressible; tongue furred, but moist; she had no great thirst, and no particular tenderness of the abdomen. The tumour was much congested, the ligature appearing to act satisfactorily. The fœtor emitted from the semi-putrescent mass was considerable; it was, however, controlled by the free use of the solution of the chloride of lime and Collins' disinfectant.

The next day (April 11th), I found that the ligature was slackened; and as the fœtid exhalation was very offensive, I thought it advisable to remove by excision the whole organ. This, I accordingly did, in the presence of, and with the concurrence of the gentlemen whom I had brought with me, having first applied a fresh and tighter ligature upon the neck of the tumour. A strong dose of opium was given, and she was plentifully supplied with wine, quinine, and beef-tea.

April 12th. She had passed a favourable night. The pulse was good—98. She had no unnatural thirst. She complained of slight uneasiness in the hypogastric region; but beyond that, was going on as well as could be expected. The parts looked well, having no appearance of gangrene spreading. There was a slight purulent discharge from the vagina. She went on progressing favourably day after day; and the ligature came away just seven days after its application.

From this time she became daily convalescent, and in three weeks after the removal of the tumour, was walking about the streets of Denbigh, to the astonishment of her friends and neighbours, and to my very agreeable surprise.

She is at present in good health, though she complains of pains in the loins, and weakness and tremblings of the inferior extremities. I have lately examined her *per vaginam*, in order to ascertain the state of the parts, after the removal of the uterine mass. I must mention first, that the vaginal passage, immediately after the excision of the womb, did not appear to exist in fact; presenting, both to sight and touch, an occlusion to the vaginal entrance; but in a few days, the inverted vaginal walls gradually retracted; and at the present time, the vaginal canal has resumed its proper form and direction, and is natural in every way, except its terminal extremity. On introducing my finger as far as possible, I find that the vaginal passage is so altered at its superior part, that I am somewhat at a loss to render clear by description the state of the parts as it now exists. The finger comes into contact with a loose, patulous fold, somewhat resembling to the touch a relaxed os uteri when dilated to the size of a shilling or larger. On introducing the finger through this *quasi* opening, it is stopped by a thick resisting substance; this appears to be the floor of the bladder, which when filled with urine, is more distinctly felt. And I think there can be little doubt of this, when I record the fact, that a catheter introduced into the bladder can be felt by the finger when pushed up into the peculiar opening alluded to.

Such are the facts in connection with this rare case in obstetric surgery, as they have come under my notice; and I will conclude my remarks by endeavouring to explain the altered appearance the womb presents.

In a case of external prolapse of fifteen years' duration, I presume that the uterus and its appendages, after so long a strain upon their natural attachments, must undergo the greatest possible changes. The cellular tissue becomes enormously multiplied; the mucous membrane extensively altered; the ligaments so elongated that they *may* become agglutinated by chronic inflammatory exudation, the uterus itself being no longer *in situ*; and perhaps it is reasonable to suppose that the structure of the uterus itself is rendered into something other than what it was originally. The vaginal tissues undergo similar changes, and the supports to the uterus after twenty years' strain participate largely in these altered conditions.

I shall only occupy your time by reading a case precisely similar to the one I have narrated; the only one that I have been able to find in the archives of obstetric surgery, that I have had access to. The case is one which happened in the year 1757, and is related by Smellie in a letter by Mr.

Oakley of Birmingham, bearing the above date, to Mr. Smellie.

"Sir,—I was lately called to a woman near this town. I found her in bed, and she gave me the following account of her case. That assisting her husband in lifting a weight that afternoon, 'she felt a lump fall out of her body,' on which she sent for a midwife, who endeavoured to restore it into its place, but not being able to reduce the same, advised to send for me. Upon examination, I found the uterus out of the os externum, about the size of a large man's fist, hard, and the glands scirrhous, each having the exact appearance of a garden-bean. The patient was low and faint; had but little pain. As reduction was impracticable, I immediately directed emollient and discutient fomentations with poultices, and after some days, I bled her in small quantity, for she was too weak to bear the loss of much blood. The body was kept open, and when restless with pain, quieted with opiates. Notwithstanding which, it increased in size, and after three weeks discharged a thin ichor from its surface, and in about six weeks *the patient died.*

"I should take it as a very great favour to have your opinion about extirpation by ligature, which, I think, might be easily done, and which I proposed to the patient, but she would not submit to the operation.

"My opinion was, that I could not resolve his question, as I never had any case in which it could not be reduced; but no doubt, when a gangrenous appearance begins, and there is no hope of the reduction, what he proposed should be attempted to save the patient's life; but such operations should not be attempted without the concurring approbation of experienced surgeons, nor should it be undertaken but when the patient has strength, and the gangrene is only begun in the lower parts, and not advanced above the parts that are to be separated. Mr. Girle of St. Thomas's Hospital, once appointed the pupils to attend the amputation of the uterus; but luckily for the patient, it was reduced the night before."

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

TREATMENT OF APNŒA FROM DROWNING: RELATIVE MERITS OF THE MARSHALL HALL AND SILVESTER METHODS.

By Robert L. Bowles, Esq., Folkestone.

[*Read at Canterbury, November 28th*, 1863.]

You are all probably aware that the National Life-Boat Institution wishes to take the opinion of the medical profession on the relative merits of the Marshall Hall and Silvester methods, in the treatment of the apparently drowned. Those who reply to the communication issued by the Institution, will doubtless be materially guided in the opinion they give, by the result of the inquiries so wisely instituted by the Royal Medical and Chirurgical Society, and published by the Society in July 1862.

The report of the committee is not only of the deepest interest, but is, in one point of view, especially satisfactory; inasmuch as it is the result of the most careful experiments and deliberations of scientific men of world-wide reputation. So far, therefore, as their conclusions go, the importance of these experiments cannot be over-estimated. As, however, it is sought to establish on the basis of the report a principle, on the perfect truthfulness of which depend the lives of numbers of individuals, it behoves every member of the profession not to trust too much to authority, but to think and investigate for himself.

A *principle*, it appears to me, has more influence on mankind than a thousand empirical facts stowed away in the mind's *vade mecum*. A principle is, one might almost say, intelligent. It is ever on the alert to be applied; not merely to that end to which it was originally directed, but to other allied objects which may arise at any future time.

Now, it appears that the Royal Medical and Chirurgical Society are seeking to establish the following principle; that, in the treatment of the apparently drowned, the main object to be sought is the *introduction of air* into the lungs. But, in my opinion, the primary object should be the *expulsion of the water*, or other foreign matter, which may be present in the lungs.

The instructions of the Royal Humane Society terminate with the following note:—"The above directions are chiefly Dr. H. R. Silvester's method of restoring the apparently dead or drowned, and have been approved by the Royal Medical and Chirurgical Society." It is this note to which I would draw your attention; and I hope, after having adduced my reasons, you will think with me that the Royal Medical and Chirurgical Society is premature in thus endeavouring to supersede a method which has already stood the test of experience by one at present imperfectly investigated.

The inquiry of the committee was conducted—1. By means of experiments upon living animals; 2. By means of experiments upon the dead human body.

In the first place, the principal phenomena of apnœa in its least complicated form—namely, when produced by simply depriving the animal of air—were investigated; secondly, the phenomena of the more complicated form of apnœa, drowning.

In simple apnœa, the average duration of the *respiratory movements* after the animal had been deprived of air was found to be 4 minutes 5 seconds. The average duration of the *heart's action* was 7 minutes 11 seconds; thus showing that this last action continued 3 minutes 15 seconds after the animal had ceased to make respiratory efforts.

The next question investigated was the period after the deprivation of air at which, under natural circumstances, recovery is possible, without the aid of any artificial means of resuscitation.

These experiments led to the conclusion that a dog may be deprived of air during 3 minutes 50 seconds, and afterwards recover without the application of artificial means; that a dog is not likely to recover, if left to itself, after having been deprived of air during 4 minutes 10 seconds.

The force of the inspiratory efforts was found to be so great that they were capable of raising, in the case of the dog, a column of mercury four inches; showing how foreign bodies may be drawn into the lungs in cases of drowning, and the importance of this fact in the pathology and treatment of apnœa. In drowning, as a striking contrast to simple apnœa, it was found that one minute and half's submersion sufficed to destroy life.

To quote the committee's own words in summing up this part of the subject, they say:

"Other experiments satisfactorily showed that the difference of time between simple apnœa and that by drowning is not due to submersion, or to depression of temperature, or to struggling; but that it is connected with the fact, that, in the one case, free passage of air out of the lungs and of water into them is permitted; in the other, the exit of air and the entrance of water are prevented."

"There can be no doubt, from other considerations put forward, that although both these circumstances are concerned in producing the difference observed, yet that is mainly due to the entrance of water and the effects thereby produced."

The *treatment* of apnœa, unconnected with artificial respiration, was next considered.

"Many other methods of resuscitation which have been recommended were employed, including actual cautery, venesection, cold splash, alternate application of hot and cold water, galvanism, puncture of the diaphragm.

"Although some of the above means were occasionally of manifest advantage, no one was of such unequivocal efficacy in a sufficient number of cases to warrant the committee in specially recommending its adoption."

The experiments for the investigation of the various forms of artificial respiration were well considered; and not to trouble you with details, I may state that the investigation resulted in the superiority of the Marshall Hall and Silvester methods to any others. In both it was found that the amount of exchange of air varied much; but that, in general terms, the Marshall Hall method gave from a few to fifteen cubic inches, whilst the Silvester method gave from nine to forty-four cubic inches.

As I purpose making some critical remarks upon the committee's suggestions, I feel that clearness will demand that those suggestions be read to you at length, although already published in the medical journals. The committee recommend:

"That all obstruction to the passage of air to and from the lungs be at once, so far as is practicable, removed; that the mouth and nostrils, for example, be cleansed from all foreign matters or adhering mucus.

"That, in the absence of natural respiration, artificial respiration by Dr. Silvester's plan be forthwith employed in the following manner. The body being laid on its back (either on a flat surface, or, better, on a plane inclined a little from the feet upwards), a firm cushion, or some similar support, should be placed under the shoulders, the head being kept on a line with the trunk. The tongue should be drawn forward so as to project a little from the side of the mouth. Then the arms should be drawn upwards until they nearly meet above the head (the operator grasping them just above the elbows), and then at once lowered and replaced at the side. This should be immediately followed by moderate pressure with both hands upon the lower part of the sternum. This process is to be repeated twelve or fourteen times in the minute.

"That, if no natural respiratory efforts supervene, a dash of hot water (120° Fahr.) or cold water be employed for the purpose of exciting respiratory efforts.

"That the temperature of the body be maintained by friction, warm blankets, the warm bath, etc. In the case of drowning, in addition to the foregoing suggestion, the following plan may be, in the first instance, practised. Place the body with the face downwards and hanging a little over the edge of a table, shutter, or board, raised to an angle of about thirty degrees, so that the head may be lower than the feet. Open the mouth and draw the tongue forward. Keep the body in this position for a few seconds, or a little longer if fluid escape. The escape of fluid may be assisted by pressing once or twice upon the back."

From the first part of this report—viz., that on living animals—it would seem that if a minute and half's immersion will destroy life, we have but little hope of saving the lives of those who have been drowned; whereas we have the most conclusive evidence of very able men, that a person may be much longer immersed than this and yet be restored to life. I would especially illustrate this by reference to the case reported by Dr. Wiblin of Southampton (*Lancet*, Nov. 1857). By a large number of persons the body whs said to have been submerged ten minutes, and the corroborative evidence is clearly very strong in support of this; for example, after various other efforts had been employed, a man dived three times, and the whole length of a ship had to be dragged three times, before the body was found, and it was then, I believe, very deep in the water. It was forty minutes in this case before the slightest inspiration was observed, and an hour and a quarter before the ribs moved perceptibly; and not for five hours could the patient do without artificial respiration, only half a minute's interruption of the Marshall Hall method inducing a state ot coma.

Besides this, there are many well-authenticated cases, especially one related in Dr. M. Hall's book on *Drowning*, by Mr. Cook, who was at the time assisting Mr. Stedman of Guildford. From careful calculation it is asserted that the body was under water fully eight minutes, and when taken out was cold and blanched, and to all appearance lifeless. The heart was still. After the employment of the Marshall Hall method, the first gasp was observed in from five to seven minutes; and from this time he very slowly recovered. There could be no doubt in this case as to the completeness of the immersion, for the head was fastened under a sluice.

The strong evidence of experience is thus opposed to that part of the report; at least, as regards the human subject. And, moreover, Dr. Waters of Liverpool, who experimented on the same subject, found the average duration of the heart's beat to be twenty-six minutes in eighteen cases; whereas the committee found the duration to be only about seven minutes. The experiments of Mr. Edwards also give a different result from those of the committee. These discrepancies are sufficient to make us hesitate before we attempt to look upon the conclusions drawn from the report as unalterable.

If I correctly understand the report of the committee, the mode, too, of experimenting was imperfect. A tube was inserted into the windpipe below the glottis, thereby taking away entirely the protective power of the glottis, which, we all know, is very great on the attempted introduction of foreign matter into the trachea; and you will observe that much stress is naturally laid on the great difference in the length of time in dying from apnœa and from drowning.

I must now beg you to consider the second part of the report; viz., that referring to the experiments on the dead body for the purpose of investigating the means of artificial respiration.

The general results obtained by the experiments were, that in the Marshall Hall method from a few to fifteen cubic inches were inspired; whereas in the Silvester method there were inspired from nine to forty-four cubic inches.

I would here remark that in the experiments performed by Dr. Long Fox, Mr. C. Hunter, and myself, for the late Dr. Marshall Hall, at St. George's Hospital, we obtained by the Marshall Hall method an average of from fifteen to thirty cubic inches; and our experiments were very numerous, and extended over a long period of time. We also tried what is now named the Silvester method long before Dr. Silvester brought it before the public; and we succeeded, as he did, in inducing inspiration; but we found so many difficulties in the way of making it a "ready method", that we discarded it in favour of the postural method, which was much more applicable and uniform in its results.

I do not desire to prove that one system is absolutely right and the other absolutely wrong. An intelligent medical man would have both systems at his fingers' ends, and be able to decide which would be more suitable to the case under his observation; but I do desire to prove that, for the use of the public at large,

one system is decidedly more suitable than the other, for the following reasons.

1. In the Marshall Hall method, the tongue and all foreign matters must be cleared away without the necessity of further thought on the part of the operator.

2. The water which is present in the lungs in all cases of drowning will gradually drain away each time the body is in the prone position.

3. As no direct inspiratory force is employed, further than the natural elasticity of the ribs, the water is less liable to be jammed, as it were, tighter into the minute ramifications of the bronchial tubes.

4. When the patient is in the position recommended in the Silvester method, the tongue may appear to an unpractised eye to be well forward, while the base of it lolls back and covers the glottis; and if there be fluids in the stomach (which is not uncommon), they are very liable to be thrown up into the pharynx when pressure is made on the sternum; and when the pressure is removed, the next inspiration would certainly draw the fluid into the bronchial tubes.

5. One person can perform the Marshall Hall method at once, without any preparation; which is certainly not the case in the improved method recommended by the Medical and Chirurgical Society.

6. In the Silvester method, from the continued stretching of the pectoral muscles, the inspiration becomes less and less the longer the manipulations are continued, as we found in our experiments at St. George's in 1856.

In remarking upon these reasons in favour of the Marshall Hall method, I must beg you to remember especially that the first and most vital point is that nothing should stop the way of the access of air.

Only a fortnight ago, I was present at the reduction of a dislocation of the shoulder in a county infirmary. The patient was sitting on a chair fastened to a post, whilst the pulleys were on the arm. After chloroform had been administered for some time, the man suddenly ceased breathing and became deadly pale, the jaw dropped, and the tongue touched the incisor teeth. The gentleman who had charge of the chloroform immediately procured water and dashed it on the face and back. Seeing the man did not recover, I, at once, though a stranger, introduced my finger into his mouth, and hooked up the base of the tongue, when the patient instantly inspired, and rallied without further difficulty.

The recommendation of the Committee to exert pressure on the sternum whilst the patient is recumbent, is most directly and palpably a dangerous proceeding. In 1860, this subject was kindly brought forward for me at the Medical and Chirurgical Society by Mr. Cæsar Hawkins, at which time I was able to prove the reality of the danger of foreign matters being carried from the stomach to the lungs, not only by repeated observations on the dead subject, but also by observations on the living body. A case was related of suffocation in a drunken man, under the care of Dr. Brisowe, in which a quantity of grumous matter from the stomach was found in the bronchial tubes.

You will doubtless, too, remember, gentlemen, that I brought the same subject before you in May 1862, and related a case of delirium tremens that occurred n the practice of Mr. Bateman of Folkestone, in which sudden asphyxia ensued on an attack of vomiting. No *post mortem* examination was allowed, but t was almost certain that some of the contents of the stomach had passed into the lungs, and caused leath. At the same meeting, Mr. Reid confirmed my argument, by stating that this was an acknowledged danger in cases under surgical treatment by the long splint; for if vomiting occurred, the patients were sometimes unable to turn round sufficiently on the side to prevent being choked. To-day, Mr. Eastes of Folkestone tells me that, in cases of drowning, he has seen a quantity of fluid ejected from the stomach when the patient was turned face downwards.

As for the existence of water in the lungs, this is now, I think, satisfactorily proved to every one, both by direct experiment on animals, and by pathological observation on the human subject. You will probably remember that I brought before you a successful case of the treatment of drowning, in which the water was seen to ooze away from the chest for a considerable time. I am convinced that the expectation of the water coming away at once, as supposed by the Committee, is utterly hopeless and unreasonable.

The only plausible objection to the Marshall Hall method is that less air is inspired than in the Silvester method. To this I reply, *so much the better*. The Committee proved that it was the presence of water which killed more than the want of air; and as long as water is present, the air, being forcibly drawn in, can do nothing but mischief. Moreover, persons in a state of syncope want but little air—see how feebly and how seldom they inspire; and, certainly, those who like myself have anxiously and narrowly watched the breathing of a man recovering from drowning, will come to the same conclusion.

I trust, gentlemen, that you now see with me the extreme importance of mature reflection before allowing yourselves to be unduly influenced by the recommendations of the Royal Medical and Chirurgical Society. The National Life Boat Institution has already adopted the Marshall Hall method, and I believe with the most satisfactory results; but from so much having been said of the superiority of the Silvester method to that which they now employ, they wish the profession to inform them whether it is their duty to substitute the new for the old and well tried plan. I hope, from what has been now brought before you, that, even if you do not feel justified in specially advising the Marshall Hall method, you will at least write to the Society, and give as your opinion that the evidence in favour of the new method is not at present sufficiently strong to justify the Society in altering their present rules.

Reviews and Notices.

On the Treatment of Syphilis and other Diseases without Mercury. By Charles R. Drysdale, M.D. Pp. 133. London: 1864.

The author of this work has called the attention of the profession to a very important subject upon which (the evidence being now before us) he believes judgment should be delivered. He thinks that we have now sufficient materials for summing up and giving our verdict; and accordingly he proceeds to lay before the profession the evidence upon which he has come to the conclusion that mercury was needlessly introduced into the profession, and that it now holds its place among the list of remedies solely from its having been used by the practitioners of the past, without any evidence that it is ever of the slightest service.

To support this view, Dr. Drysdale quotes passages from various eminent authors. For instance, he gives us the experience of Dr. Fergusson in Portugal. Dr. Drysdale quotes at length Dr. Fergusson's reasons for not giving mercury to the native Portuguese; but he does not inform us that Dr. Fergusson, after all his experience, found mercury ne-

cessary for the treatment of syphilis in the English officers and men.

Again, Dr. Drysdale quotes Mr. Rose.

"I ventured" (Mr. Rose says) "to lay aside mercury entirely, with a view of observing for a time the progress of the virus when not interfered with by this specific. The result has been very different from what I had expected; and the cure in every case has been effected without the necessity of having recourse to any mercury whatever."

But Dr. Drysdale does not tell us what Sir Benjamin Brodie, who witnessed Mr. Rose's experiments, does; viz., that in private practice, Mr. Rose was continually getting into scrapes by his non-mercurial treatment of syphilis; and that later in life, after his experience had been matured, he used mercury in syphilis like other practitioners.

Dr. Drysdale quotes, at some length, what Mr. Pearson says mercury will do "under the direction of an unskilful man"; but omits altogether to inform us what Mr. Pearson's own practice was in the treatment of syphilitic diseases.

The evidence that Dr. Drysdale has adduced is, therefore, in the nature of special pleading; one side of the case only is argued. And, however this may be calculated to influence those who with Dr. Drysdale see only a part of the question, we cannot think that he has advanced any evidence upon which he can claim a verdict from those members of the profession who have studied the whole subject; or from those who have read the book of nature as it lies open for their inspection.

It was an observation which Sir B. Brodie was continually repeating, that there is no medicine that can do much good, which may not also, if abused, do much harm; and if mercury is to be abandoned because it has been badly administered, we should, upon the same ground, have to discard almost every other drug. Our new *Pharmacopœia* would contain only sarsaparilla and a few innocent decoctions and infusions.

But what we chiefly have to complain of in Dr. Drysdale's work is, that he has made no attempt to distinguish between those syphilitic affections which are supposed, in the present day, to require mercury and those which are not. In Dr. Fergusson's, Mr. Rose's, and Mr. Guthrie's time, all sorts of syphilitic affections were indiscriminately treated by mercury; and it is surely most unfair to attempt to make the modern practitioner responsible for the errors of treatment in what, as regards the knowledge of syphilis, must certainly be regarded as one of the dark ages.

There can be no doubt that Mr. Rose did cure without mercury a large number of syphilitic cases in the Coldstream Guards; but there is also little doubt but that the soldiers who did not find themselves getting well, or who did not like to be made the subjects of experiment, sought and obtained mercury elsewhere during their treatment. We have been informed of a person who formerly carried on a thriving business at Knightsbridge, by selling mercury in different forms to the soldiers, who might be, and no doubt were, at the same time, under the care of their regimental surgeons.

The experience that has been accumulated during the present century has, we have reason to know, led many of the surgeons of the Guards, not to discard mercury in cases of syphilis generally, nor to give it indiscriminately in all instances; and when they do give, they often adopt the plan of introducing it into the system through the skin, by inunction or by calomel fumigation, by which most of the evils attributed to its internal administration are avoided.

Regimental surgeons have better opportunities than others of observing the natural progress of disease, and of testing the effects of remedies. The result of their experience is, therefore, most valuable; but it must not be lost sight of that they labour under the disadvantage of treating one class of patients only. An experiment may fairly, perhaps, be made upon a common soldier; but a similar experiment can scarcely be made with regard to an officer; so that practically the information gained by regimental surgeons may be considered as having reference to, and as being proved by, the cases of common soldiers only. Now, in many parts of the world, it has long been ascertained that these men get well of their venereal complaints without mercury; and the reason is probably the same in all countries. The man who enlists is generally one that has no other occupation, and one who belongs to the lower classes of society. He is one who has not improbably been subject to syphilis before joining the army, or who is not unlikely to have inherited the disease from his parents. Such persons are very much in the same condition as the Portuguese to whom Dr. Fergusson so pointedly refers, and are, as a rule, subject to that variety of syphilis only which does not infect the constitution; or if they get the other variety, it appears in them in such a modified form as not to require any particular specific treatment.

These facts were well observed and graphically recorded by Dr. Fergusson; but the explanation of them has only been given of late years. That explanation is contained in the announcement of the law, that, after a person has once had the infecting form of syphilis, he is not likely to have the same disease again; or, if he do have it a second time, it will appear in a form so modified as not to require the same treatment as was requisite for the original disease.

Transactions of the Odontological Society of Great Britain. Vol. III. 1861-62-63. Pp. 436. London: 1863.

This volume contains short abstracts of the proceedings at the monthly meetings of the Odontological Society, and, in full, the papers read at the meetings. The subjects of the papers are: Disease and Treatment of the Pulp, by Mr. S. Cartwright; Caries and its Treatment, by Mr. Bridgman; The Nature of Dental Caries, by Mr. Coleman; The Necessity of Plasticity in Mechanical Dentistry, by Mr. Truman; Description of an "Articulator", by Mr. W. Campbell; Certain Conditions presented by Amalgams used in filling Faulty Teeth, by Mr. J. Tomes; Diseases of the Pulp, by Mr. Belisario; Anæsthesia in Dental Surgery, by Mr. Coleman; Absorption of Bone and Dentine, by Mr. Bridgman; Manufacture of Mineral Teeth, by Mr. Truman; Treatment of Dental Caries, by Mr. Bartlett; Retarded Development of the Permanent Teeth, by Mr. Vasey; Cases of Supernumerary Teeth, by Mr. Tomes; Local Neuralgia dependant on Diseased Teeth, by Mr. Cattlin; Exostosis, by Mr. J. Walker;

Treatment of Inflamed Dental Pulp, by Mr. Bate; and Prize Essay on the Pathology of Dental Caries, by Mr. Bridgman; etc.

In this list there are, as will be seen, several subjects treated of, and that with ability, which are not only interesting to the dentist, but also to those engaged in general practice, and who are frequently called on to treat diseases of the teeth. The getting up of the book—as regards paper, typography, and binding—shows that the Odontological Society have not been sparing of expense in this particular; and, where necessary, well-executed woodcuts and coloured plates are introduced.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. The Drawings by H. V. Carter, M.D. The Dissections jointly by the Author and Dr. Carter. Third Edition. By T. Holmes, M.A.Cantab., Assistant-Surgeon and Lecturer on Anatomy at St. George's Hospital. Pp. 788. London: 1864.

Beyond the fact that this third edition of Mr. Gray's well known work on Anatomy has been brought out under the competent supervision of Mr. Holmes, there is little room for comment on our part. The editor informs us that the original plan of the book has undergone no alteration, except "an attempt to give greater precision to the language, and to supply the necessary references to anatomical works of merit which had been published since the date of the last edition."

Progress of Medical Science.

MATERIA MEDICA, CHEMISTRY, AND PHARMACY.

New Alkaloid from the Calabar Bean. Messrs. Jobst and Hesse, of Stuttgardt, have instituted a chemical examination of the Calabar bean. They found the active principle to be contained in the cotyledons only. It was obtained by treating the beans with alcohol, and then acting by means of ether on the residue left after evaporation of the alcoholic solution. The etherial solution after evaporation left pure *physostigmine*. Physostigmine is a brownish-yellow mass, amorphous, and in the first instance separated in the form of oily drops. It is easily soluble in ammonia, caustic and carbonated soda, ether, benzole, and alcohol; less soluble in cold water. From the ethereal solution it is entirely precipitated by animal charcoal. The watery solution has a faintly burning taste, a clearly alkaline reaction; it gives a copious kermes-coloured precipitate with biniodide of potassium, and a precipitate of hydrated oxide in solution of chloride of iron; fused with hydrate of potash, it evolves fumes which have a strongly alkaline reaction. Acids dissolve it easily, and yield solutions of salts, which have mostly a dark red, more rarely a dark blue, colour. The hydrochlorate of physostigmine yields precipitates, with tannin acid, reddish-white: chloride of platinum, pale yellow; chloride of gold, bluish—a reduction taking place; bichloride of mercury, reddish-white. Twenty-one beans yielded only a little alkaloid. Two drops of a watery solution of the alkaloid placed on the eye caused the pupil to contract after ten minutes to about one-twentieth of its original diameter. In this condition it remained for an hour; after from four to six hours it had again assumed its former size. Taken internally, physostigmine is as poisonous as the most dangerous cyanides. The alkaloid from one bean was given to a rabbit. Five minutes afterwards it fell, remained motionless, and died twenty-five minutes later, or half an hour after the taking of the poison. Physostigmine causes contraction of the iris, even in the eye of an animal which has already been dead for some time. A rabbit's eye, treated with two drops of watery solution an hour after the animal had been killed mechanically, showed a contraction of the pupil to one-fourth of the other eye. A rabbit killed with physostigmine did not show this feature; but it was exhibited to a small degree by one which had been killed by cyanide of potassium. This shows that muscles, though dead, are yet liable to be influenced specifically, and not only by the galvanic current, but also by physostigmine. (*Ann. Chem. und Pharm.*, Jan. 1864.)

Coca. The resemblance of the word to cocoa—a species of palm yielding the cocoa nut—and to cacao, the fruit of the *Theobroma cacao*, is apt to lead people to imagine that it is derived from one or other of these plants. This is not the case; coca is a name given to a shrub (*Erythroxylon coca*) which grows on the eastern declivities of the Andes of Peru and in Bolivia. It grows wild, but it is also cultivated. The leaves are collected and dried, either in the sun or over a fire. Great care is observed to keep the leaves dry, as damp soon renders them inert. Their flavour, Von Tschudi states, is slightly bitter and aromatic, and very like the inferior kinds of green tea. In the fresh state, the smell is almost overpowering. Weddell says that the leaves were used in the time of the first Incas, but only by the sovereigns and by the priests in their religious ceremonies. The juice of the thorn-apple was also used by the latter, to throw themselves into a state of ecstacy; and the Indians still believe that they can, by drinking it, hold communication with the spirits of their ancestors. In Peru each Indian carries a pouch with the dried leaves and a gourd with unslacked lime. When he takes the leaves, which he does four times a day, he chews them until they form a ball, and then inserts a little of the lime into its centre. Europeans, when they begin to chew, use sugar, but they soon have recourse to something more pungent. All the mountain Indians, Von Tschudi states, use from one ounce to one and a half ounce a day. It excites a copious flow of saliva. Its action resembies that of the thorn-apple, rather than that of opium. It produces dilatation of the pupil. Weddell says that it acts as a sustaining stimulant. In addition to increasing the flow of saliva, observes Wackenroder, it produces a sense of warmth and fullness in the stomach, increases bodily activity, and checks the occurrence of hunger and sleep. It never causes, even when taken to excess, sleep. The coca-chewers require but little food, Tschudi states; but Weddell did not find this to be the case: they were able to go a long time without food, but when they did eat they consumed as much as those who did not chew. Abused, it produces a peculiar aberration of the mind, indicated by hallucinations (Weddell), and after some years wears out the mental activity. The gait becomes unsteady, the teeth greenish and stumpy, breath offensive, lips and gums pale, and the skin yellow, and the expression of the face apathetic (Tschudi). In moderate quantities it is conductive to health, and the Indians live long. Tschudi employed an Indian 62 years of age, for five days and five nights at digging. He took only two hours sleep nightly, and but very little food. He chewed the leaves constantly, renewing them every three hours. He drank a strong infusion of the leaves

when at Puna, 14,000 feet above the sea; it enabled him to climb the heights without difficulty. He had no cerebral excitement, but felt great anxiety and a disinclination for food for some time afterwards. It would, he observes, be a better stimulant than ardent spirits. It contains an active principle analogous to theine, which has been called cocaine. Weddell seems to have been the first who obtained it. Frémy, who made a more careful analysis, says that it is very bitter, uncrystalisable, soluble in alcohol, but insoluble in ether.

SURGERY.

Vesical Tenesmus following Sprain of the Hip. A man, aged fifty-six, was admitted into the Hôtel-Dieu under M. Laugier, having severely sprained his right hip by an accident. He was unable to move the limb, and complained of being unable to pass urine. On introducing a catheter, the bladder was found to be empty. Nothing could be found to account for the symptom: no blood had passed by the urethra, and the patient's complaint was in reality limited to an excessive slowness in the discharge of urine, which was nevertheless complete. No effusion of blood could be detected on examination *per rectum*, nor was there any sign of fracture of the pubic bone. A symptom, however, appeared soon after the accident, which led to a supposition as to the origin of the tenesmus. Sensation was impaired in the whole of the right lower limb. Celsus, in his eighth book, speaking of dislocations of the thigh, says that, "if they take place anteriorly, there is often suppression of urine." These words have been by some interpreted to mean that the bladder is pressed on by the head of the thigh-bone; by others, that the urethra is pushed aside. A circumstance, however, related by M. Laugier may suggest another interpretation. In an experiment made with Louvrier's machine for reducing ankylosis, considerable force having been applied to a knee anchylosed in consequence of muscular contraction, the tendons and skin were torn; and the patient was seized with retention of urine. In this case, without doubt, as in those where dysuria has set in after dislocation of the hip and contusion of the pelvis, there was injury of the sacral and sciatic plexuses, and of the nerves proceeding to the bladder. Paralysis of the arm is often observed after dislocations of the shoulder or of the vertebræ, from stretching, irritation, and contusion of the branches of the brachial plexus. M. Laugier's patient presented similar symptoms in the right lower limb; there was evidently contusion of the nerves of the lumbar and sacral plexuses. The dysuria cannot be regarded as a reflex phenomenon, but was a consequence of injury of the sacral plexus. (*Gaz. des Hôpitaux*, 5 December, 1863.)

Treatment of Abscess by Chlorine Water. M. Hervieux recommends injections of chlorine water in the treatment of chronic abscess. In 1858, while acting for M. Noel Guéneau de Mussy at the Pitié Hospital, he had under his care a man who had a deep fistulous opening in the groin, which had resisted all kinds of treatment, and to which, for several months, nothing but simple dressing had been applied. M. Hervieux employed injections of chlorine water, varying the strength according to the state of the parts; and in less than a week the fistula was perfectly healed. In a very obstinate case of large axillary abscess lately under his care, he has employed the same means, with the results of rapidly producing contraction of the cavity and improving the health of the patient—a young woman aged twenty. (*Bull. Gén. de Thér.*, 30 Nov., 1863.)

DR. GARROD'S LECTURES

ON THE

BRITISH PHARMACOPŒIA,

Delivered at the Royal College of Physicians.

Dr. Garrod's second lecture was delivered on Friday, January 29th. The lecturer said that, before proceeding with his notice of the new remedies introduced, he would say a few words on the *change of nomenclature* which had occurred in the Pharmacopœia. Some striking alterations have taken place in the naming of the drugs and preparations; and these changes, though not entirely approved by all the members of the Committee, have not been made without due consideration. The following are some examples of the changes. Chlorine, rendered *Chlorinium*, and Iodine, rendered *Iodinium*, in the London Pharmacopœia, are now termed *Chlorum* and *Iodum*; Chlorinated Lime is now called *Calx Chlorata* in place of *Calx Chlorinata*; and Tincture of Iodine, formerly *Tinctura Iodinii*, is now *Tinctura Iodi*. Why have these changes been made? Some members of the Committee objected to the names *Chlorinium* and *Iodinium* that they were wrongly formed, being merely the English names with a Latin termination; and it was considered that, in the formation of Latin names for such substances, the roots of the words should in preference be adopted. Hence, by making use of the roots, ἴον a violet (or ἰώδης, violet-coloured), and χλωρὸς green, the words *Iodum* and *Chlorum* were formed. Hence, also, the term *Chlorata* in place of *Chlorinata*. Again, a change of name has been adopted in the case of substances whose composition is not very definite or is imperfectly understood. Thus, the Sulphuret of Potassium (*Potassii Sulphuretum*) is now called Potassa Sulphurata or Sulphurated Potash; and the Potassio-Tartrate of Antimony (*Antimonii Potassio-Tartras*) or Tartar Emetic, now appears under the name of Antimonium Tartaratum or Tartarated Antimony. In some instances, however, the principle of not using a name giving a definite idea of composition has not been carried out; as in the instances of Citrate of Iron and Ammonia (*Ferri et Ammoniæ Citras*) and of Citrate of Iron and Quinine (*Ferri et Quiniæ Citras*). Again, certain preparations have, in successive editions of the London Pharmacopœia, undergone change of name, in accordance with the mutations of chemical views as to their constitution, which has given rise to perplexity and even to danger. This is especially the case with the preparations of mercury. The Committee, therefore, thought it best to give to these names having little or no scientific meaning; and hence they have re-introduced the terms Calomel (*Calomelas*) and Corrosive Sublimate (*Hydrargyrum Corrosivum Sublimatum*) for the two Chlorides of Mercury. The Protiodide and Biniodide of Mercury are now called simply the Red Iodide (*Iodidum Rubrum*) of Mercury and the Green Iodide (*Iodidum Viride*) of Mercury. The Nitric Oxide of Mercury is now Red Oxide of Mercury

(*Hydrargyri Oxidum Rubrum*); and the Ammonio-Chloride of Mercury (*Hydrargyri Ammonio-Chloridum*) of the former Pharmacopœia, is in the British Pharmacopœia termed merely Ammoniated Mercury (*Hydrargyrum Ammoniatum*). The names here mentioned are intended for use in prescriptions; but in each case the chemical composition of the salt is appended. Again, the well known bismuth salt, which has been at various periods, and in different Pharmacopœias, an oxide, a trisnitrate, a subnitrate, and a nitrate, is now called simply White Bismuth (*Bismuthum Album*); and is chemically defined as a trisnitrite ($Bi O^3, NO^5$). There have also been some changes in the names of the alkaloids; *e.g.*, Quinia for Quina, etc. The noun substantives ending in *as* (as *Nitras*, etc.) have been made feminine; hitherto they have been neuter in the Edinburgh and Dublin, feminine in the London, and masculine in the United States Pharmacopœias.

The first article of the Materia Medica which Dr. Garrod noticed in this lecture, was the

Aconitum Napellus. In the Pharmacopœial preparations of this there are several alterations. The alkaloid *Aconitia* is re-introduced. Under the name *aconitina*, it appeared in the London Pharmacopœia of 1836; but for some unknown reason, was omitted from that for 1851. In this interval of time, however, it had gradually come into use as an external remedy. Aconitia, as now re-introduced, is defined as "an alkaloid, $C^{60} H^{47} NO^{14}$, obtained from aconite root"; and certain distinctive characters and tests are appended, which are very necessary, as, from its high price (though this is less than it formerly was), the alkaloid is very liable to adulteration. Most of the so-called aconitine, indeed, imported from the continent, has been found to be inert. In its pure state, aconitia is an intense poison. When rubbed on the skin, it produces a sensation of tingling, followed by numbness. From its highly poisonous properties, aconitia should never be administered internally; in some experiments performed several years ago, Dr. Garrod found that one-fiftieth of a grain was sufficient to destroy large dogs. Its action is, however, not rapid; for half an hour elapsed before the death of the animals took place. The nervous system appears to be first acted on by aconitia; and through this the heart's action is influenced. There is paralysis of sensation especially, rather than of motion; the heart's action becomes gradually slower; and death takes place. This is what occurs in animals; and similar symptoms have been observed in man, in cases of poisoning by aconite. As an external remedy, aconitia is very valuable; and Dr. Garrod has found nothing equal to it for the relief of neuralgic pains. The Pharmacopœia directs an ointment to be made by dissolving eight grains of aconitia in half a fluid drachm of rectified spirit, and mixing with an ounce of lard. This is a clean and elegant preparation.

The *Tincture of Aconite* of the British Pharmacopœia is of much lower strength than its predecessor. In the London Pharmacopœia, each ounce was equal to 180 grains of the root; while it is now equal to 54 grains only. The London tincture was too strong for internal and too weak for external use. That now ordered is intended to be given internally; and for external use we have now a spirituous solution, termed *Liniment of Aconite*, having eight times the strength of the new tincture. The liniment also contains some camphor (one ounce to the pint.)

In addition to the root of aconite, the *fresh leaves and flowering tops*, "gathered when about one-third of the flowers are expanded," are now introduced into the materia medica. An *Extract* of the fresh juice is directed to be made from these parts of the plant; but Dr. Garrod considers it an uncertain preparation.

Aloes. In the London Pharmacopœia, three kinds of aloes are mentioned: the Barbadoes, Socotrine, and Hepatic. In the British Pharmacopœia, the hepatic aloe is discarded, being in no respect superior to the Socotrine. It has been a very common opinion that the watery extract is a preferable remedy to the aloes itself; that the portion insoluble in water—the resin—is much more irritating to the bowels than the soluble part of which the extract is formed. To test the accuracy of this opinion, Dr. Garrod had separated the soluble portion and the resin of socotrine aloes, and had caused pills to be made of each. These were given to a number of patients; and the effect of each dose was carefully noted. The result was, that the watery extract was found to be a much more powerful purgative than the resin; and also—contrary to the general supposition—that it was much more liable to produce griping. Dr. Farre made, at the same time, a similar series of experiments, and arrived at the same conclusion with Dr. Garrod.

The preparations of Barbadoes aloes are, enema, extract, pill, compound gamboge pill, compound colocynth pill, and pill of colocynth and hyoscyamus; those of Socotrine aloes are, enema, extract, compound extract of colocynth, pill of aloes and assafœtida, pill of aloes and myrrh, and compound rhubarb pill. Thus, in each preparation, a distinct form of aloes is used; and there is an opportunity of testing the relative efficacy of the two kinds.

Preparations of Ammonia. The salt lately called *Sesquicarbonate of Ammonia*, is now termed *Carbonate* for the purposes of prescription; but is described as being chemically a sesquicarbonate ($2 NH^4 O, 3 CO^2$). In the *Aromatic Spirit of Ammonia*, the cloves and cinnamon have been omitted, and thus the liability to change of colour is obviated; and the amount of alcohol is increased. The *Fœtid Spirit* and the *Compound Tincture* of Ammonia have been omitted. In the *Liquor Ammoniæ Acetatis* there is an important change. It was formerly made by mixing the sesquicarbonate of ammonia with dilute acetic acid; thus prepared it was liable to undergo change. Now, however, it is made by neutralising acetic acid by means of liquor ammoniæ; and the new preparation has about five times the strength of the preparation of the same name in the London Pharmacopœia. It might be asked, why acetate of ammonia itself was not introduced into the materia medica? The answer is, that the salt has been omitted, on account of the difficulty of its crystallisation and preservation.

The *Liquor Ammoniæ Citratis* of the London Pharmacopœia has been omitted.

Two new salts of ammonia have been introduced; the *Benzoate* and the *Phosphate*. The benzoate is formed by neutralising benzoic acid with ammonia. It is more soluble than benzoic acid, and can be readily given in a liquid form. It is rapidly absorbed; and the benzoic acid is converted into hippuric acid—not undergoing decomposition within the body, but taking to itself some other substance, probably glycocoll, which forms with it hippuric acid; and this is then eliminated by the kidneys. The change in the quality of the urine produced by benzoic acid renders the salt useful as a medicine when the kidneys require stimulating; it acts beneficially on the mucous membrane of the bladder where there is a tendency to phosphatic deposits, and generally in chronic inflammation of that viscus. The urine is not affected by the ammonia of the salt; because ammonia is not eliminated by the kidneys, but escapes by other passages, probably chiefly by the skin and mucous membranes. Benzoate of ammonia may be given in large quantities without producing any injurious effects.

The *Phosphate of Ammonia* consists chemically of ammonia combined with tribasic phosphoric acid and water ($3\,NH^4O, PO^5 + 5\,HO$). Phosphoric acid, as is well known, is an important agent in the animal economy; and it differs remarkably from the other acids, in that, with one atom of base, it forms an acid salt; and with two atoms an alkaline salt. The alkaline solution of phosphate of ammonia is believed to dissolve and hold in solution urate of soda; and there is evidence in favour of the use of this salt in cases of urinary diseases occurring in gouty habits. Dr. Garrod believed that it is useful when its use is long continued; and that it is not liable to prove injurious.

Preparations of Antimony. There has been much difference of opinion as to the *Compound Antimonial Powder* of the London Pharmacopœia; some considering it to be an active preparation, while others have asserted it to be inert, or at least inferior to the secret preparation known as "true James's Powder" (*Pulvis Jacobi Verus*). Now the metal antimony forms two oxides; a teroxide having basic properties (SbO^3); and antimonic acid ($Sb\,O^5$). Besides these, there has been described an antimonious acid ($Sb\,O^4$); but this is probably a compound of the other two oxides—an antimoniate of antimony. The teroxide of antimony is dissolved freely in weak acids, and in the stomach is probably converted into a salt of the metal; while the antimonious acid (so-called) is very insoluble. It is said that in James's Powder, the antimony exists in the soluble form; while in the compound powder of the London Pharmacopœia it is insoluble. The Committee had made several experiments, and had examined the pharmacopœial preparation; specimens of James's Powder obtained from Newbery and from Butler (both of whom profess to have the original receipt); and a specimen of James's Powder furnished by Mr. Squire, and said to be sixty years old. In these the amount of antimonious acid varied from 45 to 63 per cent, and that of teroxide from 1 to 9 per cent; the amount of both being greatest in the old preparation. In all the specimens, the bulk of the powder was made up of phosphate of lime. Probably, Dr. Garrod observed, one of these preparations is as good as another.

Antimonii Terchloridi Liquor is introduced, and is used in the formation of oxide (teroxide) of antimony (*Antimonii Oxidum*). This oxide is insoluble in water, but is soluble in hydrochloric acid, and dissolves readily with cream of tartar. It is introduced into the Antimonial Powder (*Pulvis Antimonialis*), which is made by mixing one ounce of oxide of antimony and two ounces of precipitated phosphate of lime. This must be equal or superior to James's Powder, provided the proportion of teroxide be constant. It is the opinion of many, that all the good effects of antimonial salts can be obtained from properly regulated doses of tartar emetic. This may be true; but it is probable that a non-irritating salt, which is slowly acted on and dissolved, will be more certain in its effects. Whether the phosphate of lime does more than add to the bulk of the medicine, is a question that must be left for future decision.

The *Solution of Terchloride of Antimony* is used as an external agent, and in making other antimonial preparations. It is a powerful caustic; and, when evaporated, leaves the substance known as *butter of antimony*.

Beberia. This is an alkaloid obtained from the bark of the Bebeeru, or greenheart tree. The bark is brought to England in large flat pieces; it has a very powerful bitter and somewhat astringent taste. It contains an alkaloid, beberia, of which the sulphate has been introduced into the Pharmacopœia. The salt has not been crystallised; but in commerce it is met with in the form of "dark brown translucent scales, yellow when in powder; with a strong bitter taste; soluble in water and alcohol." The free alkaloid is in the form of a yellow amorphous powder. Beberia is one of the many substances that have been proposed as substitutes for quinine. It was chiefly introduced into medicine through the recommendation of Dr. Douglas Maclagan of Edinburgh, as being equally efficacious with quinine, and less liable to affect the nervous system. Dr. Garrod had, however, much doubt as to its powers over intermittent fever; in his practice, it failed in several cases of this disease, which were at once relieved by quinine. He had been told by an Edinburgh physician, that beberia is not useful in intermittent fever but in neuralgia of an intermittent character; this, however, requires to be tested. In testing the effect of antiperiodic remedies, we must bear in mind the effect of change of climate and of diet. The dose of beberia is ordinarily from one to five grains; in some of the cases of intermittent fever, Dr. Garrod had given as much as ten grains.

Conium Maculatum. The *fruit* (commonly called *seeds*) of this plant are now made officinal; in the London Pharmacopœia the leaves were directed to be used. Hemlock owes its activity to an alkaloid—conia; and this, when free from acid, tends to become

liquid, and very readily undergoes decomposition. Hence it must be kept in sealed tubes. Even while still within the plant, it is liable to change; and hence arises the uncertainty in strength of the preparations made from the leaves. This uncertainty, it is believed, has been (to some extent at least) obviated by the use of the fruit.

Within the last few years Dr. Garrod has made many observations on conium, and has compared the tinctures of the London and British Pharmacopœias. Conium is regarded as a powerful sedative of the nervous system, especially the spinal cord. It is most frequently given to allay spasm, as of the respiratory organs; and also has been used in cases of cancer. At first Dr. Garrod, in his experiments, commenced by giving 20 or 30 minims of the London tincture; but he soon found that even much larger doses produced no physiological symptoms; and in twenty cases he had given doses varying from a drachm to half an ounce, and in one case even as much as an ounce. The tincture which he used was prepared from carefully dried leaves, and by establishments of acknowledged reputation. On the other hand, in the patient who had taken an ounce of the London tincture, slight symptoms were produced by five drachms of the new tincture (British Pharmacopœia). Hence the latter is apparently about twice as strong as the tincture of the leaves; but still it is not very potent.

Dr. Garrod had given conium in several cases of spinal disease, with advantage. It relieves those cases of paraplegia which are attended with a subinflammatory state of the spinal cord, indicated by pain in the back and startings of the legs, and with incontinence of urine—those cases, indeed, the symptoms of which are aggravated by the use of strychnia. He referred in illustration to an interesting case which had come under his notice. The patient had been exposed for some time on a raft at sea; and was suffering from spinal meningitis. The symptoms were markedly relieved by conium; and were as distinctly aggravated whenever, for the sake of testing the effect of the medicine, the conium was omitted and strychnia substituted for it.

[Errata. In the report of Dr. Garrod's lecture in last week's Journal, at page 132, col. 1, line 17, for *Santonina*, read *Santoninum*; and at line 23, for "action of the medicines," read "physical and chemical characters of the medicines."]

Small-Pox appears to be raging at Washington.

Frightened to Death. Another instance of death resulting from the effects of sudden terror is recorded. A girl, aged 15, in good health, a little after ten o'clock at night saw one or two men on the roof of the house. She shrieked out as if much terrified, three days afterwards was taken seriously ill, and died. Mr. G. Haycock, surgeon, said that the immediate cause of death was apoplexy, resulting from the fright the girl had sustained. The jury returned the following verdict:—"That the deceased expired from the mortal effects of apoplexy, caused by extreme fright, and her said death arose by misadventure."

British Medical Journal.

SATURDAY, FEBRUARY 6th, 1864.

MEDICAL EDUCATION.

We beg to call especial attention to a very remarkable communication from Dr. Latham, which appears in our impression of to-day, on the subject of Medical Education. The words of wisdom which fall from the pen of one so experienced in teaching cannot fail to have great weight with the profession. We rejoice to find, that so high an authority supports the views lately given in this Journal on the subject of the education of the student. We expected, when remarking upon the evil system which forced upon the student's mind in the shape of lectures such a mass of ill-digested food, that we should have received the angry rebukes of lecturers. To our great surprise and delight, three teachers, at all events, of metropolitan medical schools have given in their warm adhesion to the reforms proposed by us. This is a happy omen. It shows that our medical teachers are too high-minded and patriotic to allow private interests to stand in the way of the rightful education of the student.

This question of Medical Education is at this moment the question of the day in medical politics. To regulate the education of the student is the chief business of the Medical Council; and it is well known—thanks to the motion of Mr. Syme—that at the next meeting of the Council the question will have to be seriously debated. There is a general feeling in the profession, and amongst unprejudiced teachers, that the system heretofore and at present pursued, and which has ended in increasing to a lamentable degree the forced attendance of the student upon lectures, is radically defective; and that so far from advancing, it only interferes with his real acquirement of knowledge. The Medical Council has already forwarded to the different medical corporations questions on this point—asking opinions and advice; and when the Council meets in April next, the reports of all these licensing bodies will have to be considered and digested. It is well, therefore, that the profession at large should turn their attention to the matter, and aid the Council by their advice in arriving at a true solution of this most complicated subject—the student's education.

The first burthen from which the student requires relief, is the attendance on the intolerable courses of lectures now laid forcibly on him. The absurdity of the system, and the injury which it exercises on the mind of the student, are patent to all of us. What sustains the anomaly is, the dread of interfering with vested rights, and the worship of ancient prac-

tices. But this must no longer be. The Medical Council, if it do its plain duty, will lay down *simpliciter* the courses of study which the youth ought to follow, not the courses of study which it is to the interest of this or that school or teacher that he ought to follow. Lectures must in future be arranged solely for the benefit of the students, and students not used for the benefit of the lecturers.

It must be remembered that in London, and no doubt in other places, schools of medicine have been unnaturally forced into existence. A given number of medical men united about a hospital, or elsewhere, discovered that they wanted to teach medical students; and so put themselves forwards to get students, instead of waiting until students came to seek their instruction. In this way, the supply of instruction has in certain quarters been of an unnatural character—the instructors having in view not simply the instruction of the student, but other objects of a kind much more personal to themselves. Wherever this state of things has prevailed, this nursing of medical schools into existence, no doubt much injury to education has resulted; and it will be the duty of the Medical Conncil to redress the injury.

It seems to us, that the reform urgently required demands a reduction of the number of medical schools, and a reduction of the number of lectures at present demanded of the student. First, as regards the schools, let us see how the case stands. A multiplicity of schools necessarily produces a number of small schools. Small schools are, of necessity, poor schools. And at poor schools, instruction can hardly be as well carried out as in well-endowed schools. The lecturers at small schools undoubtedly make great personal sacrifices in the matter of teaching; but why should they make such sacrifices? Why should not every man be well paid for his labour? And, again, is it reasonable to suppose, that an ill-paid or a no-paid lecturer will for ever continue to deliver himself of his lecture with the same satisfaction and force as a well-paid professor does? Can any one reasonably expect of him that he will do so?

Now it does so happen, that the reduction of the courses of lectures and the reduction of the number of schools, would come together excellently in practice. Let us, in order to show this, suggest for consideration the Utopia of medical instruction which our system, if followed, would make in this metropolis, for example; and see how beautifully the thing works on paper at all events.

In our model medical republic, the schools would be reduced to such a number as would suffice to make teaching a pecuniary consideration worthy of a scientific professor's attention. We would have no teachers but well-paid teachers, and, therefore, such as were able to teach, and had proved themselves to be masters of their subject before they entered upon the business of teaching it. The professors should be made for the chairs, and not the chairs for the professors. Just let us imagine for a moment what would probably happen if St. George's, St. Mary's, and the Middlesex medical schools were united in this sort of Utopian triple alliance. Let us imagine the three schools fraternally united in one central and neutral lyceum. We suppose it will be granted that the working plant of any one of these schools would perfectly suffice for the supply of the wants of all the three schools combined; that one dissecting-room, one museum, one set of lecture-rooms, one set of porters, etc., would do equally well the work of the three schools. Well, when we recollect that the working stock of each of these schools represents a sum of between £6,000 and £7,000, we may imagine what an enormous saving such a combination would at once effect, and, of course, to the benefit of the professorial chairs.

Then, again, no one will, we suppose, deny that one set of lecturers could do the lecturing work equally as well, at all events, as it is at present done by the three sets of lecturers. The professor, when he is at it, can address a hundred or two of students with much more effect than he can a dozen or a score. By this concentration of schools, professorships would become valuable holdings; and the picked men out of the three schools would then become the chosen lecturers.

Thus our Utopian medical republic would give us a splendid and richly furnished school, well-paid chairs, and carefully selected and capable professors, whose business it would be, mainly and above all, so long as they remained professors, to teach effectively and completely. Being paid an equivalent for their services, they would be without excuse if they did not fully render those services. Another great good, therefore, resulting would be this: a man of science would then be enabled to live comfortably on his professorial salary whilst busied with science, and whilst awaiting calmly his possible rise into the golden regions of future practice. Instead of keeping our rising scientific lecturers on starvation salaries, or no salaries at all, we should pay them decently whilst engaged in the business of teaching. We should then also enable men to devote themselves wholly to science, if they had the gift that way, instead of making them wear out their lives in the petty details of the practice of medicine, in order to enable them to keep themselves afloat as teachers. The teacher of science would then live by science.

In a former article, we indicated what (as we view the thing) should be taught in this our model school. We would have no lectures given except those which require demonstration and illustration. We should have our three hospitals, and our one school; and

nothing should be taught in the school which could be more fitly taught in the hospitals, and nothing in the hospitals which could be more properly demonstrated in the school. The schools should prepare men for the capacity of rightly appreciating what they see, and can only see, in the hospital. Medicine and surgery should be taught in the hospitals; surgical operations, at the school. Chemistry, anatomy, physiology, pathology, and pathological anatomy, belong to the school. The medical student's materia medica should be comprised under botany and chemistry (which of course, belong to the school), and the pure course of materia medica handed over to the pharmaceutists. Midwifery would belong both to the school and to the hospital.

Moreover, in our model school, courses of lectures would be remodelled. Thus, for example, the teaching of pathological anatomy should belong to the physician and to the surgeon. The physician who dilates in his clinical lecture learnedly on kidney-diseases, for example, has taught his hearers defectively, unless he has also demonstrated to them the physical changes which attend those diseases. It is very well for the student to be made familiar, in an abstract way, with pathological changes of structures; but he is only half taught, if he be not shown by his clinical teacher the connexion which actually and in practice exists between the altered structure, as shown in the dead body, and the disturbance which that altered structure occasioned during life. The separation of the teaching of pathological anatomy from clinical medicine and surgery is an unnatural divorce.

But we must now for the present conclude. We think we have suggested a tolerably large opening for a change in medical education; and, although our suggestions have been floating in the regions of Utopia, we yet trust that they will bear some serious consideration.

AN "INFALLIBLE" REMEDY.

A Committee has lately been sitting in New York to investigate the value of sarracenia purpurea as a cure for small-pox. The Committee have made their report, on the strength of all the published observations touching the matter on which they could lay their hands. This is their summary of the value of the article. Let us hope the enthusiastic will learn a lesson from it.

"Your Committee has endeavoured to lay before the Society the history and recorded experience thus far in the use of the sarracenia purpurea for the treatment of small-pox, and in conclusion would respectfully submit the following, as their deductions from the testimony here accumulated. 1. That the analyses already made of the plant do not give any active principle or elements which would indicate any great medicinal potency. 2. That the discoverers and advocates of the specific remedial power of the sarracenia purpurea over variola have given apparently too great credit to the *post hoc* circumstances, as being *propter hoc* influences (one reason for this latter inference being suggested by the loose, unscientific, and eulogistic style of the communications). And 3. That the reliable recorded experience thus far appears to preponderate against the remedial efficiency of this plant in those forms of the disease which do not generally recover under the administration of ordinary remedies."

ST. BARTHOLOMEW'S STAR.

We naturally expect that the medical schools of this metropolis would send forth many men eminent in the several branches of our profession; but it rarely happens, as is the case at the present time, that all the highest offices of honour and distinction in our medical corporations are occupied by the *alumni* of one school. It may, however, interest the profession to be informed that the President of the General Council of Medical Education and Registration in the United Kingdom, the President of the Royal College of Physicians, the President of the Royal College of Surgeons, the Master of the Society of Apothecaries, and the President of the Royal Medical and Chirurgical Society, were all of them students of the medical school of St. Bartholomew's Hospital. Abernethy was one of their instructors; and it has been related of him, that when entering the theatre of that hospital to deliver an introductory lecture, regardless of the cheering with which he was greeted, but impressed with the appearance of so many young men seeking to qualify themselves for the medical profession, he cast his eyes around, and, thinking aloud, as was his practice, he exclaimed, "God help you all! What is to become of you?" That question is now answered; and, had Abernethy lived, he would have had good reason to be proud of the professional reputation of many of the then students of St. Bartholomew's; but he could scarcely have expected that the Presidents of all the great medical corporations in England should have been his pupils. A coincidence so extraordinary deserves to be recorded.

TOWNLEY THE MURDERER.

The opinion so often repeated in this Journal, that if ever a murderer ought to have been hanged, according to law, Townley was the man, has now found the fullest confirmation. Drs. Hood, Bucknill, Meyer, and Helps, have examined the man in Bethlehem Hospital, and have unanimously certified that he "is of sound mind." "Neither in mode of speech nor in look and conduct was there any sign of insanity observable in him." Moreover, these gentlemen knock to the ground all the pretty scaffolding of delusion, hereditary predisposition, and unsoundness of mind, on which was raised the idea of his legal incapacity. Townley, therefore, is, in the eye of the law, still a punishable criminal, and he is to

be punished by being removed to a state of penal servitude for life. Sir George Grey cannot, after what has occurred, quite make up his mind to send him from Bethlehem back to the gallows at Derby. What will the public think of the medical evidence given in this case, as it now stands out in the most prominent relief of strong opposition? We fear that we shall not all of us exactly receive the applause of society in that particular. Good, however, must assuredly come out of this unpleasant affair; and in this respect, that in cases of this kind, the prosecution—the Crown—must be in future prepared to deal with the hypothesis of insanity in a proper and dignified manner. It must provide its own skilled and impartial men, who shall give calm and unprejudiced advice; and who shall appear both for the purposes of protecting the criminal, if he be really lunatic, as well as for the purpose of seeing justice executed if he be a responsible agent.

CRATUITOUS MEDICAL SERVICES (?).

Mr. Leech, Townley's lawyer, writes in the *Times*, that neither Mr. Gisborne, Dr. Goode, Mr. Harwood, nor Dr. Forbes Winslow, have received any remuneration for their services rendered in this case. Dr. Forbes Winslow, he writes,

"Who has been accused of receiving a large fee for his services as a psychological expert, refused to enter upon an examination of the prisoner's mental condition, unless he were permitted to do so unfettered and uninfluenced by any pecuniary engagement, and up to this moment he is without fee or reward."

We read this at the same time that we read in another journal that

"The fees paid to the counsel for defending Townley were as follows:—Mr. Macaulay, Q.C., received 150 guineas; Mr. Serjeant O'Brien, 75 guineas; and Mr. F. Stephen, 25 guineas."

Are we really to understand that our medical brethren are going to give gratuitous services in this case? or are we to conclude that, when Mr. Leech says these gentlemen have not *yet* received any fees, he simply means that they will be duly remunerated in the course of time—that is, when the lawyer's costs are properly arranged and made out? It is all very well for the solicitor to throw dust in the eyes of the public; and we sincerely trust that he *is* throwing dust in their eyes in this matter; and that it is not really the fact, that our profession have been doing the gratuitous, whilst the men of law have been pocketing heavy fees in this case. Indeed, we will not believe that Dr. Winslow and the other medical men receive no fee, until Mr. Leech assures us that they have absolutely refused to do so.

Our readers will see, from the following, that the reforms in education proposed by Mr. Syme are not, in Edinburgh at least, to be left in the state of mere suggestions. Some of the important recommendations made by him in reference to the examinations have already been sanctioned by the Senatus Academicus.

"The Senatus Academicus of the University of Edinburgh," we read, "at their meeting on Saturday last, agreed to sanction the following recommendations of the Medical Faculty:—1. The Medical Faculty recommend that there should be from three to five class examinations each session, conducted by means of questions and written answers, without aid from books or notes. 2. That with each medical professor who conducts written class examinations, there shall be associated one or more assessors, to be selected by the Medical Faculty from the Examiners in Medicine, or from the members of the Faculty, to whom the questions to be proposed shall be submitted for approval, and who, along with the professor, shall examine the answers, and determine their value. 3. That in the event of any student gaining 75 per cent. of the marks in any department, he shall be exempt from further examination on that subject when he appears for his degree examination. 4. That in the event of a student gaining 50 per cent. of the marks in any department, he shall only be required to undergo an oral examination on that subject when he appears for his degree examination."

The portrait of Sir Richard Blackmore, Physician in Ordinary to William III, has been presented to the College of Physicians, through the Treasurer, by Richard Almack, Esq., of Milford, in Suffolk, a near relative of Mrs. David Pitcairn, whose maiden name was Almack. Mrs. David Pitcairn left by will to the College the three following splendid portraits: Dr. William Pitcairn (President, 1775) (painted by Sir Joshua Reynolds); Dr. David Pitcairn (painted by Hopfner); and Dr. Mathew Baillie (painted by Sir Thomas Lawrence).

The honour of knighthood has been conferred by the Lord Lieutenant of Ireland on Dr. W. R. Wilde of Dublin. The dignity, his Excellency observed, was conferred not so much in recognition of Dr. Wilde's professional reputation, which had been recognised by many countries in Europe, but on account of the services rendered by him to statistical science, especially in connexion with the Irish census. We congratulate Sir William Wilde on his new dignity, and the medical profession in Ireland on the circumstance that it has been conferred on so worthy a member of their body.

In a late clinical lecture, M. Civiale thus speaks of his *confrères*: "Hospital surgeons appear not to see what is going on beneath their eyes; they do not make use of my instruments, which alone are good; they think there is no need for them to take any preliminary care in performing lithotrity; they take the first instrument that comes into their hands, and

openly discard everything which may facilitate the operation and ensure its success. No wonder then that success is so rarely met with in our hospitals."

The death of M. Schönlein is announced. He died in his seventieth year, at Bamberg, in Bavaria, through stricture of the windpipe. Since 1819, he had been successively professor in the Universities of Würzburg, of Zurich, and of Berlin.

M. Broca relates an operation which has probably never been before performed in a civilised (Christian) country, viz., that of *infibulation*. It was performed in the case of a girl five years old, who was the victim of the most determined masturbation. It consisted in paring and uniting the surfaces of the labia majora so as to cover and form a barrier about half a *centimètre* long over the clitoris and the labia minora; and thereby also to prevent contact with the vagina and the neck of the uterus. A very small opening was left for the flow of the urine. A long discussion on the case took place at the Surgical Society, the general feeling not being in favour of the operative procedure. Its value in this case is to be hereafter reported.

According to MM. Schlagintweit, the most elevated human dwelling is the Buddhist convent Hanle, in the Himalaya Mountains. It is higher than Mont Blanc, being 15,117 feet above the level of the sea. The villages Chushul and Panamik are respectively 14,406 and 14,146 feet high. Shepherds, however, live for a few months of the year in pastures 16,500 feet high. In examining the glacier Higamann, MM. Schlagintweit camped for ten days at a height of 22,259 feet. At these heights, headaches, dyspnœa, prostration, etc., are experienced.

In a clinical lecture on glaucoma lately delivered, M. Liebreich says: "This disease, which was absolutely incurable before the discovery of Von Gräfe, is at present curable in all its forms. Iridectomy removes, we know not how, the inflammatory symptoms and the increased pressure; and the more pronounced these symptoms are, the more striking are the effects of the operation."

Professor Gintrac, in *L'Union Médicale*, gives an account of an epidemic of typhoid fever, and winds up as follows: "Once a pupil of the Paris school, a physician practising in a large town, and long attached to a great hospital, I had never observed a fact demonstrative of the transmission of this fever, and I had little faith in its contagiousness. But events have given me an opportunity of comparing two neighbouring and successive epidemics; one caused by infection, and the other manifestly produced and propagated by contagion. I conclude that, under certain circumstances, still undetermined, typhoid fever is contagious."

In the discussion in the French Academy of Medicine concerning vaccine, Bouillaud backs the opinion of Depaul; viz., that vaccine and variolous virus are identical. M. Bouillaud, however, kindly suggests that, notwithstanding this opinion, Jenner is not to be cast down from his pedestal. Jenner's invention does not consist in the discovery of vaccine, which does not exist, but in a new method of inoculation of equine variola, transmitted to the cow.

M. Trousseau describes an interesting case of progressive muscular degeneration lately under his care in Hôtel-Dieu. The man was a carver in ebony, and therefore not subject to any great muscular exertion. The affection began about the beginning of the past year with weakness of the muscles of the shoulder, which at length prevented his working; and, becoming gradually worse, he entered the hospital in November. The muscular atrophy was readily recognised. The patient made great and fruitless efforts to raise his hand when his pulse was felt. The muscles of the arms and the forearms of the shoulder, as well as the pectoral, were flattened, thin, and almost wholly atrophied. Over the head of the humerus there was little more than skin, and the infra- and supra-spinati muscles were completely withered. Electrical exploration produced merely very slight contractions, showing that only a few muscular fibres were still left undegenerated. The man, however, presented all the signs of excellent health; and his intellect was intact. His appetite was good, and general nutrition went on well. M. Trousseau frequently examined the state of his respiration. On entering the hospital, he breathed freely, and the play of the diaphragm and intercostal muscles was perfect; but, in the course of a month, the patient began to feel a weight at his chest, and that he could not expand it as formerly. In fact, the respiratory muscles began to fail. A few weeks ago, he was attacked with bronchitis, and thereupon his breathing became very difficult, and he was rapidly carried off asphyxiated. This is the way, M. Trousseau remarked, in which these sufferers are usually carried off. Sometimes the muscles of the larynx and œsophagus are paralysed; and then the patient dies suffocated, from the passage of food into the windpipe.

M. Broca has addressed a learned letter to M. Trousseau touching the latter professor's employment of the term used to express *loss of voice*. He discusses at length the value of the different words aphonia, alalia, aphasia, alogia, aphrasia, and aphemia, but is unable to make up his mind to a choice. Aphemia was the term he once selected; but he now finds objections to his own choice, and he thinks aphrasia might be preferred perhaps. In the difficulty he therefore refers himself to his master Trousseau. "I have hesitated between these two words, but am rather inclined to take aphemia; do you throw your opinion into the balance and decide."

THE LATE WILLIAM JOHN WICKHAM, Esq.

We regret to have to record the death of one of the earliest members of our Association, Mr. William J. Wickham of Winchester. His age was 66.

From quite an early period of his practice, he was surgeon of the Winchester Hospital, and had (together with Mr. Henry Lyford) a great surgical reputation in Hampshire, founded on his skill as an operator and his command of the various resources of our art in the general treatment of disease. He paid especial attention to the diseases of joints, and embodied his experience in a good practical treatise on that subject. That he was a bold operator, is shown by a case he published in the *Medico-Chirurgical Transactions*, in which he tied the distal ends of the carotid and subclavian arteries in a case of aneurism of the innominate artery. In difficult cases, he bestowed much thought and pains; and this, with his quiet observation, sound sense, and cool judgment, made his opinion valuable and much sought for in consultations. He was, besides, one whom his brethren could trust.

He was a gentleman in education, manners, and bearing, as well as in mind. He was genial, kind-hearted, and most hospitable, keeping up a high social standing, and supporting the dignity of his profession. His father, who died at an advanced age, had an equal reputation; and the hereditary good name is kept up by his son, who has for many years practised with him, and is succeeding to the well grounded confidence of the public. In all his family and domestic relations, his excellence was shown by the love of his family and their deep regret at their loss.

For several years, Mr. Wickham was a very active secretary of our Association in his district. He took part in organising two large meetings at Southampton; one in which the late Sir John Forbes was the chairman, and the other the great annual meeting of the Association. From some local causes, the Association has not increased in this district as in others; but has decreased in numbers. But as the new Army Medical School at Netley, with its staff of professors, must give a new impetus to medical science in Hampshire, we trust that a new district Branch will be again organised, and again flourish as it did some years ago, when our deceased friend was its active secretary.

Men like Mr. Wickham, who attain an extensive professional reputation on solid grounds in a county, who maintain a sound and true social standing, and who are felt by their medical brethren to be thoroughly safe and trustworthy gentlemen, do much to keep medicine in its proper rank in public estimation; and their names should be remembered as good examples.

THE LATE JONATHAN OSBORNE, M.D.

Dr. Osborne died at Blackrock, Dublin, on Friday, January 22nd. He had been complaining for some time past of bronchitis. Dr. Osborne graduated in 1818, and took the degree of M.D. in 1837. In 1840, he was elected King's Professor of Pharmacy and Materia Medica, in the place of Dr. John Crampton, and to this chair he was re-elected at the expiration of each term of office. He was a distinguished classical scholar, spoke Latin with fluency, and possessed a great knowledge of Greek. In 1858, he published in the twenty-fifth volume of the *Dublin Quarterly Journal of Medical Science*, a remarkable paper on the "Plague of Athens," as described by Thucydides, and established fairly his position that it was sea-scurvy; in the same journal he wrote on the poison used in the case of Socrates. He lately brought before the notice of the profession an animal heat thermometer for the measurement of the cooling power of the air on the human body. By the death of Dr. Osborne, the Professorship of Materia Medica in Trinity College is vacant. (*Dublin Medical Press.*)

THE LATE JOHN BLEECK LYE, M.D.

We have to announce the death this week of Dr. Bleeck Lye, who has for some time past been gradually sinking. He died on January 17th, in the 77th year of his age. He was born at Warminster; and was one of twelve children, and the last survivor of his family. Of his brothers, one was in the navy, and attained the rank of admiral; another was a captain in the army, and served in the 11th Dragoons in the Peninsular war. The youngest brother, a clergyman, was the rector of Rounds, in Northamptonshire, and held that living for thirty-five years. John Bleeck, the fifth son, commenced practice as a medical man at Ross in 1811, graduated at Aberdeen, and subsequently removed to Hereford in 1812, when Dr. Blount and Dr. Hughes were the leading physicians of the city—just fifty-two years ago!

At an early period after taking up his residence in Hereford, he became one of the physicians of the Infirmary, and held that honorary appointment, "to the great benefit of the charity," for nearly half a century. During his practice of more than that long period, his great ability obtained for him a reputation which placed him at the head of his profession. Having been thus so long connected with our noblest charitable institution, it can be no matter for wonder that the governors should have taken the preliminary steps for conferring distinction upon one who had so well established his claim to it; but it seems a matter of regret, that this course had not been taken at an earlier period, when the doctor could have more fully appreciated an honorary recognition of his long and valuable services to the charity.

As a medical man, perhaps the most prominent trait in his character was his singular geniality of disposition—his *naturalness*, if we may so write—which always made him a welcome visitor to the house of sickness.

Another leading trait of Dr. Beeck Lye's character was his disinterestedness; and it is perhaps this feature, so well known, which has been the foundation of the happy relations and mutual good understanding which so long subsisted between him and his professional brethren.

In his personal friendships, the Doctor was as unchangeable as we can ever expect humanity to show itself.

The primary causes of death were cancer in the stomach and the presence of a long-standing abscess.

Such a man cannot depart from our midst, without the tribute of popular regret. Dr. Bleeck Lye's memory will not be forgotten in Hereford and its surrounding country until the present generation shall have passed away; and fortunate indeed will be that man who shall step into his professional chair, and, like him, fill it as the first physician of the city and county of Hereford. (*Hereford Paper.*)

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

On Friday evening, January 22nd, a *conversazione* was held in the College of Surgeons, when Dr. Gairdner delivered an interesting lecture "On the Early History of the Medical Profession in Edinburgh" The paper was one of antiquarian as well as of medical interest; and the erudition and research which it displayed, appeared to chain the attention of the numerous audience, composed not only of members of the medical but of the other learned professions. Dr. Gairdner did not attempt to treat his subject in a systematic manner. His lecture may be considered as the continuation of one which he delivered before the College of Surgeons in 1860, on the history of that institution.

In his last lecture, Dr. Gairdner confined his attention almost entirely to the position occupied by the medical profession in Edinburgh during the sixteenth and seventeenth centuries. The lecture was interspersed with most interesting quotations and extracts, some of which elicited the greatest merriment. Dr. Gairdner gave examples of the serious consequences which resulted from the license of the College of Surgeons being, in olden times, more easily accessible to sons-in-law and sons of Fellows than to other individuals; and amused his audience by reading some of the enactments which the College was obliged to pass in order to protect its members from the turbulent and insolent conduct of their apprentices. Dr. Gairdner pointed out the curious fact that, long after the establishment of Protestantism, it was considered quite lawful to hold meetings of the College of Surgeons on Sundays, when any kind of business was transacted.

On the motion of Lord Deas, seconded by Sir H. Moncreiff, a cordial vote of thanks was given to Dr. Gairdner for his interesting lecture.

Since the Christmas vacation, the lectures on Physiology in the University have been delivered by Dr. Argyle Robertson, the assistant to the Professor, as Dr. Bennett has been obliged to leave Edinburgh on account of ill-health. For some time past, he has suffered from a laryngeal affection, which has been very much aggravated by lecturing. Having been strongly advised to try a change of climate, Dr. Bennett left a short time since for Torquay; whence he proceeded in a few days to Italy. As many of our readers will feel the greatest anxiety with regard to Dr. Bennett's health, I may state that, although rumours have been circulated which were calculated to cause alarm, there was no good ground for them; and that we may shortly hope to see Dr. Bennett restored to the health and strength so essential to the discharge of his important academic duties.

As Dr. Bennett will be unable to take charge of the University clinical wards in the Royal Infirmary, on February 1st, when by rotation they fall to his charge, it is uncertain what arrangements may be made. It has been rumoured for a long time that our very popular Professor of Medical Jurisprudence, Dr. Douglas Maclagan, intends to assume the functions of clinical professor; and it is, therefore, not improbable that we may shortly see his *début* in his new capacity. Dr. Laycock has had charge of the wards during the first three months of the session; and if Dr. Maclagan succeed him in February, it is not improbable that Dr. Bennett will resume clinical teaching in the summer.

The medical profession in Edinburgh has lately sustained a serious loss in the person of Dr. Newbigging, who, until a few months before his death, occupied the post of President of the College of Surgeons, and who was besides Physician to the Children's Hospital.

The mortality in Edinburgh just now is very high; the returns of the medical officer of health last week showing an increase of nearly forty on the deaths of the preceding week. Medical men in large practice affirm that the number of cases of influenza at present far exceeds that at any period which they can remember. For the last few months there have been a great many cases of fever in the Infirmary, a large proportion of the cases being typhus.

On Monday evening, the fifth ordinary meeting of the Royal Society of Edinburgh took place. The hall was crowded with the fellows and visitors, who assembled to hear an address by Professor Lyon Playfair, C.B., on the Chemistry of the Coal-Tar Colours. The chair was taken by Principal Sir David Brewster, one of the vice-presidents of the Society. His Royal Highness Prince Alfred was present. Dr. Playfair's lecture was delivered at the request of the Council, and consisted of a systematic and admirable account of the various pigments obtained from coal-tar. Professor Playfair introduced his subject by a slight sketch of its history; and closed it by drawing attention to the powerful influence which chemistry had exerted on the commercial relations of our country; and showed that the history of the coal-tar colours served to encourage those who pursued science for its own sake, for the sake of truth, and not merely with an utilitarian view. The coal-tar colours were, he pointed out, the indirect result of the beautiful researches of Hofmann; the mere overflowings of science into the channels of commerce. The lecture, which extended over a period of two hours, was admirably illustrated by experiments, and by magnificent specimens sent for the purpose by Messrs. Perkin, Nicholson, etc.

Suicide by Boys. During the week before last two boys, of 12 and 15 years of age, attempted to commit suicide.

New Preparation of Bismuth. Under the title liq. bismuthi there has been introduced to the notice of the Faculty a preparation, which purports to possess great advantages over the ordinary basic nitrate. The desirable points in this preparation are—first, its solubility; second, its slight taste; and third, its alkalinity. It has also the peculiarity of not being precipitable by water. (*Pharm. Journal.*)

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, February 11th, 6 P.M.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, Feb. 16, 4 P.M.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thursday, Feb. 18, 7 P.M.

WEST SOMERSET BRANCH: CONVERSAZIONE MEETING.

A conversazione meeting of this Branch was held at Clarke's Castle Hotel, Taunton, on Wednesday evening, January 20th. Thirteen members attended.

The Secretary read a letter from C. P. Collyns, Esq., the President, regretting his inability to be present, in consequence of family affliction. The members expressed their sympathy and sorrow at the cause of his absence. Dr. Gillett was then requested to take the Chair.

Communications. The following communications were made.

1. The Dietetical Treatment and General Management of Puerperal Women. By W. Legge, Esq., of Wiveliscombe. Mr. Legge being prevented from coming to the meeting, it was resolved to postpone the reading of his paper to a future opportunity.

2. Spontaneous Gangrene. By H. J. Alford, Esq., of Taunton. After some general remarks, Mr. Alford read notes of a remarkable case now under his care at the Taunton and Somerset Hospital, of a young boy who had been twice affected by this complaint, and who is at this time suffering the loss of several fingers by the usual slow process of separation. A drawing, taken at an earlier stage of the disease, was shown; and the patient submitted himself for inspection. After the reading of the paper was concluded, a lively discussion on the causes of the affection in the case under notice followed, especially on the theory of embolism. Mr. Alford was thanked for his communication, and requested to send it to the Journal for publication. He promised to do so when the issue of the case could be recorded.

3. Ovariotomy. By William Liddon, Esq., of Taunton. The writer illustrated his subject by relating the histories of four cases which had occurred in the Taunton and Somerset Hospital, and exhibited preparations of the tumours removed (which are preserved in the hospital museum). The operation was described; and it was shown to be admissible as well in the multilocular and complex, as in the more simple varieties of the disease. After a discussion, a vote of thanks to Mr. Liddon was passed, and the wish was expressed that he would publish his paper in the Journal.

4. Remarks on a Case of Concealed Birth. By Hugh Norris, Esq., of South Petherton. The particulars of the case he read from his notes. Besides other suspicious signs of infanticide, he found laceration of the frænum linguæ and soft parts under the tongue. He had been told that such injuries were often present in cases of this nature, and were believed to be produced by the mother in suffocating the infant and suppressing its attempts to cry. He was anxious to draw the attention of his professional brethren to the subject, as important in a medico-legal point of view.

A vote of thanks to the Chairman concluded the proceedings.

MIDLAND BRANCH: QUARTERLY MEETING.

The quarterly meeting of the Midland Branch was held in the Board-Room of the Derby Infirmary, on Thursday, January 21st.

Consultation with Homœopaths. After some discussion on Remarks by Dr. Goode on a Case of Prolonged Salivation, it was proposed by Mr. Thorpe and seconded by Mr. Lindley—

"That in future no member of the Midland Branch of the British Medical Association should meet in consultation, either a homœopath or a registered practitioner practising homœopathy."

The resolution was carried unanimously. It was brought forward in consequence of it being stated, that one or two practitioners of Derby had been in the habit of meeting in consultation a registered surgeon who practises homœopathy.

After transacting the ordinary routine business, the meeting broke up.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 12th, 1864.

R. Partridge, Esq., F.R.S., President, in the Chair.

CASE IN WHICH THE LEFT OVARY WAS FOUND IN THE SAC OF AN OBLIQUE INGUINAL HERNIA, OCCURRING IN A YOUNG WOMAN: WITH REMARKS. BY HOLMES COOTE, ESQ.

A young woman was brought into St. Bartholomew's Hospital with a swelling in the left groin, and suffering from the symptoms of strangulated hernia. In the course of a few hours, the usual operation was performed, when the ovary and the Fallopian tube were found in the sac. A similar malposition of parts was subsequently noticed on the opposite side of the body. The left ovary was removed, some thickened omentum cut away, and the patient was put to bed; but the sickness and constipation continued, and she died four days after the operation. The cause of the sickness, etc., was displacement of the stomach and transverse arch of the colon.

Mr. Coote raised two questions.

1. Was the displacement of the ovaries congenital, or the consequence of the hernia? He inclined to the former opinion.

2. The woman stated that she had always menstuated regularly. Now, on the examination of the body, it was found that both ovaries were *well developed*, and that the formation of the Graafian vesicles was going on naturally; but the Fallopian tubes were quite impervious, the uterus was completely absent, and the vagina was a short canal—an inch and a half in length, and terminating in a thin membrane. She said that she had been menstruating the week before her admission; and some of the female attendants at the hospital noticed the usual marks, though faint, upon her dress. Was the possibility of menstruation to be admitted, under this abnormal condition of parts?

Mr. Holmes Coote has been elected corresponding member of the Surgical Society of Paris.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

[*Concluded from page* 136.]

SIR,—With respect to the glaucoma-iridectomy itself, I shall take the liberty of extracting my account of it from your former volume (October 11th, 1862), as it will supply without other comment my answer to several of Mr. Walton's objections.

"*Note on the Operation of Iridectomy for Glaucoma.* The operation is best done when the patient lies on a sofa on his back, with the surgeon standing at his head. I prefer to use chloroform, though I have often operated without it. It should be given so as to render the patient completely passive; for the great delicacy of the operation requires perfect quietude of the eye, lest the steps should not be severally completed in the most perfect way. My own opinion undoubtedly is that there is hardly any person to whom chloroform may not be safely administered; though, it is true, some objects demand more care in its exhibition than others. The sickness may usually be avoided by taking care that no food be in the stomach at the time; and if it occur during the operation, the steps must be simply delayed while it lasts, not varied in any way. If the sickness is very straining, so as to distend the vessels of the head and face, I usually close the eye, and gently compress it by the fingers on the lid, during the efforts at vomiting. I have not seen any harm happen from such vomiting, when the incision has been properly made; not too extensive, and not too far back from the corneal margin.

"I always keep open the lids by the wire speculum, which an assistant holds a little forwards if it tends to exert pressure on the globe. It is well for the surgeon to be able to use the right or left hand indifferently in making the incision, as he can then select the most convenient spot. I have always preferred to make the iridectomy nearly or quite upwards; because I believe this direction to be as good as a lateral one in reference to the visual field, and the upper lid then covers the gap in a way useful both optically and for appearance sake. It is, however, rather more easy, on the whole, to make the iridectomy to one side than upwards.

"I make the incision in one of two methods, according to the size of the anterior chamber. When there is space enough, it is best to use the triangular lancet-shaped blade, inclined at an angle on the flat, and which I believe is used generally abroad, as well as by Von Gräfe. Having selected a place for the incision, I seize the conjunctiva with proper forceps immediately opposite, and thus fix the globe without making any pressure upon it, or pulling it from its bed. The lancet is then thrust in so as to enter the anterior chamber at its rim immediately in front of the attached border of the iris, and is carefully advanced towards the opposite side so as to form an opening of the required size; and if the opening cannot thus be made as large as is desired, it is enlarged at one angle on withdrawing the blade. When, however, the chamber is shallow, I prefer what I at first always used; namely, a narrow extraction knife, running its point along the rim of the chamber for the requisite extent, and making the counter-puncture much as in ordinary extraction. Thus the instrument avoids the pupillary region and the lens. The operation is more difficult where the chamber is shallow. Whichever instrument be employed, it enters a little behind the apparent junction of the sclerotica and cornea, in the sclerotica, and in entering the rim of the anterior chamber, it usually passes across that junction and through a very little of the corneal tissue just in front of the pillars of the iris.

"As the instrument used in making the incision is withdrawn, the aqueous escapes; and it is well to let it do so gradually, and to keep the point of the instrument towards the cornea rather than towards the lens. The iris may now be found either to remain in the chamber or to prolapse. If the former, the small* slightly curved iris forceps are to be introduced (closed) into the chamber, and made to seize the iris opposite the middle of the incision, about midway between its pupillary and outer border. The iris is then brought outside the chamber and divided with small scissors, on one side of the forceps, from the pupillary to the ciliary border, the forceps pulling it gently at the same time, so as to ensure this complete division of it. The end held by the forceps is then torn from the ciliary attachment as far as the angle of the incision, and even dragged upon a little, so as to detach it beyond the angle, and then divided with the scissors quite close to the angle. The cut end then retreats within the chamber. The opposite side of the prolapsed part is then seized and dealt with exactly in the same manner. No iris should be left in the angle of the incision, lest the healing process be imperfect, and subsequent irritation occur.

"If the iris at once prolapse on the completion of the incision (it is often bulged by aqueous humour of the posterior chamber), the forceps need not be introduced within the incision, but may seize it outside. The less any instrument enters the anterior chamber the better, for fear of damage to the lens.

"If any blood flow into the anterior chamber during the operation, it is as well to allow it to escape before it coagulates. This is best done by inserting a fine scoop within the lips of the incision (not into the chamber), and at the same time by making, if requisite, slight pressure on the eye by the forceps which holds it. The cornea should not be pressed on, lest the lens receive injury; and, rather than run the slightest risk, the blood may be allowed to remain, as it is very soon dissolved by the aqueous humour, and flows out or is absorbed.

"The operation just described ensures the excision of a complete segment of the iris, from pupillary to ciliary margin, of a width determined by the size of the incision, and which may be usually about a sixth or a seventh of the whole circle."

Wishing as far as possible to elucidate every point on which difficulties are felt, I will notice some few additional objections of Mr. Walton. Such are the following:—"It is not always possible to complete the operation according to the prescribed rules, especially the tearing away of the iris to its very root, in consequence of bleeding, by which the parts are concealed from view; and in the attempt to remove the blood by pressure, the only available method, there is much risk of dislocating the lens, or of so injuring it as to cause opacity."

Answer. See above in my account of the operation. I think the lens could hardly be dislocated or injured, unless the incision be made too far back, or pressure be made rudely or too near the lens-region. It is very rare indeed to find this part injured in an iridectomy properly performed. Cataract also very rarely follows as a consequence of the operation.

Mr. Walton. "But cataract may follow without the direct injury, as I think, by interruption of the nutri-

* "The points of the forceps, when closed, should form a perfectly smooth end, so as not to scratch the lens, or catch in the iris, on sliding over it."

tion of the lens through the disturbance set up in the surrounding nervous and vascular tissues."

Answer. The disturbance is *already set up* in the surrounding nervous and vascular tissues by the *glaucomatous disease.* The iridectomy by its proved efficacy in arresting this, relieving pain, and equalising the circulation, must apparently have a direct contrary tendency to that attributed to it here. Cataract may occur in connection with glaucoma, when an iridectomy has been performed, in either of three ways.

1. It may have preceded the glaucoma and the iridectomy, the glaucoma having come on during the progress of the cataract; of this I have seen several instances. In these cases the glaucomatous complication has first to be dealt with by iridectomy, and at a subsequent stage, when the tension has been reduced, and the usual indications for cataract operation have arisen, the cataract may be dealt with. In such cases I have never seen the operation of iridectomy hasten the progress of cataract. (See *Ophthalmic Hospital Reports,* vol, iv, p. 51.)

2. The cataract may be glaucomatous cataract, *i,e.,* that sort of opacity of the lens which usually takes piace at an advanced stage of glaucoma, when the nutrition of all the ocular tissues has been interfered with through long-continuance or intensity of tension, and the disturbance of circulation thereto pertaining. It is rare for this form of cataract to occur while any sight remains worth attempting to save by an iridectomy. But it must be borne in mind that iridectomy by its power of relieving tension may often render great service to an eye already blind from glaucoma, by reducing its inflammation and putting a period to the protracted sufferings of which it is too often the seat, and which are proof against other means short of excision or the seton. Here, of course, Mr. Walton's objection does not apply.

3. A cataract might arise as a direct consequence of the operation. This might be by direct wound of the lens, which certainly ought not to happen; by bruising or otherwise injuring it, without direct contact of the instrument; this also ought not to happen, and if it do so, must not be charged to the operation, but to the operator. While the steps of the operation were less familiar to us than now, and its liabilities had been less studied, this happened sometimes; once to myself; but now it could hardly occur; it ought not to occur.

Von Gräfe has seen on a very few occasions the formation of cataract after iridectomy when the lens had not been touched, and he was led to attribute it to a bulging of the equator of the lens on the side of the iridectomy, with a rupture of its capsule into the canal of Petit. Such an occurrence must be regarded as most rare and as having no force as an objection to iridectomy, performed as it is for averting blindness. Besides, when the glaucomatous state is arrested, a cataract may be operated on at a proper period with good prospect of recovery, as I have myself proved in several instances; so that even if unhappily cataract should by any accident follow the operation in the way of consequence, it is not an irremediable calamity, though of course to be deplored. But what is the alternative? That all glaucomatous patients are to be deprived of the benefits of iridectomy, or be abandoned to the method of repeated tappings with its eventual resulting blindness?

Mr. Walton. "Then the eyeball may suppurate—a disaster more imminent when a great deal of inflammation is present."

Answer. Suppuration, except as an incident of the last disorganised stage of glaucoma, is extremely rare. The inflammation of glaucoma has not a suppurative tendency. It is more allied to the serous and hæmorrhagic inflammations of other parts. At all events so rare is suppuration, that I hardly remember more than one or perhaps two examples of it, and in one of these the phlegmonous form of inflammation supervened upon the serous after a paracentesis of the vitreous humour, which for several hours both gave marked relief to tension and to pain, and also improved vision. An eyeball sometimes suppurates after the most trifling operation on its interior, but Mr. Walton would not therefore refrain from such interference when it was reasonably indicated. I think, undoubtedly, suppuration is more rare after glaucoma-iridectomy than after extraction of cataract. I do not, however, here include cases in which it is performed on old blind painful glaucomatous globes, not for recovering sight, but for ease. Then suppuration may sometimes prove a happy event; or atrophy without suppuration, which is also recounted by Mr. Walton among the objections.

Mr. Walton. "The operation may be frustrated by the closing up of the pupil, and the gap newly made." This may happen in the glaucomatous stage of iritis or irido-choroiditis; or when iridectomy is undertaken under certain circumstances (as for recurrent iritis, etc.,) without undue tension; and it must then often be accepted as an intermediate condition on the way towards ultimate recovery of sight. But this objection does not correctly apply at all to iridectomy performed for typical forms of glaucoma, where the pupil is certainly left large enough.

Mr. Walton. "Imperfect union of the edges of the tunic of the eye through which the incision was made, with the bulging of the new and imperfect tissue, occasionally takes place." This is what Von Gräfe has recently described at length, with many interesting particulars, under the term *cystoid cicatrisation* (see *Ophthalmic Hospital Reports,* vol. iv, p. 53.) To the translation of his paper, I have added some remarks embracing my own experience on this subject up to last October, and might add here some additional particulars, but that it would carry me too far. Von Gräfe has met with this in a greater or less degree in about one-fifth of his cases. It is generally harmless, sometimes perhaps even salutary, by affording a yielding point at which any remaining tendency to eye-tension may so far find relief as to save the eye from its injurious effects. In some very rare cases it may perhaps prove a source of eventual trouble. There may be found means of disarming the operation of iridectomy of this liability to the cystoid scar.

This and many other subordinate questions are now engaging attention, but appear to me to form no argument at all against an operation which constitutes the only remedy yet known for typical glaucoma.

Mr. Walton. "I should like to know how often the eyeball has been extirpated because of the ill-results of iridectomy?"

Answer. I cannot tell. The question might have been asked by an opponent of the operation of placing a ligature on one of the great arteries, when that seemed the only rational and scientific method of treating a disease threatening life, 'I should like to know how often has a limb or a life been sacrificed because of the ill-results of this tying of the great arteries?' The severity of the disease and the infinite variety of individual conditions under which it occurs will cause some among a multitude of cases to have an unfortunate result. Every medical man will understand this from his experience of any single disease, especially if it be one most apt to occur in the feeble and the aged. But of all the operations for the sinking or removal of an eye that has become blind from glaucoma (while some have had iridectomy previously performed, almost always for the relief of pain, not for the restoration of sight, which was already lost), the large majority had certainly fallen

under that sad necessity *through the want of a timely performance of iridectomy.*

One further objection of altogether a different nature has still to be met. Mr. Walton calls iridectomy "an operation which breaks the structure and disarranges the wonderful mechanism of the glorious and precious eye." "Iridectomy," he says, "destroys the integrity of the eye by interfering with refraction, adjustment, and the regulation of light to the eye. I never saw perfect vision after the operation; that is, no person so mutilated could see small things and distant, in different degrees of light, equally well with one of the same age, whose eye might be called normal and healthy. I have been careful to inspect this. A person may blunder over this or that sized type, a few inches from the face, with a pair of spectacles in a carefully arranged position as to the light, and yet have very imperfect sight. Several whose cases seemed in print to be all that could be desired, I have found to be miserable cripples."

Answer. An amputation necessary to save life cannot rightly be called a "mutilation"; or, if it be so, it is a mutilation of which science and humanity may boast. If iridectomy be proved necessary to save sight—even partial and imperfect sight—the patient may well be grateful for *an eye which sees,* though it have been rescued from blindness at some sacrifice of its physiological perfection. Mr. Walton says he has been careful to inspect the results of iridectomy on vision. He has at least declined to inspect cases which I freely offered to show him; and an inspection of which would have rendered my explanation on this point, and probably my whole reply, unnecessary. The fact is, that an iridectomy, especially if performed upwards, leaves the eye but very little the worse as an optical instrument. It is only disadvantageous by in some degree uncovering the marginal part of the lens and admitting some rays which do not form so perfect a focus on the retina as those which still pass through its centre. The act of adjustment or accommodation, as it depends on the ciliary muscle, is not affected by it; and if it were, the subjects of operation being generally of an age when presbyopic glasses are necessary for near vision, the variation in the power of the convex glass necessary can be of no importance. And, indeed, I have often seen a patient after iridectomy read with a weaker glass than before, owing, apparently, to the glaucomatous disease often presenting hypermetropia or increased presbyopia, as one of its conditions, as long ago pointed out and explained by Von Gräfe, and to the iridectomy having lessened this.

But, after all, an exact examination of the state of vision after a successful iridectomy, where the retinal function has been preserved entire, and therefore where the *optical* state may be separately scrutinised, often clearly proves that the iridectomy leaves the eye with the power of seeing distant objects perfectly, according to the most searching tests, and also (with glasses suited to the time of life) able to read the smallest type. I venture, therefore, to say expressly, that Mr. Walton, in raising this objection, shows himself to have had as yet too few opportunities of examining the real results of the operation, where it has been suitably performed.

The last objection is, that "iridectomy also spoils the appearance of the eye." *Answer.* If the operation be performed upwards, the pupil retains its natural aspect, being partly covered by the upper lid, and if performed inwards, which is the other direction usually followed, its new shape is hardly visible to an ordinary observer. I never heard an objection on this score from any patient.

In conclusion, let me add that as, in this and the preceding letters, the subjects of glaucoma and iridectomy have been treated in the necessarily partial aspects incidental to a controversial discussion, and of course with no pretension to be a complete account of the modern doctrine and treatment, I desire my paper of August 6th, 1862, published in the British Medical Journal of October 11th of that year, to be regarded as explaining and supplementing whatever may have been here incompletely expressed.

I am, etc., W. Bowman.

5, Clifford Street, January 26th, 1864.

Letter from J. R. Wolfe, M.D.

Sir,—I have read with deep interest all the communications which have appeared in your Journal from some of our most eminent ophthalmologists on the subject of iridectomy for the cure of glaucoma; and I am confident that the extensive discussion will tend to convince the undecided, and not only to popularise that operation, but also to establish it upon a true scientific basis, which seems at present to be the only desideratum.

When Mr. Hancock first proposed the section of the ciliary muscle for the cure of glaucoma, as an improvement upon Von Gräfe's operation by iridectomy, I (considering the procedure only as a modification of paracentesis corneæ) questioned the propriety of temporising with an affection of an invariably destructive tendency, when we have such a valuable, well-established modificator as that introduced by the illustrious Berlin professor. With regard to the pathological anatomy of that affection, I stated at the time, that I did not consider glaucoma as having its starting point from the choroid, as assumed by Von Gräfe; but rather inclined to the opinion of M. Tavignot, that "it consists in a deeply seated perturbation of the ciliary nerves." This theory appeared to me in harmony with the experiments of Magendie on the important action of the fifth pair upon the organ of vision. (See my letter, *Lancet,* December 10, 1859.)

I have been in the habit of performing iridectomy in many cases of irido-choroiditis with contracted pupil, or with central ulcer of the cornea after small-pox, and in (a few) cases of glaucoma, with "brilliant" results. Since the commencement of this session, I did several iridectomies in presence of my pupils and some of my colleagues in the Royal Infirmary; and I have never met with any of those accidents referred to by some of your eminent correspondents. A closed pupil is the most unfavourable (rare) occurrence, which is generally remedied by another iridectomy.

It is not my object at present, however, to enlarge the catalogue of successful cases; a sufficient number having already been recorded in the course of the present controversy, by surgeons of unquestionable correctness of observation and acumen, whose scientific reputation is sufficient guarantee in favour of iridectomy.

But, having read your editorial remarks (December 19, 1863), which have been re-echoed by some of your correspondents, that "those who practise it can give no satisfactory account of the manner of its action; that, in fact, it has no clear and well definable principle to rest upon"—I am induced to offer some observations on the *modus operandi* of iridectomy in irido-choroiditis and in glaucoma. It is without affectation of modesty that I must state, that it is with considerable diffidence I approach this task; not only on account of its intrinsic difficulty, referring, as it does, to the most complicated mechanism of the animal economy, but also on account of the high authorities who are arrayed on the other side of the controversy. Has not the operation been condemned by a surgeon of the highest eminence, as opposed to the

anatomy and physiology of the organ? Has not one of our celebrated oculists pronounced it an absurdity, because, after long experience, he "could not discover that the removal of a piece of iris has ever exercised the slightest influence over any inflammatory condition of the eyeball, or over the disease called glaucoma"? And another authority in ophthalmic subjects does "not believe that the principle of the operation is explainable." Yet I may be permitted to explain my views on this subject, which are based upon the anatomy and physiology of the organ of vision. These I shall endeavour to state as briefly as compatible with the space you can be expected to afford me for a subsequent communication.

I am, etc., J. R. Wolfe,
Ophthalmic Surgeon Aberdeen Royal Infirmary.

Aberdeen, Feb. 1st, 1864.

GELATINE ATROPINE PAPERS.

Letter from J. F. Streatfeild, Esq.

Sir,—In the *Lancet* of the 16th instant there appeared a notice of a new mode of applying some external agents to the eye, which I have lately brought before the profession, in which my claim to its introduction was not in any way recognised. I then addressed a letter to that journal, which was not allowed to appear; and, therefore, I shall be much obliged if you will permit me to publish it in the British Medical Journal.

The receipt of my letter was briefly acknowledged among the notices of correspondents in the *Lancet* of the 23rd inst. The editors (among whom is Mr. Hart) remark, that Mr. Hart and I have "followed a pretty parallel course"; but they acknowledge my priority "of publication", which certainly is indisputable.

"*To the Editor of the Lancet.*

"Sir,—My attention has just been called to an article in the last number of your periodical (January 16th). In it, the reporter of Mr. Hart's cases at St. Mary's Hospital has made an error which may be easily explained, and which calls for some notice from me. He has evidently reported some remarks made by Mr. Hart in reference to an article recently published by me, as if they referred to Mr. Hart's own investigations. The communication to which I am alluding is in the *British and Foreign Medico-Chirurgical Review* (page 281), published on the 1st of January in the present year. I am glad to learn, from Mr. Hart's remarks, that he has found the gelatine so great an improvement upon the paper, that my 'new mode of applying some external agents to the eye' was quoted by him in almost the same words, and at any rate in the sense, in which I had recommended it in the *Review*. In the following paragraphs, for instance, I have said: 'It has occurred to me that an improvement might be made if . . . . we could secure, along with the convenience and efficacy pertaining to the paper, some vehicle which would not need to be removed from the eye after it had been applied, and the desired result had been gained. . . . . I may allude to the alarm felt by some patients at any investigation of their eyes, even if only to remove the scrap of paper that has been introduced, and to the trouble sometimes found in removing it when it has got up beneath the upper lid. . . . . In order to obtain what I wanted, I first tried what is called 'wafer-paper'; but this is brittle when dry, and loses all consistence when wet, so that it becomes unmanageable when moistened; and, moreover, the pulpy substance in the eye, if not washed out, might irritate. I am now employing gelatine rolled out in sheets of the thickness of thin writing-paper, and imbued with a definite proportion of sulphate of atropine or any other salt required. This retains the advantages of, and only requires the same mode of application as, atropine paper; but it *need not be removed from the eye.* It is soon dissolved in the tears, and acts in every way well,' etc.

"Other errors on the part of the reporter could be pointed out. For instance, Mr. Hart cannot have represented the matter as if I had expected to find the 'wafer-paper' soluble.—I remain, sir," etc.

"P.S. I must claim for Mr. Squire the merit of having first prepared the gelatine imbued with atropine. It was suggested by me to him about two months ago. I cannot exactly fix the date; but an invoice which he has sent to me, dated December 7th, shows that it was then delivered and supplied to me as I now use it, and have since supplied several of my friends who were willing to try it experimentally. —J. F. S. January 16th, 1864."

I am etc., J. F. Streatfeild.

January 1864.

MERCURY IN SYPHILIS.

Sir,—There is at the present time a controversy regarding the use of mercury, which ought to call forth the opinion and experience of all practical men. I believe a majority of the profession still have undiminished confidence in it as a well-tried remedy of great efficacy—in fact, a specific—in many of those cases in which sceptics are trying to prove that it is positively injurious. I consider that the real point at issue is (the old one) "its use and abuse", which entirely depends upon the skill, judgment, or discrimination of the practitioner; and the same may be said of all other remedies and treatment.

In my opinion and experience, mercury is the remedy *par excellence* in the treatment of indurated (Hunterian) chancre, both constitutionally and locally. However, after the desired effect is produced, I eliminate it from the system by following it up with iodide of potassium with sarsaparilla, iodide of potassium with chlorate of potash, or dilute nitric acid with sarsaparilla. Secondary and tertiary diseases I treat in the same manner, and always with the most satisfactory result. There are certain conditions and constitutions in which the mercurial treatment may not be advisable; but these are exceptional cases; and it is such variations which specially test the skill and discrimination of the practitioner.

I condemn the employment of mercury in non-indurated and phagedænic chancre. Such cases I treat with potassio-tartrate of iron, internally and externally. Certain cases require modifications of alteratives, tonics, or astringents, readily apprehended by the enlightened surgeon.

With regard to the use of mercury in inflammations, I consider that it depends upon whether the case is of a sthenic or asthenic character. As a general rule, I limit its employment to the former; and, as soon as the signs or symptoms indicate that the sthenic action is controlled or subsiding, I leave off its administration, and may, if necessary, follow it up by stimulants. In asthenic cases, if I consider its administration advisable, I conjoin it with sustaining treatment. I am, etc. J. W.

January 1864.

[Our correspondent will see the subject of his letter treated of by a high authority in a review of Dr. Drysdale's work. See British Medical Journal, p. 151. Editor.]

Medical News.

APOTHECARIES' HALL. On January 28th, the following Licentiates were admitted :—

Arnold, Richard Orlando, Charing Cross Hospital
Costin, John Quick, Kimbolton, Hunts
Davies, Richard William. Colnbrook, Bucks
Duncan, Peter Charles, Great Marlborough Street
Langston, Thomas, Hulme, Manchester
Moore, James, Rothwell, Northamptonshire

At the same Court, the following passed the first examination :—

Williams, David Martin, Charing Cross Hospital

APPOINTMENTS.

SMITH, Robert Angus, M.D., to be Inspector of Alkali Works.

ROYAL NAVY.

CLARKE, William H.. Esq., Surgeon, to the *Leander*.
CYNSEY, Josiah F., Esq., Assistant-Surgeon, to the *Pembroke*.
CULVANY, C., Esq., Assistant-Surgeon (additional), to the *Duncan*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

GULD, C., M.D., to be Assistant-Surgeon 10th Renfrewshire R.V.
CLARKE, W. B., Esq., to be Assistant-Surgeon 1st Administrative Battalion Cumberland R.V.
COCK, E., Esq., to be Honorary Assistant-Surgeon 12th Surrey R.V.
DAVIES, W. A., Esq., to be Honorary Assistant-Surgeon 5th Montgomeryshire R.V.
DAWSON, W. H., Esq., to be Honorary Assistant-Surgeon 11th Worcestershire R.V.
DEVEREUX, D., Esq., to be Assistant-Surg. 8th Gloucestershire R.V.
FLETCHER, J. W., Esq., to be Honorary Assistant-Surgeon 19th Worcestershire R.V.
KNIGHT, G. I., Esq., to be Hon. Assistant-Surgeon 14th Surrey R.V.

DEATHS.

BASTE, Michael Lambton, M.D., late 1st Life Guards, at 207, Marylebone Road, aged 84, on January 26.
HARVEY, Edward R., M.D., of 34, Clarges Street, Piccadilly, at San Remo, aged 32, on January 24.
JAMESON. On January 22nd, at Dublin, Lucy, wife of William Jameson, M.D.
KENDALL, Walter, Esq., of Budleigh Salterton, Devon, at West Lulworth, aged 68, on January 27.
MURPHY. On January 25th, at Budleigh Salterton, Devon, James C., infant son of Joseph B. Murphy. M.D.
SCOTT. On January 30th, Louisa, widow on John Scott, M.D., of Edinburgh.
SELTAU. On January 30th, at Plymouth, aged 17, Mary Elizabeth, eldest child of William F. Seltau, M.B.Oxon.

NETLEY HOSPITAL. A railway will shortly connect Netley Hospital with Southampton.

DR. MARION SIMS, the American, is at present engaged in practice in Paris.

CHOLERA IN BOMBAY. Bombay has suffered greatly in consequence of the prevalence of cholera.

SURGICAL ANÆSTHESIA. MM. Perrier and Lallemand have published a treatise on *Surgical Anæsthesia*.

ACADEMY OF MEDICINE. The budget of the Academy of Medicine has suddenly been raised from 3,000 to 150,000 *francs per annum*, by M. Duruy.

LONDON FEVER HOSPITAL. The recent contributions in aid of the funds of this hospital have reached the sum of £2,642.

AN ARMY ASSISTANT-SURGEON KILLED IN ACTION. The military obituary for January records the death of Assistant-Surgeon W. Pile, M.B., 101st Regiment, killed in action at the Umbeyla Pass.

VIRCHOW THE POLITICIAN. Herr Virchow made a masterly speech, occupying two hours, and distinguished by the urbanity and moderation which have assigned him so high a place among the experienced debaters of the Prussian parliament.

DR. H. H. GOODEVE of Bristol has been made Magistrate for the County of Gloucester. Dr. Goodeve was formerly one of the professors of the Medical College at Calcutta.

THE SWINEY PRIZE was this year adjudged to H. S. Maine, Esq., D.C.L., author of a work *On Ancient Law*. The prize consists of a silver goblet of the value of £100, with gold coin to the same amount.

POISONING BY CIDER KEPT IN LEADEN VESSELS. At Powick in Worcestershire, several persons were lately poisoned by drinking cider which had been left in a leaden vessel. One of them died.

MEDICAL DEPARTMENT OF THE NAVY. Sir John Liddell has resigned the office of Director-General of the Medical Department of the Navy; and has been succeeded in office by Dr. Bryson.

PHYSICALLY DISABLED. The quota of the State of New York was 68,000 men. To procure this number 77,862 conscripts were examined, with the rather alarming result that no less than 53,000 were found unfit for military duty, and exempted from "physical disability and other causes."

DR. LIVINGSTONE'S EXPEDITION. Messrs. Rowley and Miller have returned to the Cape of Good Hope from the Zambesi. Dr. Livingstone had received the news of his recall, and had admitted his expedition to be a failure. A rumour has reached the colony of his having been murdered near Lake Nyassa.

A COURT-MARTIAL ON THE FEDERAL SURGEON-GENERAL. It is stated that Mr. Lincoln has summoned a court-martial to investigate certain charges against Surgeon-General Hammond. Let this investigation be fair and impartial, and if fraud exist let it be traced to its proper source, and let the punishment fall upon the responsible party. (*American Medical Times.*)

SCHOLARSHIPS IN NATURAL SCIENCE AT CAMBRIDGE. Two scholarships, each £40 *per annum*, tenable for three years at least, are announced to be given for natural science at Sidney Sussex College in October next. The subjects of examination are Electricity, Chemistry, Geology, Anatomy. They are open to competition to all the world. The successful candidates will be expected to enter at the College. Those who require information are referred to the Rev. C. W. Ellis, Tutor of the College.

THE INSPECTOR OF ALKALI WORKS. The powers conferred on Dr. Robert Angus Smith, are very extensive. The alkali manufacture is now carried on on a very large scale in Lancashire and Cheshire, on the Tyne, and at Glasgow, and it affords employment, directly or indirectly, to more than 100,000 persons. The main provision of the act of last session is that 95 per cent. of muriatic acid gas evolved in the manufacture shall be condensed to the satisfaction of the inspector, and it will be the business of Dr. Angus Smith to see that this is done effectually.

DISEASED PIGS. At a recent meeting of the Liverpool Health Committee, it was reported that the steward of the Rainhill Lunatic Asylum had sold eighty pigs to a pork-butcher, because lung disease had broken out among the pigs at the asylum. It is believed that these pigs were slaughtered in Liverpool, and were consumed as human food. Others of the pigs which were left at the asylum died, and were buried; but it is believed that another sixteen of these diseased pigs have been sold. A copy of the report was ordered to be forwarded to the county justices, and a strict inquiry was ordered to be made into the matter, with a view to have the guilty parties punished. [Perhaps, some of our Liverpool friends

will be able to tell us whether or not any evil effects can be traced to the consumption of any portion of the diseased pig-meat. EDITOR.]

THE ROYAL VICTORIA HOSPITAL. One of the first visits paid by Her Majesty after her bereavement was to the large military hospital at Netley. She has again shown her care for the army and for this hospital, in which the late Prince Consort took a warm interest, by paying it a second visit on Thursday week. She proved at once that she had not forgotten any of the incidents of her former visit by desiring to see first the women's quarters, with which she was not pleased on that occasion. She found the rooms looking much more comfortable, and she subsequently inspected some rows of cottages which are now being built in the rear of the hospital for the special accommodation of the wives and children of the sick men under treatment in the hospital. She was satisfied with these arrangements. She then visited the wards, a less laborious task than last year, as there are very few patients in the hospital; the invalids from the home stations having now ceased to come, and the ships with the tropical invalids not arriving till a month or two later. She said a few kind words to the men in bed, and then made particular inquiries of Dr. Anderson, the inspector-general, as to the health of the men to whom she had spoken last year. That officer was no little surprised to find that the Queen had a distinct recollection of several cases, although her notice of them must have been almost momentary. She also entered the dining-hall, where the men who are able to leave their beds were at dinner, and carefully inspected the arrangements there. She then left the hospital and went to the medical officers' mess-room—a fine large room, which has just been completed, and in which are placed her own portrait and that of the Prince Consort, presented by herself. She expressed her approval of everything, and desired that she might be informed when the invalids from the foreign stations would arrive, so that it is hoped Netley will be honoured by another visit. She inquired particularly whether there had been any effluvia from the mud during the summer, and when told there had been no annoyance of the kind, said she had never anticipated that there would be. She also made particular inquiries about the ventilation of the hospital. During her visit she was attended by the entire military and medical staff, including Dr. Anderson, Inspector-General; Deputy-Inspectors Longmore and Maclean; the Professors of the Army Medical School, Staff-Surgeons Moorhead, Fyffe, Smith, Davidson, etc.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Gibb, "On Subglottic Œdema of the Larynx."

TUESDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal Medical and Chirurgical Society. 8 P.M., Ballot; 8.30 P.M., Mr. Callender "On Amputations at St. Bartholomew's Hospital, 1853–63"; Mr. Savory "On the Absorption of Dead Bone."—Zoological.—Ethnological.

WEDNESDAY. Royal College of Physicians, 5 P.M. Dr. Garrod, "The British Pharmacopœia: its Construction, its Comparison with the London Pharmacopœia, and the Value of its New Remedies in the Treatment of Disease."—Microscopical.

THURSDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal.

FRIDAY. Royal College of Physicians, 5 P.M. Dr. Markham. Gulstonian Lectures. "The Uses of Blood-Letting in Disease."—Astronomical (Anniversary).—Royal Institution.—Hunterian (Anniversary).

SATURDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

F. T.—The price of the large edition of the *British Pharmacopœia* is fixed at 10*s.* 6*d.* The price of the smaller edition is 6*s.* We believe that somewhere about 50,000 copies of the larger edition are to be struck off. When the smaller edition will appear, depends, we suspect, somewhat on the disappearance of the larger one. The Medical Council will have to do a little trade in the sale of these volumes in order to reimburse itself for its outlay in getting them up.

TRICHINIASIS.—SIR: The information contained in the article on Trichiniasis, is original, and was obtained from—

1. My brother-in-law, Dr. Dupré, at Hassfurth, near Magdeburg.
2. A near relative, Mrs. Bansa, at Homburg, who wrote me the account given to her by Dr. Müller, jun., of the same place. (This gentleman's brother-in-law, a M. Sartorius of Mexico, was one of the sufferers, and died. Dr. Müller, who was telegraphed for, went to the scene, and there saw many things himself.)
3. Several other persons wrote about the affair what had appeared in journals.

There is no doubt upon this point, *that the sausage at the Hettstädt dinner was cooked*—cooked in a manner, of course, which would probably not bring the meat to 212° Fah.; but, nevertheless, it was fried—*geröstet.* This means most properly "toasted"; that is to say, slightly roasted. Every one knows *Röstewurst* in those parts. The name indicates its nature; and that it is not raw, as other sausages in Germany are.

This point has, of course, excited great attention in Germany, and the controversy is high. But it is now admitted that the *encapsuled* trichina will stand a very high degree of heat without losing its life. No one maintains that, if this degree of heat were continued *long enough*, the animal would survive, nor that it could survive boiling point. But it is more than probable that it will live beyond the coagulating point of albumen (140–149 Fah.), and even up to that of the red colouring matter of flesh (197.6 Fah.).

I had a letter a few days ago from Professor Phœbus at Giessen, stating that he was going to send me some trichinæ of Leuckart's breeding. (Leuckart has written a magnificent monograph on these worms.) But he would not send them during frosty weather, unless thickly wrapped up, "because he would not rely in this respect upon their much talked of toughness of life".

I am, etc., J. L. W. THUDICHUM.

COMMUNICATIONS have been received from:—THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Mr. HENRY LEE; Mr. LOWNDES; Dr. LATHAM; Mr. UPTON; Mr. WILLIAM BOWMAN; Dr. G. M. HUMPHRY; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. J. R. WOLFE; THE SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. OLIVER PEMBERTON; Mr. T. M. STONE; V. V.; Mr. SPILLER; Mr. J. VOSE SOLOMON; Dr. CORNAZ; Dr. ALDIS; and Dr. MARTYN.

BOOKS RECEIVED.

1. Letter on Corpulence. By W. Banting. 1864.
2. Diseases of Women. By F. Churchill, M.D. Fifth edition. Dublin: 1864.
3. The Teeth in Health and Disease. By Robert T. Hulme, F.L.S London: 1864.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture VIII.
ON CURVATURES OF THE SPINE.
(*Continued.*)

Pathological Anatomy.

The *anterior surface of the thorax* presents changes which are scarcely less striking than those which have already been mentioned. Thus, on the side of the convexity, the ribs are flattened and depressed; and, together with them, the position of the mammary gland is changed, the position varying from a quarter of an inch to an inch or more. This necessarily depends both on the situation of the curve and on its extent. The gland retains, if not entirely, almost its normal relation to the ribs, and is depressed together with them. On the side of the concavity of the thoracic curve, the ribs and cartilages become prominent; so that the projection is not unfrequently spoken of as a tumour. Sometimes pain is felt in this position; and I have more than once known this to be the only seat of pain in scoliosis. This prominence is occasioned through the rotation of the vertebræ, and the consequent thrusting forward of the ribs and their cartilages. These changes are shown in Fig. 18, Lecture VI.

The sternum also deviates somewhat from its normal position, its lower extremity being directed towards that side which is occupied by the convexity of the thoracic curve.

The *viscera* both of the thorax and the abdomen are compressed, and their functions become deranged in every severe form of lateral curvature of the spine. Such is the case, indeed, before distortion reaches its most severe stage. But the thoracic viscera suffer especially, being surrounded by bony walls. On examining the skeleton, one is apt to wonder how, in numerous instances, the functions of respiration and circulation can be carried on; so great is the change from the normal condition. The most prominent effects which are produced through compression are imperfect expansion of the lungs and condensation of their parenchyma, deficient aeration of the blood, and dilatation of the right side of the heart.

The aorta always follows the inflexions of the spine in scoliosis. Sometimes the curves which it describes are sharper, and sometimes they are less so, than those which are formed by the vertebræ. In severe lateral curvature, the aorta assumes curves so sharp as to interfere materially with the circulation of the blood; and this impeded circulation is manifest in severe forms of scoliosis. Specimen 3416 in the museum of the College of Surgeons shows well these abnormal curves of the aorta.

Before concluding this subject, I must again direct attention to rotation of the vertebræ. The changes which are produced are so admirably delineated in the following figures (24 and 25), from specimens for

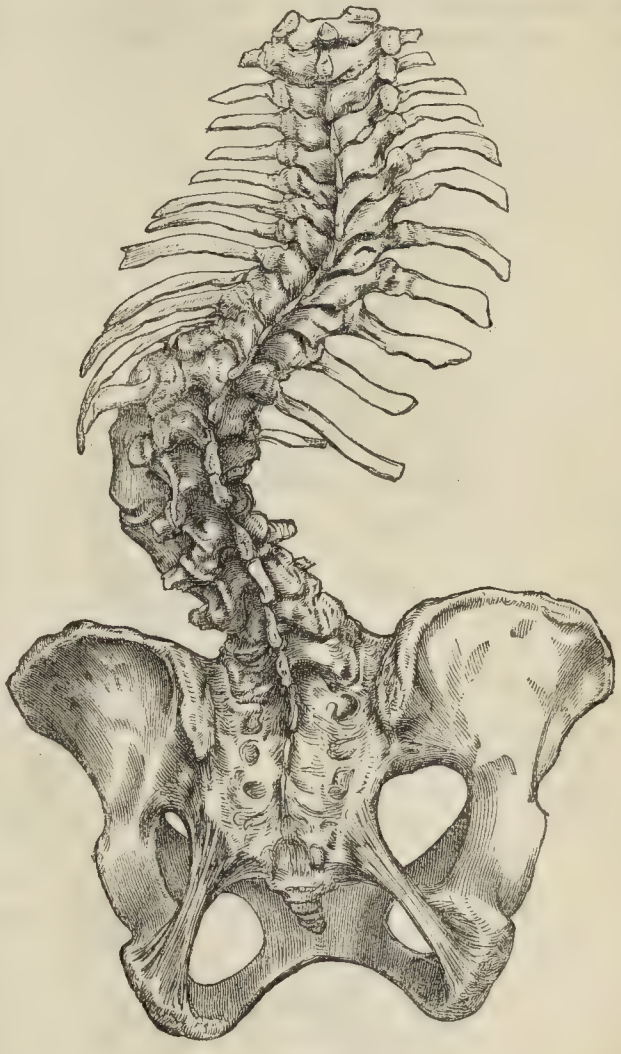


Fig. 24.

which I am indebted to my friend Mr. Wheeler, that I cannot resist giving them in this place. Here are shown the anterior and the posterior surfaces in a case of advanced distortion; and the wonderful difference between the curves which are formed by the spinous processes, and those which are formed by the bodies of the vertebræ, will be remarked. The wedge-shape of some of the bodies of the vertebræ will also be observed, as well as the position of the pelvis, which is similar to that maintained during life in the erect posture.

Rachitic scoliosis seldom appears until disease is fully established in the long bones, and usually also in the pelvis. The nature of the affection can, therefore, rarely be doubtful. A rachitic tibia or femur, by inducing obliquity of the pelvis, may be the cause of spinal curvature. This is an every-day occurrence. The curve is not, however, therefore rachitic. Rachitic scoliosis and ordinary scoliosis have little in common but the curve and the compression of viscera consequent upon distortion.

Rachitic scoliosis commences in the bony structures. First, the periosteum becomes unusually vascular, tumid, and adherent to the bone. The structure of the bone itself is then somewhat swollen, and its vessels are filled with blood. The cells, too, of the spongy parts of the bones, and of the epiphyses of the long bones, become dilated and filled with sanguinolent

fluid. Eventually the cell-walls are broken down, and the medullary cavities become chambers filled with this fatty, sanguinolent, dark coloured matter. This fluid is found both in the cavities of the bones and between the periosteum and the bone; and at length the bones become soft and cartilaginous, being

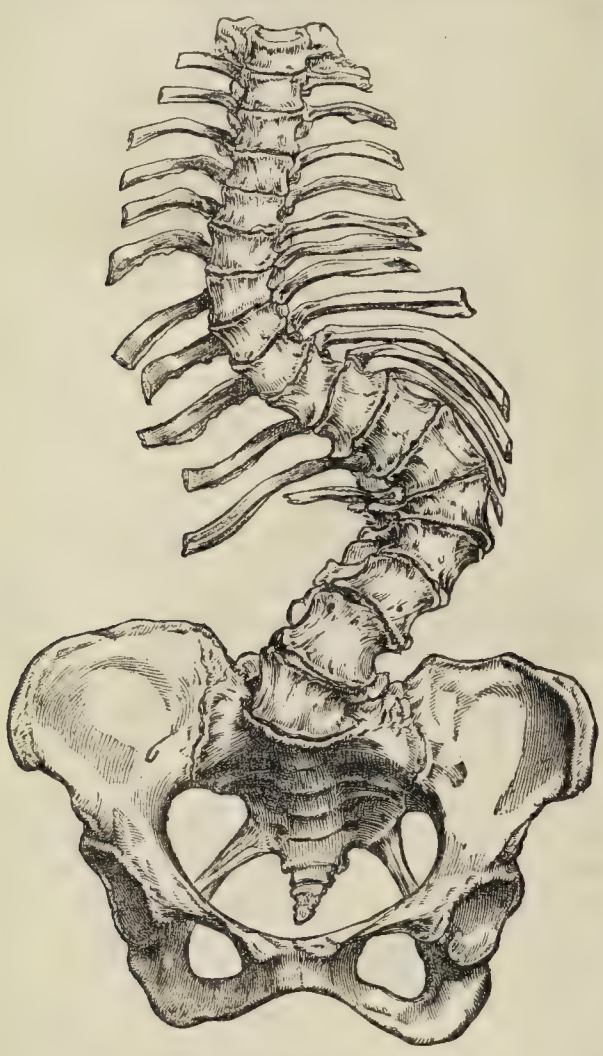


Fig. 25.

deprived of their earthy constituents entirely or in part; so that they are easily cut with a knife, or as readily yield to pressure or to muscular force, and become misshapen. Wherever pressure is greatest, there is the most distortion. So in the spine it is found that the vertebræ which are most implicated in the curve are not only much compressed, but they are twisted on their axes, and through pressure become misshapen.

Through the weight of the trunk also, the pelvis is flattened and narrowed in its conjugate diameter; and this tendency to flattening is increased by the existence of lordosis, which, as a rule, exists together with scoliosis in rickets. The ribs on both sides of the thorax are flattened, and they are distorted into every conceivable shape.

To this softened and tumefied condition another even more important yet succeeds. The bony substance becomes more and more firm, the outer surface being hypertrophied and of ivory hardness; so that the distorted limb or spine, however misshapen, must so remain: change is impossible.

Treatment.

The treatment of lateral curvature of the spine may well be divided into *preventive*, *curative*, and *palliative* treatment.

The *preventive treatment* of lateral curvature of the spine comprises all those measures of hygiene which tend to the development of the body, and which conduce to its perfection. It relates, consequently, to food, clothing, bathing, exercise (bodily and mental), sleep, rest, etc.—to every circumstance, in fact, which may affect nutrition.

In youth, every care should be taken to strengthen the bones, to develope the muscles, and to promote activity of body—a system the reverse of that which prevails throughout England.

The freedom of action which is permitted to boys prevents them from suffering from affections of this nature. Scoliosis is very rare among boys; and when lateral curvature does occur, it arises generally from some affection of the lower extremities. But debility is the commonest cause of distortion in young girls—debility which, one might almost say, is purposely induced, so different is their mode of life to that which seems to have been intended.

Exercise is essential to develope the muscular system; not only such regulated exercises as are comprised in a system of gymnastics, but freedom must be permitted in walking, running, playing, etc. This system has been introduced into some of the best schools in the neighbourhood of Paris, and with the happiest results. Nothing can exceed the appearance of health which prevails among the inmates. Widely different is it from that which may be observed in London schools, and, indeed, in schools throughout England. The use of forms and stays, and the want of adequate exercise, bathing, sleep, and rest, induce so much distortion, that it has been said, and with much truth, that it is difficult to find a young person so well developed as she ought to be, and that distortion is the rule rather than the exception in our female schools.

The *curative treatment* of curvatures of the spine comprises not only restoration to symmetry of form, but also such a development of muscular power as is necessary to that suppleness and activity of body which belong to health. The treatment may, therefore, be divided chiefly into two parts; namely, physical and dynamical, or constitutional and mechanical.

Nature Outdone. A report was read lately at a sitting of the Société Médicale d'Emulation, on a paper by Dr. Foley, in which he recommends a high atmospheric pressure as a cure for various diseases. Applying certain facts to therapeutics, Dr. Foley remarks that mountaineers are obliged to breathe more quickly than men inhabiting the plains, because the air is more rarefied on the mountains than in the plains, and therefore affords less oxygen at a breath than the denser air. Conversely, therefore, if a patient be in want of more oxygen than he can get under the ordinary pressure, let him be exposed to an atmosphere rendered artificially denser. This can be done by constructing a small chamber communicat- with a forcing-pump, and provided with an air-gauge and a safety-valve. A patient confined in such a chamber may be subjected without inconvenience to the pressure of about two atmospheres and a half. By this treatment catarrh, asthma, and other complaints of the respiratory organs may be removed; in croup the compressed air will flatten down the adventitious membranes; and in disorders arising from weakness, compressed air will arterialise the blood and increase the vital power of the patient.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture I.

On Some Points connected with the Pathology and Etiology of Fibrous Tumours of the Uterus.

Mr. President and Gentlemen,—I am well aware of the honour of addressing an assembly like the present, including as it does some of the most eminent members of our profession. But if it be an honour, as it undoubtedly is, to have been selected to deliver the Lettsomian Lectures, it involves also a heavy responsibility. Not only have I to emulate the distinguished men who have lectured here before, and deserved well at your hands, but I also feel that I address a body of experienced practitioners—men of knowledge, whose judgment must necessarily be severe. All I can hope is, therefore, that, as I have worked much at the subject, and striven hard to merit your good opinion, I may be leniently listened to, and in offering you something worthy of your attention, not disappoint your expectations altogether.

The subject which I have selected for discussion is "Fibrous Tumours of the Uterus." It is one which has for many years attracted the attention of the profession in every country. Its literature is therefore very extensive; but it is also very widely scattered. I have thought, therefore, as not only do ancient and modern writers hold contradictory views, but as even in the present day authors are not agreed as to the pathology, means of diagnosis, and treatment of these growths, that a general *resumé* might prove interesting and not unprofitable. I propose, therefore, to consider the subject under these three heads, devoting one lecture to each part of the subject; and I trust finally, from this analysis, to deduce certain practical conclusions, which I shall bring prominently before you. Your own future experience will enable you either to confirm my views, if they are founded on fact, or your better judgment to correct them if I have erred, to the advantage of those whom you treat, and who suffer from this disease.

Structure. What is a fibrous tumour? I should define it as a growth in which the fibro-cellular elements of tissue predominate. To the naked eye it appears to be made up of fibres arranged in bundles, sometimes interlacing, with more or less cellular and even adipose tissue between them, of a white yellowish colour, with tints here and there of light blue. This blue is due to veins or radicles of veins which run through the tissue, the tissue itself being non-vascular. In some instances there is less, in others more cellular tissue present; hence a division made by some into fibrous tumours, properly so called, and fibro-cellular tumours. Sometimes they contain a larger excess of uterine tissue in them; and this constitutes what some have appropriately designated the fleshy tubercle, or, later writers, muscular tumours. All this is simple enough; not so, however, when we look at the subject more scientifically. Here I must confess that my reading on the subject of fibrous tumours, in regard to their classification and division by different authors, has not been very satisfactory. No one, I think, could fail to perceive that there is much *verbal* confusion, the same word being used by various authors to designate very different varieties. I must therefore content myself with a few general remarks on fibrous tumours as a whole, and then proceed to their classification into varieties, following chiefly in this respect the French school.

When we look closely into a fibrous tumour, it appears to consist of a number of fibres, some of which are parallel, others interlace in every direction, the colouring varying from a light yellow to a light blue. These fibres, which are fibrous tissue, are very resistent, elastic, and closely knit together. Sometimes, but more rarely, they appear to assume the circular form, and to be arranged concentrically around the vessels which pass through them, as figured in the diagram.

Every fibrous tumour is generally surrounded by a *capsule*, which takes its origin from the uterus, and which is sometimes very closely adherent to the tumour, at other times so little so that the tumour may be easily separated from it or *enucleated*. This enclosing membrane is itself non-vascular, but serves as a medium for the transmission of the vessels upon which its growth doubtless depends. The veins on the attached uterine surface are much enlarged, this enlargement having a distinct relation to the size of the tumour. Arrived near the tumour, they subdivide into a *rete vasculosum*, which nourishes the growth precisely in the same manner as in the case of cartilages and other non-vascular tissues. This *rete* does not, so to say, permeate the tumour. The few large vessels which are exclusively venous, and which sometimes pass through it, end in the *rete* at the opposed side, and do not belong to the substance of the tumour, resembling in this respect the vessels which permeate fat. Arteries, nerves, and lymphatics have never been discovered in fibrous tumours.

When fibrous tumours are cut through, they either exude no juice, or if so, one which floats upon the water and does not mix with it as encephaloid matter does. Dr. A. Clark, in a communication he kindly favoured me with at my request, has examined especially this juice. He writes—"I have on several occasions examined the *juice* of succulent fibrous tumours. I can say of it chemically no more than that I have found it always albuminous. Microscopically it has varied, but common to all are the following elements:—

"1. Coagulated and variously altered blood-discs, isolated and in heaps.

"2. Corpuscular forms resembling the white cells of the blood.

"3. Moleculo-granular matter and fat.

"The soft, semi-lardaceous, imperfectly defined fibrous and muscular tumours exhibit, in addition, the following structural forms in the juice:—

"4. Oval flattened corpuscles containing a few granules.

"5. Fusiform nucleated cells.

"6. Nucleated fibres or fibre-cells resembling the elements of organic muscular fibre."

The microscopical characters of the substance of fibrous tumours themselves are as follows:—1. Fibro-plastic elements united together by cellular tissue; 2. Nucleated fibres, striated and muscular in character; 3. A vast number of granular bodies.

The fibro-plastic elements are very closely packed, sometimes straight and sometimes waved. The muscular tissue is best seen after boiling or treating with acetic acid, when the characteristic nuclei become evident. These last fibres exist in vast numbers, considerably more abundant than in the ordinary unimpregnated uterus, but less so than in the pregnant organ. Indeed, according to Robin, they constitute at least from one-fourth to one-half the entire morbid mass. This circumstance it was that led Vogel to assert that fibrous tumours were, after all, a mere hypertrophy of the muscular tissue in the uterus.

"The *granular bodies* consist of an amorphous mass, very tenacious, semi-solid, keeping the fibres firmly adherent one to another, so as in fact to mask them. This element is most important in regard to the part it plays in the harder tumour, and is especially abundant in those examples where the tumours have assumed a somewhat semi-transparent aspect" (Guyon).

Varieties. As to *classification*, I shall venture to speak of fibrous tumours of the uterus as of three classes: 1. *Fibromas*, which include *hysteromas;* 2. *Fibroids*, including the *recurrent;* 3. Malignant, as occurring both among *fibromas* and *fibroids*.

1. *Fibromas* are homologous tumours developed in a specific blastema resembling permanent fibrous tissue; differing, however, from it in this respect, that they have the power of independent growth, and of enlarging and developing indefinitely. On examination by the naked eye, we can make out two varieties: one, homogeneous-looking when cut through, shining, with no appearance of fibres, which, however, are soon developed by maceration in alcohol; another presenting distinctly the appearance of opaque fibres, sometimes white, grey, or yellow, and crossed in various directions. (Costello.)

As I am speaking, however, of fibrous tumours as they are found in the uterus only, I pass on to speak of the most common variety found in the uterus, namely, hysteromas.

Hysteromas, so called from their resemblance to uterine tissue, and their frequent presence as pathological results in that organ, contain, in addition to the fibrous elements of fibrous tissue, distinct fibro-cellules, *alias* the fibres of Kölliker; in other words, the muscular tissue of organic life. These hysteromas constitute the fibroids of Lebert, and differ from fibromas in their benignity, and in never ulcerating spontaneously.

These muscular organic fibres are distinguished by M. Lebert from *fibro-plastic bodies* (to which I shall presently refer) by a certain number of characters. The nuclei are narrower and more elongated. They have only one nucleolus: some are bent upon themselves. The fusiform bodies themselves are longer and thinner, as if unwoven. These bodies often exist in very large quantities in fibrous tumours, and sometimes it has been clearly made out that these are pediculated, and directly continuous with the uterine tissue. In other cases they are isolated; but M. Lebert is still convinced that they proceed from the muscular fibres of the uterus, and partake of their character. These productions are included by him under the name of *homologous* growths. Just as an exostosis borrows from the neighbouring bone its general characters, or a cyst contains epithelium like its neighbouring cavity, so these fibrous tumours borrow muscular fibres from the contiguous uterus. The uterus here only follows the general law, that every organ exercises a sort of especial attraction on the nutritive elements which maintain it. Any deviation from health may determine an analogous production in its neighbourhood (*Bullet. de la Soc. Anat.*, p. 324, vol. ii).

It was the frequent presence of these bodies that led Vogel to assert that a fibrous tumour was always a hypertrophy of the uterine organ, a fact referred to long since by Dr. Oldham. The later inquiries of Dr. Bristowe, well known to most of you as an accurate observer, have fully confirmed this view, more especially in relation to the pregnant state. That gentleman examined two specimens of fibrous tumour in pregnant uteri. The first had during life been supposed to be an exostosis, which led to the performance of the Cæsarean section and the death of the patient. The fibrous tumours after death were here found to be solely connected with the upper two-thirds of the posterior wall of the uterus, and formed an irregular lobulated pedunculated mass of about the size of an orange. On section, it was found that the muscular tissue of the uterus enveloped some of the tumours, but in others extended merely for a short distance at their base. The tumours presented the ordinary characters of fibrous tumours, only they were denser, somewhat fleshy in appearance, and constituted of fibres, curving and twisting in all directions with the utmost complexity.

The microscopic examination of the tumours was conducted with great care.

"Portions of different tumours (taking care not to mistake any of the muscular tissue enveloping the tumours themselves) were submitted to examination, and, contrary to anticipation, in all instances, without exception, were found to present precisely the same characters as the muscular tissue of the uterus itself. They were so similar, indeed, that it was quite impossible to say of any specimen observed under the microscope whether it was taken from the normal or abnormal structure. The tumours consisted of fusiform pellucid fasciculated muscular fibres, identical in size, shape, general appearance, and arrangement with those of the uterine parietes. There did not appear to be more fibrous tissue in these than in the uterus, although the fibrous tumours felt more dense."

Dr. Bristowe also examined another specimen of a fibrous tumour. This patient died four days after delivery, and the tumour was found, as in the latter case, to be made of muscular tissue. The fibres only were a little corrugated, as the tumour had for several years been kept in Goadby's solution (*Path. Trans.*, vol. iv). And this appears to be now the opinion generally held by French and German pathologists, even by Lebert. That learned pathologist has now confessed openly that, although at the first he hesitated to admit the identity of fibrous tumours of the uterus with the uterus itself, believing that the fusiform bodies met in them were of a fibro-

plastic nature, a more attentive examination has not allowed him to remain any longer in ignorance of their muscular structure and general resemblance to the uterine organ.

[*To be continued.*]

Original Communications.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page 25.*]

There remains to be described the form of melancholy called *hypochondriasis*. Two types or two stages of this form have been described by authors; but, though most writers agree in making these two types, the line of division between them does not appear to be the same with all. The definition of hypochondriasis being a malady in which the patient has false conceptions on the subject of his bodily health, some writers would appear to make their division rest between a hypochondriasis without mental aberration, and one with it. They seem to say, also, that one form merges into the other. When diseases do this, they cannot be said to be distinct. As these papers are professedly from clinical observation, I shall here describe only what I have met with in my own practice. There appear to me to be two types, the line of demarcation being sufficiently distinct in typical cases.

The first form or type, or hypochondriasis proper, is met with but seldom in asylums for the insane. Dr. Watson designates the patient with this malady "a plague to his physician, as well as to himself." It is a disease less frequent among females.

This disease has been called also nosomania. Cases are known to terminate in well-marked insanity and in suicide; and yet, in the early stage, patients suffering from it are seldom "*found insane*"; but, in a purely pathological sense, unsoundness of mind must exist in all its progress. It has already been shown that in other forms of melancholy, or melancholic insanity, the moral affections are the first involved. In the early stages of all hypochondriacal cases, it is the moral affections, the instincts, which are chiefly implicated. The intellect, in many of the cases narrated, remained comparatively clear for some period after the setting in of the other symptoms. In a typical case of true hypochondriasis, the intellect usually remains for a still longer time clear. The patient may so far retain his intellectual faculties as to be able to converse, argue, reason, remember, etc., correctly; yet on some subjects, especially such as relate to his bodily condition and health, he entertains an erroneous notion. It will be conceded that we possess naturally an instinctive consciousness of health, and of absence of health—disease; and it is obviously a false notion or belief to consider ourselves ill when we are well, or to believe ourselves diseased when we are whole.

This error is not one of reasoning, nor a judgment resulting from a complex mental operation, which might be liable to fail in any of its stages. It is a simple instinctive feeling that is altered. The perverted instinct which leads to the belief, or the intellect which yields to the false impression, are cerebral acts; and, these being perverted obviously by bodily disease, the nature of the malady must be considered a form of mental disease.

The second type of hypochondriasis is very obscurely described by writers. I have been in the habit of including under this name certain cases not at all uncommon in asylums, in which the mind of the patient is more or less completely occupied with the state of the bodily health or condition. These patients do not display the same anxiety to apply remedies as the other or true hypochondriacs. The false perception is a part of their mental disease; they appear to accept their lot as one not amenable to medical treatment. These patients are mostly melancholy or depressed. It will be sufficient, perhaps, to enumerate some of the delusions that I have observed in my own practice as illustrating this description of disease; and it will be observed that these cases approach the true form of hypochondriasis only in the accidental circumstance, that their illusions or delusions have more or less direct reference to their bodily health or condition. Early writers included all those cases under hypochondriasis in which the sufferer imagined he was made of glass, and was in constant fear of breaking; or was made of butter, and was afraid of melting.

I have known a great variety of instances in which extraordinary delusions haunted the patients continually, which would belong to the same category as the above; but the cases would fall under different divisions in the classification of insanity, as under monomania, chronic mania, etc. It may be convenient to enumerate some of the chief in this place, remarking that these strange vagaries of the mind occur chiefly in confirmed cases, especially when the false ideas involve an operation of the intellect proper; but when they are confined to anomalies of the instincts, they may occur at an earlier stage of the disease. These cases form, in fact, no exception to the law that the moral faculties are the first involved; that the anomalies of the intellectual faculties, as illusion and delusion, occur subsequently, generally at a much later period of the case.

It is not uncommon to meet with melancholic patients who assert that they have no gullet; that they have no passage from the bowels, or from the womb; that they have no inside; that they are hollow, etc. In cases already related, several of the patients entertained the belief that they did not require food. A patient at present under treatment believes that she has an internal cancer, and she has been an in-patient at nearly all the London hospitals. Another, who died of exhaustion during the present year, believed she was putrefying; that it was unfit for her to be with others; that her womb was diseased; and this delusion was stated to have been aggravated after an examination by the speculum prior to admission.

I had a patient who was many years under the delusion that she gave birth to hundreds of children daily. I have a second, admitted pregnant, whose infant is now about six months old; on admission, she had the delusion that she gave birth to one hundred children every day, but, since her confinement, has reduced the daily number to eight or ten.

A young melancholic female, formerly epileptic, and of very slender proportions, believed that she was of such enormous bulk and height, that she was much ashamed to be seen. Another woman, enormously stout, believes herself to be a sylph, and is afraid of being blown away.

An old lady believes she is a bird, and calls her grey locks feathers. She is a buxom body of fifteen or sixteen stone, and above sixty years of age; and

she occasionally wants to get up into the trees to roost. On admission, she had other birdlike propensities, not convenient to indoor life.

In cases already given, there were delusions or perversions of the instincts with respect to dying. In some, the feeling existed with the patient that she could not die; in others, that they had died; or in another, that she should live for ever.

I have at present a case in which the patient has the delusion that she has no blood; that her head is made of wood. She strikes her head forcibly, to prove her assertion by the sound; and she entreats others to do the same, or to run a lancet into her to satisfy themselves. This patient also believes she is under the influence of witchcraft.

A patient, very lately dead, asserted that her heart had stopped; that she was dead, and about to be buried, at which she expressed great terror.

I had formerly a patient who at last died in reality, but who maintained perseveringly for seven years that she was a corpse; and she had her distinct theory on the subject. She argued that, though her case was unique, that did not prove its impossibility. "I know such a case never was heard of before," she would say; "but my case is exceptional." Her belief was, that she died on a certain day and hour, which she named; but, owing to the negligence of the nurses, who did not tie up her jaw at the proper time, "she was left a-speaking"; and "so her jaw never dropped", and consequently "she could not get to the grave". She greatly blamed my predecessor in office, that he did not cut her head off. She repeatedly entreated me to do this for her. For years, day and night, she was in a constant state of mental agony, rocking backward and forward on her seat, and moaning, "I have not got to die, I have not got to die. It's nothing but the bitter cold wind that's speaking." This patient ate pretty well, though she declared she never did. "How can a corpse eat?" she used to say. At times she could be diverted for a short period, occasionally would play a rubber, and enter well into the game. At times she was chatty, and would relate her previous history. She was a nurse in an asylum for the insane. Her memory and reasoning faculties were clear up to within six months of her death. The disease then began to affect the motor functions. She became unable to articulate clearly; this gradually increased; and before death she became quite unintelligible. She died during my temporary absence from the asylum.

Another extraordinary anomaly, having reference to the bodily state, occurred in a patient whose name was Martha Stevens, but who persisted for years in calling herself Molly Dodd. She had, it would appear, completely lost all idea of her personal identity. She called her son, who came to see her after a long absence at sea, Martha Stevens's young man. She spoke of knowing Martha Stevens formerly, but said she died. She appeared to relate the history of her early life as that of Martha Stevens; but the latter events of her life were always spoken of as connected with her state as Molly Dodd.

A patient lately received has the idea or delusion that the various parts of her body do not belong to her. This form of insanity has been specially named melancholia metamorphosis. She asserts that her head was taken off, and a horse's head put on her. She complains much about her legs, and says that they are great ugly legs, which belonged to an overgrown boy; that her own legs were nice little legs; and she appears horrified when she casts her eyes downwards on her limbs. She says her hands have been changed at the wrists; that her arms are somebody else's, and that they do not correspond, and there is no feeling in them. This confusion of parts is the source of great mental anguish to her.

With respect to all such false perceptions and delusions, it is common to hear them attributed to peripheral excitants of various kinds; that is, to look upon the mental phenomena therefrom as arising from eccentric causes. In a very large number, there is no evidence of such; but in cases (and which, I think, are exceptional), such peripheral excitant would appear to be present. Instances have been recorded in which an insane person has suddenly recovered her mental faculties on removal by operation of a diseased organ, or by the natural termination of a peripheral disease, as the breaking of an abscess. Such cases are very striking when they occur; and one is apt, therefore, to exaggerate the frequency of their occurrence. A patient lately discharged, who on admission had the delusion that she was pregnant, was found to have tapeworm, which was brought away by the use of the oil of male-fern. She regained her strength, with the return of which her delusion vanished. The patient who, while pregnant, believed she gave birth to one hundred children, and who, after delivery, reduced her ideas to tens, is also an example of the presence of peripheral or eccentric excitants; but the evidence in the last case is equivocal, since the delusion did not cease entirely. In far the greater majority the cause of the delusion is centric—in other words, cerebral.

[*To be continued.*]

RESUSCITATION OF STILL-BORN CHILDREN: ACTION OF ERGOT.

By Edward Garraway, Esq., Faversham.

Do accoucheurs ever fail in their endeavours to establish the respiratory function in still-born children? or am I the most unfortunate of men? One reads of numbers of instances in the various medical journals of infants being resuscitated by the Marshall Hall and Silvester methods of treatment, but never of an instance of failure. Now, I have been defeated—perhaps it is not expedient to say how many times; of course, too, I have had my successes (see, in particular, the Journal of September 28th, 1861.)

Mrs. C., a healthy, small, but well proportioned young woman, aged 22, was taken in labour with her first child, at 6 A.M. I saw her at 9; the liquor amnii had escaped, and the head was presenting in the ordinary position; the os was dilated to the size of a half-crown; the pains were vigorous. By 1 P.M., the head was well down on the perinæum, which proved rather rigid, and, at the same time, the pains began somewhat to abate. At 6, the perinæum being on the stretch, and the labia separating, the pains became utterly ineffective, and I therefore gave my usual quantity of ergot, in two doses (two drachms boiled in eight ounces of water down to four ounces). Vigorous pains speedily followed; and for nearly half an hour labour seemed progressing; but now, the influence of the ergot being exhausted, the pains ceased. I never give more than the quantity above mentioned of this drug; so, after a little repose, I had recourse to the forceps. Careful manipulation, however, with one blade, aided by strong pressure on the abdomen, sufficed to deliver the head. This was accomplished without the slightest uterine effort, or even feeling of pain, on the part of the mother. By hooking my finger into the axilla, and again pressing hard upon the abdomen, the child was partly dragged and partly pushed out of the uterus, still without the slightest pain. As the feet were drawn out, a rush of air took place into the vagina—a phenomenon, as far as my

observation had hitherto gone, usually succeeded by more or less hæmorrhage. On compressing the uterus the air rushed out again; and, although there was no feeling of contraction or pain in this organ, it seemed slowly to close upon the placenta. No friction nor compression of the uterus would induce pain: and, as the funis began to tear under traction, I passed my hand into the vagina and easily removed the placenta, which was not attached. The uterus, somehow, without any apparent contraction, seemed gradually to accommodate itself to circumstances; and it is remarkable that literally not one drop of blood was lost.

I never before met with a case in which from beginning to end of the expulsion, or rather extraction, of the child and after-birth, not one single effort was made by the uterus, the mother being quite easy and comfortable during the process, whereas previously the house had resounded with her cries. There was no physical exhaustion; the pulse was quiet: and I can in no way account for the uterine inertia.

Ranking's *Abstract* contains the history of a case of resuscitation of a new-born infant by Dr. S. Reed. The case, extracted from the *Lancet* and the *Pacific Medical Journal* of October 1862, was briefly this. The doctor arrives at a patient's house, finds the labour completed; the accoucheur, who had attended for him, having departed twenty minutes, leaving behind a still-born babe and a sorrowing family. He hastens to the bedroom, detects a slight fluttering about the child's heart, at once begins forcing air from his own mouth into the chest of the infant, alternately inflating the lungs and depressing the ribs, compressing the nostrils, and so on, meanwhile keeping the child warm in flannel. "In forty minutes it gave a sigh; in twenty more it began to breathe, and was handed to the thankful mother."

Now, in my case, the child was born asphyxiated. I did not abandon it in twenty minutes; but, discovering in twenty seconds not a slight fluttering about the heart, but a decided pulsation, went vigorously to work after Dr. Reed's fashion. Over and above the attempts at inflation, the warm bath and cold douche, Dr. Marshall Hall and Dr. Silvester's plan were had recourse to, and for thirty minutes I persevered, the heart's action getting fainter and fainter, and not one gasp rewarding me for my pains. Meanwhile the mother, who ought to have been flooding, but was not, requiring my attention, I gave up the recovery of the child as hopeless.

In this case sickness accompanied almost every pain until the decoction of ergot was given. This was the first thing retained upon the stomach. Its effect was quick and powerful, militating against Dr. Graily Hewitt's theory that the action of ergot upon the uterus is through the vomiting it induces. Dr. Graily Hewitt, however, does not venture to lay this down as a law, but diffidently submits his views to the profession for confirmation or otherwise. The question is a most important one, and might be settled in a few months if every accoucheur would take note of his cases in which ergot is given. If sickness only were needed to excite uterine action, safer emetics might be used; for I suppose all men's minds are not yet quite assured of the innocuous action of ergot upon the fœtus, if delivery be long delayed after its administration. We all use antimony and ergot, but regard the two drugs as perfectly dissimilar in action. We avail ourselves of the former, by its nauseating effect, to induce dilatation of a rigid parchment-like os; of the latter, to excite expulsory pains; but at present we should not think of giving ergot to dilate—by the vomiting it may possibly induce—a rigid os, nor should we administer antimony when uterine effort fails in the last stage of labour.

This fact, I think, I have noted; that ergot manifests a much more powerful effect upon a full uterus than upon an empty one. I have rarely been disappointed with it as an aid to the expulsion of the fœtus, and seldom satisfied with it as an inducer of contraction in *post partum* hæmorrhage, notwithstanding it is invaluable in a case of anticipated flooding, if given as the head is emerging from the lower outlet.

Reviews and Notices.

THE PRINCIPLES AND METHODS OF MEDICAL OBSERVATION AND RESEARCH, for the Use of Advanced Students and Junior Practitioners. Second Edition; with copious Nosologies and Indexes of Fevers, and of Constitutional, Cutaneous, Nervous, and Mental Diseases. By THOMAS LAYCOCK, M.D., F.R.S.E., F.R.C.P., etc.; Professor of the Practice of Medicine and of Clinical Medicine in the University of Edinburgh. Pp. 403. Edinburgh: 1864.

THE aim of the author in publishing this work has been to teach the student "how to attain to a mental culture and discipline suited to his special and immensely wide spheres of knowledge and labour." He has, therefore, in seven of the lectures of which the work consists, commented on the nature and acquisition of experience in medicine; the combination of theory with experience and observation; the fallacious use of theories; the general methods and objects of clinical study; the methods of clinical examination; clinical observation of general or constitutional morbid states; prognosis, and the order of succession of morbid phenomena; the due estimate of treatment, and the management of the case; the numerical method of research; and the analogical, philosophical, or purely inductive method of research. In the remarks of Dr. LAYCOCK on these subjects, there is a good deal of practical instruction which is calculated to be useful to the student in training him to an orderly method in examining patients, and in forming a proper estimate as to the utility of treatment; and these portions of the work—we refer especially to the second, third, fourth, and fifth Lectures—may be perused with advantage while he is engaged in his studies in the hospital wards; but the more abstruse topics treated of in the sixth and seventh lectures—the relative merits of the numerical and inductive methods—will be more profitably brought before him when his mind has been somewhat relieved from the details of which he is required to obtain such a knowledge as will fit him for the practice of his art. In an eighth lecture, the author speaks of the naming and classification of diseases.

As the portion of the work to which we have just now referred has been some time before the profession, we abstain from saying more about it. But a considerable portion of the volume is now occupied with a new part, in which Dr. Laycock enters very fully on the subject of the Classification of Diseases. He classes diseases primarily as general and local. General diseases, again, are divided into three classes: pyrectic, including two orders, fevers and inflammations; constitutional, comprising diathetic and cachectic diseases; and systemic, dividing into orders according to the system of organs affected. Local diseases are arranged in two classes: diseases of the

viscera proper or of tissues and organs; and local defects of development and function. He then goes on to develope his nosologies of pyrectic and constitutional diseases, of diseases of the skin and of the nervous system, and of mental diseases; and here we must say he has carried minuteness of classification to the extreme of elaboration. Has he not also pushed it beyond the limit of practical utility? Let us take as an example the way in which he has handled certain "specific or zymotic fevers."

"Remittent Fevers—Malarious Fever, complicated with visceral inflammations:—

I. *Cerebro-spinal* Remittents—Endemic Meningitis.

II. *Pulmonary* Remittents—Pleurisy, Pneumonia.

III. *Bilious and Gastric* Remittents:—

Endemic Gastric Fevers (Gastritis, with hepatic and splenic congestion:—(*a*) Of Temperate Regions—Bilious Remittents; (*b*) Of Tropical Regions—Endemic Yellow Fever.

IV. *Pernicious* Remittents—Endemic Pernicious Fevers or Malarious Fevers, complicated with septic or miasmatic poisons:—

(*a*) Complicated with Fæcal Miasmata (sewer and dunghill emanations); Choleraic Remittents; Dysenteric Remittents; Malarious Continued Fevers, with abdominal symptoms.

(*b*) Complicated with Sepsis; Petechial and Scorbutic Remittents; Endemic Pernicious Fevers, with hæmorrhages, black vomit, etc." (P. 263.)

Now all this careful definition and classification is very interesting; but there is with it a danger lest the student, for whose perusal Dr. Laycock has written his work, should magnify all the phases of a disease here mentioned into so many distinct diseases, thereby further overwhelming and confusing his already overburdened mind. Again, can any one tell us whether at any time, and to what extent if any, medicine in its true sense—the science of healing—has been advanced one step by the elaborate systems of classification which nosologists have devised, and in the details of which no two of them thoroughly agree?

Dr. Laycock is rather fond of introducing, perhaps not new names, but names which are now scarcely ever heard of in medicine—such as Trophesiæ, Æsthesiæ, Kinesiæ, Hyperkinesiæ, Parakinesiæ, Akinesiæ, Orexies, etc. All these may be very expressive; but we fear that the same fate awaits them as has befallen several of the terms which Dr. Mason Good and Piorry have used; namely, that they will be more valued as curiosities in medical nomenclature than for their practical use. When a new or apparently new thing comes under our notice, we must make or find a name for it, which shall be as correct and expressive as possible; but few medical men, we take it, will go out of their way to learn new names for things of which they have already some idea, and a way of naming them. Who, for instance, is likely to substitute the term "encephalic hyperkinesiæ" for "general convulsive diseases"?

Dr. Laycock is unquestionably a most zealous teacher, and endeavours most conscientiously to do the duty which has been entrusted to him, of training the medical pupils of the Edinburgh University in the observation of disease. We have said, and repeat it, that there is much valuable and really instructive matter in his book; but in some points his teaching is, in our opinion, calculated to perplex the student rather than to aid him.

DR. GARROD'S LECTURES

ON THE

BRITISH PHARMACOPŒIA,

Delivered at the Royal College of Physicians.

The third lecture was delivered on Wednesday, February 3rd.

Salts of Silver. The only novelties in regard to these compounds in the new Pharmacopœia consist in the introduction of the *oxide of silver*, and the insertion in the body of the work of the process for making the nitrate.

Oxide of Silver consists of one equivalent of silver and one of oxygen (Ag O). The union between the two elements is not strong; the silver is, therefore, reduced to the metallic state by exposure to a red heat. The oxide is insoluble in water, but soluble in weak acids; and, in the stomach, is converted into chloride. The oxide of silver is less caustic than the nitrate. Internally, it acts as a sedative in some irritative states of the mucous membranes. Dr. Garrod had found it useful in gastric disturbance, and generally in cases where the absorption of silver is desired—as in passive hæmorrhages, and in various nervous affections, such as those for which nitrate of silver is commonly given. It is said not to cause darkening of the skin; but it must be remembered, that this phenomenon occurs only when the nitrate has been taken for a considerable time, and it is difficult to imagine that the coloration will not be produced by oxide of silver also, if administered for a sufficiently long period. The dose of oxide of silver ranges from a quarter of a grain to a grain; it is best given in a simple form—*e. g.*, with crumb of bread. It becomes decomposed by certain organic substances; especially creasote, which deoxidises it.

Bael (*Bela*). This is the dried half-ripe fruit of the *Ægle Marmelos*, a plant of the natural order *Aurantiaceæ*. The fruit is described as being "roundish, about the size of a large orange, with a hard woody rind; usually imported in dried slices, or in fragments consisting of portions of the rind and adherent dried pulp and seeds. Rind about a line and a half thick, covered with a smooth pale-brown or greyish epidermis, and internally, as well as the dried pulp, brownish-orange, or cherry-red. The moistened pulp is mucilaginous." The only officinal preparation is the *Liquid Extract* (*Extractum Belæ Liquidum*), a fluid-ounce of which is equal to an ounce of the dried fruit. Bael is much used in India; and, Dr. Garrod believed, was principally introduced into this country by practitioners who had employed it abroad. Its chemical composition has not been accurately ascertained; it probably contains some astringent principle. In India, it has a high repute as a remedy in chronic diarrhœa and dysentery. Dr. Garrod had, however, known it to fail in cases where gallic acid and opium afterwards proved successful.

Belladonna. In addition to the leaves and branches, the *root* of belladonna finds a place in the British

Pharmacopœia; and *atropia* and a *liniment* are prepared from it.

The action of belladonna and its alkaloid is local; this is demonstrated by its effect in dilating the pupil of one eye when applied to it, and also by the fact that, while one-thirtieth of a grain of atropia is required to be taken internally to produce this result, the local application of so small a quantity as one-millionth of a grain is sufficient. As a topical application, belladonna is used to relieve pain. For this purpose, the tincture of the London Pharmacopœia has little or no effect; the extract is, at best, a dirty preparation; and atropia itself is very expensive. Hence a *Liniment of Belladonna* has been introduced, of which each fluid part contains the properties of a corresponding weight of the root. Belladonna liniment has the colour of sherry wine. Dr. Garrod believed it to be a very efficacious local application. It requires to be diluted with two thousand parts of water before it loses its property of dilating the pupil; while the tincture of the London Pharmacopœia requires only two hundred parts to reduce it to the same want of strength. Hence the liniment appears to have ten times the strength of the tincture.

Sulphate of Atropia has been omitted; because it is not required, and is moreover an unsatisfactory preparation. The alkaloid *Atropia* is introduced; and a solution is directed to be made from it, of which each ounce contains four grains. Variously diluted, it may be used in ophthalmic surgery.

Chiretta (*Chirata*). This remedy is now introduced for the first time, although it has been for some time used in medicine. The entire plant is directed to be used; and formulæ are given for preparing an infusion and a tincture. It belongs to the natural order *Gentianaceæ*, and has some resemblance in its properties to gentian. It contains a bitter principle, but very little volatile oil; hence it is a more simply intense bitter than gentian. In India, it takes the place of the last named medicine; and is an useful tonic in cases of atonic dyspepsia. The dose of the tincture is from half a drachm to a drachm; of the infusion, from half an ounce to an ounce or an ounce and a half.

Cocculus Indicus. The dried fruit of the *Anamirta Cocculus*, a plant of the natural order *Menispermaceæ*, is introduced. The seed contains a peculiar non-nitrogenous body—picrotoxine; and the shell an alkaloid—menispermine. The only preparation directed to be made from the cocculus is an *Ointment*.

Cocculus evidently exerts its action on some part of the nervous system; animals poisoned by it lose the control over their movements. Its effects on men have been but little studied; although it is very probable that in many instances it is taken unconsciously. When introduced into malt liquors, it appears to produce an unwillingness to move. It has probably never been used in medicine otherwise than externally, in some skin-diseases or for the removal of pediculi. Care must be taken never to apply it to an abraded surface. Considering the penalties to which brewers are liable for using and druggists for selling it, Dr. Garrod thought it a matter of regret that it has found a place in the Pharmacopœia, and thereby obtained a certain amount of legal sanction for its sale. The action of picrotoxine, however, should be investigated, as it may be found to have properties which may render it useful in practice.

Indian Hemp. Although many years in use as a medicine, *Cannabis Indica* is now for the first time made officinal in England. The part directed to be used is "the flowering tops of the female plant from which the resin has not been removed." Indian hemp owes its power to the resinous exudation. Regarding the composition of the resin, nothing definite is known. Two preparations are ordered; an alcoholic *Extract*, and a *Tincture*, made by dissolving an ounce of the extract in a pint of rectified spirit. Although Indian hemp has been several years used in medicine, a thorough investigation of its physiological action is still required. In large doses it causes delirium; in smaller, it exalts the mental faculties, and for this purpose is used in Eastern countries in the form of haschisch. Hence it somewhat resembles, in its properties, certain solanaceous plants, as belladonna; but it does not produce dilatation of the pupil. Its action as an anodyne is well established; in rather large doses, it gives rise to a sense of numbness. It is also useful as an antispasmodic. Dr. Garrod has never found any soporific action to be directly produced by it; when sleep has followed its use, this has probably been attributable to the relief of pain. It differs from opium in several respects; especially in not producing the constipation, loss of appetite, etc., which attend the use of that medicine.

The dose of the extract of Indian hemp is from a quarter of a grain to a grain or more; that of the tincture from five to twenty minims or upwards. The resin is apt to be precipitated when mixed with water; but is held in solution by the addition of an alkali.

Digitalin (*Digitalinum*). This is a greyish-white powder, having the appearance of small scales. It is soluble in acids, but does not neutralise them; it appears to have one hundred times the strength of the leaf of digitalis. Dr. Garrod had had no experience in its use; but from its want of power of crystallisation, the consequent readiness with which it can be adulterated, and the difficulty with which adulterations of it can be detected, and from its great power, he thought it might have been dispensed with. The dose, for its safe administration, is from one-fiftieth of a grain upwards; but, for the reasons already assigned, its strength is likely to be uncertain.

Digitalis, though a potent remedy, may be given in much larger doses than is generally supposed. Dr. Garrod said that he remembered that, when he commenced the study of medicine, it used to be given by some in considerable doses; and in recent years this practice has been revived, and digitalis has been given in large quantities in delirium tremens, especially by the late Mr. Jones of Jersey. Dr. Garrod had tried it in a few cases of this disease; and had found it a very powerful and useful remedy when the malady is uncomplicated. He had also suggested to Dr. Lockhart Robertson its employment in acute

mania; and Dr. Robertson had accordingly used it, apparently with satisfactory results.

Preparations of Iron. In the London Pharmacopœia, iron in the metallic form had no place as a remedial agent. Now, however, it is introduced as a medicine, in the form of *Reduced Iron* (*Ferrum Redactum*)—the *fer réduit* of the French. It consists of iron reduced to the metallic state from the oxide, by means of hydrogen gas. When properly prepared, it has a somewhat steel-grey colour; is attracted by the magnet; scintillates when thrown into the flame of a candle; and is soluble in very weak acid solutions. It always contains a variable quantity of magnetic oxide of iron. It is liable to become oxidised by exposure to the air. Dr. Garrod had had considerable experience in the use of this remedy. It is very easily dissolved in the stomach, and absorbed; and produces little or no local influence, especially when taken with food. From many observations, and comparison of its effects with those of the other preparations of iron, he had come to the conclusion that it is a most potent remedy, and comparatively most useful in all purely anæmic states. He would, however, prefer some of the other preparations where astringents are required; as in passive hæmorrhages, and in relaxed conditions of the system. One grain is equal to five grains of the citrate of quinine and iron; so that a dose of from one grain taken twice or thrice daily should produce an effect on the blood. He always gives it with meals; it is then scarcely detected by the patient. The reduced metallic form of iron is most desirable when the long continued use of this metal is indicated.

Two new oxides of iron have been introduced; the *Magnetic Oxide* (*Ferri Oxidum Magneticum*), and the *Hydrated Peroxide* (*Ferri Peroxidum Hydratum*).

The *Magnetic Oxide* does not consist of the scales commonly known by that name, but is a precipitated oxide. It is in a favourable state for solution and absorption. In some respects it resembles the reduced iron; but does not scintillate in flame, and is somewhat less soluble in weak acid solutions. Dr. Garrod could not speak of its efficacy so confidently as of the reduced iron; and as far as his observations had extended, the result was rather in favour of the latter medicine. It has the name of oxide; but there are good reasons for believing it to be a salt, composed of iron in two different states of oxidation, one being basic to the other—a ferrate of iron.

Hydrated Oxide of Iron has been recommended as an antidote in poisoning by arsenic.

Iodide of Iron. A *Pill* and a *Syrup* of this are directed to be made. This salt is liable to become oxidised; and it may be questioned whether its formation into pills protects it from this.

Phosphate of Iron has long been in use as a medicine, but of late has been somewhat neglected. It has a blue colour, from partial oxidation. A *Syrup* of this is ordered to be made, one fluid-drachm of which contains a grain of phosphate of iron. Dr. Garrod knew no clinical facts showing the superiority of this salt of iron; but it has been thought to be possibly useful, as it is probable that some of the iron of the blood exists in the form of phosphate. Some years ago, Dr. Garrod used to give with good effect, in anæmic cases, a compound iron mixture (Griffith's mixture) in which phosphate of iron was substituted for the sulphate.

Three *Persalts of Iron* are found in the British Pharmacopœia.

Of the *Persulphate of Iron*, a solution is placed in the Appendix; it is used in making several of the preparations of the metal.

Perchloride of Iron is ordered in the form of solution (*Liquor Ferri Perchloridi*), of which each ounce contains nearly 125 grains of the salt, so that it differs little in strength from the tincture of sesquichloride of iron of the London Pharmacopœia. It has the advantage, however, of being uniform in strength and free from acidity.

Pernitrate of Iron is also ordered in the form of solution (*Liquor Ferri Pernitratis*), a clear reddish-brown liquid. It has been used as a powerful astringent.

The British Pharmacopœia is rich in salts of iron. The *Ammonio-chloride* of the London Pharmacopœia, and its tincture, have been omitted. In addition to the ordinary *Sulphate*, a dried form (*Ferri Sulphas Exsiccata*) has been introduced, four grains and a half of which are equal to seven grains of the crystallised salt. The Pharmacopœia also contains a *Granulated Sulphate* (*Ferri Sulphas Granulata*). This is less easily oxidised than the ordinary sulphate; but has no special superiority as a remedy.

Dr. Garrod here took the opportunity of remarking, that it might be asked why *Manganese* has not been introduced into the Pharmacopœia. A few years ago, the sulphate, in doses varying from one to two drachms, was proposed as a purgative and cholagogue; but its efficacy in this respect is doubtful. Some of the salts of manganese have also been used in France and in this country as tonics in anæmia, it being supposed that this metal forms a constituent part of the blood, and that certain cases of anæmia are dependent on a deficiency of it. About five years ago, Dr. Garrod tried manganese in several well marked cases of anæmia and amenorrhœa. The patients were first kept in hospital for a sufficient time to observe the influence of improved diet; then, if no marked improvement took place, sulphate of manganese was given in five-grain doses, or was substituted for sulphate of iron in Griffith's mixture; in some cases, carbonate of manganese was given. In no instance was any effect produced by the manganese; while, on its discontinuance, speedy restoration to health took place under the use of iron. It is worthy of note that, in France, manganese was at first given alone; but afterwards double salts of this metal and iron were used.

Glycerine is made officinal in the British Pharmacopœia. After describing its characters and properties, Dr. Garrod observed that it has been proposed as a substitute for cod-liver oil in phthisical cases. As long ago as 1848, he gave it in this disease; it certainly allayed irritation and cough; but could not be regarded as a substitute for the oil. More lately, he

had made more careful observations. A patient, for instance, was selected in whom the tubercular disease was in course of arrest. Cod-liver oil was given, with the effect of increasing the weight; on the discontinuance of the oil, the weight remained stationary. Glycerine produced no increase; but the re-administration of cod-liver oil was again attended by the same effect on the patient's weight. Hence Dr. Garrod considered that glycerine does not arrest the waste of tissue. Glycerine may be sometimes used for the purpose of sweetening in cases where the use of sugar is objectionable.

Purified Ox-Bile (*Fel Bovinum Purificatum*) is made officinal. It consists of ox-bile prepared so as to remove the albuminous and mucous substances. Ox-bile is supposed to be of value in cases where bile is deficient, and to aid intestinal digestion. It is sometimes prepared so as to be given in capsules. As yet, Dr. Garrod is not a convert to the use of the digestive products of animals in the treatment of disease in the human subject.

Pepsine has not found a place in the new Pharmacopœia.

British Medical Journal.

SATURDAY, FEBRUARY 13TH, 1864.

GRATUITOUS MEDICAL SERVICES.

WE have more than once made the remark, that what we especially desire touching the subject of gratuitous medical services is free discussion. We ask in this matter for nothing so much as the public production of the statements put forward by the admirers of the system. Nothing we can say against it would, we are satisfied, so fully prove to the minds of unprejudiced persons, its absurdity and unreasonableness as the statements produced in favour of it.

It is a curious, and perhaps a significant fact, that so few defenders of the system are to be found; we mean of the kind who will come publicly forward and defend it in public. There are plenty of people who are strongly in favour of it; but then they do not pretend to give the reasons of their belief. They believe because they believe, and have never taken the trouble to inquire into the nature of their belief. It is, therefore, a pleasure to us to find anything like an opponent who has the courage to defend the thing *coram publico;* because we then know that he is, for certain, through the weakness of his defence, propagating a belief in the wrongness of the system which he would support. The necessary feebleness of his arguments in favour of gratuitous medical services will naturally convert any reasonable reader, and not improbably even himself, to a belief in the very opposite of the views which he is supporting.

We have no doubt that an article on this subject which some time since appeared in the *Medical Critic* has had an effect of this kind, for the reason suggested. We call, however, attention to the article; because, being a solemn and serious essay, we may fairly consider that it contains all that can be suggested, in the way of argument, in favour of the gratuitous system; and it is well that the profession should see what a serious writer can say in praise of it, when he applies himself solemnly to the business.

He says that there is no analogy between the giving by a medical man of his services, and the giving of bread by a baker. A medical man's skill is "a gift of God; but a baker has no gift in any like sense." "There is a difference between skill and merchandise." It is remarkable, that this curious reasoner, holding such views, did not inquire how it is that the skilled architect does not build the hospital gratis; that the clergyman with his spiritual gifts does not dispense them gratis; why, in a word, the doctor alone of all skilled professions is to be mulcted for the benefit of the poor, or rather of the rich—it being really the pockets of the rich which he saves by giving his gratuitous services.

We are next told, that it may be true the General Practitioners are robbed of their legitimate earnings by this system; but let them reconcile this to their mind, says the *Medical Critic*, in thinking of the much superior skill and knowledge of the hospital doctors over themselves, and, therefore, of the greater advantages thence accruing to the patient. But we would ask in reply, supposing (which we do not admit) that the knowledge of hospital doctors, at this day, is so very superfine in comparison with that of other medical men, why are sick men in the lower ranks of society entitled to the benefits of such an A 1 kind of knowledge, any more than they are entitled to the benefits of turtle-soup, champagne, and the other luxuries which are purchased by the wealthy sick? If there be any reality in the argument, why are not the medical wards of workhouses supplied with the superior skilled article as well as hospitals? The injustice and inapplicability of the idea is shown again by the fact, that the hard-working clergymen, lawyers, and men of the middle class, who cannot afford to pay the fees of hospital doctors, are invariably (perforce) attended to by that very class of practitioners which the writer considers inferior, and not good enough for the chimney-sweep and tailor. The parish cobbler, indeed, in this way, can obtain gratuitously the advice of the great surgeon Sir David Slashaway; whilst the parish clergyman is forced to be contented with the services of the humble Mr. Scalpel.

The next argument (if so it may be called) is a curious one enough, and, we think our readers will admit, both far-fetched and not very easily digested, nor flattering to the profession at large.

"Gratuitous services are not only a work of Christian charity, but also a reasonable tribute to the public on behalf of the profession, for those errors and shortcomings necessary to a science imperfect in itself, and often most imperfectly practised. Does not the profession, in fact, show a higher appreciation of its lofty calling, and perform more nobly its duty to itself, by offering, untarnished by greed, a ready succour, not only to the utterly impoverished, but to the victims of erring, careless, ignorant, or incompetent brethren?"

This is, indeed, refreshing; for it is an entirely novel view of the subject, at all events.

Some medical men (the argument runs) are bound to give gratuitous advice, because other medical men are careless, ignorant, and incompetent! But why not lawyers also? why not parsons? why not barristers? Why should not the bankrupt John Sillyman, who has been cleaned out by his rascally attorney, apply to the Solicitor-General for his gratuitous services to aid him in recovering his rights, on just exactly the same terms? Would not the Solicitor-General, in giving his gratuitous services, be "offering a reasonable tribute to the public on behalf of the profession for its errors and shortcomings," etc.?

There is involved in all this another great fallacy—indeed, a really humbugging pretence; viz., that medical men do these services from a high moral motive. Any medical man who indulges in gratuitous services-giving will, if he answer honestly, tell us that he gives these services solely and simply because he considers it answers his purpose to do so—because, in fact, he finds it a good money speculation. To pretend that there is at the bottom of the gift any great or noble sentiment, is downright Tartuffism. We give our services to hospitals, because we expect thereby indirectly to benefit ourselves. No better proof of the fact could be shown than this; viz., that very few hospital men, when they have attained the position in private practice which they desire, continue, all for the love of high moral motive, to give the hospital poor the advantages of their great and accumulated knowledge. Unless their private interests pull in an opposite direction, men cease (and very properly) to give gratuitous services when their private practice enables them to be better employed—as soon, in fact, as they can secure the latter without dispensing the other.

But here, as ever, the main argument of the case is eluded. We will admit that it is a very nice thing for the tinker to be patched up and renewed by the famous hospital physician, and we don't object to the thing; only what we want to know is, on the ordinary principle of division of labour, why should not other members of society assist in curing the tinker? Why should the whole burden of the business fall on the famous physician? The physician pays his guinea a year to the hospital, and so does the vicar, and the alderman, and the wine-merchant, and the brewer, and other decent and rich members of society; but why, in addition, is the physician to give his services to the tinker? Why should not these other members of society bear an *equal* hand in the business?

This writer says, again, "Is it not better that the patient should have his sight restored *gratis* by A, than that he should be confirmed in blindness by paying half-crowns to B?" No doubt it is. But what on earth has this to do with gratuitous services? Surely A could operate just as well on the patient if he were properly paid for his work, as he could *gratis*. We want to know why he should not be paid. Indeed, the main argument in the article referred to is founded on the very flattering (?) assumption that half the profession are totally ignorant of their business, and that gratuitous medical services given by the other half are a kind of expiatory atonement for the mischief and ignorance of their medical brethren! So that, in fact, the main argument adduced by this solemn writer in favour of gratuitous medical services is founded upon a general indictment of ignorance laid against the body of the profession. "It is a noble work," he says, "to afford a refuge to the poor, where, without being mulcted in purse, they can be secured in very great measure against both the errors of haste and the errors of ignorance!"

The payment of medical men, we are told, is impossible, because it would at once cause the closing of every struggling institution. This is an assertion founded on the opinion of the writer, and must pass for what it is worth. We can only say that we should rejoice in the closing of all such institutions, struggling or otherwise, which do not pay their medical men. The closing of many a metropolitan institution of this kind, carried on as they now are, would be a boon and blessing to society.* But, if payment to hospital medical officers be not the proper thing, why do the medical officers of Guy's, of St. Thomas's, and of Bartholomew's, take payment? And, if payment is right to one set of hospital medical officers, why not to the rest of them?

Such are the arguments adduced by a serious writer in a solemn journal in favour of the gratuitous system. Are we wrong in saying, how completely condemned a system must be which has no better foundations to rest upon than such arguments as these?

WHAT IS INSANITY?

The case of Townley cannot fail to have suggested to the minds of many of our readers the immense difficulty there is, in certain cases, in deciding whether or not a man is a lunatic. We trust the learned men of law will learn a lesson of humility from the incident, and in future treat what they are pleased to call the vagaries of mad doctors and other doctors with more attention and less disrespect. That which seems

* See a paper on the Abuses of London Hospitals, etc., by Dr. Markham, in the volume of the Social Science *Transactions* for 1862.

so easy of decision to the eye of the law is by this case proved to be a matter of the profoundest difficulty. Even now that the man is declared of sound mind, many will naturally be prepared to hear that he at any moment may have become an incurable lunatic.

The lesson, indeed, to be learnt from this case, is a very instructive one. After all, every reasonable man must admit that great doubts still hang over the mental condition of this George Townley; and that, if still other four gentlemen learned in lunacy were to examine him, they might probably reverse the last conclusion arrived at concerning his mental condition. We must not forget, in judging of the man, that the evidence of his unsoundness, judged of by learned doctors, is as great as the evidence of his soundness of mind; and it is only fair that this should be still distinctly borne in mind. On the one side, we have a strong array of men of note and honour who affirm the man to be of *unsound* mind, whatever that term may mean. We have Dr. Forbes Winslow, Mr. Gisborne, Dr. Goode, Mr. Harwood, and, besides these gentlemen, three solemn and impartial Commissioners in Lunacy—supposed experts—who all follow in the same groove—who all affirm that the man is of unsound mind. *Per contra*, on the other side, we have Drs. Bucknill, Hood, Helps, and Meyer, who affirm the man to be of sound mind. Who is to reconcile these startling discrepancies? No one can doubt that science and the highest knowledge have been brought to bear upon the case; and if, therefore, the conclusion be as unsatisfactory as it manifestly is, are we not driven to confess that lunacy, in its less marked phases, is a thing about which the wisest should hesitate in expressing an unhesitating opinion? To us, this case seems unanswerably to demonstrate the propriety of the suggestion which we have more than once made in these pages; viz., that the fallible judgment of humanity should hesitate and tremble before it rushes to the sentence which condemns a possibly lunatic criminal to death. Error, if error it be, on the side of mercy, seems to us, in cases of this kind, to be simply an act to which humanity, enlightened by science, absolutely calls upon justice to submit.

In reference to the late debate in the House of Commons in the case of Townley, it is well worthy of notice that, notwithstanding the many earnest declamations made in favour of rigidly carrying out the law of the land, not a single member was found who had the courage to assert that capital punishment was either righteous or desirable. The fact is most significant, that at a moment when a violent press and many men of high position have been earnestly calling upon Sir G. Grey to do justice according to law, no voice has been raised in the House of Commons in favour of the punishment of hanging. Is not this silent fact a complete and eloquent condemnation of the punishment? If the punishment be right and proper, why have not men the courage boldly to say so in the face of the country? Even Mr. Bright's eloquent and touching appeal to his hearers in favour of the abolition of capital punishment, brought forward no advocate in its defence. We must rejoice at this, and cannot but look upon the incident as the shadow of the coming event—the actual abolition of the punishment.

It is impossible to suppose that a Lord Chancellor of England can be guilty of a legal error; and yet, unless Sir G. Grey has misinterpreted, it seems to us that our present Lord Chancellor has made such an error. Sir G. Grey, in the debate on Townley's case, speaking of the certificate signed by Mr. Harwood, said:

"Some time after the certificate in Townley's case was signed, I was informed that Mr. Harwood was not a surgeon registered under the Act, and I was asked whether the certificate was legal. There is nothing to suggest a doubt on the face of the document; but when I was told that he was not a surgeon registered under the Act, I thought it my duty to call for an explanation of it. I received a letter from him, in which he distinctly admitted that he was not registered. In fact, Mr. Harwood is a general practitioner, who has for forty-three years acted as a surgeon, who is well known to every one in the locality, and who has frequently signed certificates relating to insanity in connexion with the union of which he is medical officer. No question arose in this case upon the point. But I communicated with the Lord Chancellor, and the Lord Chancellor gave me a clear and unqualified opinion that Mr. Harwood was a surgeon within the meaning of the Act. I think it right, in the amendments which are now proposed, to provide that the physicians or surgeons called in aid by the visiting justices shall be registered as such under the Medical Registration Act."

The Lord Chancellor declares that the certificate of Mr. Harwood was good, according to the Medical Act. Now, how is this declaration of his to be squared with the following (the thirty-seventh), and, as we read it, flatly contradicting clause of the Medical Act?

"After the first day of January, 1859, no certificate required by an Act now in force, or that may hereafter be passed, from any physician, surgeon, licentiate in medicine and surgery, or other medical practitioner, shall be valid, unless the person signing the same be registered under this Act."

It is difficult to understand, moreover, why Sir G. Grey need make amendment in his new Act to provide that physicians or surgeons, called in aid by the visiting justices to give certificates, shall be registered under the Medical Act. Is it not clear as the day that, by the above clause of the Medical Act, they must be so registered, in order to give certificates? Mistakes appear to grow like mushrooms out of this Townley case? Or is there another leakage discovered in our famous Medical Act?

Every medical man has, doubtless, a right to prescribe what drugs he chooses, and every druggist has equally a right to keep what drugs he likes in his shop. Consequently, if prescribers choose to run on in the old style—in the *London Pharmacopœia* way—we suppose there is nothing to prevent them. We cannot doubt but that very many members of the profession will object to go to school a second time, and will, therefore, to a considerable extent, keep to their old-fashioned drugs and ways of prescribing; and it seems to us reasonable enough that they should be left to do so. It is impossible to believe that the *British Pharmacopœia* is perfection. Criticism will find plenty of loose joints in its construction we may be sure. It is only fair, therefore, to our patients and to the druggists. whilst prescribers are passing through this transition state—in fact, whilst they are learning their new *Pharmacopœia* A B C—that the druggists should have no kind of doubt as to which *Pharmacopœia* articles they are to employ in making up prescriptions. All difficulty under this head may be readily avoided if the prescriber will write over his prescription, *Old Pharm.*, or *New Pharm.*, or *London Pharm.*, or *Brit. Pharm.* Attention to this small particular may prevent the commission of some very considerable errors.

The Master of the Rolls has decided the first step in the celebrated case of Lord Henry Seymour's bequest to the "*Hospices*" of Paris and London; viz., What is *London?* The word "London" is to be construed in the popular meaning, and not simply as the "City of London." By this decision, all the London hospitals will be admitted as claimants to participate in the legacy, including the Hospital for Consumption at Brompton; at least, such as were in being when the will was made in 1856. The next step will be to decide what is the meaning of the word "*Hospice*"; and whether the London hospitals answer to this word. The French courts have decided that the Paris hospitals do so. When the bequest, or as much of it as may be left after all these legal proceedings are finished, will reach any of the hospitals, it is difficult to say. Each hospital will now have to bring its individual claims before the Rolls Court.

The Government has, we learn, taken a first step towards throwing its patronage over prostitution. If we are rightly informed, some fifteen beds in the Lock Hospital of London have been let to governmental authorities, for the accommodation of venereal diseased women of Portsmouth. Whether the Government pays the passage of these women to and from London, and demands from the hospital authorities certificates of the sound condition of these women—clean bills of health—we do not know. We need hardly say that, if it be right that accommodation be provided for the diseased prostitutes of Portsmouth, it must be equally right that it should be provided for the diseased women of all other towns where large bodies of soldiers are congregated. But we shall doubtless hear more of this matter. This is not a matter in which the Government can stop at a halfway house.

The Medical Council having determined that the Licentiates of Apothecaries in Ireland are entitled when registered to practise medicine in Great Britain and Ireland, the Secretary of State for War has resolved that in future all such registered Licentiates are entitled, as apothecaries, "to offer themselves as candidates for the employment of the Army Medical Service."

The profession will rejoice to hear that the charge brought against Dr. Millett of Hayle is utterly without foundation. The result of the inquiry shows clearly enough that the charge is one which ought never to have been made. Ignorance, or something worse, as it is suggested, must be the explanation of the fact. It is reported that Dr. Millett is about to take proceedings against his prosecutor; so that we may very probably hear further as to what were the motives which instigated this inquiry. That Dr. Millett should not have been admitted to bail during the process was an act of cruelty; for which, however, we cannot blame the magistrates. In face of the statements made to them, they had probably no choice in the matter. Happily Dr. Taylor's evidence neutralised all the false rumours and ignorant evidence given at the inquiry. Twelve or sixteen ounces of fluid were found in the brain of the man after death; no trace of poison was found in the body; and no symptom of any ordinary poisoning noted before his death. He died rapidly, after partaking of a hearty meal. How, in the face of facts like these, the charge of poisoning could have been pressed against Dr. Millett, is incomprehensible on any ordinary medical grounds. We will only draw one moral from the tale. It is one to which we have, on more than one occasion, adverted to; viz., the absolute necessity of the appointment of a public prosecutor, with his necessary coadjutors, to deal with cases of this kind. It is unjust to the deceased, it is most unjust to the living, that any but properly skilled persons should be allowed to meddle with the examination of the bodies of persons whose mode of death is the object of judicial inquiry. We all know that not one medical man in twenty is capable of making such an examination. To conduct a *post mortem* inquiry of the kind, requires that the operator should have had large and skilled experience in the conducting of such operations. In every district of the country such a skilled operator should be appointed, whose business it would be to make the examinations in all

such cases. Without a large experience in the investigation of pathological conditions of the body, no man can be skilled enough to undertake such serious inquiries, in which the life and honour of a man may be trembling in the balance; and the public ought to have the satisfaction of knowing that no man meddles with such cases except he who is possessed of the required skill.

At a late meeting of the members of the Senate of Cambridge University, Dr. Paget, as we read, "objected to theological students being exempted from a special examination in moral or natural science." We apprehend that Dr. Paget would do infinite service to society if he could enforce on all theological students the study of natural science. What is it, one cannot help but ask, except a want of such knowledge, which so very frequently makes members of the clerical profession profound believers in, and practisers of, the multifarious quackeries of the day? A study of natural science would be the best antidote against this unfortunate tendency on the part of so many members of the Church militant.

M. Tripier recommends the use of brandy in phthisis, to fulfil a particular indication. The idea was suggested by an experiment of Claude Bernard's, who noted that, when dilute alcohol was injected into the stomach of dogs at the beginning of digestion, the digestion was arrested. M. Tripier thence concluded that the fact might be accounted for on the hypothesis that local anæsthesia prevented the reflex action of secretion; and therefore argued, that the ingestion of alcoholic drinks, taken in quantity sufficiently weak to allow the local effect to predominate, would prevent all motor reflex manifestations connected with the secretion of gastric juice. For example, by giving brandy immediately after a meal, so as to render the stomach insensible, he concluded that he might arrest the attacks of cough, followed by vomiting, which are so often observed in the phthisical, and which are manifestly phenomena of the reflex character here spoken of. The result, he says, fully corroborated his anticipations. "Thus I believe," says M. Tripier, "that brandy, so far from being injurious in phthisis, when taken in the manner enjoined, diminishes both the cough and the sweating.

The *Gazette Méd. de l'Algérie* describes a case of hydrophobia in a mule which had been bitten by a dog.

The weather-wise M. Matthieu is now busy in justifying and explaining his late prophetic failures.

"The precocious abuse of specialities is injurious to the scientific mind. The men who have raised to the highest repute the name of the Hôpital de l'Antiquaille were men who were distinguished surgeons before they became specialists."

The Hospital Medical Society of Paris has founded a prize of 1,000 *francs*—the Phillips prize—to be adjudged every four years. The first subject proposed with this intention is this: "To determine, by Positive Facts, the Prophylaxis and Curability of Tubercular Meningitis."

A second case of ovariotomy, performed at Lyons by M. Desgranges, has proved fatal. The woman was suffering from organic disease of the heart and œdema when operated upon.

Laplace held the natural sciences in disdain, but he was a great friend of Berthollet. They held frequent discussions, Berthollet never being able to understand a joke, and Laplace always assuming himself to be right. "What I have told you," said Laplace, "is mathematical." "Oh!" replied Berthollet; "and what I tell you is a physical fact, which is far better than your mathematics."

"In England," says *L'Union Médicale*, "every subject, great and little, is discussed in the press, every one pressing his opinion on one side or the other. Hence it may be readily understood how such a stir has been made there concerning the important question of iridectomy. There is a regular row, a tumult excited. Hurrah! for Syme, says one; Hurrah! for Bowman, says another; and then off go all the journals shouting out, as if at a public meeting, on the side of their favourite. This is the way science is worked!"

The *Wiener Medizin Wochenschr.* tells us that the cattle-disease is increasing greatly in Vienna.

Dr. Maximien Rey has lately published a work on *The Degeneration of the Human Species and its Regeneration.* If his conclusions be true, we are in a sad case. "In language wise and plaintive," he says, "we are constantly told of the disappearance of art, and of the relaxation of morals. And now I, with still sadder tone, announce, that the physical condition of man is degenerating; that the human family is falling away; that it is failing in bodily health and strength."

M. Chevallier recommends youthful collectors of postage-stamps to carefully avoid putting them into their mouths, in order to avoid the chance of being affected by unhealthy saliva.

In a note to the Academy of Sciences, MM. Péchollier and Saintpierre give some interesting facts respecting the effects of the fabrication of verdigris on the health of the workmen. This substance is made on a large scale in Herault; and it would appear that this poison, absorbed in small quantities and for a long time, is borne without injury to the system. Fowls, etc., fed on the raisin-husks used in the manufacture, thrive well. The workmen, who are constantly in contact with the verdigris, enjoy excellent health, although the presence of copper in their urine surely indicates its absorption. No case of colic has been observed.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, Feb. 16, 4 P.M.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thursday, Feb. 18, 7 P.M.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 26th, 1864.

W. Fergusson, Esq., Vice-President, in the Chair.

CLINICAL OBSERVATIONS ILLUSTRATING THE EFFECTS OF IMPLICATION OF THE PNEUMOGASTRIC NERVE IN ANEURISMAL TUMOURS AND MORBID GROWTHS. BY S. O. HABERSHON, M.D.

After referring to the complex distribution of the pneumogastric nerve, and to the important symptoms of disease produced by the implication of its branches, the author proceeded to describe several cases of thoracic aneurism in which the branches of the recurrent laryngeal nerve, or the trunk of the pneumogastric, were involved.

The first case was that of a man, aged 39, who had been engaged in laborious work at Chatham and Woolwich dockyards. Two months before death he began to suffer from hoarseness, and the laryngeal symptoms were more marked than any other. There were paroxysms of urgent dyspnœa, and slight dysphagia. Five days before death hæmorrhage from rupture into the trachea commenced; and on the morning of his death the bleeding suddenly became profuse, and was quickly fatal. Dilatation of the aorta, double aneurism or the arteria innominata, and perforation into the trachea, were found. There was pressure upon the commencement of the recurrent nerve, and commencing degeneration of the muscular fibre of the laryngeal muscles on the same side. As to the physical signs, dulness and double *bruit* were produced immediately over the first bone of the sternum, but there was no *bruit* over the aortic valves. No pain had been complained of. The value of the laryngoscope had been shown in demonstrating that no disease of the larynx existed, slight œdema of the mucous membrane only being present.

The second case was that of a sailor, aged 35, who had apoplexy, with aphonia and symptoms resembling phthisis; aneurism was, however, suspected. The recurrent and the pneumogastric nerves were both compressed; the muscles of the larynx were on one side pale and wasted, and the lung on the same side was in a state of asthenic pneumonia. The thoracic duct had also apparently been compressed.

In the third instance recorded, the symptoms of cardiac disease obscured those of aneurism. There had been pericarditis and endocarditis, and fibroid degeneration of the muscular fibre of the left ventricle existed. The patient was a groom, aged 45, and two months before death symptoms of catarrh and bronchitis came on; the heart's action was irregular and tumultuous; the pulse very feeble, but without *bruit*. Afterwards a triple sound was produced below the nipple, and with renewed bronchitis there were signs of pleuropneumonia of the lower lobe of the right lung. No pain and no dysphagia were complained of, but paroxysms of urgent dyspnœa, with extreme faintness; in one of these attacks he died. In addition to the degeneration of the heart, an aneurism was found at the commencement of the transverse arch; and the pneumogastric, after giving off its recurrent branch, passed directly over the sac, and the compression of this nerve had determined the pneumonic consolidation of the lower lobe of the right lung.

In the fourth case, the recurrent laryngeal nerve was compressed, and had produced paroxysms of urgent dyspnœa, but the dyspnœa was in a great measure due to direct pressure upon the trachea. There had been feebleness of the voice, with dysphagia. Pain was of an agonising character, but also paroxysmal, and it was apparently due to direct pressure on the nerves. The aneurism of the aorta was situated immediately beneath the subclavian, and had ultimately perforated the trachea; but rapid effusion of blood had been prevented by layers of fibrine, and it was probable that the first oozing of blood took place nine months before death. No *bruit* had been produced, but a ringing second sound; the heart was healthy.

The author stated that pressure on the pneumogastric nerve and its branches by aneurismal tumours in the chest led, first, to paroxysmal and spasmodic contraction of the muscles of the larynx; secondly, to diminished muscular power, and to paralysis and wasting of the laryngeal muscles; and thirdly, to pulmonary congestion and consolidation; but that gastric symptoms, such as were found in peripheral pulmonary irritation of incipient phthisis, were not observed in thoracic aneurism. The effect of changed nervous supply of the œsophagus was briefly referred to; spasmodic contraction, and possibly also ulceration, taking place without direct pressure; the author stating that spasmodic contraction from this cause aggravated the effects of the direct pressure of tumours generally. It was likewise mentioned that occasionally no dysphagia existed, because the whole of the œsophagus opposed to the tumour was pushed aside *en massse*.

In conclusion, the author detailed an instance of disease affecting the suprarenal capsule, with bronzed skin; and exhibited a drawing from his dissection of a branch of the pneumogastric to the capsule. The irritability of the stomach often present in these cases was referred to this connection. A dissection showing the larger branches of the semilunar ganglia, and the manner in which some of these branches were involved in the diseased capsules, was also exhibited.

HÆMATURIA OF THE CAPE OF GOOD HOPE. BY JOHN HARLEY, M.D., F.L.S.

In the beginning of October last, a gentleman, resident in the Cape, consulted the author about a slight hæmaturia which he had had for some years. After micturition a little blood, never exceeding a teaspoonful, or some dark "veins," appeared with the last half ounce of urine. The urine itself was never bloody. Sometimes the "veins" would block up the urethra, and cause obstruction for a few minutes. He had an occasional twinge of smart pain in the loins. These were all the symptoms which ever appeared in connection with the urinary apparatus. He said great numbers of people of both sexes were affected in precisely the same way in certain parts of the Cape. While awaiting a sample of his urine, Dr. Harley made inquiries amongst his Cape friends and acquaintances, and as the result corroborated his patient's statements, he was now satisfied of the existence of endemic hæmaturia in Uitenhage and Port Elizabeth, and it remained for him to ascertain the cause. In the various samples of urine sent to him

by his patient, he invariably detected the eggs of an entozoon, and in one specimen he had the good fortune to discover the perfect embryo after its escape from the eggshell, under the form of a minute ciliated animalcule. From its anatomical characters and developmental changes, he was led to refer the parasite to the Trematole class of worms, and to the family Distomum. Of the five species of this genus which inhabit man, it had no relation with three. Distomum heterophyes presented some points of resemblance—viz., in the size and conformation of the alimentary canal, if he (Dr. Harley) might be allowed to compare it with an organ he met with in one sample of his own, and which he supposed to be the intestinal canal of the adult parasite. But the animal which it seemed to most nearly resemble, in the outward form of the eggs as well as in the symptoms of the disease it produces, was the Distomum hæmatobium. This parasite, according to Bilharz and Griesmyk, was very common in Egypt, and inhabited all parts of the urinary apparatus. But since the parts he had described differed in several respects from the corresponding parts of the hæmatobium, and since, from want of recorded information respecting the corresponding parts of D. heterophyes, he could not compare them with these, he was obliged to comprehend them under a new species, which he would call D. capense. Having finished his observations of this case, he was strongly persuaded that the hæmaturia of the Cape was due to the parasite, the early stage of whose development he had been able to observe; but still, as its presence in a single case might be nothing more than a coincidence, he felt that more extended observations were needed to prove that this was the constant cause of the local disease in question. With singular good fortune he had the pleasure of an introduction to Mr. Dunstroville, surgeon to the Port Elizabeth Infirmay, and who, having practised for twenty-seven years in the Cape of Good Hope—which was one of the two places in which he (Dr. Harley) found the hæmaturia to be endemic—was quite familiar with the disease, the cause of which, however, from want of leisure and means of observation, had never been ascertained. Mr. Dunstroville's two sons, in common with most other young men, suffered from the disease, but considered themselves to be now free from it. At the author's request, Mr. Dunstroville kindly supplied him with samples of their urine, and he (Dr. Harley) was at once enabled to demonstrate to Mr. Dunstroville the existence of the characteristic eggs of the parasite in question in the secretion from both. Having thus demonstrated the existence of the same parasite in three individuals suffering or having suffered from the hæmaturia endemic in some parts of the Cape, Dr. Harley concluded that the animal was the constant cause of the disease.

LIVERPOOL MEDICAL INSTITUTION.

JANUARY 7TH, 1864.

L. E. DESMOND, M.D., in the Chair.

Severe Wound of the Skull. Mr. MANIFOLD shewed a patient of his from the Northern Hospital, who was admitted with a wound between four and five inches long, extending from the inner angle of the orbit in an oblique direction upwards and outwards. The bone was completely cut through, and the membranes were also divided; there was no escape of brain-matter. He had been struck by another man with an axe; and, when admitted, was in a stupefied state, partly from intoxication. One or two small fragments of bone were removed from the frontal sinus, and the wound was dressed with two sutures and a pad of wet lint. No bad symptoms whatever came on; and the pad of lint was not removed for a week. The wound is now healed, and a deep depression in the bone can be felt. Mr. Manifold spoke of the use of perfect rest and quiet in these cases.

Hydrocephalic Fœtus. Dr. BARRETT shewed a specimen which he had delivered at its full time by perforating the occiput. When he was called to the case, the woman had already been sixteen hours in strong labour, with a midwife in attendance. The feet and body were in the world. With great difficulty, he managed to feel the head above the brim, and punctured it with the craniotomy-scissors. A very large quantity of fluid escaped, and the head easily passed out. The woman was young and healthy; and this was her fourth child. She had done quite well since.

Three Cases of Ovariotomy. Dr. GRIMSDALE related three cases in which he had recently performed this operation, and in all with a favourable result.

CASE I. A married woman, aged 35, first came under his care on January 23rd, 1863, recommended by his friend Dr. Cavanagh. She had probably been the subject of ovarian disease for upwards of two years. She had been married ten years, and had had six children, of whom the youngest was now sixteen months old. When about four months pregnant with her last child, she first noticed herself much larger than she should have been for the time. She was attended in her confinement by a midwife. A medical man attended her four days afterwards, and ordered four leeches to her right side, to relieve a severe pain which she had; and he told her there was fluid in the abdomen. She kept her bed six weeks; and when she got up, she was, she said, as large as a woman generally is at the end of her time. Dr. Grimsdale found a large uniformly fluctuating abdominal tumour, evidently ovarian. Her general health was tolerably good; she was thin, and considered herself at the time losing flesh fast; she complained chiefly of the weight of the tumour, and of her decreasing strength. Her menstruation was quite regular. The abdominal parietes were thin, but not very tense; and the superficial veins were much enlarged. No solid masses could be anywhere felt, but frictional fremitus was felt on the left side rather below the level of the umbilicus, and here and there there was evidence of adhesion over the anterior surface of the tumour. On vaginal examination, the uterus was found moveable; its os open, the anterior lip enlarged; and in front of it there was a solid mass, probably the anteverted fundus. The sound did not pass readily; and he therefore desisted from the attempt to pass it. On March 20th, she was increasing in size. In the middle of June, the circumference at the umbilicus was fifty-one inches; from the scrobiculus cordis to the pubes the distance was twenty-nine inches. As she was now very thin and weak, and complained much of the weight, and also suffered much from the distension, Dr. Grimsdale tapped her at the Lying-in Hospital, and removed sixty-three pints of a thick portery fluid. After tapping, not a trace of solid matter could be felt in the situation of the diseased ovary. She recovered well; but the cyst gradually re-filled, and she became most anxious to have the tumour removed. The chest and the urine were examined.

On September 2nd, 1863, Dr. Grimsdale operated. The patient was first placed under chloroform, and the pulse found to be 90, before operation. After making an incision about four or five inches in length through the abdominal parietes, and exposing the tumour, it was found in many places, especially on the left side, adherent to the parietal peritoneum; but the adhesions were easily separated by the hand. The sac was now opened with the large trocar, the

cyst-wall being well drawn up beyond the points of the rake. About forty pints of portery fluid were drawn out, and the sac was readily enough brought through the incision. The peduncle was now seen to be broad and somewhat shorter than was desirable; there were also many small cysts at the base of the large cyst. There was no adherent omentum; and the bowels were scarcely seen during the operation. The opposite ovary was healthy. The clamp was applied as far from the uterus as possible, and allowed to rest at the lower end of the wound, the cyst being cut away. The wound was closed by four silver wire-sutures, carried through the abdominal parietes, and including the peritoneum. As the clamp lay externally, although the peduncle was full short, there did not seem to be any great traction upon it. A few superficial wire-sutures, strips of plaister, a layer of cotton wool, and a bandage, completed the dressing, and the patient was removed to bed.

At 11 P.M., she had been once sick. She made no complaint of pain. The pulse was 92; the skin was very hot and moist. She was inclined to sleep.

September 3rd, 8 A.M. She had vomited three times during the night. She had no pain, and had slept quietly for a short time at several intervals. The countenance was good; the skin was moist and warm; the pulse was 72. She was ordered to take arrow-root and half an ounce of brandy every two hours. At 9 P.M., the pulse was 70, irregular, almost intermitting every ten or twelve beats. She had vomited once. The skin and tongue were moist; the countenance good; she had no pain. She was ordered to continue the brandy.

September 4th, 8.40 A.M. She had had a restless night from nausea, but no vomiting nor pain. The pulse was 66, still irregular. The wound was looking well. The stump of the peduncle was dry, and there was very little moisture round the clamp. Bags with Dr. Skinner's disinfecting powder, with bran, were placed over the clamp. At 6 P.M., she had less nausea, and no vomiting nor pain. The pulse was 60. She felt well, and slept occasionally.

September 5th, 8 A.M. She had had a bad night, from crampy pains in the abdomen. At about 1.30 A.M., twenty drops of laudanum in an enema were given, and relieved her. The pulse was 70, more regular. She took more arrow-root. There was very little moisture about the clamp, which was not much depressed. The wound was looking well. She had now no pain.

September 6th, 9.45 A.M. The patient was going on well. The upper part of the wound was healed. She now went on well. Slight œdema and redness appeared about clamp, and this was removed on September 8th; its removal was followed by a free discharge from the peduncle.

On September 10th, four wire-sutures were removed.

On September 24th, she was discharged to go to the Sea-side Institution at New Brighton for a week.

CASE II. Mary Westmore came to Dr. Grimsdale at the Lying-in Hospital on February 5th, 1863. She had been three years married and had one child the year after; she had always menstruated regularly since, but not in such quantity as before marriage; the duration of menstruation was two days, and it was not painful. Two months after her confinement, she had severe pain low down on the right side of the abdomen; and this continued more or less, with scarcely any complete intermission for about ten months. At this time (March 1862), she first noticed a swelling which had continued to increase. The pain decreased much when the swelling commenced. She had for some months been troubled with morning sickness; she thought the tumour increased every day, and it inconvenienced her very much from its size. She was very thin, but had a bright cheerful countenance. On examining the abdomen, Dr. Grimsdale found the whole cavity from the pelvis to the epigastrium, and laterally to the margin of the ribs, occupied with an irregularly shaped tumour composed evidently of separate cysts, with probably a considerable amount of solid matter; fluctuation could be made out here and there. The adhesions of the tumour to the abdominal parietes appeared general; there was some œdema below the umbilicus. On examination *per vaginam*, the vagina felt tight, as if pressed upon from all sides, especially anteriorly; but no tumour, either solid or fluid, could be felt through it; the os uteri was drawn up high, almost out of reach of the finger. Her chest was free from disease; and the urine was free from albumen. The tumour, according to her account, had hitherto grown with great rapidity; but Dr. Grimsdale watched its increase from February to November, and during that time its growth was very gradual. She was, however, weaker and thinner, and became very anxious to know if anything could be done to relieve her, and after all due consideration on her part and that of her friends, ovariotomy was decided upon. She was admitted into the Lying-in Hospital; and, after a preliminary tapping of the most prominent cyst, and rest in bed for a few days in order to lessen the œdema below the umbilicus, Dr. Grimsdale operated on December 1st, 1863, at noon. The first incision, about six inches in length, commenced one inch below the umbilicus and was carried down towards the pubes. On opening the peritoneal cavity, the anterior portion of the tumour was found generally adherent to the parietal peritoneum; the adhesion here was not very firm, and broke down with the application of a moderate degree of force. The most prominent portion of the tumour was punctured with the large trocar, but nothing escaped through it; it was therefore freely laid open, and thus emptied of its contents (a thick glairy fluid); the hand was then passed into the cavity, and with a bistoury, other cysts were successively opened from within, and their contents evacuated until the bulk of the whole mass was considerably lessened. Some very firm adhesions at the upper part of the tumour were now separated with some difficulty; and, as the mass was still too large to pass through the original incision, this was extended above the umbilicus about three or four inches, and the whole was easily drawn through. A large apron of omentum was then seen to be adherent over a considerable portion of the surface and came out with it; it was readily separated, and after being carefully looked over, and one bleeding point tied with fine silk, the whole was returned. The peduncle was thick, of fair length. The clamp was applied and retained externally as in the last case. The wound was closed by thirteen deep *silk* sutures; some superficial ones, also by silk, brought the skin more accurately into apposition along the whole length of the wound. Strips of plaister, cotton-wool, and a bandage as before completed the operation, which was a very tedious one, from first to last occupying more than an hour and a half. 7.50 P.M. The pulse was 120; the skin very perspiring; the tongue dry in the centre. She had been once sick, but had very little pain. 10.45 P.M. The pulse was 136. She had no pain; had been once sick. Her countenance was good.

December 2nd, 8 A.M. She had passed a good night, having had three hours sleep, an hour at a time. She had no pain; had been once sick. The tongue was less dry; the pulse 132; the skin moist; the urine free; the countenance very good. She felt hungry. The clamp was not much depressed; there was some slight oozing around it. Portions of the stump were removed. 2.30 P.M. The pulse was

120. She had no pain, and was taking tea, arrowroot, and barley-water.

December 3rd, 10 A.M. She had a good night, having slept four hours. The pulse was 110. She had been sick once; the tongue was clean and moist; the skin quite natural. The wound appeared healed by the first intention. 9.30 P.M. She had three hours sleep during the day; was sick once. Two deep sutures were removed.

December 4th, 10.30 A.M. She slept eight hours. The pulse was 110. She had no sickness, nor pain. Nine deep sutures were removed; each one, when withdrawn, was perfectly dry, and no moisture followed.

December 5th, 11.30 A.M. The pulse was 104. She slept five hours, and had no pain. At 9 P.M., the clamp was removed.

December 6th. She slept well. The wound was quite healed, except where the peduncle came through. The slough was not much depressed. Two sutures (one deep) were removed.

December 8th. At 6 P.M., she complained of much griping, low down on the left side; it went and came, and she was very feverish with it. She slept at about 9 P.M., and was much better afterwards. (This was the nurse's account.)

December 9th. The pulse was 132. She had no pain, and no sickness. On the left side just above the groin there was some swelling, with dulness on percussion; no tenderness. The discharge from the peduncle was free. She was ordered to have an enema of castor oil and gruel. 8 P.M. The enema acted well, and she felt much relieved. The pulse was 120. One deep suture was removed. The slough from the peduncle was nearly cleared. From this time forward she steadily improved, and was discharged well on December 28th.

CASE III. On May 8th, 1863, Dr. Grimsdale was requested by Mr. Turner to see Miss W., an unmarried lady, who had for some time been suffering from ovarian disease. She was 35 years of age, thin, somewhat pale, but apparently in fair health. She had first noticed an abdominal swelling in January; but, previously to this, for at least two months she had suffered much from pain, chiefly low down on the left side, and vomiting, especially after meals; menstruation had been throughout regular. The swelling was now increasing. On examination, Dr. Grimsdale found an abdominal tumour of no great size, globular, uniformly smooth and fluctuating, and moveable most readily from the right, attached evidently in the situation of the left ovary. The cyst itself appeared tense; and the abdominal parietes, containing much fat, were stretched tightly over it. She was altogether a small made person, so, that really a comparatively small tumour produced mechanically much discomfort. By the middle of July, she began to suffer so much from the tumour, pain and vomiting, with tympanitic distension in the epigastrium, that it was necessary to tap her; and on July 28th, Mr. Turner tapped her, and removed eleven pints of viscid straw-coloured fluid. For two or three weeks afterwards she suffered greatly from irritable stomach and spasmodic abdominal pains; after this, however, she improved for two months, and so was in capital health and spirits. During this period, and while she knew the sac was refilling, she had made up her mind to undergo the operation for removal, and declared she would have nothing else done. Accordingly, on December 2nd, 1863, six days after the cessation of the menses, Dr. Grimsdale operated at noon. An incision about four inches in length having been made through the fat and abdominal parietes, and the cyst having been enlarged, some adhesions were met with on the left side, pretty extensive, but not firm. The cyst was tapped, and about eleven pints of fluid were drawn off; and the sac was then very easily brought through the wound. The peduncle was of fair length, thick and broad, and the right ovary was healthy. The clamp was applied as before, and left on without tension. Five deep sutures through the peritoneum, and three silk superficial ones, brought the wound well together. Plaister, cotton-wool, and bandages were applied as before. For the first twenty-four hours after the operation, she was almost incessantly sick; and for eight hours there was much complaint of bearing-down forcing pain, requiring three opiate injections for its relief. The pulse was 120; the tongue moist, and raw looking. She had a good deal of pain in the intercostals and epigastrium, but no pain below after the first eight hours. Fomentations seemed to give great relief, both to the pain and to the vomiting. Ice, barley-water, champagne, brandy, oxalate of cerium, and effervescing mixture were tried in vain. By the evening of the second day, thirty-four hours after the operation, there was less sickness; the pulse was 96; the wound looking well.

December 4th, 9.30 A.M. She had had some hours' sleep; no vomiting since 1 A.M. She could take nothing but water and ice. The pulse was 86. The clamp was not at all depressed. She was still using fomentations.

December 5th. She had a bad night from flatulence and colicky pain. Four deep sutures were removed.

December 6th. One deep suture was removed. She had sickness and pain. 9 P.M. She had improved since morning; she had taken some carbonate of magnesia and bismuth three times. There had been no pain nor sickness for some hours. She had taken a little toast with tea, and had not felt so comfortable since. The tongue was red, sticky, clean on one side; the skin inclined to heat and dryness; the pulse 100. The wound appeared a little angry here and there. The discharge from the peduncle was very free.

December 7th, 9 A.M. The clamp was removed. She had a restless night from pain. The tongue was raw, angry looking; pulse 100. There was some suppuration in the track of the wound. Very little of the superficial parts were healed; the parts were looking well about the peduncle. 3 P.M. She was in much pain all over the abdomen; the pulse was 120; and she had perspiration. She was ordered to have opiate enema and fomentations. 10 P.M. She had an hour and a half's sleep, and felt much better. There was no pain, no sickness; pulse 100.

December 8th. She expressed herself as much better, and looked so. She had no pain, nor sickness. The pulse was 96; the skin moist; the tongue improving. The discharge from the peduncle was free; the wound looked well. She was beginning to take nourishment. She now went on well, and was down stairs within the month, and out of doors within five weeks from the date of operation.

Dr. Grimsdale said the cases he had thus detailed were, he believed, fair representatives of the class of cases which come under our notice, justifying, and he thought requiring, the operation of ovariotomy. On the question of the justifiability or non-justifiability of ovariotomy he had no intention of entering, satisfied as he was that it is an operation which is gradually but surely obtaining the sanction of the profession, and the results of which will, at no distant period, challenge comparison with any of the so-called capital operations.

There were a few points in these cases worthy of some remark. In the first case the cyst was an extremely large one, holding at the first tapping sixty-three pints, and although this is by no means the

largest on record, still it is sufficiently above the average to make it noteworthy. In this case also, the slowness and irregularity of the pulse, for some days after the operation, are points of some interest.

There was no murmur with the heart's sounds; the pulse was not laboured, neither was there any evidence of difficulty in the pulmonary circulation. The probability, he thought, was that these were simply the results of nervous shock. Mr. Spencer Wells told him he had met with the same signs in two of his cases, both of which terminated fatally. He had never had slowness or irregularity of the pulse in any of his recoveries; he thought a clot in the heart was the cause in his own cases. In the second case, that of Mary Westmore, with the large multiple cysts, it is worthy of note how large a mass of omentum may be safely returned, even although it has been adherent to the tumour, provided it is well looked over for any bleeding points, and to remove any parts that are torn away from sufficient vascular connection. This case was the first in which he had used silk sutures, and the result appeared to him to be remarkably in favour of this material. The ease with which they were withdrawn at the end of the third day (seventy hours after the operation), the absolute dryness of the sutures and their track, shew sufficiently that up to this time after the operation, wire could have had no advantages over silk, while the greater difficulty of withdrawal with the risk of scratching through the fleshy united peritoneum was avoided.

The number of operations he had now had was six, with the result of four recoveries to one death in the five completed operations. The remaining case was an uncompleted operation in consequence of universal adhesion of the cyst-wall to the peritoneum, so close that it could not be separated by the most careful dissection. Dr. Simpson, who called on him a few days ago, mentioned that there had lately been a similar case in Edinburgh, in which after death, the pathologist of the Infirmary could not by dissection separate the two adherent membranes.

Mr. Higginson, Mr. Bailey, and Mr. Turner expressed the pleasure with which they had heard these cases related, and their sense of the credit due to Dr. Grimsdale, who had detailed alike his successful and his unsuccessful cases to this Society.

Dr. Vose regretted the small attendance of members. Cases so interesting and satisfactory as these help to constitute a new era. He was old enough to remember when a professor of surgery at Edinburgh was held up to the greatest ridicule for attempting such a procedure. We may congratulate society on the gradual steady progress of this operation. He was familiar with the medical aspects of ovarian dropsy, and certainly there is no disease less tractable. Consider the suffering, the lingering state, and the mental depression. He hoped medical men would open their minds to these things.

Dr. Nevins had heard these cases with the greatest pleasure, and they would go far to remove prejudices that he himself had entertained.

Dr. Grimsdale, in answer to a question from Dr. Nevins as to the accidental rupture of cysts before or during an operation, said this often does happen in spite of all care during an operation. If the contents be purulent, the effused pus must be carefully sponged away.

Mr. Higginson thought there must sometimes be a difficulty in diagnosing the extent of the adhesions.

Dr. Grimsdale said that, where we have a friction feeling there are some adhesions more or less loose; if, on the patient's breathing deeply, there is an uniform movement and no puckering, there are probably no adhesions in front; if we see no movement, there is probably general adhesion. This may generally be made out pretty certainly. It is curious that adhesions take place more anteriorly and laterally than posteriorly where there is less motion.

Correspondence.

GRATUITOUS MEDICAL SERVICES.

Letter from W. Boyd Mushet, M.B.

Sir,—The members of the Association, with infinitesimal exception, highly appreciate your hearty and uncompromising spirit relative to gratuitous medical services, and must earnestly trust that the question will not be allowed to drop; for, as to the propriety, the necessity of remuneration, our body is of course agreed, notwithstanding its proneness to difference of opinion concerning most other topics. The public regards what is given for nothing as worth nothing; of which it nevertheless avails itself, because it is cheap. In its usual generalising way, it in consequence thinks lightly of medical men and medical science generally. Hence the common phrase, "Why pay the doctor?" Physic and advice cost nothing. Other professions are less easy. Although the clergy are supposed to be equally as Christian and as charitable, I never heard of an instance in which one of the cloth performed a marriage, christening, or burial ceremony, *gratis*. The pens and ink of the lawyer are of as little intrinsic value as the materia medica of the practitioner, or the paper on which he writes his prescription: yet the lawyer seldom fails to obtain payment. On the contrary, medical men, practising amongst the reputedly paying class, lose, I believe, 10 to 15 per cent. of their claims; and the gratuitous advice of our London and provincial physicians and surgeons, which lies at the root of the evil, greatly fosters the loose ethics of the people, and represents a loss of many many thousands a year to the profession, and quite as much in loss of dignity and respect. Quacks never *give* their nostrums or advice, yet many of them realise enormous fortunes.

The point to be resolved is, How can a revolution be effected? A system must be organised. Action should commence, or at least be countenanced and supported, by the magnates of medicine; and the medical corporations, and Medical Council itself, might appropriately bestir themselves in the cause. The several medical societies might also combine; for why should they disdain the welfare of the body politic, more than knotty matters in pathology and therapeutics? Our hospital physicians, who, like their Poor-law brethren, have been too eager to compete for unpaid appointments and work for nothing, should firmly assert their rights; for the example of men who have striven for unsalaried posts at hospitals and dispensaries has most injuriously affected humbler members, who can hardly expect adequate payment or recognition, if the more eminent estimate their services at nought. If Mr. Griffin, almost single-handed, has obtained concessions (small as yet, 'tis true) from a cold official government body, surely the more impressible public can easily be compelled to capitulate before the united pressure of the majority of the profession.

I have been induced to trouble you with this communication, though but a weak echo of your own sentiments, as it is evoked by circumstances alluded to in the subjoined letter, in which the grievance finds practical, if feeble expression. Let the post mentioned be unheeded until a stipend be attached. Let every hospital, dispensary, and Poor-law vacancy, etc., be alike unresponded to, and in a few years we shall

not have a single unremunerated practitioner in the kingdom. I am, etc.,

WM. BOYD MUSHET, M.B.LOND., M.R.C.P.,
Physician to the Royal General Dispensary.

Norwood, January 7th, 1864.

P.S. With pleasure will I give time, labour, and a contribution to an association for the abolition of gratuitous medical services, as it must ultimately conquer, and return immense prospective advantages.

[COPY.]

Tusculum, Norwood, January 6th, 1864.

GENTLEMEN,—As I find many of the patients have to be visited at home, most of whom are proper cases for the parish surgeon, I beg to resign the post of Physician to the Royal General Dispensary, as there is, or should be, a limit to *gratuitous medical services*. I was unaware, when I accepted the appointment, that the physicians were expected to attend out-door cases, except under special circumstances, according to the ordinary rule at metropolitan hospitals and dispensaries. I would suggest to the Committee that alteration of the regulations with regard to home patients is demanded, as the time has arrived when physicians (who, equally with others, have to live by their profession) will object to sacrifice the valuable part of two days at least weekly, on the score of "charity", in the performance of most objectionable duties—in a word, will refuse to work for the public without remuneration.

I have the honour to be your obedient servant,

WM. BOYD MUSHET.

To the Committee of the Royal General Dispensary.

LETTER FROM SEPTIMUS GIBBON, M.B.

SIR,—Public bodies move slowly; but I fear that, in the above matter, our Committee of Council do not seem disposed to move at all. This is a disappointment to many, who regard this unjust, unchristian, and unprofitable system as extremely detrimental to that professional honour and welfare which the Association was formed expressly to uphold.

No doubt there must be a great amount of prejudice, if not actual ignorance, on the bearings of this subject, within our ranks, that has to be removed. We have all been taught by example, as well as by precept, that it is not only a charity, but a duty, to do this public work gratis. In London, and other towns where there are medical schools, we are not content with giving the public our time, blood, brains, and muscle for nothing, but we must, according to the present system of compulsory attendance on lectures for medical education, starve and stint the education by weighting the professor with the care of hundreds, if not thousands, of out- or in-door patients: in other words, we eat one another, in order to swell our unpaid services to the community at large. I have a suspicion that this unpaid labour is unprofitable to all parties, and know that experience has led many out-patients to entertain the same opinion. If this be true, the profession should act upon the injunction—

"To thine own self be true;
And it must follow, as the night the day,
Thou canst not then be false to any man."

In thus recalling the profession from the error of its ancient ways in this matter, our Association will be bidding for the confidence of the public, as well as of the profession. The great body of the community, except the large employers of labour, who foster and manage hospitals and dispensaries in order to save their own pockets, would applaud us as public benefactors for acting on the principle of "the labourer is worthy of his hire". It rests, however, entirely with the profession to abolish this deeply rooted system. Unfortunately, there are gentlemen who state publicly that it is not a matter within the control and discretion of the profession; but that, in order to succeed, we shall have to subsidise the public press, and to send peripatetic lecturers about the country, as did the Anti-Corn-Law League. This is a course of action consistent neither with the dignity nor the ability of the Association, and wholly unnecessary; for I am certain that the general public has quite as clear a perception of what is just between man and man as the profession has. No, sir, we have deluded the public into the belief that we do this work for the sake of charity, or the indirect gains or the honour of the thing; and it is incumbent on the profession, by its action, to undeceive the public. If the Association would take some such preliminary steps as those indicated to discourage the acceptance of unpaid medical service, I believe much good would result. Action on the part of the medical corporations would follow; and we might live to see the day when these bodies will refuse to license or recognise a hospital for purposes of tuition until provision is made for remunerating the medical officers. The fathers of the church and heads of the law take good care that remuneration is attached to the public services of their respective professions.

I am, etc., SEPTIMUS GIBBON.

February 1864.

SIR,—The profession generally has had much reason to thank you for your repeated and outspoken denunciations of the system of gratuitous medical services; to your arguments no addition is needed, to show how widely spread and how deeply rooted is the evil of which we all feel the burden.

But, sir, your admirable leaders and the letters of your correspondents have, as a rule, had reference only to one side of the question—to the gratuitous giving of public medical services—while private medical aid has been untouched and unnoticed. To this last phase of the matter, I would, with your leave, address myself. It is an injury to the profession as great, though not as manifest, as the former; certainly not so strongly declared; for hospitals, with their unpaid medical officers, speak trumpet-tongued from our metropolis and county towns; yet far more widely spread, for hardly a market-town exists of any size where gratuitous advice may not be obtained on application to the physician or physicians resident therein.

One word before I write further. I should much regret if, by this letter, I gave offence to country physicians, many of whom I have learned to know and to respect. The doings of their class I reprobate. I write against a corrupt system; not with the purpose of condemning the actions of any single individual.

This supplying medical advice gratis has dated from many years back; and existed simply to give rise, as its necessary sequence, to the present monstrous hospital system. This practice among physicians reigns rampant in lieu of the nosocomial charity in towns where hospitals and infirmaries are not. It is equally to be found where such institutions are flourishing in full luxuriance.

Granted freely enough, that there was a time when the physician medical autocrat centred in his august person the major part of the accurate knowledge of medicine in any given neighbourhood. Then, too, the general practitioners, superficially educated, holding no social position, looked up to this one luminary of their profession, who wrote M.D. after his name, and enjoyed the *prestige* of an education and a degree from one of the Universities. Thus arose that con-

ventional idea of superiority which has come down to our own day: that the "doctor of advice" is, by virtue of some occult and indescribable property, by far the highest authority on medical matters within a given radius of miles from his own county town.

The tangible grievance, however, is this: that in far too many instances, the *pure* physician of the place, following the traditions of his predecessor, is in the habit of seeing patients at his own house *without fee or reward*—people of whose position and antecedents he knows nothing, and from whom he receives nothing but a garbled and indefinite medical history. They are of all classes. There are among them sad and weary invalids, flying from one medical man to another in vain hope. There are those who are, rightly or wrongly, discontented with their late attendant; and those, too, who long for and delight in "cheap advice", as they would in any good bargain.

For my present purpose, all these applicants rank in two divisions:

1. Those who are able to pay the ordinary fee; but, on principle, object to paying when they can get what they wish for nothing.

2. Those who can pay a small sum, or to whom even this is a difficulty.

The physician is unjust to himself when he gives his time and knowledge for nought to those able properly to recompense him. He is unjust to his professional brethren when he gives that same time and skill to those who, without means to pay a guinea fee, are yet able to make a smaller payment to some struggling practitioner. In no less degree is the reproach of injustice merited, when, in seeing some pauper or club-patient of another medical man, he gives an opinion and suggests a plan of treatment, so constituting himself, indirectly it may be, a censor and a judge of the prior treatment, concerning which he has had no valid imformaion whatever. In all these examples, he is depreciating the money value of his professional knowledge, and that of his brethren, by an ill-judged charity in the dispensing of medical advice.

I shall be met by two objections.

1. If this were stopped, the young physician would lose the means of increasing his knowledge of disease, and so of making himself a master of his art.

No one has a right to acquire knowledge to the injury and damage of his neighbour belonging to the same profession. I leave untouched the palpable absurdity conveyed in the admission that the physician is far too often self-constituted a consultant when he has his profession practically yet to learn.

2. You would deprive the pauper of the advantage of a second opinion. Confessedly he cannot pay a guinea; therefore he must waive all hope of obtaining benefit from the advice of a higher authority.

By no means; the consultant physician is in daily intercourse with his fellow-practitioners—in one sense, indeed, he depends on their goodwill. Let him, then, follow out some such rule as this: either, on seeing a patient, let him take his guinea; or, if the applicant be a pauper or club-patient, entitled to other medical advice, let him examine and prescribe for the case only on receiving a distinct request from the parochial or club-surgeon.

Then he will prove himself practically the friend and the ally of his brother practitioner; too often now he is practically felt to be just the reverse; for opinions are daily wormed from the physician to be used as a sting and a torment to the general practitioner in attendance.

There is sadly too much want of *esprit de corps* among us; sources of bitter feeling are only too common; but I am well satisfied that the adoption of consentaneous working where charity is concerned (for clubs and parochial appointments are charities on a larger scale) would remove much of existing annoyance on this score.

The services of country physicians are daily less positively required; but if they would, each man for himself, adopt and carry out the rules I name, their opinion would be more frequently asked and their professional status be better defined.

It is in human nature specially, if long ill, to wish for "further advice"; by all means let the wish be granted; but in a mode which shall not injure or prejudice the interests of one class of the profession, with the very dubious and distant chance of conferring benefit on the practitioners of pure medicine.

Pray, sir, support my pleading, if, as I think you will, you side with my view of the whole question.

I am, etc., RUSTICUS EXPECTANS.

CRIMINALS' RESPONSIBILITY.

LETTER FROM HENRY MAUDSLEY, M.D.

SIR,—The desirability of appointing a Commission of eminent men, for the examination of those criminals in whose behalf insanity is pleaded, would appear so plain and undeniable, that one need not, perhaps, entertain any hope of its being adopted. The scene is, no doubt, a more interesting one in which a judge is seen to point out with a confident decision the utter untenableness of the evidence for insanity; to express, in pronouncing sentence of death, his entire concurrence in the verdict of the jury; and, in the course of a day or so, to write to the Home Secretary, suggesting a further examination into the prisoner's state of mind. Meanwhile, science suffers discredit by the contempt which it meets with in court; and law gains anything but dignity by the conscientious vacillation of its highest representative. It is the misfortune of science to have been placed in a false position; it is the misfortune of the judge to have been compelled to decide upon a special matter of which he had not special knowledge.

If the appointment of experienced men to assist the court be not deemed advisable, there is a simpler proceeding, which, if adopted, might do something towards checking the very serious evils which result from our present system of making advocates of scientific men. Dr. Bucknill has suggested that, *whenever the scientific expert examines the criminal, a sworn shorthand writer, appointed by the Crown, should be present, to take down the conversation;* and that his report should be placed in the hands of the judge and of the counsel both for the prosecution and defence. It needs but little reflection to appreciate the advantages of this course. Had it been adopted in Townley's case, there is much reason to believe that the so-called delusion as to the "conspiracy" must have resolved itself into what most people suspected it was, and which the report of the lunacy commissioners has proved it to have been—a simple belief that the relatives of Miss Goodwin wished to release her from an undesirable engagement, or to prevent her from making an ineligible match. On the whole, one may, I think, allow that to be a belief which any sane man might very naturally have—which, indeed, it would rather have shown insanity *not to have had*, under the circumstances.

One can scarcely, again, sufficiently wonder at the strange inertness or singular forbearance of the prosecuting counsel in the cross-examination of the so-called scientific evidence for the defence of Townley. Had the crown done its scientific duty with half the zeal which the defence exhibited, there can be little doubt that the vague nondescript theory of Townley's insanity must have suffered grievous damage. To what

category of insanity recognised by author ancient or modern, foreign or English, theoretical or practical, the insanity of Townley was supposed to belong, it would be very interesting in the cause of science to learn. Here, then, arises another argument for the appointment of a Commission of impartial men; for it is obviously quite possible that, when a rich prisoner has engaged the most eminent authorities, justice may fail for want of a sufficiently subtle and properly directed cross-examination.

The appointment of a Commission to assist in the detection of insanity would indirectly operate in the most beneficial manner on so-called medical psychology, and help to drag it out of the extreme depth of degradation in which it is now sunk. A slight consideration must prove that medical psychology, standing as it does at the foundation of a moral science, is of the utmost consequence, and must, with the advance of knowledge, have an ever-increasing importance. Now, too, that it has ceased to be the fashion for physicians to be learned in classical lore, there are few studies which will do more for the discipline and liberal cultivation of the student's mind than the study of mental science. And, if other arguments fail, the discredit which falls upon medicine generally by the present condition of the lunacy speciality might well move it to take some steps for putting the latter in a more satisfactory condition. It is useless to fall foul of the newspapers because of their outcry against scientific evidence in insanity, when the fault is in ourselves.

But, whatever other consequences might flow therefrom, one would fain hope that the ultimate result of the painful Townley tragedy, and of the scarce less painful farce which has followed it, may be, as you suggest it will be, to strengthen the hands of those who would abolish hanging; and that the strange and horrible spectacle of a society agreeing to take away life, as an example to prevent the taking away of life, may ere long cease to disgrace the character and to satirise the professions of an age which boasts of its civilisation.

I am, etc.,

HENRY MAUDSLEY.

38, Queen Anne Street, January 1864.

ATROPISED AND CALABARISED GELATINE.

LETTER FROM JOHN H. BRYANT, ESQ.

SIR,—In reference to the letter which you published last week on this subject from Mr. Streatfeild, I beg to state that Mr. Ernest Hart has been using gelatine, in the form of sheets of various density and of particles impregnated with atropine and calabarine, under my observation and that of others who attend the Ophthalmic Department of St. Mary's Hospital, upon the out-patients here, with excellent effect, since early in November last. I would also refer to the articles in the *Annales d'Oculistique* of September and October 1863, by M. Warlomont, in which he says, after pointing out the inconvenience of paper as a foreign body always more or less irritating and requiring subsequent removal, that, to avoid these inconveniences, he was employing a mucilaginous substance, which was not irritating and might be more or less soluble in the tears.

Mr. Hart had previously employed glycerine plasma with starch; but found these and mucilaginous substances less portable and convenient than gelatinous materials. I think, therefore, that Mr. Streatfeild's reclamations are singularly ill-founded.

I am, etc., JOHN H. BRYANT,

Non-Resident Medical Officer, Ophthalmic Department, St. Mary's Hospital.

7, Bathurst Street, Sussex Square, W., Feb. 8, 1864.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on January 27th.

Battye, William, Plymouth (St. Bartholomew's Hospital)
Cheetham, Wm., Rochdale (Manchester School)
Cooper, G. H. C., Woburn Place (University College)
Denny, Charles John, Aston, Warwickshire (Manchester School)
Dickinson, John S. A., Norfolk Street (Middlesex Hospital)
Dunn, Wm. Daniel, Devonport (Birmingham School)
Freeman, Richard Thomas, Hatcham (Guy's Hospital)
Gammage, Robert George, Sunderland
Griffiths, Thomas, Merthyr Tydfil (St. Thomas's Hospital)
Hadwen, E. St. Paul, Waterloo Road (Westminster Hospital)
Hale, A. E., Nantwich, Cheshire (Birmingham School)
Harrison, George William, Whitchurch
Holman, Herman B., Crediton, Devon (London Hospital)
Lloyd, John, Birmingham (Birmingham School)
Morris, Samuel, Preston (St. Thomas's Hospital)
Powell, Frederick, St. John's Wood (Westminster Hospital)
Rablah, J. J., Walsall, Staffordshire (Westminster Hospital)
Rooth, Samuel, Chesterfield (Guy's Hospital)
Shackleton, James, Whitworth, Lancashire (Manchester School)
Somerville, William Wallace, Wakefield
Watts, William Frederick, Dewsbury

At the same meeting of the Court—

Close, Henry Ashlin, H.M.S. *Royal Albert*, Plymouth, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date April 11th, 1859.

Admitted on January 28th—

Authonisz, James E., Ceylon (St. Bartholomew's)
Bennett, Charles J., Buxton, Derbyshire (St. Bartholomew's)
Cockerton, Alfred J., Islington (London)
Curgenven, William G., Plymouth (Middlesex)
Garlike, Edward W. B., Tulse Hill (St. Bartholomew's)
Green, Frederick K., Stoke Newington (St. Bartholomew's)
Griffin, Frederic C. G., Weymouth (St. Bartholomew's)
Hewley, John Petch, Ripon, Yorkshire (St. George's)
Hope, F. S., Kirby Fleetham, Yorkshire (Middlesex)
Jones, Hermann Johnstone, Upper Clapton
Langhorn, Joseph, Savile Row (St. George's)
Law, Caleb, Australia (London)
Long, Henry P., Barham, Canterbury (Westminster)
McConnell, William, Lisburn, Ireland
Pearson, E. B., Yeavely, near Ashbourne, Derbyshire (London)
Peirson, George Brigg, Leeds
Penn, Wm. C., Edwardes Square, Kensington (St. George's)
Philpot, Frederick, Chelsea (University College)
Skinner, William, Sheffield
White, George, Dalston (London)

At the same meeting of the Court—

Kynsey, Josiah Frederick, L.R.C.P., Dublin, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date July 19th, 1859.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. (Double Qualification.) The following gentlemen have passed their first professional examinations during the recent sittings of the examiners.

Eames, William Lawton, Cork
Hogg, James, Edinburgh
Jackson, Joseph, Cumberland
Macdonald, Thomas, Ross-shire
O'Keeffe, John N., county Kerry
Simpson, James, Cumberland
Simpson, Thomas, Yorkshire

And the following gentlemen have passed their final examinations, and been admitted L.R.C.P.Edinburgh, and L.R.C.S.Edinburgh.

Hinds, James, Notts
Horan, Patrick Callan, county Cavan
Kingston, Joseph Lindsay, county Cork
M'Culloch, Latham Blacker, Drogheda

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentlemen have passed their first professional examinations during the recent sittings of the examiners.

Anderson, Robert, Haddingtonshire
Ingram, James, Orkney

And the following gentlemen have passed the final examinations, and obtained the diploma of the College.

Dunbar, Robert Pearson, Perthshire
Godfrey, James, Glasgow
Melladew, Heinrich Frederik Lawatz, London
Middleton, John, Glasgow
Montizambert, Frederick, Quebec
Taggart, William John, Antrim

APOTHECARIES' HALL. On February 4th, the following Licentiates were admitted:—

Haines, Richard Wheeler, Bromsgrove
Soper, Robert Wills, Dartmouth, Devon

APPOINTMENTS.

JACOB, A., M.D., elected Vice-President of the Royal College of Surgeons of Ireland.
STOKES, William, jun., M.D., elected Surgeon to the Meath Hospital, Dublin, in the room of the late J. Smyly, Esq.

ARMY.

DAVYS, Staff-Surgeon J., to be Surgeon 38th Foot, *vice* T. F. Wall.
MASSEY, Surgeon H. H, M.D., 2nd Dragoon Guards, to be Staff-Surgeon.
WALL, Surgeon T. F., 38th Foot, to be Surgeon 2nd Dragoon Guards, *vice* H. H. Massey, M.D.

INDIAN ARMY.

CORBYN, Assistant-Surgeon F., M.D., Bengal Army, to be Surgeon.
FAYRER, Assistant-Surgeon (Brevet-Surgeon) J., M.D., Bengal Army, to be Surgeon.
HOOPER, Assistant-Surgeon J., Bengal Army, to be Surgeon.
LOWDELL, Assistant-Surgeon C., Bengal Army, to be Surgeon.
YOUNG, Assistant-Surgeon D., M.D., Bengal Army, to be Surgeon.

MILITIA.

HEATON, F. L., Esq., to be Surgeon Royal Denbigh Militia.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

GANGE, A. W., Esq., to be Surgeon 36th Middlesex R.V.
HOPWOOD, R., Esq., to be Assistant-Surgeon 13th Cheshire R.V.

BIRTH.

STEELE. On February 2nd, at Liverpool, the wife of *A. B. Steele, Esq., of a daughter.

DEATHS.

CLIFFORD, Herbert W., Esq., Surgeon, at Tivoli Villa, aged 28, on January 28.
COWCHER, E., Esq., Surgeon, at Abingdon, aged 77, on Janu ary 31.
COVENTRY. On February 1st, at Cheltenham, Juliet, widow of John Coventry, Esq., Surgeon.
RAMSBOTHAM. On February 4th, at Cambridge, Mary, wife of Francis H. Ramsbotham, M.D.

THE EARLSWOOD ASYLUM FOR IDIOTS. Extensive alterations and improvements have been lately made at this institution.

VETERINARY SURGEONS. Mr. Holland has given notice of asking for leave to bring in a Bill for the better regulation of veterinary surgeons.

THE PUNISHMENT OF DEATH. Mr. W. Ewart has given notice that he will move for leave to bring in a Bill to abolish the punishment of death; also, a Bill for legalising the use of the metrical system.

WORKHOUSE-BORN BASTARDS. The number of bastard children born in the workhouses of England and Wales during 1862 was 8115; the number for 1860 being 7077, and for 1861 8020.

A NEW HOSPITAL IN NEW YORK. By the will of the late Mr. Roosevelt, about 900,000 *dollars* have been bequeathed for the establishment and endowment of a hospital in New York.

HEALTH OF THE METROPOLIS. The deaths in the metropolitan districts last week exceeded by 174 the estimated number. The deaths of eleven nonagenarians are recorded, the oldest of whom was a man who had attained the age of 98 years.

SIR JOHN LIDDELL. The Queen has appointed Sir John Liddell, Kt., C.B., M.D., late Director-General of the Medical Department of the Navy, to be an Ordinary Member of the Military Division of the Second Class, or Knights Commanders of the Most Honourable Order of the Bath.

IRISH POOR-LAW MEDICAL OFFICERS. A meeting of medical practitioners residing in the county of Longford has been held, to adopt measures to forward through Parliament, during the present session, a Bill for the superannuation of workhouse and dispensary medical officers. Similar meetings should be held in every county in Ireland. (*Dublin Med. Press.*)

THE RAINFALL. The smallest rainfall of any one year in nearly a quarter of a century was in 1858, and the largest in 1852. The driest months in the twenty-four years were November 1858, and January 1855, when only 0·10in. of rain fell in each month, while the wettest month in the twenty-four years was November 1852, when a rainfall of 6·20in. was recorded.

ASTHMA. Dr. Hyde Salter considers iodide of potassium to be *occasionally* of great value in the cure of asthma. He considers, however, that its services have been much exaggerated as a general remedy in this affection. He cannot subscribe to the high praises which have been sung of it as being something of an infallible remedy.

VACCINATION RETURN. A return "of the number of unions or single parishes in England and Wales, of which the guardians or overseers have taken measures to enforce obedience to the Vaccination Act, under the provisions of the Act 24 and 25 Vict., c. 59," has been issued in pursuance to an order of the House of Commons. The replies are mostly in the negative, either simply or qualified. Out of 700 answers from the various unions of England, only 79 are "Yes"; and 47 responses from Wales there are only 7 affirmatives.

DR. LAMBTON ESTE would have been rather surprised if he could have read the statement in the last number of the *Lancet*, that he had been in the *naval* medical service. Dr. Este was an army medical officer all his life, being surgeon in the Life Guards. He served with the army in Egypt under Sir Ralph Abercrombie. Very early in life, he was sent from the Foreign Office with important despatches to Lord Nelson, with whom he remained for some months, acting as his private secretary.

THE M.D. OF THE COLLEGE OF PHYSICIANS. The Master of the Rolls has not yet delivered judgment with reference to the claim of the College of Physicians to grant degrees of Doctor of Medicine. It is believed that, whatever his decision may be, an appeal will be made by the defeated party to the House of Lords. It is, we believe, the intention of the College to commence legal proceedings to prevent Trinity College from granting *licences* in medicine; that being, as is alleged, the exclusive province of the College of Physicians. (*Dublin Medical Press.*)

MEMORIAL TO THE LATE MR. SMYLY. We are happy to learn that a movement is in progress to connect the name of this distinguished surgeon in a permanent and practical manner with the Meath Hospital and County Dublin Infirmary, where he so long laboured, and where his professional skill was so signally blessed, to the relief of the suffering poor. It is in contemplation to erect and endow a ward for children in the hospital, to be called the Smyly Ward. The erection of such a ward was an object near to Mr. Smyly's heart. A sum of £200 would be sufficient to build the ward, and about £2,000 would endow it for ever; the cost of maintenance of six beds amounting to £100 per annum. (*Saunders.*)

No Irish Need Apply. Our attention has been called to the election of a House Surgeon to the Warneford Hospital, Leamington. There were six candidates, and it appears that one gentleman obtained the appointment only by the exclusion on a legal quibble of another gentleman. This latter gentleman was a Licentiate of the Royal College of Surgeons in Ireland, and the first objection started by his antagonist was, that as the rule says "a member of the Royal College of Surgeons," the title of Licentiate invalidated the candidature. This point being untenable, it was necessary to fall back on a still more ridiculous one, that the word *the* meant the London College and no other, and on this point the gentleman was excluded. (*Dublin Medical Press.*) [Surely our cotemporary must be in error. Exclusion on grounds such as these here mentioned is hardly credible. Editor.]

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity. A half-yearly general meeting of the members of this Society was held on the 27th of January last; T. A. Stone, Esq., President, in the chair. It was announced that the petition for a Royal Charter of Incorporation, which would reconstitute the Society on a firmer basis than before, was before the Queen in Council. The accounts for the year expired were read, when it appeared that a rather smaller amount of relief had been expended than during the preceding year, being as follows: Grants for ordinary relief to widows and orphans, £1,843 : 10; for immediate relief, £21; towards self-maintenance of adult orphans, £20; for extra-relief, £20; by general meeting to a widow, £25; total, £1,929 : 10. The following gentlemen were elected officers and directors for this year: *President:* T. A. Stone, Esq. *Vice-Presidents:* Martin Ware, Esq.; E. A. Brown, Esq.; P. M. Latham, M.D.; John Bacot, Esq.; T. Turner, M.D.; D. Henry Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; E. Tegart, Esq.; G. Burrows, M.D., F.R.S.; John Miles, Esq.; Sir J. W. Fisher; Cæsar H. Hawkins, Esq., F.R.S. *Treasurers:* J. T. Ware, Esq.; G. Hamilton Roe, M.D. (acting); R. S. Eyles, Esq. *Directors:* J. C. Salisbury, Esq.; H. Blenkarne, Esq.; T. King Chambers, M.D.; John Clarke, M.D.; P. G. Hewett, Esq.; John Morgan, Esq.; J. Gregory Forbes, Esq.; W. Munk, M.D.; B. W. Holt, Esq.; Charles Miles, Esq.; W. J. Little, M.D.; W. Cathrow, Esq.; H. Sterry, Esq.; Alder Fisher, Esq.; H. Jeaffreson, M.D.; J. Paget, Esq.; H. T. Illingworth, Esq.; F. Hawkins, M.D.; T. Hammerton, Esq.; John Love, Esq.; H. A. Pitman, M.D.; John Adams, Esq.; R. Druitt, M.R.C.P.L.; E. Tegart, jun., Esq. Those members of the profession who are desirous of joining this most excellent Society may do so by applying to Dr. Merriman, the Secretary, before the 2nd of March next, as directed in our advertisement columns.

Medical Journalism for the Million. The introduction of non-medical questions into the columns of medical journals is open to reprehension, if the suspicion of touting for extra professional patronage attaches thereto. Perhaps it is commercially advisable to provide some literary aliment for tavern and coffee-house patrons, but we would suggest the selection of at least semi-medical subjects to give what the lawyers call "a colourable pretext" for their publication. The auscultation of Heenan's chest, or the extent of his varied ecchymoses, are not subjects of importance to the profession; nor do the very common every-day occurrences of the death from disease of Mr. Justice Wightman, or the safe and natural birth of a Prince, call for comment, while the pseudo-official details of size and weight of the infant, in which our contemporary glories, are by many considered as intrusive violations of the privacy which should be inviolate. Surely medical journalists have no lack of topics that they should be driven to such expedients. (*Dublin Medical Press.*)

Cattle Disease in Switzerland. Accounts from Lausanne state that the disease of sore mouth and sore feet has attacked horned cattle in Switzerland in a terrific manner. The Executive Council have consequently commanded that no more cattle markets shall be held. A strict watch is set upon all farmyards where the disease prevails and upon those within a hundred yards of them. Cattle in the suspected farmyards are not to be permitted to drink at the public fountains. All strangers are forbidden to approach any farmyard, nor is any mendicant to pass the night there. Veterinary surgeons and police agents are desired, when they quit an infected stable, to wash and change their clothes before they enter another. Farmers are to adopt similar precautions when they attend a fair or market.

The Army Medical Service. There is no country in the world that has more reason to be proud of its military surgeons than England. John Hunter learned in the battlefield the great truths which he taught; and each successive war in which England has engaged has brought with it devoted men who have either perished in aiding the wounded and the dying on the battlefield, or brought back a rich stock of experience for the guidance of their fellow-surgeons. But England has failed more than any other country in recognising the importance of the surgical art, and the merit of those who have practised it. At the present moment, in spite of all that Lord Herbert did to reform the military system, the medical service of the army is the most unpopular in the country. At the last public examination for medical posts in the army, only half the number of candidates needed presented themselves, and of these only a very small proportion passed their examinations in the first class. All honour, then, is due to the men who, amidst contumely, injustice, and contempt, practise their profession in the English army, with a single view to the advancement of their profession and the benefit of humanity. (*Athenæum*, February 6th, 1864.)

Diseases of Overworked Men. Time was when the very phrase, diseases of overworked men, would have been considered foolish. Now it conveys a truth of national importance. From being a comparatively idle world, we have of late become an insane world on the subject of labour. So long as the muscles merely were employed, so long little harm was done; we remained men; now we aspire to be gods, and we pay the forfeit of our ambition, From overwork we now get a class of diseases the most prolonged, the most fatal. The suns of our best men go down at noon, and so accustomed are we to the phenomenon that we cease to regard it as either strange or out of place. It is through the mind, now, that the body is destroyed by overwork; at all events, it is so mainly. The men of intense thought—men of letters, men of business who think and speculate, men of the State who are ambitious to rule, these men are the sacrifices. With them, the brain has not merely to act on its own muscles, bidding them perform their necessary duties, but the one brain must needs guide a hundred other brains, and all the muscles thereto appended. An electric battery works a single wire from the City to Brighton, and does its work well, and goes on for some months before it is dead or worn out. Can it do the work of a hundred wires? Oh, yes, it can; but it must have more acid, must wear faster, and will ultimately die sooner. We may protect the plates, make the battery to an extent self-regenerative, as the body is, but in the main the

waste is in excess of the supply, and the wear is certain as the day. Men of letters, men of business who do their business through other hands and do great business, and men immersed in politics, suffer much the same kind of effects from overwork. They induce in themselves, usually, when they suffer from this cause one or other of the following maladies :—Cardiac melancholy or broken heart; dyspepsia, accompanied with great loss of phosphorus from the body; diabetes, consumption, paralysis, local and general; apoplexy, insanity, premature old age. They also suffer more than other men from the effects of ordinary disorders. They bear pain indifferently, can tolerate no lowering measures, are left long prostrated by simple depressing maladies, and acquire in some instances a morbid sensibility which is reflected in every direction; so that briskness of action becomes irritability; and quiet, seclusion and moroseness. They dislike themselves and feel that they must be disliked, and if they attempt to be joyous they lapse into shame at having dissembled, and fall again into gloom. *(Social Science Review.)*

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Edward Smith. Lettsomian Lectures on Physiology. Lecture I, "The Rate of Pulsation under the Influence of Numerous Agencies in Health and Disease."

TUESDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Statistical.—Pathological.

WEDNESDAY. Royal College of Physicians, 5 P.M. Dr. Markham. Gulstonian Lectures. "The Uses of Blood-Letting in Diseases."—Pharmaceutical Society, 8.30 P.M. Professor Redwood, "The British Pharmacopœia."—Meteorological.

THURSDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Harveian Society of London, 8 P.M.—Zoological.—Royal.—Linnæan.—Chemical.

FRIDAY. Royal College of Physicians, 5 P.M. Dr. Markham. Gulstonian Lectures. "The Uses of Blood-Letting in Disease."—Geological (Anniversary).—Royal Institution.

SATURDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE LARYNGOSCOPE.—The pamphlet "On Laryngeal Disease as exhibited by the Laryngoscope", by Dr. James Russell, contains a summary of what has hitherto been said concerning this instrument. It is written in an unostentatious style; but contains a terse and well-written exposition of the subject.

S. T.—It is understood that the long-desired Report of the Chloroform Committee of the Royal Medical and Chirurgical Society will soon appear—probably during the next month.

INVESTIGATION OF DISEASES.—We beg to call the attention of those of our readers who are interested in the registration of diseases to a paper read by Dr. G. H. Philipson, before the Northumberland and Durham Medical Society, "On the Investigation of the Prevalent Diseases of the District", which has since been published. The paper was referred to the Committee of the Society, who highly approved of the plan, recommending its adoption by the members. It was unanimously resolved that the scheme should be adopted, and come into operation at the commencement of this year. The great bulk of the members of the Society, numbering over a hundred, together with many others, have signified their intention to fill up and return the forms; so there is every hope that the plan will be attended with success. Dr. Philipson has evidently bestowed great care and labour in the elaboration of his scheme. We shall look with interest to the results which it may bring forth at a future day.

PUBLIC MEDICAL NOMENCLATURE.—SIR: In a notice to one of your correspondents, in the BRITISH MEDICAL JOURNAL of January 23, you approve the term Pogonotrophy; meaning, as you suppose, the cultivation of the beard; and you applaud the use of such terms, because they attract attention, and strike awe into the mind of the public. You are right, no doubt; but I should be curious to know into what the public would convert the terms; perhaps into something that would strike awe into the profession, if I may judge from the following specimen of public medical nomenclature, which I have collected in dispensary practice. They are all the expressions of women, and some of them may have arisen in consequence of the patients mistaking the names given to their diseases by the medical attendants. Thus, a patient said she suffered from "gas-a-titis" (gastritis?). Another exclaimed that she was "thirstified", "feverified", and her lips were "crackified". A third said that she had a "centralisation" in the leg. A fourth was seized with a "flustration". A fifth suffered from an "airysema" (emphysema?). A "doctor" told a sixth that she had a "spodomic" (spasmodic?). A seventh was "caustic" in her inside. An eighth was "impregnant". A ninth had a "complexion" (compression?) of the brain. A tenth wanted medicine for the "interlopers"; meaning worms. An eleventh suffered from "Convitus's Dance". A twelfth wished to be admitted into the "Convalest"s Hospital; and the last had "consecrated" (constipated?) bowels, she being a patient at a Church Dispensary. I am, etc., C. J. B. ALDIS, M.D.Cantab.
1, Chester Terrace, Chester Square, S.W., Feb. 1st, 1864.

ELECTRICITY IN CHLOROFORM ACCIDENTS.—SIR: The case of recovery from chloroform accident by galvanism in last week's JOURNAL, is one of vast importance. As the writer is desirous to know more of accidents of this kind, as well as the best form of electricity, etc., he will find in a new journal (*The Electrician*) four cases of the same kind where the effect of the "induction" or other current on the respiratory nerves and muscles was quite magical. I believe this subject so unpopular of electricity in chloroform accidents, is far more important and practical than any result likely to arise from the present popular debate on iridectomy operations (and I have seen hundreds of the latter); yet a leading medical journal, so to call it, is striving to extinguish all efforts with electricity to save life in chloroform accidents.

Of the extreme value of electricity in accidents, there is happily now no longer any doubt. We had this opposition to ovariotomy; yet it has taken its place amongst the useful surgical resources for the saving of human life. Amongst these miserable archives of the profession, it was shown the deaths in lithotomy are 1 in 2; but the real fact is 1 in 7 or 9: so of the stereotyped errors as to "cardiac syncope" in chloroform accidents, fatty heart the cause of death, the Marshall Hall "ready method" the only perfect cure, etc. Your JOURNAL acts fairly—hears both sides; and one would not half so often write, but that the ready method is really no cure at all, "fatty heart" never seen in chloroform accidents, but electricity so much opposed the one thing needed.

Let the Association only help us to remove this stigma and others from the profession, let it encourage legitimate and laborious experiments with electricity and other agents to restore life, as in the case last week, and it will prove a public blessing; but from one-sided mischievous journalism, we have nothing but discord to expect; medical trials of innocent medical men; and in chloroform—chaos. I am, etc., C. K.
Sackville Street, January 14th, 1864.

COMMUNICATIONS have been received from:—Mr. WILLIAM BOWMAN; Dr. SANKEY; Mr. BRODHURST; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. DRYSDALE; Mr. JAMES ROBERTSON; Mr. J. H. BRYANT; Mr. W. MARTIN; Mr. GEORGE RIGDEN; Dr. D. WILLIAMS; Mr. T. SOMERVILLE; Dr. HENRY JOHNSON; Dr. LANKESTER; Mr. A. B. STEELE; Mr. THOMAS POPE; Dr. PARKES; Mr. ED. GARRAWAY; Dr. S. MARTYN; TWO STUDENTS; and Mr. T. M. STONE.

Clinical Lecture

ON THE

SURGICAL TREATMENT OF HYDATID TUMOURS IN THE ABDOMEN.

Delivered at the London Hospital.

BY

JONATHAN HUTCHINSON, F.R.C.S.,

SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY IN THE MEDICAL SCHOOL.

GENTLEMEN,—We discharged a few months ago from Talbot ward, a man whose case had excited much interest, as an instance of a large hydatid tumour in the abdomen cured by operation.

He was a man aged about 45. You may recollect that he was admitted on account of a large fluctuating tumour, which presented immediately beneath the edge of his lower ribs in the left dorsal region. He had been aware of the existence of a tumour in this part for several months, and latterly it had occasioned him much pain. He still, however, retained good general health. When, in the first instance, he applied as an out-patient, my colleague, Mr. Little, introduced a grooved needle into the swelling, with the result of obtaining a small quantity of clear fluid. The knowledge of this fact much helped our diagnosis when the man came under our care in the ward. We had to deal with a large swelling which filled the upper part of the lumbar region, which received an impulse on coughing, which fluctuated distinctly, and from which a clear fluid had been obtained by exploratory puncture. The man had no symptoms of disease of the spine; nor were there the physical signs of pleural effusion, nor the usual history of pleurisy. Under these circumstances, our conjecture was, that the tumour was probably of hydatid nature. The pain which the man had recently suffered made him very willing that we should adopt any means thought best. A few days after his admission, I made an opening into the tumour in the following manner. An incision having been made through the skin, fascia, etc., the tumour was well held backwards, and I then thrust a narrow bladed knife deeply into the most prominent part.* This was followed by a gush of watery fluid, slightly turbid, but still very different in appearance from any form of pus. After the knife, I passed a pair of dressing forceps, by which the deep puncture was stretched until it admitted a piece of India-rubber tubing, which latter was secured in position in the usual manner. At least a pint of fluid had escaped from the puncture, and it continued afterwards to run away freely through the tube. As nothing but fluid had been seen, and as that fluid was necessarily mixed with blood from the wound, I was unable to speak positively as to its coming from the interior of a hydatid cyst; but I stated my belief that it did so.

The man was feverish and rather ill for several days after the operation. The fluid became turbid and purulent, and was secreted in large quantity. About ten days later, we removed the tube, and enlarged the fistula by introducing a pair of long narrow forceps and then opening the blades.

A few days after this, our diagnosis was made certain by the escape of a fragment of white leathery membrane, about an inch square, semi-transparent, and resembling a lamella of boiled onion. This fragment I now show you. There cannot be felt the least doubt as to its nature by any one who has ever seen the like before. If, however, any doubt could be felt, it is at once dispelled by the inspection of a section under the microscope. You see that it is made up of closely packed concentric lamellæ like the layers of an onion, or, still better, like the lines of a fortification agate. No structure, as far as I am aware, found in the human body presents this peculiar appearance excepting the hydatid membrane.

After this fragment had escaped, I repeatedly stretched the fistula by forceps with the view to facilitate the escape of others, and great quantities came away. On one occasion, I was shown a porringer full of these pieces of membrane, which had been forced out during a coughing fit on the previous evening. All were broken and in a state of decomposition, the pus in which they floated stinking horribly. With the microscope, I detected echinococci and their detached hooklets in considerable numbers.

The man was now much improving in health. He had a good appetite, and little or no pain. About two months after his admission, we allowed him to return home, as he was very anxious to go to work. No portions of hydatid membrane had escaped for a fortnight prior to his discharge, and the secretion of pus had indeed almost ceased, its fœtor being quite lost. I had taken care to keep the external orifice well open; and my belief is that the cyst was quite emptied of its parasites, and that the fistula would very shortly heal.

With regard to the exact structure in which the cyst was in this case developed, I can give no positive opinion. We had no evidence that it had any connection with the lungs, liver, kidney, or spleen; and my impression is, that it had probably found its bed in the subperitoneal cellular tissue.

A fortnight ago, we admitted another case, in which, although as yet we have not confirmed the opinion by the result of a puncture, yet I venture a confident diagnosis that the tumour is hydatid.

Alice Stiff, the child now before us, is, as you see, a little girl having the appearance of perfect health, and about four years old. She was brought to the hospital on account of a hard swelling in her abdomen, of the existence of which her parents had only become aware a few weeks previously. It has occasioned no symptoms whatever.

The tumour rises as a very visible rounded swelling to the right of the navel, extending both above and below it. It is freely movable, and no pain is caused by handling it. In its centre is an obscure sense of fluctuation; but at its sides it is very firm. Different opinions have been given confidently by those who have examined it as to whether or not fluctuation is really present. I cannot myself feel any doubt about it. On the left side, the free edge of the liver can be easily felt continuous with the globular enlargement; and here also an oblique notch extending upwards and to the right can be distinguished (fissure between the right and left lobes). There is no pushing out of the ribs, from which fact it seems probable that the liver is dragged downwards by the weight of the tumour developed in its structure. The size of the tumour is, perhaps, about that of two fists. The tumour is so movable that when the child is made to lie on her left side it falls over towards the left. It is quite clear that there are no peritoneal adhesions. On percussing from above downwards, it is

* In this case, I preferred to open the tumour with the knife instead of using the trocar, for several reasons. 1. The diagnosis was not certain. 2. The tumour was probably behind the peritoneum. 3. I thought it probable that it had already inflamed, owing to the previous puncture. On reviewing the case, I think, however, that a trocar evacuation would have been the best practice.

found that where the lung clearness ends there the hepatic dulness begins, and that the latter is continuous with the tumour. There is no enlargement of the spleen. I cannot detect hydatid fremitus with any degree of certainty.

I have ventured the diagnosis of an hydatid cyst with much confidence. If we proceed by the method of exclusion, it is almost impossible to suggest any other which should be at all plausible. It is true, that hydatid tumours have been very rarely indeed met with at so early an age; but there is no *à priori* reason why they should not occur. The diagnosis being, therefore, considered to be established, we come to the important question as to what treatment is advisable. We have the choice between two plans only. Either we may let it alone, and trust to natural processes; or we may operate with the view of procuring the death of the parasite and the contraction of the cyst. No known medicine affords the slightest chance of advantage.

Now, gentlemen, I will invite you to feel very incredulous as to the necessity of any interference in the case before us. The little patient is in good health and suffers no inconvenience from the tumour; why subject her to the risk attending a trocar-puncture into the substance of her liver? I reply, that it is probable in a high degree that the tumour will increase in size; that it will before very long become the cause of pain and of disturbance to the functions of the adjacent organs; and that eventually it will jeopardise life. I allege, on the other hand, that the operation of puncture is attended by very little risk; and that it is highly probable that it will effect a permanent cure. Let me produce evidence on these points.

I will first relate one of the most satisfactory cases which has occurred in the whole of my surgical experience. Last winter, I was requested by Mr. Marsh, of St. John Street, to see a patient of his who was suffering from an abdominal tumour of a doubtful nature.

Mrs. B., aged about 33, married, and the mother of a family, had only quite recently come under Mr. Marsh's care. She had previously been seen by several other surgeons, by whom, in the belief that the disease was malignant disease of the liver, a most unfavourable prognosis had been given. She was indeed very ill; and, at first sight, there seemed much to confirm this view of the case. She had lost her flesh greatly, and was of pale sallow complexion. The suspicion that the tumour might prove to be hydatid and not malignant had, however, occurred both to Mr. Marsh and to Dr. Hughlings Jackson, who had examined it before I was called in. When we met in consultation, we found Mrs. B. much emaciated, quite confined to her bed, and suffering from almost constant sickness. It had been necessary to give morphia freely, in order to procure rest and relief from pain. The tumour filled the epigastrium, from the lower part of the sternum to the umbilicus, and extended laterally into the hypochondriac region on each side, lifting the lower ribs. On the sides it felt very firm indeed; but at the epigastrium we thought that fluctuation could be detected. The bulging of the whole region was quite perceptible to the eye. The integuments over the tumour were thickened and somewhat inflamed; but this seemed accidental, and connected rather with some boils which had formed than with the tumour.

The history was obscure. During the last few years, the patient had had several illnesses with abdominal pain; but we made out satisfactorily that she had had neither dysentery nor jaundice. She had known of the existence of a tumour for about a year, and it had much increased of late. The sense of fluctuation obtained was that of fluid contained in an exceedingly tense cyst; and I thought I could elicit a certain degree of vibration (hydatic fremitus). We all agreed that the tumour was probably hydatid; but, partly because of the patient's dread of an operation, it was decided to defer any radical measures of treatment.

I saw her twice during the next ten days, and on each occasion my opinion was strengthened. At length, the patient's sickness exhausted her so much, that it became clear that we were running great risk in any longer deferring an operation. I accordingly punctured the tumour at about the middle of the epigastrium with a small exploring trocar; and having obtained clear fluid, changed the instrument for one about the size of No. 4 catheter. With the latter, we drew off more than two pints of clear salt water. The fluid had not the slightest opacity; and on subsequent examination, it was found to contain a large quantity of chloride of sodium and no albumen. There could be no doubt that it came from a hydatid cyst. The puncture was closed with lint and strapping.

After the tapping above described, the patient progressed uninterruptedly well; her sickness ceased; she took food well; and the tumour did not refill. We had, at the time, not nearly emptied it; we only drew off as much fluid as would easily flow. The cyst, however, did not inflame; at least, not so as to cause any constitutional symptoms. After a while, the fluid which had been allowed to remain was absorbed, and the cyst contracted.

Three months after the operation, the patient called upon me at my house. She said she was in as good health as ever she had been in her life, and her aspect fully confirmed her statement. There was scarcely any evidence of enlargement or thickening in her liver.

In this case, we have an instance in which a large hydatid tumour perished in consequence of a simple trocar evacuation of its fluid contents, and in which shrinking of the cyst occurred without inflammatory symptoms. The obstinate sickness from which the patient had suffered, was no doubt due to the mechanical pressure of the tumour on the stomach.

A case somewhat similar to this was under my care in the Metropolitan Free Hospital, in conjunction with my colleague, Dr. James Jones, about four years ago.

Our patient was an Irishwoman, aged about 36, and in fair health. Her tumour was very large; but it was developed in the right lobe of the liver, and had dragged that organ low in the abdomen instead of pressing upward, as in the previous case.

The patient was thin; and the boundaries of the tumour could be easily made out. There was no doubt as to its being a large tense-walled cyst. A certain degree of fremitus or vibration was discoverable. The lower ribs on the right side were lifted by the tumour, which also extended downwards nearly to the crest of the ilium. No doubt was felt by any of those who examined the case, as to the nature of the tumour. It had caused the patient much pain, and was increasing rapidly; so that there appeared much reason to apprehend that it might give way into the peritoneal cavity. It was accordingly determined to puncture it. This I did with a trocar of small size (about No. 3), selecting the most prominent part of the tumour. Fluid as clear as water and very salt escaped freely. We drew off about three pints, which had the effect of reducing the tumour to a third of

its original size. The puncture wound was protected by lint and plaster.

During the week following the operation, the patient had rather sharp febrile symptoms, with tenderness over the tumour, either from peritonitis on its exterior, or from inflammation of the cyst itself. The latter became almost as large as it had been before, and contained a large quantity of air; over the whole of its front part it was tympanitic. That the air had been excreted, or was the product of decomposition, was certain; as none had been admitted at the time of puncture. In a short time, these symptoms passed off satisfactorily; and the woman made a good recovery, the tumour shrinking till it could scarcely be detected. She left the hospital well about six weeks after her admission. I saw her again some months later, and she was then wholly free from her disease.

I must ask you to note that, in this as in the preceding case, none of the smaller cysts were removed, and that the tumour shrank up in consequence of the evacuation of its contained fluid only. It is singular, that so simple a measure as a puncture with a small trocar should suffice to destroy the vitality of these parasites. We might have supposed that the fluid would be quickly re-secreted, and that their life and growth would continue as before. But it is not so; the withdrawal of the fluid in which they float suffices, I believe, always to accomplish their death. Their death may or may not cause inflammation of the part in which they are embedded.

Having thus brought before you the particulars of three cases in which excellent results were obtained by operative interference, I have now to mention one in which spontaneous recovery (partial) took place.

A young Irishman, of about 18, came under my care as an out-patient, about ten years ago, on account of a large tumour in the right lobe of his liver. The tumour occupied the whole right half of his abdomen, bulging out his liver, and displacing his ribs upwards. It fluctuated, and had the tense elasticity of an hydatid cyst. Excepting from the pain caused, the man was in good health; and despite its weight and inconvenience, he still kept at his work. I felt no doubt whatever as to the diagnosis. I advised him to come into the hospital, and have the tumour punctured; but this he refused. He remained under observation several months. At one time the tumour caused him so much pain, that he was obliged to give up his work. One morning, his friends sent, begging that I would come and see him, as they thought him dying. He had been unable to lie down all night; and the pain he suffered was such that I much feared the cyst would burst. I took a trocar with me; but again his courage failed, and he would not allow me to puncture it. From this time he improved. The attacks of pain became less frequent; and in a week or two he returned to work. I examined him six months later, and found the tumour diminished to half its original size, and quite free from pain. He promised to let me see him from time to time, but neglected to do so; and I have since not succeeded in obtaining any information respecting him. I believe he recovered, and that the cyst was in process of contraction. Let us clearly remember, however, that he ran the narrowest possible risk of his life. The tumour, when at its largest, probably contained not less than from a gallon to a gallon and a half of fluid; and it was a mere chance that it did not give way into the peritoneal sac.

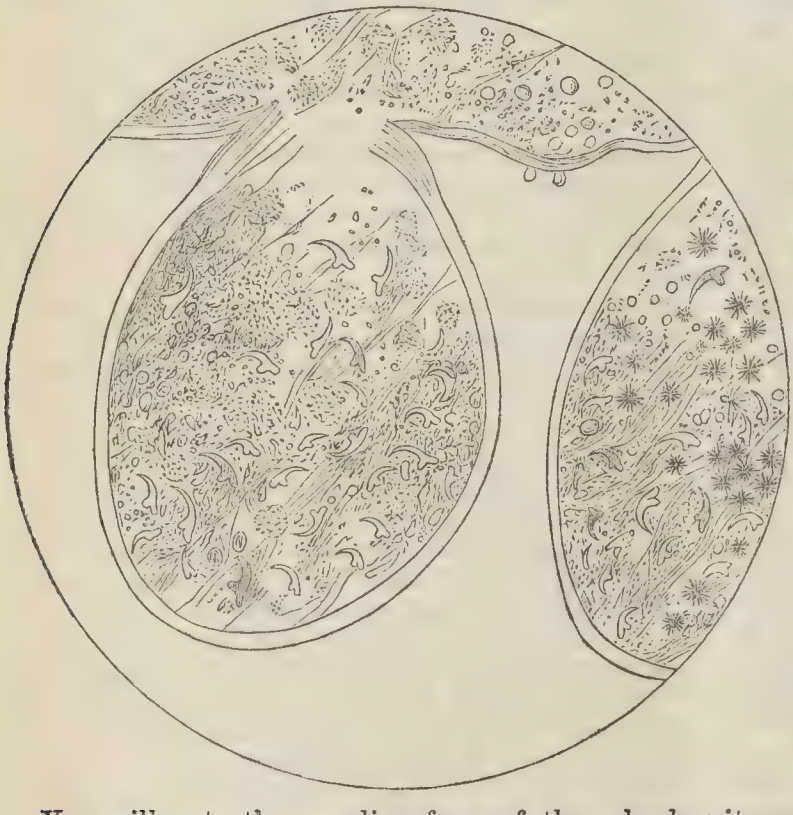
The spontaneous death of hydatids is not a rare event; and when they do die, I believe, the cyst usually contracts, its fluid contents being absorbed, and no injury is caused to its possessor. At any rate, we not unfrequently, in the *post mortem* theatre, meet with specimens of collapsed and dried-up hydatids in the livers of those who have died of other disease. Here is one which Mr. Spencer removed a few months ago from a patient of mine who had died after injury to the head. The whole tumour is not larger than a hen's egg. It is lodged in the left lobe of the liver near its free margin. Closely adherent to the hepatic tissue, is a dense fibrous capsule secreted by the liver in consequence of the irritation of the parasite. Within that we have the parent hydatid cyst, much involuted and folded. The parent contains many smaller ones, all of them collapsed and shrunken. All are opaque and somewhat softened, and amongst them is a glutinous material with opaque yellow cheesy matter. Probably this specimen has been dead a few years. An almost exactly similar one, but three times as large, and shewing less evidence of decomposition, was removed two or three years ago from the liver of a patient of mine, who had died after strangulated umbilical hernia. It has chanced that I have three times met with these tumours in the autopsies of hernia patients; and it suggests itself as possible, that the distension of the abdomen by them, when living and of considerable bulk, may possibly increase the risk of the occurrence of hernial protrusions. If you come upon a hydatid tumour at a still later period of degeneration after death than the one before us, you will find a dense cyst containing cretaceous and cheesy material without any evidence of secondary cysts whatever. In this chalky material, you will still often be able to discover with the microscope the hooklets of the echinococci.

But, although we often find *post mortem* proof that these parasites may die spontaneously, and cease to be the source of danger to their possessors, yet I believe we have but little reason to think that this fortunate event can be hoped for in cases in which the tumour has once attained a large size. Spontaneous death is probably brought about by external compression by the fibrous capsule which surrounds them; but this pressure must become very inconsiderable when they have reached a certain bulk. I know of no case on record parallel to the one I have mentioned, in which a very large one spontaneously diminished and probably died. There are, on the other hand, abundant cases on record in which these large tumours have caused death. You have but to turn to Dr. Bright's admirable *Memoirs on Abdominal Tumours*, or to Frerichs's excellent account of hydatid tumours given in his work on *Diseases of the Liver*, for instances of this. One such, which occurred at this hospital about two years ago, will be in the recollection of some of you. The subject of the latter was a man under the care of my colleague Dr. Little. The tumour was very large indeed; and had displaced the diaphragm upwards, so as greatly to compress the left lung. A perfectly correct diagnosis had been given, and an attempt to puncture the cyst had been made; but, unfortunately, the trocar entered at a part where the liver-tissue was thick, and no fluid was obtained. It was intended to try again in a few days; but, meanwhile, the man rather unexpectedly died. The puncture had nothing to do with his death, which

resulted, I believe, simply from the pressure of an immense cyst upon the thoracic contents.

The specimen obtained in Dr. Little's case was remarkable in that, although so very large, it contained no secondary cysts. You may, perhaps, be aware that the peculiar symptom known as hydatic fremitus is not met with if there be no floating cysts in the interior of the parent one. It consists in a kind of trembling of the cyst-wall felt by the hand some seconds after the vibrations produced by percussion have subsided; and is supposed to be produced by the secondary cysts which float in the interior bobbing against the wall of the parent, and thus causing a sort of percussion from within.

The drawing which I now show (see woodcut) was taken from echinococci obtained from the lining membrane of the cyst in Dr. Little's case. They were not numerous, and all that I found were dead. The sketch represents the body of one echinococcus and part of another; both are attached to the cyst-membrane. In both, the hooklets are all detached and floating loose in the body of the parasite. There are also seen crystals of some fatty matter—no doubt the product of decomposition of the dead animal. Had it not been dead, the hooklets would have been seen arranged in an orderly circlet on the animal's head.



You will note the peculiar form of these hooklets, and their close resemblance to crabs' claws. It is desirable to have a trained eye for these little bodies, since their discovery in pus will often help out a diagnosis. They are remarkably difficult of destruction, and are to be found much more often in the pus discharged from suppurating hydatid cysts than are whole echinococci. Their form is so definite that, when once recognised, it is impossible to mistake them.

You may find, in the works I have mentioned, and also in many others, numerous cases in which large hydatid tumours have been punctured or opened with success. In addition to those which I have cited, and which occurred to myself, I have seen, in the practice of other surgeons, several other cases; in all that I can recollect to have witnessed the result was good.

Of those recorded, in a certain number death has followed, either from escape of fluid into the peritoneum, or from the exhaustion and irritative fever consequent on the suppuration induced. Ill consequences have, however, been decidedly exceptional; and my impression is, that they will become still more so when is generally recognised what I have endeavoured to show; viz., that simple puncture and evacuation of the fluid is all that is needed. In many cases, or indeed in almost all, the endeavour of the surgeon has been to secure a fistulous opening by which the secondary cysts might escape. With this object in view, various preliminary measures have been thought needful, to secure that the cyst should be adherent to the peritoneum before it was opened. Caustic potass and acupuncture, with incisions through the skin, only have, with this object, been tried. Then, again, in other cases, the patient's risk has been increased by the injection of irritant fluids, iodine, gall, etc., into the cyst, in order to destroy the parasite. If further experience shall prove that a simple puncture with a fine trocar is all that is needful, the treatment will have been rendered much more safe. I should recommend the use of a very fine exploring trocar—the fluid is quite thin, and will run easily through the smallest bore; and that no pressure should be made in the tumour, just so much fluid being allowed to escape as will run away spontaneously. The operator should have at hand a fine probe or wire with which to push away any floating cysts which chance to fall against the end of the cannula and stop the flow.

Occasionally, hydatid tumours open spontaneously, and are cured by the discharge of their contents. This, however, is a mode of termination attended by much inconvenience and often by danger. I have several times seen patients who had voided fragments of hydatid cysts with their urine, and in whom frequently symptoms of obstruction had been caused. A man who was in the habit of passing hydatids *per urethram* was, about a year ago, under Mr. Curling's care in this hospital. He suffered but little, and eventually quite recovered. Sometimes, hydatids in the liver open through the diaphragm into the lungs; or, in other cases, into the stomach or intestine. Here is a fragment of hydatid cyst which a patient passed by the bowel; but which is so stained with bile that there can be no doubt as to whence it came. When the cyst obtains access to the pleura or lung, very serious symptoms may ensue. At the best, there will in such a case, in all probability, be prolonged fœtid expectoration, and the patient's strength will be much damaged.

Looking, therefore, candidly, at all the aspects of the question—1, the improbability that large cysts will be cured spontaneously; 2, the dangers which attend them in respect to possible rupture into the peritoneum, or the effects of pressure on adjacent viscera; 3, the inconvenience and risk incurred should spontaneous evacuation take place; 4, the very little danger that attends a simple puncture; and, lastly, the great probability that such puncture will be sufficient to produce a cure—we may,

I think, safely conclude that, when hydatid tumours in the abdomen have attained a size large enough to be recognised as such, it is the best practice to puncture them.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

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LECTURE I. (*Continued.*)

ON SOME POINTS CONNECTED WITH THE PATHOLOGY AND ETIOLOGY OF FIBROUS TUMOURS OF THE UTERUS.

2. *Fibroids* are heterologous growths, which may be described as originating from an abnormal or pathological blastema, and they are of two kinds—the fibro-plastic and fibro-nucleated, each variety being a permanent pathological state, resembling one of the transient forms of fibrous tissue.

a. One way in which fibrous tissue grows is—1. A blastema appears; 2. In this are formed a number of nuclei: these become cells with a single nucleolus. The cells elongate when split at the ends, and finally fibres are found. Lastly, the nucleoli disappear. The cells during elongation come to be spindle-shaped. Now the *fibro-plastic tumour* of Lebert is a tumour made up of these bodies, the nuclei being called *fibro-plastic nuclei*, the spindle-shaped cells *fusiform bodies*, and the fibres *fibro-plastic fibres*. In a fibrillary tumour these several bodies exist in vast numbers. The cells are perhaps more rounded than in ordinary fibrous tissue: the fibres sometimes exist in very large numbers, so that the tumour may be said to be almost entirely made up of them. The nuclei, however, never entirely disappear.

b. The *fibro-nucleated* fibroid is a permanent condition of the second mode of growth observed in fibrous tissue. In this tissue the fibres may be formed directly from the blastema without the intermediate agency of cells, *i. e.*, directly from the blastema; so that we have an appearance of cells and fibres quite distinct from one another. There may sometimes be very few fibres, so that the tumour may be said to be made up almost entirely of cells. Commonly, however, the fibres are present. Fibro-nucleated tumours are generally more malignant, and not necessarily encysted or circumscribed.

Intermediate between these two kinds of fibroids we may have very numerous differences, so that it may almost be difficult to say to which a given tumour exists, although the broad characters of a fibroid exist. To some such modification the recurrent fibroid may be referred, which is occasionally found in the uterus, in fibrous polypi, and in pelvian bodies. From the researches of Paget, which have been confirmed by subsequent writers, these tumours resemble the common fibrous tumours which are whitest, most homogeneous, least fasciculated and glistening. Microscopically, the cells are more elongated, caudate, *oat*-shaped, many with long and subdivided terminal ends. Nuclei and grumous and granular matter, such as might arise from disintegrated cells, are also present. The fibres are very few and far between.

3. *Malignant fibroids* are said by Paget to resemble exactly in all particulars the ordinary fibrous tumours of the uterus, with undulating white bands. The whole substance of the tumour has the same characters microscopical and general as these, although repeatedly examined, *i. e.*, nothing but the compact well-formed fibrous tissue with imbedded elongated nuclei. On boiling, gelatine is freely yielded.

The association of cancer and fibrous tumours has been denied. The later pathological records, however, seem to leave no doubt as to their co-existence. Mr. Hilton exhibited to the Pathological Society (*Trans.*, xii, 219) a tumour of a cancerous nature probably, following a recurrent fibroid. M. Bouvier (*Annales de Chirurgie*, iv, 21) gives a case of similar atnure, quoting others from Cruveilhier and Dumas. A similar case is given in the *Bulletin de la Soc. Anat.* (for April 1861, case 7), by M. Gillet, of general cancer in the abdominal organs with fibrous bodies *in utero* undergoing cancerous transformation. In a case to which I shall refer in the sequel, in the same tumour portions were cancerous and portions fibrous. To my mind, there can be no doubt that these two diseases do not uncommonly exist in the same tumour; and if malignant be understood to mean a tumour which may recur, and when cut or injured may leave an ulcerated surface which will not heal, there can be no doubt that this state is not uncommon in fibroids.

I cannot, however, stop here to discuss these points. To give, moreover, a treatise on fibrous tumours is no part of my intention. I can only glance at a few points, which in the sequel may be found useful to illustrate the practical points to which I wish particularly to call your attention. Whether we have to do with a true fibroid or fibroma with superimposed muscular tissue, these new growths in one important respect differ from uterus or muscle. If a fibrous tumour be wounded, so far as I am aware, it *never* heals by the first intention; it is followed by suppuration, generally gangrene. In a few exceptional cases the wounds set up an irritation in the parts which leads to absorption of the tumour. Years ago, Atlee showed that fibrous tumours had *very little* vitality in them, less vitality, indeed, than most adventitious growths. The knowledge of this fact is most important, as I shall hope to show in the sequel. For, while advantage has been taken of it to perform certain kinds of operations upon fibrous tumour, as in enucleation, it has been completely overlooked in the operation of gastrotomy, and has been often, I believe, a cause of death.

The *position* which fibrous tumours occupy in relation to the uterus has led to their subdivision into three classes, each of which has peculiar symptoms of its own. 1. *Extrauterine* or *surface tumours*, *i. e.*, where they are situated just beneath the peritoneum. 2. *Intrauterine* or *cavity tumours*, where they are within the cavity of the uterus. 3. *Intramural* or *parietal tumours*, where they are imbedded in the walls of the organ. If the tumour-points be intermixed with much uterine tissue interposed here and there, some have made this another variety, and

called it interstitial. It is only, however, a modification of the parietal. In the first and last varieties the point of connexion may be more or less constricted and lengthened out, constituting a pedicle. In this case the tumours are called *pedunculated;* and, when the tumour is within the cavity of the organ, by common consent the name of *polypus* has been applied to it.

The *size* to which some fibrous tumours will grow is enormous. Commonly they weigh from 3 to 4 lbs., frequently 7 to 8 lbs. Krüll met one which weighed 36 lbs. Gaultier de Claubry one which weighed 39 lbs. Kraumer met a surface pediculated tumour 46 inches in circumference, and which weighed 40 lbs. Dr. Graily Hewitt met with one which weighed 42 lbs. Waller mentions one which weighed 74 lbs. The largest tumours, however, are the pedunculated.

Extrauterine fibrous tumours sometimes have very small and weak pedicles, and these occasionally give way. Then they either continue to float within the cavity of the abdomen, and are there nourished in a very analogous manner to the loose bodies in articulations. Sometimes, however, they become again attached to some portion in the vicinity of the uterus, bony or otherwise, and constitute the "*tumeurs pelviennes*" of Huguier, or the "*tumeurs fibreuses de la fosse iliaque*" of Nélaton, not usually noticed in classical works. A very full account of these is given by Huguier and Nélaton (*Gaz. des Hôpitaux*, 1860, 411, and 1862, 77). The former was the first to call attention to them in 1860. They may be *intrapelvic* or *extrapelvic*. They are generally situated between the fascia transversalis and the peritoneum. Huguier's first case was attached to the sacro-iliac synchondrosis; two others were attached to the left anterior superior spinous process; another to the fourth false rib and left crista ilii. A similar one was seen by Verneuil also attached to the left anterior superior spinous process. The two cases described by Nélaton were in the right iliac fossa, one attached to the crista. These tumours are never found in men, a fact which shows their origin from the uterus; and, curiously enough, they have always been found in women who have borne children. Their size varies from that of a nut to that of an apple; and of this size they have been met in the posterior cul-de-sac by Depaul, so as to interfere with labour. In their structure they exactly resemble the uterine fibrous tumour; another reason, as Barth emphatically asserts, which proves that they originate from the uterus (*Bull. de la Soc. Anat.*, vol. xix, 13). In one case recorded by Gosselin, and in another by Chassaignac, they were recurrent. In Chassaignac's case, where the écraseur was used, followed by the red-hot iron, the tumour recurred in fifteen days. A second operation, followed by the Vienna paste, proved more successful. These tumours are hard, not adherent to the external skin, with a certain degree of mobility, limited only by the pedicle, smooth on their surface. They are often the seat of pain locally, of a lancinating character, like the points of needles. This pain is often aggravated by pressure. The only point of difference in the feeling between these tumours and the so-called displaced ovaries is that, although pain is produced by their pressure, it is not attended with sickness, as in displaced ovary. Their growth is usually very slow, occupying years in development. There is a very interesting case recorded by M. Demarquay (*Bull. de la Soc. Anat.*, xix, 13) of a pelvian fibroid which weighed upwards of eight pounds, surrounded by gross veins and made up of lobes. It was situated in the left iliac fossa, and partly ossified; another character common both to these bodies and to subperitoneal fibrous tumours of the uterus. No pedicle could be found. Barth, however, asserts that these pedicles are sometimes very minute, and may easily escape observation.

[*To be continued.*]

Original Communications.

PATHOLOGY OF BLOOD AND FEVER.*

By William Addison, M.D., F.R.S.

Blood consists of two distinct parts: the corpuscles, and a fluid—the liquor sanguinis. During respiration blood absorbs a small portion of oxygen, and, at the same time, gives off carbon in the form of carbonic acid.

The amount of carbon expired from the lungs may be altered by many circumstances. Hunger and rest diminish, satiety and labour increase it. It is greater during the day than at night, and greater in children than in adults.

That the carbon expired from the lungs is discharged from the corpuscles of blood seems proved, by the change of colour they undergo in the lungs, and because in healthy persons the consumption of oxygen and the amount of carbonic acid expired are in a direct ratio with the number of corpuscles in the blood of the person.

Urine is a fluid withdrawn from the liquor sanguinis. It holds in solution a peculiar matter called urea. And it is to be observed amongst all classes of animals which have red corpuscles in their blood, that urea and uric acid, or one of the two, is a constant constituent of the secretion of the kidneys. But whence is urea derived?

The kidneys of an animal have been extirpated. In such cases, where the animal has survived the operation, a large amount of urea has been found in the liquor sanguinis. It is very clear, then, that urea is not *formed* in the kidneys. On the other hand, the chemical analyses of blood and urine by Andral and Gavarret, by Becquerel and Herberger, would seem to leave no doubt that urea is an excretionary product of the blood-corpuscles. Herberger analysed the urine of a chlorotic girl on three occasions before, and twice after the use of iron. The amounts of urea before the use of iron are represented by the numbers 7.04, 7.00, and 7.12. After the use of iron these numbers rose to 26.8 and 27.3. In connection with these analyses of the urine, small quantities of blood have been taken from chlorotic girls and analysed before and after the exhibition of iron. In one case, previously to the use of iron, the amount of blood-corpuscles in a thousand parts of blood is represented by the number 46.0. After the use of iron for some weeks, this number rose to 64.0. In another example, the number before the use of iron was 49.0, after it, this number rose to 95.0.

The amount of urea in the urine increases, *pari passu*, with an increase in the number of corpuscles in the blood; and the presumption is, that the use of iron as a remedy for chlorosis would not have increased the amount of urea in the urine, had there been no increase in the number of corpuscles in the blood.

* Abstract of two lectures delivered at Brighton, November 1863.

The corpuscles of blood contain a fluid. And the only explanation which can be given of it is, that they take in fluid from the liquor sanguinis. And if a fluid be absorbed by the corpuscles from the liquor sanguinis, some kind of used material must be discharged from them, otherwise they would gradually increase in size, which we know is not the case. Of what nature, then, is the used material discharged from blood-corpuscles into the liquor sanguinis? Our answer is, from the analyses just mentioned, that it is represented by urea or uric acid. It would appear then, that the vital properties of the corpuscles of blood are sustained, on the one hand, by fresh material (oxygen) derived from the atmosphere, and on the other hand, by fresh material (a fluid) from the liquor sanguinis; and that used material (carbon) is discharged from them into the atmosphere, and used material (urea) into the liquor sanguinis.

This account of the actions of blood-corpuscles corresponds with what has been observed in all other departments of life. Every living body, whether plant or animal, is at all times taking in fresh material from surrounding matter; it is also at all times discharging or throwing off used materials. And used materials accumulating in contact with living elements, are prejudicial to health and vigour. We need not dwell upon examples. But if the statement be true of living bodies, it must be true of the various cells of the body. And we conclude it to be true of the corpuscles of blood, which are cellular bodies.

The first inquiry then is, as to the phenomena which appear in the human body from accumulation of used material in the blood.

Pathology of Retention of Carbon. In acute pneumonia, the interchange between the corpuscles of blood and elements of the atmosphere are hindered sometimes over a large area of the lungs. In such cases the countenance, lips, and skin of the patient are dusky or dark coloured. These appearances announce disturbance of the corpuscles of blood as distinguished from the liquor sanguinis, which is colourless.

The other symptoms of severe pneumonia are fever, wandering of the mind, delirium, and coma; because impeded respiration hinders the discharge of carbon from the blood corpuscles, and the brain suffers as from a narcotic poison. In drowning, the discharge of carbon is totally arrested, and a speedy loss of consciousness ensues. When respiration is restored, carbon is again discharged from the blood-corpuscles, and consciousness returns. Ether and chloroform are hydrocarbons. The inhalation of the vapour of either of them produces insensibility; because the inhalation of vapours already saturated with carbon, stops the discharge of carbon from the blood. These pathological phenomena are proofs of a very close relation between the corpuscles of blood and elements of the brain. Is there anything in the anatomy of the organ which helps to explain it? The brain is very largely supplied with blood; nevertheless it is an extremely soft or diffluent organ. It falls to pieces upon the slightest handling. This condition of the organ would seem to imply a species of actual contact between corpuscles of blood and elements of brain; because the coats of the extreme vessels have no coherency.

Pathology of Urea. When the kidneys are diseased, urea accumulates in the liquor sanguinis. Suppression of urine from any cause leads to accumulation of urea in the liquor sanguinis. In these cases the symptoms are those of brain-disturbance, tremblings, muttering, delirium, and coma. Sir H. Halford has left a record of five examples of suppression of urine, and in all of them the symptoms before death were those of poisoning of the brain and nervous system from accumulation of urea in the blood. Thus we show that the used materials of the corpuscles of blood are poisonous to the brain and nervous system, if not eliminated and discharged away from the body. That is to say, the corpuscles of blood in the exercise of their natural functions give origin to poisons, which are eliminated by the lungs and kidneys.

Liquor Sanguinis. In man, and in all the higher animals, under the most opposite kinds of food, the corpuscles of blood, although somewhat different in form, are of the same red colour, and are similar, if not identical, in chemical composition. The liquor sanguinis, on the other hand, is variable in its composition.

It is well known that numbers of people enjoy health and pursue their daily avocations upon very different systems of diet. Moreover, the diet of both rich and poor varies with the seasons of the year in respect of fruit and vegetables. That elements of diet mingle with the blood is proved, because numerous substances taken as food or drink have been detected in blood. When iron has been taken as a remedy for chlorosis, it has been discovered in the urine by its appropriate tests. If a few drops of spirit of turpentine be taken into the stomach, a very short time elapses before the odour of it may be perceived in the urine; and urine is a fluid withdrawn from the liquor sanguinis. But the corpuscles of blood have an uniform composition, that is to say, a composition which does not vary with everything in the liquor sanguinis. It must, therefore, be the fluid of blood which conveys things of diet from the stomach and alimentary canal to the kidneys.

All secreting organs derive elements of secretion from the blood. The milk of a nurse will acquire purgative qualities from her having taken aperient medicine. Mercury and sulphur taken into the stomach have been found in the cutaneous secretions. Other medicines taken into the stomach have been discovered in the blood, and after death in organs of secretion and in the brain. In these examples—if the corpuscles of blood have an uniform composition—the liquor sanguinis must have been the medium of transmission.

But a substance in solution in the liquor sanguinis must be distributed generally throughout the whole body. How is it, then, that symptoms of poisoning are local? When a person takes small quantities of mercury repeatedly, symptoms of poisoning appear in the salivary glands. Narcotic poisons taken into the stomach produce disturbance in the functions of the brain exclusively. Moreover, the brain is unaffected when the salivary glands are suffering severely from mercury; on the other hand, the salivary glands are unaffected by a narcotic poison.

Physiologists explain these phenomena by reference to the specific properties of different kinds of cells. All cells, they say, manifest a property of absorption. But they do not admit indiscriminately every sort of surrounding matter; on the contrary, they exhibit peculiar affinities. And it is in virtue of these affinities in cell-elements that secreting organs manifest special relations towards particular poisons.

That this is a true interpretation seems proved, not only by the limited effects of poisons, but because all the organs of the body are indifferent to many substances in the liquor sanguinis which, *à priori*, we should have expected would seriously disturb or poison some of them. For example: ferrocyanide of potassium may be taken into the stomach to a considerable amount, and be very soon detected in the urine. To reach the urine, it must have been in solution in the liquor sanguinis. If in solution in the liquor sanguinis, it must have circulated through all the organs of the body. Nevertheless, no signs of distress or dis-

turbance appear in any organ from its presence in the blood. Ferrocyanide of potassium is not a necessary of life. Nor can it be said to be a poison. We say it is a thing indifferent.

It may be affirmed, then, respecting soluble matters in the liquor sanguinis, that—1. Some are necessary to life; 2. Some are indifferent; And, 3. some are medicines or poisons.

1. Those things are necessaries which preserve the mean physiological constitution of the liquor sanguinis in respect of water, fibrine, albumen, fatty compounds, and salts. They are comprehended under the terms diet, food, and drink.

2. Those things may be said to be indifferent which are not necessaries, but which, being present in the liquor sanguinis, pass away through some depurating organ without any sensible effect upon the health or feelings of the person; as ferrocyanide of potassium, and other things.

3. Those things are medicines or poisons which sensibly vary or disturb the functions of some local organ; as opium, mercury, etc.

Hence, then, the category or class in which a substance in solution in the liquor sanguinis is placed, is determined by its properties in relation to some tribe or group of cells. The mere fact of a thing being in the liquor sanguinis amounts to nothing, if it do not affect any of the cell-elements of the body.

Now the corpuscles of blood constitute a tribe or group of cellular bodies. We have, therefore, strong ground for arguing that they have those properties which are common to all cells, namely, special affinities.

In explanation of phenomena in inorganic bodies, the chemical philosopher is constrained to admit a doctrine of elective affinities. And the physiologist, in explanation of the various products of the living body, feels in like manner constrained to admit a similar doctrine with respect to the actions of cells. But a doctrine of special affinity, whether applied to the molecules of ordinary matter, or to the cell-elements of living bodies, necessarily implies a co-ordinate indifference or resistance. That is to say, if cells have special affinities towards some things, we must admit indifference or resistance towards other things. For example, if a plant resist the vicissitudes of heat and cold, no difficulty is felt in referring the power of resistance to the plant. But the resisting power is different in different parts of the individual. The blossom droops before the leaves, the leaves before the stem. This can be referred only to different susceptibilities in different sorts of cells; and a difference of susceptibility is a difference of resistance.

Applying this doctrine of resistance to the relations subsisting between the corpuscles of blood and the liquor sanguinis, the argument is, that poisons calculated to disorder some local organ may be in solution in the liquor sanguinis without disturbing the corpuscles of blood.

It is very usual to say that narcotic poisons are specific to the brain; mercury specific to the salivary glands; other poisons specific to other organs; and our object is to show that there are poisons specific to the corpuscles of blood.

In all the severe or malignant forms of fever, blood is of a darker colour than natural. Huxham, Fordyce, Perry, Armstrong, Rokitansky, Simon, and most other writers on fever, speak of the dark hue of the blood in the malignant forms of the disorder. And with the deepening hue of the blood, cerebral disturbances deepen also. That the dark hue of the blood in fever is evidence of some change or incapacity in the corpuscles seems proved, because exposure to air has no effect in brightening it.

[*To be continued.*]

DIFFICULT LABOUR FROM DEFORMED PELVIS, REQUIRING CRANIOTOMY: UTILITY OF DR. EARLE'S PELVIMETER.

By A. Meadows, M.D., M.R.C.P., Physician-Accoucheur to the General Lying-in Hospital, and to the St. George's and St. James's Dispensary.

In the third volume of the *Transactions of the Obstetrical Society of London* (page 145) will be found a drawing and description of a pelvimeter invented by Dr. Earle of Birmingham, of which I ventured to express a very favourable opinion in presenting it to the notice of the Fellows of that Society. At that time I had not had an opportunity of testing its value, but such an occasion has since occurred to me, and the results were so completely satisfactory that I am anxious the profession should know of the existence of this very useful little instrument. The details of the case in question are as follows.

On December 23rd, 1862, I was sent for to Mrs. J., aged 31, who, I was informed, had been twenty-eight hours in labour with her first child, little or no progress having been made towards delivery for the last four hours, although the os was reported to be fully dilated. The patient was also beginning to show symptoms of exhaustion. On examination, I found evidence, in the bowed extremities, of rickets in early life; and this prepared me for corresponding deformity of the pelvis, in which I was not disappointed. The promontory of the sacrum was projected forwards, and was approximated by the symphysis pubis. Examination by the finger alone gave me the impression that the conjugate diameter did not exceed $2\frac{1}{2}$, or at most $2\frac{3}{4}$ inches. Having Dr. Earle's pelvimeter* with me, I applied it, and found that it registered a conjugate diameter of $2\frac{5}{8}$ inches; and I may here add, that its employment gave not the slightest difficulty, indeed it was easier to reach the sacral promontory with it than with the finger. In addition to this complication, though the head presented and was resting upon the brim unable to enter the cavity, about six inches of the cord were hanging in the vagina, the pulsation in it being exceedingly feeble. As the patient's condition was such as required speedy delivery, I at once performed craniotomy, and in about quarter of an hour delivery was accomplished.

The patient went on well till the third day, when acute mania set in, and she died seven days after delivery.

A *post mortem* examination was made next day, and there was found commencing inflammation of the peritoneum. The liver and kidneys were large, pale, and fatty; the spleen, stomach, and intestines were healthy. Firm old adhesions of the pericardium existed, together with fatty degeneration of the muscular fibre of the heart, and warty growths on the mitral valve; there was also thickening of the bases of the semilunar valves. The pelvis, after removal of the soft parts, measured at the brim $2\frac{3}{4}$ inches in the antero-posterior diameter, $4\frac{7}{8}$ in the transverse, and $4\frac{5}{8}$ in the oblique.

Thus, it will be seen, that the pelvimeter gave indications which were perfectly trustworthy; and though pretty nearly the same results were anticipated from digital examination alone, it was nevertheless highly satisfactory to have this opinion confirmed as it were by another authority. I can quite imagine circumstances where the employment of this instrument would not only be easier, but the infor-

* This instrument is made by Matthews, Portugal Street.

mation derived from it more certain, than where the finger alone is used; and, in the country more especially, where a consultation with a brother practitioner is not always obtainable, a guide of such proved integrity may, I think, be found of no small comfort in cases of similar difficulty.

Cavendish Place, Cavendish Square, February 1864.

Reviews and Notices.

THE SECOND STEP IN CHEMISTRY; or, the Student's Guide to the Higher Branches of the Science. By ROBERT GALLOWAY, F.C.S. With Illustrations on Wood. Pp. 771. London: 1864.

THIS book is intended for the use of the student of chemistry, after he has become sufficiently acquainted with the elementary matters treated of by Mr. GALLOWAY in his *First Step in Chemistry*. In it are placed before the learner the chief theories and discoveries, having a general bearing on chemistry, that have of late been attracting attention in the chemical world. An idea of the nature of the work may be gathered from an outline of its contents.

In the first chapter, the author treats of the Properties of Matter; and explains and illustrates the specific gravities of gases and vapours, the expansion and compressibility of matter, liquefaction, vaporisation, etc. The second chapter is on the Law of Volumes. Here we find instruction as to combination by volume, the densities of vapours and gases, etc. The third chapter has for its title Molecular Atoms; and in it the author gives the former and present views as to the constitution of elementary bodies. In the fourth chapter, the subjects of the Numerical Relations of Equivalent Numbers, and the Binary Theory of Salts, are fully treated of. The fifth chapter contains a description of the interesting phenomena known among chemists as Polymorphism, Pseudomorphism, and Isomorphism. In the sixth chapter, the author speaks of the Atomic Weights of the Elements; the Constitution of Chemical Bodies; and the Meaning of Chemical Formulæ. This chapter will be a very interesting one to the student of modern chemical philosophy, as in it he will find an outline of the views of Gerhardt, with arguments for and against doubling the atomic weight of oxygen, as proposed by that learned chemist; the different views held as to the constitution of compounds, including expositions of the "unitary system" of Gerhardt, the various theories as to the constitution of alcohols and ethers and of ammonia, the meaning of formulæ, molecular types, and equivalent values of radicals; and at the end of the chapter is given a classification of bodies in accordance with Gerhardt's views. The following four chapters contain the application of Gerhardt's system of notation, the simplest, or Hydrogen Type, being treated of in the seventh chapter; the Water Type in the eighth; the Hydrochloric Acid Type in the ninth; and the Ammonia Type in the tenth. In the eleventh chapter, Mr. Galloway has placed before the student a very full account of the views of Wurtz, Lyon Playfair, Frankland, and Kolbe, on the Constitution of Bodies. The twelfth chapter has for its subject the Atomic Volumes of Solids and Liquids. The subjects of the thirteenth chapter are: Boiling Points; Fractional Distillation; Specific Heat; Atomic Heat; Heat of Combination; and Calorific Intensity. Those of the fourteenth, are the Diffusion of Liquids; Dialysis; and Osmose. And the fifteenth chapter contains an account of Chemical Analysis by Spectrum Observations. At the end of the work are two Appendices, one on Weights and Measures and other useful matter; the other containing a copious selection of Questions in Chemistry from the examination-papers of various boards, with references to the parts of Mr. Galloway's works in which their answers may be found.

Without attempting to give any further analysis of this work or of any of its chapters, we will only say that the chemical student will find in it as complete an account as he can possibly require of all the subjects of which a list has been given above. The book is, it will of course be understood, not intended as a complete guide in the operations of the laboratory; this duty is left to be performed by such works as those of Fresenius, or Mr. Galloway's own *Manual of Qualitative Analysis;* but, while the author has necessarily introduced a certain amount of instruction as to the preparation or analysis of various compounds, his main purpose is to place before the more advanced student the abstract principles of modern chemical science. In carrying out this object, Mr. Galloway has been careful to place the views of chemical observers fairly before the reader.

"Instead of making the students accept the facts and principles on the *ipse dixit* of the book, the different views which are entertained by different chemists on the same subject are collated, and the several arguments by which these views are maintained are given, so as to teach him to form his own opinion on the disputed points, rather than adopt the opinions of others. This method of teaching will best fit the student for reading original memoirs on the science, whilst, at the same time, from its exercising his reasoning faculties, it will form the very best discipline for the mind. I have, therefore, drawn largely upon original memoirs; and on such important subjects as molecular atoms, the doubling of the atomic weights of oxygen, sulphur, etc., I have not hesitated to give the memoirs of Sir B. Brodie, Dr. Wolcott Gibbs, and Dr. Odling, almost *in extenso*."

To increase the utility of this work to the teacher and to the student, Mr. Galloway has, as in his *First Step*, introduced a large number of *exercises;* which, he believes (and in our opinion rightly) will facilitate the understanding of the subjects. Thus—the data for working out the solution of the problem being in each case previously given—we find such questions as the following:

"A gas measures 20 cubic inches at 50 F. What would it measure at 90 F.?

"A gas measures 15 cubic inches at 90 F. What would it measure at 60 F.?" (P. 8.)

"In what proportion of volume must hydrogen and sulphur combine, to form sulphide of hydrogen?" (P. 47.)

"Deduce from the following per centage numbers the formulæ of the different substances, and employ the system of notation just explained:—A specimen of the mineral monradite was found to contain in 100 parts, $Si O^3$ 56.17, of Mg O 31.63, of Fe O 8.56, HO 4.04." (P. 156.)

"Calculate the calorific intensity of ether (C^4H^5O) in oxygen gas and in atmospheric air." (P. 624.)

"A caking coal from Northumberland was found to have the following per centage composition:—Carbon 80.54; hydrogen 4.76; oxygen 14.70. Deter-

mine its calorific intensity from these numbers." (P. 625.)

Each of these questions is only one out of a series of several of the same kind; nor have we given examples of all the kinds of problems that are offered to test the student's power of solving them.

To those of our readers who have the inclination and the opportunity to become acquainted with the principal views of modern chemical philosophy, Mr. Galloway's *Second Step in Chemistry*, containing as it does a full and impartial exposition of the various doctrines and discoveries, will be a most valuable guide.

DR. GARROD'S LECTURES

ON THE

BRITISH PHARMACOPŒIA,

Delivered at the Royal College of Physicians.

THE fourth lecture was delivered on Friday, Feb. 5.

Three new *Resins*, obtained from drugs, are now introduced; viz., the *Resin of Jalap* (*Jalapæ Resina*); the *Resin of Scammony* (*Scammoniæ Resina*); and the *Resin of Podophyllum* (*Podophylli Resina*). These substances are commonly known by the names of jalapine, scammonine, and podophylline.

Resin of Jalap, or jalapine, is the active principle of jalap-root; its dose is about one-twelfth or one-fifteenth of that of powdered jalap.

Scammony Resin is the chief constituent of scammony; which sometimes contains 80 per cent. or more; but the quantity is very variable. About two tons of scammony are sent each year to Europe; and it appears to be the business of two thousand men in Turkey to adulterate it. The scammony resin is now ordered to be prepared from the root itself; and it presents a marked difference from the ordinary scammony, which has a musty odour, probably from chemical changes, while the root is fragrant, and the resin has a similar odour. From clinical observations made by Drs. Garrod and Farre, scammony resin is quite equal in its effects to the best scammony, either alone or with other purgatives. The dose is much the same as that of pure virgin scammony, which indeed contains, in good specimens, as much as 80 or 90 per cent. of resin.

Resin of Podophyllum is obtained from the root of *Podophyllum Peltatum*, a plant of the natural order *Ranunculaceæ*. The dried root is imported from North America "in pieces of variable length, about two lines thick, mostly wrinkled longitudinally, dark reddish-brown externally, whitish within, breaking with a short fracture." The resin is "a pale greenish-brown amorphous powder, soluble in rectified spirit and in ammonia; precipitated from the former solution by water, from the latter by acids." Podophylline has been extensively employed in this country; and Dr. Garrod has arrived at the following conclusions regarding it. It is a powerful purgative. It produces large biliary evacuations from the intestines; probably rather through emptying the gall-bladder than through increasing the secretion of bile. In large doses, it has a griping and depressing effect. It is best given in combination with other purgatives; of which it increases the action. The griping produced by it may be prevented by combining with it belladonna or henbane. It is a valuable substitute for mercury. The dose of podophylline is from a quarter of a grain to half a grain or a grain.

Preparations of Mercury. Beyond the change of nomenclature referred to in the second lecture, no extensive alteration has been made. The *Red Sulphuret* of the former Pharmacopœia has been omitted. *Red Iodide of Mercury* (*Hydrargyri Iodidum Rubrum*) has been re-introduced; it is a simple iodide (HI). An ointment composed of sixteen grains of the iodide to the ounce, is ordered. The dose for internal use is from one-twelfth to one-fourth of a grain—somewhat greater than that of corrosive sublimate.

Iodine has a powerful influence in modifying the action of mercury. Many years ago, the occurrence of symptoms of mercurialisation after the use of iodide of potassium was noticed by Dr. Garrod and other practitioners, and was also referred to in works on materia medica. From further investigations, it has been shown that, where mercury is taken for any length of time, it is partially deposited in an insoluble form in the tissues; sometimes in combination with albumen, sometimes in the metallic state. Melsens has shown that iodide of potassium sets the metal free and renders it soluble, so that it is again introduced into the blood and excites mercurial salivation. Dr. Garrod referred here to some illustrative instances. A young man came under his care with a sore-throat and skin-eruption, the result of syphilis. Iodide of potassium was first given in doses of from five to ten grains three times a-day; no remarkable symptoms nor change in the patient's condition were produced. This medicine was then omitted, and calomel was given in grain doses; salivation was rapidly produced, and the patient's symptoms were improved. The calomel was then discontinued; and, when the symptoms of mercurialisation had entirely disappeared, the iodide of potassium was resumed, in ten-grain doses. In forty-eight hours, however, intense salivation returned; and it was not till after some time that the patient was able to take the full dose of the iodide with impunity. The effects of the simultaneous administration of iodine and mercury form an interesting subject for future investigation.

Acid Solution of Nitrate of Mercury (*Liquor Hydrargyri Nitratis Acidus*) has been introduced. As a caustic, it has been employed in the treatment of carcinoma; but care is required in its use, as it has been known to produce symptoms of mercurialisation.

In *Alcohols, Ethers,* and the allied compounds, some important alterations have been made. *Rectified Spirit, Proof Spirit, Sherry Wine,* and *Chloroform,* remain practically the same as before. *Spiritus Vini Gallici* has been omitted. *Ether* is directed to be of a lower specific gravity than formerly.

Ethereal Oil (*Oleum Æthereum*) is omitted for the following reasons: there is no clinical evidence of its antispasmodic properties; it is a very expensive remedy; and it is extensively adulterated.

Spirit of Chloroform (*Spiritus Chloroformi*) is ordered as a substitute for the pharmaceutical compound commonly known as chloric ether—which has been a very erroneous name, as the so-called substance bears no relation to the true chloric ether or chloride of ethyl. The pharmaceutical chloric ether has hitherto varied much in strength; containing sometimes 1 part of chloroform in 6 of rectified spirit, sometimes only 1 part in 19 or 20. In the British Pharmacopœia, it is directed to be made by adding one part of chloroform to nineteen of spirit. When it is thus made, the chloroform is not precipitated by the addition of water, even when this contains much saline matter.

Spirit of Nitrous Ether (*Spiritus Ætheris Nitrosi*) should be a solution of nitrous ether in spirit. Made, however, according to the process directed in the London Pharmacopœia, it was very uncertain; and, as found in the shops, often contained less than one per cent. of nitrous ether. In the British Pharmacopœia, it is directed to be made by distilling a mixture of sulphuric acid, nitrite of soda, and rectified spirit. Thus prepared, it is likely to be of more uniform strength; and there will be an opportunity of ascertaining its real value as a medicinal agent.

Rectified Pyroxylic Spirit (*Spiritus Pyroxylicus Rectificatus*) has been introduced; it is defined as a "hydrated oxide of methyle, C^2H^3O, HO, with about ten per cent. of water, a product of the destructive distillation of wood." As it is a methyl compound, it is necessary to be careful not to confound it with methylated spirit, which is ordinary spirit spoiled by the addition of methylic alcohol so as to render it unfit for drinking purposes. It is to be regretted that some druggists have used this methylated spirit for the purpose of making tinctures.

Has pyroxylic spirit (purified methylic alcohol) any real properties? It has been used as a sedative in vomiting, gastric disturbance, and cough. Dr. Garrod has had but slight experience in its use; but he thought that, when good effects have followed its use, these have resulted rather from the impurities contained in it—hydrocarbons allied to creasote. He doubted whether an absolutely pure methylic alcohol will procure relief; and considered its introduction an injudicious step, on account of the use made of the impure methyle-alcohol for the purposes of adulteration.

Anthelmintics. Four new anthelmintic remedies find a place in the British Pharmacopœia; viz., Male-fern; Kousso; Kamela; and Santonine.

Fern Root. This is the dried rhizome of the *Aspidium Filix mas.* It has been sometimes given in the form of powder; now, however, a *Liquid Extract* (*Extractum Filicis Liquidum*) is ordered; it consists of an ethereal solution of an oily matter contained in the fern-root. The value of fern-root as a remedy in tapeworm is well known; it apparently produces the death and expulsion of the parasite. The dose of the fluid extract is from half a drachm to a drachm.

Kamela is much less known as an anthelmintic than fern. It is a coarse orange-red powder, consisting of the substance adhering to the capsules of *Rottleria tinctoria.* It is mostly soluble in ether, but is insoluble in water; it is soluble in alcohol. Kamela is much employed in India, and to some extent in this country, as a remedy for tapeworm. Dr. Garrod had given it in some instances. In one case, a gentleman had suffered during several years from symptoms of tænia. Two drachms of kamela were given; and sixteen feet of the worm were expelled—the head, however, could not be found. There has been no return of the symptoms, during an interval of two years and a half. In other cases also, large quantities of tapeworm have been expelled; in some, however, a return has taken place. The dose is one, two, or three drachms, given in gruel or syrup. It is a powerful purgative, and, therefore, does not often require to be followed by other medicines having a similar action.

Kousso (*Cusso*) consists of the flowers of *Brayera Anthelmintica,* a plant of the natural order *Rosaceæ.* An infusion is ordered to be made by mixing a quarter of an ounce of coarsely powdered kousso in four fluid-ounces of water. It is a powerful remedy in tapeworm, but numerous comparative trials are required before its real merit can be established. For an adult, the dose is from a quarter to half an ounce. As the kousso itself is directed to be taken with the infusion, without straining, the bulk of the dose renders it somewhat difficult to swallow.

Santonine (*Santoninum*) is a crystallised neutral principle obtained from santonica, the unexpanded heads of some undetermined species of *Artemisia.* On the continent, it is commonly called *semen contra*—the seed against worms. Santonine is insoluble in water, but is soluble in alkaline solutions.

Santonica has been occasionally given in doses of from half a drachm to one or two drachms; its bulk is the principal objection to its use, but this is overcome by the employment of santonine, of which from two to six grains are sufficient. There appears to be good clinical evidence of its efficacy as an anthelmintic; it is said also to have antiperiodic properties.

Cherry-Laurel Water (*Aqua Lauro-Cerasi*). This is made from the leaves of the cherry-laurel or *Lauro-cerasus.* It would not have been introduced into the British Pharmacopœia, if it had not been previously in those of Edinburgh and Dublin, and had been in use in Scotland and Ireland. The cherry-laurel water contains hydrocyanic acid, the product of the decomposition by certain ferments of the amygdaline contained in the leaves. It is considered to be an elegant mode of using hydrocyanic acid. But it is very liable to vary in composition; and it is not required, as dilute hydrocyanic acid is already a pharmacopœial preparation. The dose is from half a drachm to a drachm.

Diluted Hydrocyanic Acid (*Acidum Hydrocyanicum Dilutum*) remains the same as in the London Pharmacopœia. Dr. Garrod advised practitioners in future not to prescribe Scheele's acid. It has been said, that this is superior to the Pharmacopœial acid. Chemists, however, are in the practice of making a strong hydrocyanic acid, which they dilute to 4 per cent. and call it Scheele's acid; while other portions of the same, diluted to 2 per cent., are sold as Pharmacopœial acid.

Bromide of Potassium was contained in the London Pharmacopœia of 1836, but omitted in that of 1851. It is now re-admitted. The formula of the salt is K Br.; and in its chemical relations it is closely allied to the chloride and iodide of potassium. It is very soluble in water. When first introduced, bromide of potassium was considered to resemble the iodide in its physiological properties; but little was known regarding it. About nine years since, Dr. Garrod gave it with apparently good effect in some cases of syphilitic psoriasis, etc.; he also found that, when pure, it did not give rise to symptoms of iodism. When it did so, this arose from the presence of iodide of potassium in the salt. The results at which he arrived from observation of its effects were the following. It does not produce coryza. Some persons, after taking it, experience a peculiar dryness of the throat. It produces in all drowsiness, and headache when given in large doses. The administration of large quantities is followed by slight paraplegia. The action of the drug is alterative; there is no marked action on the perspiration or urine. It has been recommended by Sir Charles Locock in cases of epilepsy, hysteria, and uterine disturbance; and has been found to lower the functional excitement of the generative organs. Hence it has been found useful in cases accompanied by irritation or overexcitement of these organs. It has also been found useful in deadening the sensibility of the larynx, as a preliminary to the use of the laryngoscope. Dr. Gibb has also recently recommended for this purpose the bromide of ammonium; which he says he has employed with good effect.

Preparations of Arsenic. The *Solution of Chloride of Arsenic* (*Liquor Arsenici Chloridi*) of the London Pharmacopœia has been omitted; because it contains no chloride, but simply arsenious acid; and because, although effective in skin and nervous diseases, it has not proved superior to Fowler's solution. Dr. Garrod has found that, when doses containing an equivalent quantity of arsenic are given, the intolerance of the two solutions is the same.

The British Pharmacopœia contains Fowler's solution, under the name of *Arsenical Solution* (*Liquor Arsenicalis*); and two new salts of arsenic—*Arseniate of Soda* and *Arseniate of Iron.*

Arseniate of Soda has long been used as a medicine on the continent; and is, according to Dr. Garrod's observations, a valuable substitute for Fowler's solution. He referred to some cases in which he had made a comparative trial of the two remedies. In one patient, a woman, aged 50, arsenious acid produced gastric irritation, and was omitted; but arseniate of soda was tolerated, even when the dose contained a larger quantity of the mineral than had been given in the former medicine. The same result was obtained in other cases. The British Pharmacopœia orders a solution of arseniate of soda, of which each ounce contains four grains of the salt.

Arseniate of Iron ($3\,Fe\,O, As\,O^5$) has been given in doses of one-twentieth of a grain and upwards in carcinomatous affections.

British Medical Journal.

SATURDAY, FEBRUARY 20TH, 1864.

EXPERTS AND CRIMINAL LUNATICS.

EVERY member of our profession must note, on all occasions when matters medical are debated in the House of Commons, how unfortunate it is that there is no member of the profession there capable of giving authoritative information and explanation on the points in question.

The debates on Townley's case, in so far as they touch the medical side of the question, are full of inconsistencies, and exhibit, above all things, a want of real knowledge of things and men appertaining to our calling. Whenever a word unfavourable to medical evidence in lunacy cases is uttered by any member, it is received with the usual marks of parliamentary approbation. Most of the speakers, indeed, on the occasion referred to, took occasion to point out the unworthiness, or rather the untrustworthy character, of medical evidence; the result of all this being, in fact, a marked condemnation of the whole profession as witnesses in cases of lunacy.

If a member of our profession, who knew the profession, had been present, he would have at once pointed out the absurd error into which the Imperial Parliament had fallen, and would have shown the false conclusions on which the error was based. The members of the House referred to fell into the very common and vulgar mistake of arguing generals from a consideration of particulars. Because members of the medical profession occasionally cut a very poor figure in the witness-box, and talk a good deal of erudite nonsense, therefore, it is argued, no member of the profession is capable of giving sensible evidence. And, again, because certain professional men, with wide reputations as lunacy doctors, enter the witness-box, well paid advocates, to save a criminal's life, therefore, argues the House of Commons, all lunacy doctors' medical evidence is to be regarded as *per se* unacceptable or suspicious. The fallacy involved in all this is really very transparent to men of medicine. The House of Commons argues that, because certain lunacy doctors give advocate-evidence, therefore all lunacy doctors will give advocate-evidence. Instead of regarding such evidence as merely the evidence of a partial advocate, they give to it all the value, and argue of it as, of the evidence of a solemn judicial expert whose sole and only object is to tell a plain and uncoloured tale.

But the most surprising part of the case is this, that any member of the House could fall into such an illogical position, with positive facts to the contrary staring him in the face. Thus, for example, we have Mr. Hardy illustrating his assertions by examples

which prove, or tend to prove, their total incorrectness. By no means, he says (amidst cries of "Hear, hear"), let your commission be composed wholly of doctors. You want, he says, lay people to decide when doctors differ! Or, in other words, when, on a matter of scientific investigation, men of science, skilled in a study of that matter, are unable to come to an agreement, then send for a number of men, who know nothing about the matter, to decide the differences of the men who do! Such is Mr. Hardy's logic. But how does he illustrate his position? In the very next breath, he tells us that

"The Commissioners of Lunacy" (composed of his laymen and of doctors) "drew a distinction most dangerous to society; for they thought the man was of an unsound mind, but that he was in such a state that he ought to be responsible for his actions. [*Hear, hear.*] Finally, they had a commission issued, composed of most eminent men, who seemed to have conducted their inquiry with a good sense which contrasted strongly with the previous mode of inquiry, and they came to the conclusion that he was not insane when they examined him. [*Hear, hear.*]"

So that the opinion of the mixed commission, formed of his laymen and doctors, was "most dangerous"; whilst the opinion of the four "eminent men" who were all skilled lunacy doctors, not skilled advocate-doctors, was "full of good sense," etc. And this is the way in which Mr. Hardy illustrated and supported his opinion that the commission should not be a purely medical one! For the first time, in this case the Government appoint four medical men, skilled in a knowledge of lunacy, solemnly and impartially to investigate the condition of mind of George Townley, and for the first time they get a common sense, clear, and definite opinion of his mental condition; and thereupon Mr. Hardy argues that medical men are not fit persons of themselves to decide in such a case of difficulty! He supplies an illustration which manifestly upsets his own conclusion.

Sir George Bowyer took a very sensible view of the case; but he also fell into the mistake of supposing that there is or could be, in fact, a distinction between the medical (if we may use the term) and the legal definition of insanity. The whole mistake lies in the supposition that medical experts, solemnly instructed by the Crown to investigate the state of mind of a criminal, would act the part now acted by medical advocates. If the Crown had already had experience that such medical experts appointed by it were incapable of taking any other than what is called this medical view of the case—this narrow and purely professional view—an obscured diseases of the mind or brain sort of view—then would the Crown have reason to reject the evidence of such experts as a safe guide to justice. But nothing of the sort has the Crown before it. The Crown has never yet employed medical experts in such cases, excepting on this one occasion, where it admits that the experts have given a most excellent opinion.

When Professor Taylor's opinion is disputed on a matter of medical jurisprudence, does the Crown send a layman to decide the difference? Surely not. And why then in this case? The investigation of the lunatic state of man's mind is a purely scientific investigation. The study is one in which a man perfects himself only by research and long experience; and, therefore, it is evident, that he who has had the greatest experience in dealing with lunatics must, by the fact, be most capable of investigating the mental condition of supposed criminal lunatics. There neither is, nor can be, any solid distinction in what is called the *dictum* of insanity. There can be no difference between the legal and the medical *dictum*. The Crown wants to know, what the state of mind of the man is; and it is simply the business of the expert to state the degree of soundness or unsoundness of his mind. And how, we should like to ask Sir G. Bowyer, is it possible, that any layman or legal man can alter, or neutralise, or in any way modify, the opinions given by Crown medical experts in such a case? The expert, whose evidence in such case is without suspicion, defines the state of the man's mind, and instructs the Crown as to its condition of soundness or unsoundness.

Clearly, there are all degrees of mental soundness to be found in specimens of humanity. In a certain sense, no man's mind is perfectly sound; and it is the business of the expert to define the degree of unsoundness of mind in the particular case. What justice wants to know is this, Did the man know right from wrong when he committed the act? Well, we put it to any man of common sense: Who is more fitted to give an answer to that question than the expert, who has been all his life engaged in dealing with lunatics; of studying their acts and motives of action, and their ideas of responsibility? How, then, can the medical be opposed to the legal *dictum?* The legal conclusion must infallibly be founded on the medical evidence, and, therefore, cannot in right differ from it. It is a logical conclusion. The whole pith and virtue of the medical evidence is the very point in dispute; viz., whether the man knows right from wrong. If the expert give not this evidence, he gives none at all.

The reason of the thing plainly and unhesitatingly dictates the conclusion, that the Crown should be helped in this case by its skilled experts, just as it is helped in certain cases of poisoning by its chemical and other skilled experts. But the public and the House of Commons have a prejudice, founded on error, against lunacy experts; and, therefore, they hesitate to act according to the plain reason of the thing.

Let the House, however, reflect, that its prejudice is founded on an unjust surmise; viz., that because medical advocates—the paid agents of the prisoner—have given partial evidence—evidence such as an ad-

vocate would give—hair-splitting and highly sublimated evidence fitted for the purpose of throwing dust in the eyes of the jury—therefore, all medical experts' evidence must be of a similar character. Let the House also remember that, when the Crown sends four medical experts, skilled in lunacy, unbiassed and untrammelled, to do absolute justice, as in the case of Townley, it obtains a report which almost all the world confesses is just and righteous and most reasonable.

Let us, in conclusion, ask of those who would have a Commission composed of laymen and of doctors, to tell us what is meant by laymen in the sense as opposed to medical men. We suppose they must mean men of law, who know all about what is called the legal *dictum* of insanity, and nothing about the actual thing itself as demonstrated in the body of man. The doctors, it is thought, must necessarily be ignorant of and misguided as to the law of insanity, and the laymen are admitted to be ignorant of the facts of the case; but by a judicious combination of the two knowledges, and a neutralisation of each other's ignorances, the truth, it is supposed, will be elicited. What are we to say of such imperial wisdom as this? Is it not clear as the day, that it is the business of the doctor—of the medical expert—and of the doctor only—to define the mental capacity of the man; and that the business of law and justice is solely to decide whether that degree of capacity, as defined by the medical expert, is or is not consistent with responsibility?

What earthly business can the layman—the man of law—have on such a commission as this; the laymen being, according to the terms of the proposal, men who are not expert in a knowledge of insanity itself? The medical experts examine the criminal, and they say, the man knew right from wrong when he committed the act; or they say he was not of sufficient capacity to know right from wrong when he committed the act. This is manifestly the duty of the medical experts. This is the simple question which they have to answer. Of course it is not one on which the laymen—ignorant of the ways of lunatics—can give any opinion whatever. Of what use then, we ask, are these laymen on such a commission? Surely, the expert's evidence is evidence to go to the jury; and it is the jury's business, and not the laymen-commissioners' business, to estimate and weigh the opinions of the medical commissioners' evidence. The criminal is or is not of sufficient capacity; and the medical experts have to decide whether he is or not. How can the legal laymen, with all their legal knowledge of the law of insanity, deal with this yea or nay of the medical experts? We might as well ask them to decide whether white was white or black black. In this case, therefore, it is the medical expert's evidence alone which is of value in a commission of the nature supposed.

Had a medical man of sufficient knowledge been in the House of Commons to advise our imperial rulers, we feel satisfied that he would have suggested these patent facts to the unconscious House; and would have thereby demonstrated to our rulers, that the way to deal with supposed criminal lunatics is plain and most simple; viz., that in all cases of supposed insanity the Crown should appoint medical men of admitted experience—men of the stamp who decided Townley's fate at Bethlehem—to examine the criminal, if possible previously to trial, or at all events during the trial. Let the Crown treat the question of insanity, in a word, as it would treat any other question of science, in which evidence is useless, unless it be the evidence of men of scientific knowledge and of large experience in the matter under investigation. It will be time enough for the Crown to say that such a simple plan cannot answer, when it has tried it and seen the failure of it. Justice to the public and justice to the criminal demand that the judge and jury sitting in judgment should be thus enlightened by the impartial—the judicial—evidence of an expert or experts solemnly appointed by the Crown to aid it in the dire difficulty of possible insanity. Mixed commissions are mixed absurdities. To deal with subjects of scientific consideration, men of science alone are capable.

MEDICAL PHILANTHROPISTS.

[*Communicated.*]

The readers of the Journal (*vide* August 1st, 1863) are aware that an Association of medical officers has lately been formed in Calcutta, and that it has been proposed to make this Bengal Medical Association a Branch of the British Medical Association. We have been favoured with the introductory address delivered at the opening meeting by the President, Dr. Chevers; and this contains much excellent matter. We extract some passages from it, and wish to direct attention particularly to the notice of the early career of two of our most distinguished medical brethren in India. Many of us will receive probably with as much gratification as surprise the news that members of our profession have, not once, but repeatedly, been the means of obtaining the most important political advantages for their country; and this, not simply in their capacity as citizens, or volunteer soldiers, statesmen, or merchants, or political adventurers, but as medical men modestly pursuing their true vocation of healing the sick and consoling the afflicted. When asked to name the rewards they expected for priceless services, these disinterested men exhibit neither greediness for gain nor inordinate ambition, but are content to give reins only to the impulse of an enlightened patriotism. We must confess that small, comparatively, have been the rewards accorded to the medical

officers who have since become temporary or permanent exiles in our eastern dominions. Great the satisfaction these noble pioneers must have felt in the thought that they had preferred their country's good to their own temporary exaltation; and equally great to their successors the satisfaction in having been the means of inaugurating and carrying out plans of improvement in the country of their adoption, and giving the natives the benefit of all the civilisation and enlightenment of the West. As regards medicine, indeed, it seems that we have been only giving the oriental the dues he could morally claim from us: for Dr. Chevers says:

"I am in the habit of telling my pupils that, in teaching them medicine, we are literally merely repaying, with considerable interest, a debt which Europe has, for at least seventeen centuries, owed to India."

It seems that the Great Mogul, "in 1614, peremptorily assured Sir Thomas Roe, King James the First's ambassador, that permission to trade in Bengala and Synda *should never be granted*".

"About the year 1644, Gabriel Boughton, surgeon of the United Company's ship *Hopewell*, having cured the daughters of the Emperor Shah Jehan of a frightful burn, was desired by the grateful emperor to name his reward. Thus offered by a prince of boundless wealth the well and hardly earned reward of his science and his skill, whither fled the thoughts of this poor surgeon? Towards release from the noisome little ship in which the flower of his days had worn away; where in every voyage the crew became, despite his best efforts, so thinned down by flux and scurvy and putrid calenture, that, long ere the first cocoa-nut trees came in sight, there was scarcely a man to hold the rudder or to trim a sail? Did his mind, I say, attempt to tear him from his almost servile position in this pestilent little craft, and away to the oak-avenue of some well remembered hall in merry England, where, as lord of the manor, as master of the hounds, as knight of the shire, as president of his college, his own unblemished character and sound good sense, backed by the freely offered gold and jewels of the Great Mogul, would win him the blessings of a station and a home, the gratitude of the poor, the honour of powerful friends, the smiles and kisses of little children clinging about his knees? Being a man, and a wise one, he of course thought of such things as these; but his only request was, that his masters—the Company—might be granted the often sought and always denied privilege of establishing factories in Bengal, and of trading there free of all taxation. That which had been insultingly refused to the King of England's ambassador was at once frankly conceded to the surgeon of one of the then obscure Company's vessels. Proceeding to Bengal, intending to establish securely the privilege thus obtained, he made the friendship of Sultan Soojah, Subahdar of Bengal, the Emperor's third son, and succeeded in curing one of the ladies of his harem of a dangerous malady. Consequently, he obtained the fullest aid in carrying out the Emperor's *firman*. He lived to see factories established, first at Piplee, and afterwards at Balasore and Hoogley. He then passed silently, and, as far as history is concerned, to his rest, and, let us trust, to his great reward. Do any who visit that now desolate spot, Rajmahal, pause to think of the great and patriotic heart which once glowed and throbbed there with no single mean or selfish wish, and which probably still awaits its call in its place unknown to all eyes but One—beneath the sand of the river-bank, or in the shadow of some ancient tree?

"In 1715, the power of the United Company of Merchants trading to the East Indies was well-nigh broken by the exactions and oppressions of Moorshed Ally Khan, the Nawab of Bengal. They consequently sent an embassy to the Emperor Ferruk Shere at Delhi. It is a positive historical fact, that the utter failure of this embassy was just impending, when Mr. William Hamilton, their surgeon, having succeeded in curing the Emperor of a most distressing malady, entreated that the requests of the ambassadors might be complied with. Consent was freely and immediately conceded. A *firman* was granted, confirming all the original privileges of the Company, authorising the president to issue passports, exempting goods from search throughout Bengal, allowing them the use of the Mint at Moorshedabad, and permitting them to purchase thirty-eight additional villages near Calcutta. The tombstone of noble William Hamilton may still be discovered in an obscure nook of St. John's Cathedral yard; although it is on record that, before leaving India, Warren Hastings visited it, and desired that the letters of the inscription should be gilt, and that the slab should be erected in a conspicuous situation in the porch of the then new cathedral. I believe that it is reserved for the recently appointed municipality to give Calcutta a Hamilton Place and a Boughton Square.

"Having taught our pupils up to the standard of our own knowledge, we now start fairly with them in the scientific race. Upon Aristotle's axiom, that 'men born in hot countries are wiser than those born in cold' (England was then only famous for tin and oysters!), we must strain every sinew, if we do not wish to be last at the goal. In selecting the profession of physic, we of England and our native brethren have chosen that which the wise and learned Dr. Parr declared to be '*the most desirable of all professions, as being equally favourable to a man's moral sentiments and intellectual faculties*'. Let us be content to teach and learn and practise this profession together in a spirit of amity and just feeling, rebutting the theory of Hobbes of Malmesbury, that society is a mere conflict, in which every man's hand is against his neighbour; and remembering that, however necessary resolution and hard struggling may be while we are engaged in the hot battle of life, the poisoning of our rival's reputation and the stabbing of men in the back are as little suffered by the onlooking world as they are by the Great Umpire in whose ever vigilant presence we contend.

"It is commonly remarked that, although the medical graduates of Indian schools go forth into the world highly educated, they rarely attain remarkable scientific eminence in after life. The same may, I think, be said of the brightest English students, when their lot in life is cast, as general practitioners, in the Yorkshire wolds or the Lincolnshire fens. Most solid bodies are sharpened by attrition; so are men's minds in social and scientific intercourse. I confidently believe, as a result of many years' personal observation, that the eminence of the greater proportion of the leading medical men now in London is in a very large degree, if not mainly, due to the fact that they have laboured constantly in societies like this from their youth upwards.

"Let us, therefore, begin to strive together, not against, but for, each other; ever pressing manfully onward upon the narrow and difficult road which leads to honour—and above it."

It would not be easy for writers of romance to in-

vent stories of more thrilling interest than these artless sketches of the careers of the two Anglo-Indian doctors of a bygone period; and we may thank Dr. Chevers also for so clearly pointing out the relative duties and aspirations of the European and Indian practitioners for the present and for the future.

Commodore Wiseman, in his despatches referring to an engagement with the natives of New Zealand, writes as follows of the medical officers:

"I would also bring to their lordships' notice the admirable conduct of Assistant-Surgeons A. B. Messer of the *Curaçoa*, and Duncan Hilston of the *Harrier*. They were landed with the seamen and marines, and were indefatigable in their attention to the wounded, dressing them under fire.

"Mr. Messer, when he heard of Mr. Watkins's fall, went up to the body, which was lying in the ditch close under the parapet of the enemy's work, to ascertain if he were alive or not. Finding he was dead, he returned to attend to the other wounded. He was accompanied, both on his going and returning, by William Fox, ordinary seaman, of her Majesty's ship *Curaçoa*, and on both occasions exposed to heavy fire.

"The wounded, both naval and military, were brought on board the *Pioneer* and *Avon*, and remained on board till landed at the Naval Camp on Sunday the 22nd. During this period, Drs. Messer and Hilston were unremitting in their attention to them."

We need hardly remind our readers that rarely does any fighting occur, and especially in naval warfare, without some members of the medical service being exposed to the worst vicissitudes of war; and yet our great army and naval authorities delight to designate and to treat the army and naval medical men as non-combatant officers. In consideration of the distinguished conduct detailed in the despatches of Commodore Wiseman, Assistant-Surgeon Messer, M.D., has been appointed Surgeon; and the name of Dr. Hilston has been "favourably noted." We are sure every one must feel that Dr. Messer has well earned the Victoria Cross.

As the question is still asked, Can a physician sue for his fees? we will again tell our readers how this point is. Before the Medical Act was passed, a physician's fee was an *honorarium*, for which the physician could make no legal claim. Under the Medical Act, to every registered man of medicine, physician, surgeon, or apothecary, was given the power to make a legal claim; but also the Medical Act gave Colleges of Physicians the power to pass a by-law to relieve them from what their dignity might deem the onus of such a new legal right. Now the London College of Physicians has, in fact, availed itself of this power, and has passed a by-law to that effect, so far as regards that class of physicians who are dignified with the title and privileges of Fellows. But the College did not interfere with the right of their Members and Licentiates to sue under the Medical Act, and for a very good reason. The College affairs are ruled by the Fellows; and, as it was impossible to know what the feelings of the Members and Licentiates, as a body, were on the subject, the Fellows did not think themselves justified in including the Members and Licentiates under the aforesaid by-law. Indeed, it is very much to be doubted whether a large number of the Members and Licentiates would not have entered a protest against any interference with the new powers given to them under the Medical Act. It was all very well for the Fellows to prescribe in this matter for themselves; but it is evident that they would have been taking overmuch on themselves, had they, in this matter, taken away the powers of suing for fees given to the Members and Licentiates under the Medical Act. It is, of course, quite a mistake to suppose that the Members and Licentiates have any power to sue for fees under a by-law of the College. They derive that power simply and solely from the Medical Act, as above mentioned.

On the 29th ult., an important meeting, to further the interests of the Nurses' Training Institution and Home, was held at Bristol. Dr. Symonds took the chair, and was supported by Dr. Martyn and a large number of other influential gentlemen and ladies. It is gratifying to notice that the benefits of the system of nurse-training are beginning to be so generally felt throughout the country. Dr. Symonds made some most excellent and *apropos* remarks on the occasion. A few outlines of what he said we subjoin.

"This institution," he said, "is intended to be at once a school of nursing art and a repertory of good nurses. But what do we mean by good nursing? It is not merely sedulous, devoted, untiring attendance; nor is it merely the expression or manifestation of sympathy and compassion; nor is it merely the official execution of the directions of medical advisers, in administering food or medicine, or in managing ventilation or regulating temperature, or in discharging the more technical duties of a nurse. But it also consists in performing the duties of the office, and in rendering the services of kindness, in a manner that shall be easy and soothing to the sick person. A nurse may be faithful, and vigilant, and conscientious, and painstaking, and kind-hearted, and good-tempered, and yet she may be a bad nurse. Above all things, there must be tact, either natural or acquired. Natural tact is a compound result of fine perception and accurate observation, and an instinctive *savoir-faire*, and a quickness of imagination—such imagination as enables the possessor of the faculty to realise the sufferer's condition, to divine his feelings, and thus anticipate his wants. Some persons are as much born nurses as others are born poets. But those who are not blessed with such natural endowments may yet, by training and experience, acquire as an art that which others have by nature; they may learn to do in the best possible way what is required for the help and relief of sick people. Next to the sick themselves, the persons most to be pitied are their relatives and friends. To them it is real suffering to see those dearest to them in want of

the solace which good nursing can yield. But, besides the friends of the sick, there is another class of persons on whom this institution, if it progresses as we hope it will, must confer very great benefits. It is a class to which I have the honour to belong, that of medical practitioners. A good nurse saves them much labour, by enabling them to pay fewer visits. But a more important result is, that her help enables them to select the very best remedies and methods of treatment that the art can furnish."

A CASE of great distress, in the family of a late member of this Association, has been brought under our notice. A correspondent sends us an advertisement from one of the Birmingham papers, from which we learn that Mr. W. S. Partridge, of Bordesley, Birmingham, where he had honourably practised as a surgeon for twenty-four years, has died suddenly, leaving a widow and thirteen children in a state of great destitution. A committee, consisting of Drs. J. Johnson, Evans, F. Elkington, Bell Fletcher, Russell, Warden, Wade, the Rev. W. H. Hill, and Messrs. G. Elkington, Hadley, Clayton, Chesshire, West, etc., has been formed for the receipt of subscriptions, to be applied for the benefit of the family in such way as may be determined on by three trustees. Subscriptions are received by Dr. Bell Fletcher of Birmingham; by Mr. E. F. Mason, 67, New Street, Birmingham; or by Messrs. Attwoods, Spooner, and Co., bankers, Birmingham. We call the attention of our readers to this case, feeling assured that they will not allow the appeal to which we have alluded to be made in vain.

A MEMBER of our Association, Dr. Corry of Belfast, has recently been subjected to the annoyance of an attempt to fasten an unfounded charge of gross misconduct on him. It appears that Dr. Corry, who is a dispensary medical officer, was called to attend a person named Rose Drummond; and that, although he remained only five minutes with her, and though none of the persons in the room below heard any noise, the woman attempted to raise a charge of violent assault against him. An investigation before the magistrate, lasting two days, has happily ended in the complete breaking down of the plaintiff's case, without the necessity of calling any evidence on the part of Dr. Corry. So thoroughly are the public in Belfast satisfied of Dr. Corry's innocence, that his accusers have found the place too hot for them, and have been obliged to retreat to Glasgow. We are glad that Dr. Corry has so easily disposed of a charge which might, under circumstances that have occurred in other cases, have caused him months of anxiety, and have cost him large sums of money, if, indeed, it did not shake his professional reputation.

WE are glad to find that the Executive Committee of the Medical Council have resolved to publish both small and large editions of the *British Pharmacopœia* simultaneously; and that the editors are doing their best to carry out the intention of the Council, and to pass the smaller edition through the press and publish it with all possible dispatch. It has been resolved to print 10,000 copies of the demy octavo edition, and this has been done. There is no resolution or understanding as to an increased issue of the large edition; and no foundation for the statement made to us, that 50,000 copies of it would be printed. Hence, therefore, we may shortly expect the appearance of the smaller edition; and may rest assured that the Council are not waiting for the disappearance of the large edition before they produce the smaller.

M. BERTHIER, of the Bourg Asylum, says that there is an ophthalmia peculiar to the lunatic; that it may become inveterate and incurable; and that it is a sign which may be useful in the diagnosis of maniacal fury, when this is simulated.

Dr. Hervieux, physician of the Maternité, has lately investigated the question as to the presence of gases in the circulatory system of puerperal women, and he concludes: 1. That the sudden death of puerperal women is in cases undoubtedly caused by the presence of gas in the circulatory system; 2. That it is impossible to regard the presence of the gases as a *post mortem* effect; 3. That there is a chemical identity between these gases and the gases of the blood, and therefore a probability of their spontaneous development during life; 4. That, although the introduction of air by the uterine veins has not been proved, the practitioner should never resort to injections into the uterus, except with extreme caution.

Dr. Occhim, in *L'Imparziale*, relates a case of a woman whose abdomen was torn open by a cow to the extent of twenty-five *centimètres*. The mass of the intestines was exposed and lay upon the thighs, but they were not injured. The intestines were washed with warm wine, and reduced; the two epigastric arteries were tied; twenty-two sutures closed the wound. Twelve leeches were applied to the ecchymosis on the left side, and poultices; saline purgatives and calomel administered. Notwithstanding (!), says the report, the abdomen became swollen and very painful, and an intense fever was set up. Frictions with extract of belladonna allayed these accidents. An abscess appeared at the ecchymosis. The sutures were removed on the ninth day, and in about five weeks cicatrisation was complete.

The sudden cold has produced in Vienna, as elsewhere, an increase in the numbers of catarrhal and inflammatory diseases, and also of typhus fever and of children's diseases.

Victor Emmanuel has given 300,000 *francs* from his private purse, for the erection of a civil hospital at Naples.

Association Intelligence.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A MEETING of the above Branch was held in the Medical Department of the Birmingham Library, on Thursday, February 11th; ALFRED BAKER, Esq., President, in the Chair. There were also present twenty-two members.

New Members. The following gentlemen having, at a previous meeting of the Council, been elected members of the Association, were unanimously elected members of the Branch:—Herbert Budd, Esq., Worcester; John Gabb, Esq., Bewdley; W. C. Cooksey, Esq., Worcester; E. S. Machin, Esq., Erdington; J. N. Greensill, Esq., Great Witley.

Papers. The following papers were read.

1. Amputation by a Single Flap. By H. D. Carden, Esq.

2. The Origin of Bright's Disease of the Kidney. By James Russell, M.D.

Notice. Mr. DUNCALFE gave notice that, at the next meeting of the Branch, he should bring before the members the following subject.

"A recent case, in which a charge of neglect of professional duty was preferred by the coroner for the district of West Bromwich, in the Southern Division of the County of Stafford, against Mr. John Manley, surgeon."

METROPOLITAN COUNTIES BRANCH: SPECIAL GENERAL MEETING.

A SPECIAL general meeting of the Metropolitan Counties Branch was held at the rooms of the Royal Medical Benevolent College, 37, Soho Square, on Tuesday, February 16th, at 4 P.M.; B. W. RICHARDSON, M.D., Vice-President, in the chair. The object of the meeting was to consider the propriety of appointing a Committee to watch the progress of bills introduced into Parliament affecting the medical profession.

Resolutions. The following resolutions were unanimously carried.

1. Proposed by Dr. GIBBON, seconded by Dr. PAUL:

"That a Committee be appointed to watch the progress of all bills introduced into Parliament, affecting the medical profession; to communicate with the Committee of Council of the Parent Association, and with the other Branches; and to report to the Branch on all questions having relation to the political and social interests of the profession."

The proposition was supported by Dr. WEBSTER; by Dr. SEATON, who spoke of the necessity of watching the progress of bills having relation to lunacy; and by Mr. W. MARTIN, who alluded to the grievances suffered by the medical officers of the army and navy and of the Indian army. The CHAIRMAN also briefly alluded to the ways in which the Committee might work.

2. Proposed by Dr. WEBSTER, and seconded by Mr. W. MARTIN:

"That the Committee consist of the Council of the Branch, with power to add to their number."

3. Proposed by Dr. CORMACK, and seconded by Dr. STEWART:

"That the Committee be requested to consider whether any means can be taken by the Branch to increase the representation and influence of the medical profession in the House of Commons."

Dr. CORMACK explained that the object to be sought was, in his opinion, not merely the election of medical men into Parliament, however advisable this might be, but the obtaining of an influence in the House of Commons as at present constituted.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

JANUARY 21ST, 1864.

R. GEE, M.D., Vice-President, in the Chair.

Thoracic Aneurism. Dr. WATERS shewed a specimen. The patient, a sailor, aged 49, was admitted into the Northern Hospital one evening, spitting up blood in large quantities, and died in an hour and a half after admission. It appeared that for ten years he had suffered from pain in the chest, for which he had had advice at different times. Two years ago, he felt too weak to go to sea, and had since been employed as a shipkeeper. On December 14th, 1863, he had been lifting a heavy weight, when he was seized with hæmoptysis, and at once taken to the hospital. The blood was bright and frothy, and after about an hour's time, came up in large quantities; it almost seemed to be vomited up; and in half an hour he sank and died.

On a *post mortem* examination, the left pleura was found full of blood, and a large clot lay in the costo-vertebral groove. The valves of the heart were healthy, excepting the aortic, which were slightly atheromatous; the aorta was thickened, dilated, and very atheromatous. Three inches below the opening into the left subclavian artery on the outer side of the aorta, was an opening the size of half-a-crown, leading to an aneurismal sac the size of the fist. The sac contained laminated fibrine. The aneurism lay on the third, fourth, fifth, and sixth intercostal spaces. These and the corresponding ribs were ulcerated; and in the fourth intercostal space the aneurism passed through to the back. There was a large rent in the sac of the aneurism, which had burst into the lower lobe of the left lung, and also into the cavity of the pleura. The stomach and œsophagus were quite free from blood. The liver was pale and fatty. The heart was apparently healthy; but under the microscope was found to have undergone fatty degeneration; in some of the fibres muscular striæ were visible, but in many were entirely obliterated. The cartilages of the ribs were much ossified about their centres, and in this siuation no cartilage-cells were visible; the other portions were healthy.

Dr. Waters remarked that this ossification of the cartilages of the ribs frequently occurs in connection with fatty degeneration of the heart and arteries; and where we have one of these conditions, we may expect to find the other.

Some discussion ensued, in which the Chairman, Dr. Nottingham, Mr. Hodgson, Mr. Hakes, and Dr. Waters, took part.

Wound of the Intestine. Mr. HAMILTON shewed a portion of the small intestine of a Malay, who had been stabbed, and taken to the Southern Hospital. On admission, there was found to be a wound on the left side, two or three inches long, from which the whole of the small intestines were hanging out. In replacing them, he observed a little escape of fæcal matter, and found a small wound, which he stitched up, and returned everything within the abdomen; the mesentery was wounded. Hæmorrhage afterwards came on from the epigastric artery, of which Mr.

Hamilton secured both ends. The patient, who was much collapsed at first, rallied after the intestine was returned, and again even after the hæmorrhage; but incessant vomiting came on, and he died thirty hours after admission. There was found to be considerable peritonitis, and the wound of the intestine appeared to have united. The peritonitis was quite in its first stage.

Abscess of Liver. Mr. NASH shewed a specimen. The patient was a sailor, who had come from India, and had enjoyed good health during the voyage. He was driking before Christmas; and on Christmas-eve was drinking and dancing, and exposed afterwards to cold. A few days after he came to the Infirmary. He had rather a frequent pulse, and dry tongue, and pleurodynia, but no severe symptoms then, and no diarrhœa; a few days later, most urgent diarrhœa came on, with great pain in the right side. This continued for a fortnight, in spite of stimulants and opium given freely. He died rather suddenly; and this large abscess was found, which involved a great portion of the liver, and had ruptured into the peritoneal cavity. Ulcers were found in the intestines. There was no previous history of dysentery.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, JANUARY 31ST, 1864.

W. ADAMS, ESQ., F.R.C.S., President, in the Chair.

INDURATED CHANCRE IN THE FEMALE.
BY VICTOR DE MÉRIC, ESQ.

MR. DE MÉRIC gave three cases of infecting chancre in the female, viz., of the cervix uteri, of the labium, and the fourchette. The percentage of indurated chancre in the female was small, and chancre of the cervix was rarely met with. He had, moreover, had the opportunity in two cases, not only to watch the sores from the beginning, but to examine the men from whom the diseases had been taken. The sore on the cervix uteri was of the hard glazed kind, and had seemingly been taken from a gentleman labouring under secondary syphilis, but with sound organs of generation. The lady made a good recovery after a sufficiently prolonged mercurial course. The chancre of the labium was also derived from a gentleman labouring under secondary syphilis, but with a penis free from disease; whilst the disease near the fourchette was taken from a gentleman affected with a chancrous erosion seated on a very large indurated base. Mr. de Méric alluded to such cases of chancre on the cervix uteri as had been quoted by authors, and concluded by some remarks on the occasional transformation of indurated chancres into mucous tubercles.

Mr. CURGENVEN did not quite coincide with the usually received opinion, that syphilis was merely inoculated by contact of infected persons. He had seen cases to prove the contrary; and mentioned one of a sailor, who had been for a long time at sea, before he discovered a chancre on his penis. With regard to the natural history of the disease, when untreated with mercury, he had already brought forward two severe cases in the debate upon Dr. Drysdale's paper; and he would now mention another. A man had chancre, which was treated without mercury, and healed. The man remained without any bad symptoms for about six years, and then his health broke down. Among other symptoms, he was troubled with frequent emissions of seminal fluid, especially in the presence of the other sex. These ceased, and he then became impotent.

Dr. DRYSDALE believed the occurrence of indurated sores in women to be very rare. M. Cazenave had recently asserted that secondary symptoms in women were in nineteen out of twenty cases preceded only by discharges, without any ulceration. As to the inoculation of secondary symptoms, M. Ricord's experiments had shown this to be very rare. He had as high a respect for all attempts at arriving at correct diagnosis in syphilis, as in other diseases; but it by no means followed, even if we accepted the descriptions of events given by Ricord, that, therefore, we should grant that the disease should be treated by so dangerous a drug as mercury. For the experiments of Fricke, Guthrie, John Thompson, Syme, etc., had shown that it always causes the disease to become a thousandfold graver. As to secondary symptoms, too, Professor Boeck had recently shown by large comparative experiments, that they occur nearly twice as often, when mercury is used; and the time of treatment, too, is nearly twice as long. Dr. Diday shows that great misery often results from M. Ricord's six months of mercury, and gives cases treated by himself of secondary symptoms, which had had no relapse in periods from four up to sixteen years. As to infantile syphilis, it was a rare disease, one per cent. in the Children's Hospital, and was far better treated without mercury than with it.

Dr. GRIFFITH had carefully observed cases among the Chinese, where no mercury was given, and where he had seen cases of flattening of the nose, from caries of the nasal bone. He thought that although such symptoms were in this country often the result of the amalgam disease, yet that such cases arose where none had been taken. He quoted the case of a patient of Mr. Erichsen's, a hospital mate, who some years ago had had a chancre. This was treated and cured by simple means, and yet he was now suffering from necrosis of the cranial bones. Another case was at present in the Lock Hospital. This man had some years ago been a marine, and had contracted chancre, which was cured by local applications alone. He remained without any symptoms for several years; but then his health failed, and he became covered with ecthymatous and rupial spots. This was again cured with simple treatment, and he continued well a long time. Recently again, through family distresses, his health failed, and the eruption re-appeared; the neck, face, etc., were covered with the crusts and cicatrices of rupia and ecthyma. Another case was mentioned to him by Mr. Shillitoe. A gentleman contracted chancre, and was cured without mercury. The disease disappeared entirely for a long time, but then appeared in the form of tertiaries.

Mr. BERKELEY HILL mentioned that the surgeon to the hospital St. Lazare in Paris had informed him that indurated sores occur in about 16 per cent. of all ulcers in women.

Dr. CHOWNE thought it sometimes a matter of great difficulty to say what part was the infecting focus, in the case of females affected with profuse discharges. With regard to mercury, he had been in practice now nearly fifty years, and had heard the remarks of Guthrie, Rose, etc.; but he must say with regard to the drug, that he looked upon it as the agent to which he always felt inclined to fly when he found others fail in any disease.

Mr. DE MÉRIC said, that the cases cited by Mr. Curgenven were interesting. He was, however, very severe upon himself, and must remind Mr. Curgenven that his cases, if substantiated, would quite revolutionise the current ideas upon the disease, since he had related instances where the patient had been without any symptom of the disease for years, and then became affected—a sequence not admitted by writers on the subject. We could not tell what had happened to the patients between these dates. The cases cited by Dr. Griffith, too, although less open to criticism, were liable to the same objection.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—It appears from the letter of Dr. Browne of Belfast (*ante*, p. 136), that some time back you "did him the honour to solicit his views on the much debated question of 'iridectomy as a *cure* for glaucoma'," and he now responds to your request. Knowing that Mr. Walton had dedicated his work, *On the Surgical Diseases of the Eye*, to Dr. Browne, I naturally anticipated an able contribution to our discussion, particularly as Dr. Browne claims to be considered "an unprejudiced observer," and to ground his opposition to the new practice on much study of the literature of the subject, and on a large personal experience.

As I am far from underrating the importance attaching to strong opinions professing to be thus supported, I am the more desirous of sifting their real value, chiefly for the sake of those who, for lack of similar opportunities, might be inclined to rest their conclusions on the *dictum* of so imposing an authority.

"For several years," says Dr. Browne, "I have devoted considerable time and attention to learn, if possible, the *exact* nature of the disease of the eye named glaucoma by the iridectomists." "During the last four years I have carefully observed every case of eye-disease, more than five thousand in number, that has come before me, and I have not been able to recognise more than one per cent. which I could classify as glaucomatous, namely, *deep-seated inflammation of the tissues of the eyeball; dilated pupil; probable effusion within its structure, and tension of the entire globe; severe pain, with impairment, or almost complete loss of sight, the disease at the same time running a more or less rapidly destructive course, and not being controllable by medical treatment.*" This one per cent. in more than five thousand cases, or (say) fifty in all, have thus been examples of acute inflammatory glaucoma, and one of the proofs, rather the chief proof, of their glaucomatous nature has been the fact that they have "*not been controllable by medical treatment.*" For, "I have seen," he says, "within the same period a large number of cases of acute inflammation of the deep tissues of the eye with the symptoms of effusion, namely, dimness of vision, in several degrees, and appreciable tension of the globe. These were cases of choroiditis, or chronic iritis; *were perfectly manageable*; and in them, under proper treatment [*i. e.*, without iridectomy], the eyes were restored either to tolerably good, or to unimpaired sight."

Now, "dilated pupil," it is true, is here mentioned under the glaucomatous class, and not under the other; but every one knows that a dilated pupil is met with in non-glaucomatous forms of choroiditis. As for increased tension, it is enumerated under both heads. So that the only distinguishing character left us in Dr. Browne's description of these two large and important categories of disease, is that of the one "not being controllable by medical treatment," while the other was "perfectly manageable" without iridectomy.

These fifty cases, then, of deep-seated inflammation having been thus recognised as glaucomatous through the failure of medical treatment, I can hardly be wrong in supposing that medical treatment was fully tried in them, either by himself or others, before he was satisfied of their glaucomatous nature; before, therefore, he could have entertained the idea of iridectomy, or practised it "with all the care he could exercise in some of the cases referred to as glaucomatous." The natural conclusion is, that this destructive disease had virtually run its course before the tardy remedy was applied, and that his operations must have been performed when little or no rational hope could have remained of the recovery of sight. So that no one need be at all surprised when Dr. Browne insists upon "his own experience of iridectomy in the treatment of glaucoma having only afforded him negative results." We might rather have been surprised had it been otherwise.

Further, in thus limiting his detection of glaucoma in five thousand ophthalmic cases to about fifty examples of the severer inflammatory form (deep-seated inflammation, severe pain, etc.), and passing over without any mention at all those other common types which are attended with either none, or but few of the ordinary signs of inflammation, or which have an intermittent character, Dr. Browne inadvertently confesses that he has altogether omitted to recognise these latter as glaucoma. It is also very well known now that the acutely inflammatory glaucoma is in the greater number of instances preceded by a *premonitory period*, in which there is either no apparent inflammation, or but very little, and that it is particularly important not to overlook the disease at this stage, inasmuch as iridectomy is especially valuable before the severe inflammation sets in, which is attended by its own special hazards of spoiling the structures it involves. Of this premonitory period of acute glaucoma he says nothing, and we may assume that it likewise has not been recognised by him yet.

I make these observations under some reserve, because he expresses what he calls "a shrewd suspicion" that the disease in Belfast is something different from what we find it to be generally in England (including the Irish in London), and what it is described to be in other countries of Europe. These forms, unmarked by him, are less obvious to a casual observer, their symptoms are less obtrusive, they are apt to be confounded (by those who have not had their signs pointed out to them) with various forms of amaurosis or impaired vision, and they require on the part of the practitioner who would detect them—(1) some familiarity with their ophthalmoscopic characters, and (2) a discriminative touch as regards the existence of increased tension.

1. Concerning the *ophthalmoscopic signs* of the presence of glaucoma Dr. Browne is absolutely silent. He implies that only the acute glaucoma can be recognised from other forms of disease, and that chiefly by its not being "controllable by medical treatment." Other forms he omits to mention, except to hint at their having an existence only in our fancy; and yet in these forms the diagnosis is usually even more definite than in the acute, because the greater transparency of the media allows the characteristic appearances of the optic disc to be seen by the ophthalmoscope.

2. Concerning *tension*, "which *now*," he says, "seems to be the great point" (but the considerable time and attention he has devoted to the subject should have taught him that it has *always* been the great point since 1856), he takes pains to explain that he is unable by means of touch to discriminate between glaucomatous and various other diseases. He finds tension of the eye, it is true, in acute glaucoma, but he likewise finds it to be "a prominent sign in cases of acute choroidal, corneal, and iritic inflammation."* He adds, what is more remarkable still, "I have lately had a patient with goître under my care, in

* I allow augmented tension in certain forms or stages of these, where there is glaucomatous complication; and on this I need not here dilate, because I have already touched upon it in two previous letters (pp. 55 and 106), and may have to do so again.

whom the eyes were prominent and *tense*, with impaired powers of sight" [rather a vague phrase], "yet, just as the enlarged gland diminished in volume, so did the abnormal condition of the eyes recede also. Would any man in his senses," he then inquires, "and with a just regard to the honour of our noble profession, operate in such a case because he had discovered that dimness of sight and tension of the eyeball were present?"

Now, in reply to this very pertinent question—not to invoke unnecessarily "the honour of our noble profession," or to call other senses than touch into question—I must say that I could never discover any abnormal increase of tension whatever in a case of proptosis with enlarged thyroid body, and it has occurred to me to see and narrowly to watch a considerable number. So that the question of iridectomy in such a disease has never once entered my thoughts, nor, so far as I know, the thoughts of any one else practising iridectomy in glaucoma. May I not, in my turn, hazard "a shrewd suspicion" that the tension of the eye in the proptosis of anæmic bronchocele may perhaps be different in Belfast from what we find it to be here? or else that Dr. Browne must mean by *tension* of the eye some state very different from that of *undue hardness?*

Dr. Browne adds, "after all these observations I may be told, as others have been, that I am incapable of recognising a truly glaucomatous condition of the eye, and that hence I cannot appreciate the *nice* principles of iridectomy!" Let me explain, in reply, that I have not knowingly told any one that he is "incapable of recognising a truly glaucomatous condition of the eye." If I have, I shall be glad to have the passage pointed out. And I do not tell even Dr. Browne so; although I am not quite clear why, after so much attention given to the subject, he has failed, according to evidence deduced from his own letter, in doing so in numerous instances. It appears to me probable that glaucomatous diseases in Belfast must pretty much resemble those of other places, and that by laying aside natural prejudices, and taking some moderate pains to acquire a practical acquaintance with the physical and other signs of glaucomatous types of disease, as they have been very graphically and now repeatedly described, any surgeon, and particularly one accustomed to eye-diseases, may easily master the diagnosis. My hearty desire, since the autumn of 1857, as I have on all occasions taken pains to evince, has been that the knowledge of the new treatment should spread as widely and as rapidly as possible. Those who have resisted it have done so, I quite believe, with honesty of intention (and I have never for a moment doubted it in the case of any one), though, as I think, under a serious mistake; and a mistaken view on such a subject must of course have been attended with results which one would have wished different.

This brings me to one other paragraph in Dr. Browne's letter, which I was sorry to see there, and which I would gladly have left unnoticed. I might safely have done so as regards any influence it is likely to have on the minds of those who bear in mind the tenour of my recent letters; for nothing they contain gives the slightest ground for the imputations it puts forth. But as the charge, if unrefuted, may possibly be regarded hereafter by some as having rested on a solid foundation, I think it better to meet it in a precise manner, particularly as I find it to be a repetition of what was contained in Mr. Walton's letter, and which I have already commented on, but apparently too briefly (*ante*, p. 104).

Dr. Browne says, "I cannot but allude to a certain tone which has more or less pervaded the letters of the iridectomists, but more especially of one who is the leader of the school" [a compliment, by the way, which I unaffectedly disclaim]. "I refer to the patronising air, the offended dignity, but more particularly to the *denunciatory terms* in which *his opponents have been threatened with loss of name and fame, and, by consequence, of practice.* Such a course, permit me to tell the writer, is wrong. No surgeon has the right to stand up among his equals—his peers—and *thus denounce any of his brethren*[!]. I *contend, on the contrary,* that any educated and conscientious surgeon has not only the right to express his opinions, but to maintain them too, by legitimate argument and conduct, *without being denounced before the profession and the public as perpetrating a grievous wrong, because he will not adopt the course pursued by others,* when his experience and conscience tell him that he is following the path of rectitude and honour."

I have looked through my previous correspondence in your JOURNAL, to see if I could discover on what pretext this strange imputation could be supposed to rest, and find the following in your last volume, p. 535, under date Nov. 14, 1863.

"On the whole, I must say that any oculist is pursuing a course perilous to his own reputation, however great, who, after six years of open proofs of the efficacy of iridectomy, continues to treat glaucoma by those purely 'medical means' which universal experience declares to be but temporising and inefficacious expedients. What can a surgeon, who knows how these expedients have beguiled the practitioner into the loss of splendid opportunities, say, when afterwards asked by the disconsolate patient, 'Could my sight have been saved at an earlier period?' With the kindest wish to screen a professional brother, he can but evade the question by some such words as these, 'I have no doubt all was done by those you consulted that seemed to them at the time to be best for you,' or maintain a painful silence; *à priori* arguments are but poor opponents to facts."

In the letter from which this extract is taken I was replying categorically to the objections to iridectomy, which in a leading article you had alleged to be taken by various surgeons and oculists "of the highest celebrity," *whose names, however, were withheld.* I said, "when the eminence of men is thus advanced as an argument to add weight to opinions opposed, as I believe, to scientific truth, and pernicious in proportion as they prevail in practice, I am surely justified in asking that the names of these gentlemen should be stated, and that they should be requested to report the cases on which they have based their conclusions, so that these opinions should be open to examination and criticism."

Mr. Syme had indeed "denounced" the operation, and I replied to him in terms becoming, I hope, both to him and myself. He met that reply in a proper manner. No other eminent surgeon or oculist had recently spoken on the subject in an adverse sense, and I used the language above first quoted in the way of friendly but earnest caution, so that no one might unguardedly commit himself to views which he might afterwards see cause to regret, or continue to pursue the former method of inefficacious treatment without a new and fuller examination and inquiry. Those words, being words of truth, ought not, I think, to have been resented by any, though they may not have been palatable; certainly they were no *denunciation*, and implied no *threat*. I have had, and continue to have, the most friendly feelings towards all my fellows.

There is one other passage to which allusion may possibly be intended by Dr. Browne, and I shall therefore quote it entire, without comment, in order that every one may judge for himself of the tone in which it is written. It is in your last volume, p. 649, as follows:—

"These inflammatory forms of glaucoma, thus confused with other forms of inflammation, I may incidentally say, were constantly, to the great misfortune of the poor patients, treated too indiscriminately by bleeding, leeching, blisters, mercury, colchicum, opium, etc.—remedies ineffectual in glaucomatous disease, and of which, though some may be palliatives, the greater number are only too surely aggravations of the misery they are intended to relieve. I have formerly given them myself a hundred times, and am heartily thankful that the necessity for using them in glaucoma can never occur again. I am heartily sorry when I see that they have been given now, with the best intentions but the worst results, by practitioners who have overlooked the glaucomatous nature of the case, not being yet aware of the recent advances in knowledge, or who, being partially acquainted with these advances, reject an effectual remedy, infinitely less onerous to the patient than a course of mercury. The excuse formerly was, that we knew no better, we did our best, and hoped against hope, leaning on reeds that had constantly failed us in these glaucomatous cases, though they had often succeeded in others that we could not then distinguish from these. *But we know better now.* Iridectomy supersedes these severe measures in glaucoma. Those who reject it have to explain whether they still employ these unavailing remedies, or leave their patients practically untreated; and, if these be employed, whether they prove adequate now to arrest a disease against which they were formerly directed in vain." I am, etc.,

WM. BOWMAN.

5, Clifford Street, February 8th, 1864.

NEW REMEDY.

SIR,—In reference to your notice of Dr. James Watson's opinion of certain remedies which have been recently introduced, I think it is the duty of every practitioner to give his personal experience of the same, because it can only be by the accumulated testimony of many observers that such new remedies are either to be approved or condemned; it will not do to adopt or cast them aside upon an authoritative opinion delivered by one or two individuals, however eminent they may be. I can only speak of the Veratrum viride. I had an opportunity for the first time of observing its powerful sedative effects on the circulation while attending the Bellevue Hospital, New York, in 1857, and I do not recollect that its use ever produced pain. As I do not readily adopt new remedies if those which have stood the test of more lengthened experience will answer the purpose, I never tried it in my own practice until last summer, when I had to treat a case of encephalitis of a desperate character in a young woman aged twenty. She had a full bounding pulse of over 100, with corresponding action of the heart, irritable stomach (though not severe), purging, and, at times, evacuations of blood from the bowels. I administered successively, and in combination, hydrocyanic acid, tincture of digitalis, and tartarised antimony, but with no decided benefit. I therefore tried the tincture of veratrum viride (Cutter's) with a most satisfactory result. Its power in controlling the force and frequency of the heart's action, and, to a corresponding degree, the cerebral symptoms, was most marked, at the same time reducing the previous high temperature of the skin. That it was the veratrum viride which produced these effects was undeniable, for, although administered in the form of mixture, when I increased or diminished the dose of veratrum, a corresponding effect followed. This, however, led me to observe, that, although beneficial in relieving the symptoms, it did not subdue the cerebral disease; I therefore combined it with iodide of potassium, and, I am glad to say, with the desired result. The general treatment consisted in keeping the patient in a cool darkened room, utmost quietness, the head shaved, with evaporating lotion applied, and low diet of arrowroot, milk and water, etc. I am, etc., B. W.

January 18th, 1864.

MORTALITY IN LABOUR-CASES.

LETTER FROM GEORGE RIGDEN, ESQ.

SIR,—Your correspondent, "A Medical Practitioner of Fifty Years' Standing", who is curious about midwifery statistics, and who wishes to know the proportion of deaths to the mothers delivered in Great Britain, is not, I fear, likely to meet with the information he seeks. Those of our members, however, who are engaged in large midwifery practice, and who have records of their cases, can help him to something like an approach to the result.

I append the number and the causes of death that I have met with, in an attendance upon 2950 cases. It is satisfactory to observe that fatality to the mother is quite an exception in modern midwifery practice.

I would also suggest an inquiry—one indeed of national importance—as to the proportion of still-born children to those that are born living.

I am, etc., GEORGE RIGDEN.

Canterbury, February 5th, 1864.

1. Aged about 20; unmarried; had been idiotic, and frequently epileptic, from childhood. First labour; first seen when in the second stage of labour; comatose; child presenting naturally, and delivery effected without assistance, of a still-born child within an hour's attendance; continued comatose until her death, two hours after delivery.

2. Placenta prævia; about 20 years of age; married. First labour; considerable flooding; delivered of a still-born child by turning; placenta followed quickly; rigors and puerperal fever on the third day, terminating fatally on the sixth day.

3. Nearly 40 years of age; married; the mother of several children. Natural labour; satisfactory convalescence until the seventh day; when rigors and fever supervened; followed by death on the third day of the disease.

4. Nearly 40 years of age; married. First labour, and protracted from disproportion; delivery effected by the forceps; placenta retained through inertia; excessively hot weather and a small room; fever on the fourth day terminating fatally on the sixth day.

5. About 25 years of age. First labour; natural, and without difficulty; convalescence favourable for four days; supposed to have used damp linen; rigors appeared on the fifth day, followed by fever and death on the thirteenth day.

6. About 40 years of age; married; the mother of several children; had menstruated regularly throughout her pregnancy. Labour protracted through inertia; delivery effected by forceps without difficulty; rigors appeared on the third day, followed by fever, and death on the sixth day.

7. About 35 years of age; married; the mother of several children; epileptic for several months past. Labour natural; placenta retained for an hour; convulsions ten hours after labour, ending quickly in death.

8. About 30 years of age; mother of two children, and the subject of seven miscarriages at the sixth or seventh month, three of which were attended with

convulsions; constantly anasarcous from diseased kidneys. Labour natural and quick; delivery of a still-born child, after which there was little or no secretion of urine; death on the eighth day from uræmic poisoning.

MERCURY AS A REMEDY.

Letter from Thomas Pope, Esq.

Sir,—The homœopathist and the proscriber of mercury are in a pitiable state; and woe to their victims. As with the former, so is it with the latter; many of those professing their craft publicly, like those following in their wake, recreants as they are, courting popularity, secretly belie themselves.

What may we infer from the remark of a gentleman who lately, at the Harveian Society, boasted that for several years past he had never used mercury internally? If mercury in the system be always deleterious, then I should say, the sooner such a notion be exploded, the better; for I am bold to say that I look upon mercury as an internal and external agent of more value to the medical man, in his treatment of disease, than, I had well-nigh said, all the other articles of the materia medica conjoined. Give me this, and air, food, sleep, excretions, exercise, and the passions, and I think I could do my patients more good without any of the other articles, valuable as they are.

Mercury, like arsenic and other poisonous articles of the materia medica, requires the greatest caution in its use. Who would give it in cases where the crasis of the blood is in a dissolved state, or in organic disease, particularly of the liver and heart? Or who would venture on large doses without first knowing whether idiosyncrasy existed in the individual? We know there are some few who cannot tolerate it at all, and others to whom we can hardly give enough, and, between these two states, gradual steps; therefore we see the great advantage of a knowledge of the constitution, not only of a tolerance of this, but of the others. Much may be said in the praise of this mineral, and some I have said in this Journal; and I believe I can safely say that I had never cause to regret its use. I will, however, conclude with its advantage in infantile syphilis. I know four grandfathers whom I treated, before they were a month old, with a grain of blue pill daily for about two months; they have healthy progenies. For about sixty years up to the present time, I have never been long without patients of this description, male or female; so that I am not in the same predicament as the Irish candidate mentioned in our Journal of the 23rd ult. (page 110); and but for its use, most of them would have fallen sacrifices like thousands of others without this specific, or would have lingered and died miserably at different periods of life; and if after marriage and progeny, what horrors ensue!

I am, etc., Thomas Pope.

Cleobury Mortimer, February 8th, 1864.

MERCURY IN IRITIS.

Letter from Charles Drysdale, M.D.

Sir,—The debate upon iridectomy, which has been so long carried on in your columns, has afforded us all much instruction. In all difficult points, the best way of eliciting truth is to hear what has to be said on both sides of the question.

If there be so much difficulty in coming to a conclusion as to the diagnosis and treatment of the disease glaucoma, however, there is likely to be still more in the decision of the question of the treatment of iritis by an internal remedy such as mercury. Hence the propriety of administering mercury in this disease is considered by some, *at least*, quite as doubtful as the necessity of operating on the iris in glaucoma is by many ophthalmic surgeons.

Thus Mr. Hugh Carmichael treated many cases of syphilitic and other varieties of iritis by means of doses of oil of turpentine, without mercury, with great success. Then Dr. H. Williams of Boston treated sixty-four cases of all varieties of the disease by means of belladonna, opium, and depletion, without mercury, with the result that sixty of them made a perfect recovery. Mr. Travers and Mr. Acton both express their opinion (in which I concur) that the complaint is sometimes *caused* by mercury. Dr. Hughes Bennett says: "As to mercurials, the confident belief in their power of causing absorption of lymph, by operating on the blood, is not only opposed to sound theory, but is not supported by that experience which has so confidently been appealed to in their favour." Mr. Zachariah Laurence treats all cases of iritis entirely without mercury. Mr. J. Hogg has informed me that he believes the drug does harm in rheumatic iritis; although he, as well as Mr. Ernest Hart, seems afraid to extend this view to cases of syphilitic iritis.

Such being the state of opinion on this matter among such instructed surgeons, will you allow me to ask two questions of any eminent oculist who may favour me with a reply?

1. Is mercury useful in all cases of iritis?
2. If not, why is it only useful in syphilitic iritis, seeing that statistics show the drug frequently to *produce* iritis, and to do enormous damage, when given largely, in every other part of the system?

I am, etc., Charles Drysdale.

Southampton Row, February 5th, 1864.

MAN-MIDWIFERY.

Sir,—I have read the letter in your Journal of the 9th instant, headed Man-Midwifery, and was sorry to learn that an attempt should have been made to unsettle and prejudice the public mind on that subject by the pamphlets therein alluded to. Having been in a pretty extensive obstetric practice for many years, and, of course, not only conducted a great number of cases myself, but met in consultation with my brethren of the profession, I have the satisfaction to state that I never witnessed an instance of immoral conduct in them at such times; nor have I, that I can recollect, heard anything reported of them as resulting from their obstetrical attendance on women. I believe, indeed, that the most decorous and gentlemanly conduct marks the character of our profession in their attendance on females, and that where there are instances of a contrary kind they are the exception.

The fact is, sir, if it be indecent and immoral to have male accoucheurs, then it is, also, to have male physicians and general practitioners. Every one knows that, in all cases of medical and surgical attendance on females, the peculiarities of the sex, both anatomical and physiological are well known, and, when necessary, made the subjects of inquiry; and yet I trust that in the great majority of cases, though the opportunities and facilities are much greater than in midwifery, our brethren are too honourable, or, at any rate, too prudent and careful of their own reputation, to abuse the confidence placed in them by their patients and their friends, to suffer themselves to be guilty of a breach of morality and propriety of conduct. If, therefore, men-midwives are to be done away with, so I should say *à fortiori* should male medicals.

It may be argued by some that men should only be in attendance in very difficult cases; and that then, and only then, should they be sent for. But I would ask, how and when are they to get their experience so as to be able to afford the required help? The public would shut them out from all common cases, and send for them, inexperienced as they would then be, to deliver in difficult and dangerous labours. Does not every one see that in the course of some years, when the present able men in the profession shall have died off or become superannuated, that there would hardly be found a medical man, supposing these prejudices to have been acted upon, in urgent cases? and the poor sufferer and her friends would have to be told that the cause of modesty and female delicacy was held paramount to everything else, and that she must consider herself as honoured in dying a martyr in the cause.

It is surely no disparagement to the female character and capabilities to say that, with some few exceptions, they have neither the skill nor courage to deliver in very difficult labours; or why do they so frequently send for us at such times; and whence come the mistakes as to the presentation and the officious manipulation we sometimes find to have been made by these professors and amateurs of the art? And how could a sufficient number be properly educated and trained to afford any chance of efficiency?

There may be some specious arguments brought forward and disgraceful facts raked up, calculated to work upon the minds of husbands, fathers, and brothers; but allowing all that may be adduced, and even much more,—I ask the plain question, whether the public are prepared? whether these husbands, fathers, brothers are prepared to trust the lives of their wives, daughters, and sisters in the hands of women midwives entirely, however clever they may be? I say entirely, in every case, because, if not entirely, then it must be the wisest plan to encourage male practitioners, that their experience and efficiency may be promoted. But even should such relatives be willing to commit the lives of those most dear to them to the care of women, would the patients themselves be willing? in dangerous cases, would they be willing, I say? From what I have witnessed, I am sure they would not.

I hardly think, sir, you will consider I have trespassed by the length of this letter, considering the importance of the subject. I should be happy, at any time, to state anything in support of the views I have been advocating, and to vindicate the character of the profession from the broadcast seeds of suspicion and calumny, which the pen, a more mischievous instrument than the tongue, may throw out against it.

I am, etc., G. D. R. McC.

January 19th, 1864.

REGISTRATION NECESSARY FOR CERTIFICATES.

Letter from Henry Goode, M.B.

Sir,—In the report of the speech of Sir G. Grey on the amendment of the Prison Lunacy Act, the Home Secretary is made to say that Mr. Harwood's certificate of lunacy was good in law, though he is not registered. This is a mistake, as the words should have been, that Mr. Harwood is not registered *as a surgeon*. It will be found, on turning to the *Register*, that Mr. Harwood has been duly registered as a member of the Apothcaries' Company since the passing of the Medical Act.

The wording of the Prison Discipline Act is in other respects so lax, that the use in it of the words "physician or surgeon" could scarcely be limited by any other rule than that of common parlance, which calls a general practitioner a surgeon; and in this sense, I should imagine, must be taken the decision of the Lord Chancellor that Mr. Harwood, as a registered apothecary, is a surgeon within the meaning of the Prison Act.

It appears to me important that this correction should be made public, lest any misapprehension should hereafter occur, if the decision of the Lord Chancellor were cited in its present wording, due merely to an imperfect report.

I am, etc., Henry Goode,
Formerly Secretary to the Derbyshire Registration Association.

Derby, February 15th, 1864.

Medical News.

Royal College of Physicians of London. At a general meeting of the Fellows, held on Monday, February 15th, 1864, the following gentleman, having undergone the necessary examination, was duly admitted a member of the College:—

Birch, Scholes Butler, M.D.St. Andrew's, Gore Lodge, Upper Kensington Gore

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Brietzcke, Henry, Deptford
Cameron, Charles, H.M. Bengal Army
Gill, William, Truro, Cornwall
Maclure, Duncan Maclachlan, 16, Harley Street
Mickley, Arthur George, Buntingford
Morgan, Cosby William, Newcastle, New South Wales
Parry, Henry Hitchcock, Allington, Devizes
Thomas, George Frederick, Taranaki, New Zealand
Williams, Kenrick Henry Bold, Llansaintffraid, Conway

The following gentlemen were reported by the examiners to have passed the first part of the professional examination:—

Bagnall, Samuel Freeman, King's College
Bell, William, King's College
Burge, Frederick John, King's College
Collier, Thomas, Guy's Hospital
Powne, Benjamin Lamb, St. Bartholomew's Hospital
Rigden, George William, University College

Apothecaries' Hall. On February 11th, the following Licentiates were admitted:—

Butcher, H. O. F., Ware, Herts
Jackson, J. B., Leicester
Shorto, W. B., Charing Cross Hospital

At the same Court, the following passed the first examination:—

Burge, F. J., King's College Hospital

Army Medical Service. List of the candidates who were successful at the Competitive Examination in February last, and who have passed through a course at the Army Medical School.

Names.	Studied at	No. Marks.
Troup, R. W.	Aberdeen	5210
Kynsey, W. R.	Dublin	5100
Lawless, R. W.	Dublin	4946
Beattie, J. F.	Aberdeen	4572
Cunynghame, R. B.	Edinburgh	4492
Thomson, A.	Aberdeen	4192
Turner, A.	Aberdeen	4015
Preston, A. F.	Dublin	3926
Forsayeth, R. W.	Dublin	3776
Delmege, J.	Dublin	3756
Cuffe, C. McD.	Dublin	3743
Gouldsbury, V. S.	Galway	3729
Shaw, J. A.	Dublin	3710
Haines, Charles	Cork	3717
Dick, F.	Edinburgh	3693

Collier, H. C.	Edinburgh	3622
Barker, J. E.	Dublin	3619
Greenhill, J. R.	London	3572
Greene, H. R.	Dublin	3511
Bolton, R. H.	Dublin	3315
Morris, Henry	London	3289
Lyons, P. P.	Dublin	3259
Condon, E. H.	Dublin	3251
Barker, James	Dublin	3224
Barry, James	Cork	3100
Atkins, C. A.	London	3092
Smith, W. P.	Dublin	3052
Fearon, George	Dublin	3022
Weir, C. J.	Dublin	3029
Howard, Francis	Dublin	2989
Byrne, Frederick T.	Dublin	2983
Elgee, William	Dublin	2784
White, Thomas	Dublin	2573

APPOINTMENTS.

ARMY.

BARTLEY, Staff-Assistant-Surgeon A. G., M.D., to be Assistant-Surgeon 101st Foot, *vice* W. Pile, M.B.

CODRINGTON, Assistant-Surgeon O., Supernumerary in 68th Foot, to be Staff-Assistant-Surgeon, *vice* G. C. Gribbon, M.B.

GRIBBON, Staff-Assistant-Surgeon G. C., M.B., to be Assistant-Surgeon 25th Foot, *vice* J. C. Rattray, M.D.

HARVEY, Staff-Assistant-Surgeon H. O., to be Assistant-Surgeon 21st Foot, *vice* J. H. West, M.D.

HATCHELL, Assistant-Surgeon E. J., 60th Foot, to be Staff-Assistant-Surgeon, *vice* G. A. Hutton.

HOYSTED, Assistant-Surgeon T. N., 77th Foot, to be Staff-Assistant-Surgeon, *vice* H. O. Harvey.

HUTTON, Staff-Assistant-Surgeon G. A., to be Assistant-Surgeon 60th Foot, *vice* E. J. Hatchell.

OUGHTON, T., Esq., to be Staff-Assistant-Surgeon.

WEST, Assistant-Surgeon J. H., M.D., 21st Foot, to be Staff-Surgeon, *vice* J. Davys.

ROYAL NAVY.

BROWNLOW, Thomas D'A., M.D., Acting Assistant-Surgeon, to the *Asia*.

COCKIN, John, Esq., Surgeon, to the *Britannia*.

DOMVILLE, W. T., M.D., Staff-Surgeon, to the *Fisgard*.

GOODALL, Alexander, M.D., Acting Assistant-Surgeon, to the *Princess Royal*.

HAGUE, Robert, M.D., Assistant-Surgeon, to the *Princess Royal*.

HALPIN, Joseph, Esq., Assistant-Surgeon, to the *Curaçoa*.

O'MALLY, James N. J., Assistant-Surgeon, to the *Hastings*, for the *Ferret*.

TOMS, Francis Y., Esq., Surgeon, to the *Princess Royal*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

RISK, K. R., M.D., to be Assistant-Surgeon 65th Lancashire R.V.

DEATHS.

BUTT. On February 6th, at Thurlow Terrace, Clapham, aged 85, S. Newsome, widow of Edward Butt, Esq., Surgeon, of Bath.

FALCONER. On February 12th, at Bath, aged 6, George Howard, younger twin son of *R. W. Falconer, M.D.

GLEESON. On February 13th, aged 3 months, Florence E. A. F., youngest son of *Edward M. Gleeson, Esq., Athlone, Ireland.

KEBBELL. On February 13th, at Brighton, aged 1 year and 5 months, Eleanor, youngest child of William Kebbell, M.D.

MUSTON, Edward, Esq., late Surgeon Bengal H.E.I.C. Service, at Bordeaux, aged 75, on January 5.

NICOL. On February 7th, at Ardmarnock House, Argyleshire, Margaret D., wife of John Nicol, M.D., late of Liverpool.

DEATH OF HEINRICH ROSE. This distinguished analytical chemist died at Berlin, on January 29th, aged 69.

DR. TURNBULL. We are glad to note that Dr. Turnbull, Surgeon of the 6th Dragoons, contradicts the report that he has been placed upon half-pay.

UNIVERSITY OF LONDON. Her Majesty has nominated the Right Hon. Edward Cardwell, M.P., and Dr. William Sharpey, secretary to the Royal Society, to be members of the Senate of the University of London.

THE LONDON HOSPITAL, which at present contains four hundred and fifty beds, is not large enough to supply the wants of the surrounding people. The Committee have therefore determined to enlarge it by the addition of a wing.

PUBLIC DINNER TO THE LATE SHERIFF OF CORNWALL. At a meeting held on the 9th instant, at Penzance, it was resolved to invite Mr. W. Coulson, late sheriff of Cornwall, to a public dinner, as a means of acknowledging the able and courteous manner in which he discharged the duties of his office during the last year. A committee was appointed to make the necessary arrangements.

THE MORTALITY OF LONDON showed a slight decrease last week from that of the week before. It is still, however, high; the average estimate for the last ten years is 195 below the number of 1647, whose deaths are recorded last week. While the death-rate is high, the birth-rate is low. The number of births recorded last week amounted to 2005; the corrected average for the last ten years is 2116.

THE BRITISH PHARMACOPŒIA. In forming an opinion of the merits of this work, it is impossible to forget that the book has now been more than four years in preparation, and that it has cost a sum variously stated at £6000 or £8000. We have no interest in depreciating the value of literary and laboratory work, but we have no hesitation in asserting that, the work could have been as well prepared in less than twelve months by any moderately accomplished chemist and pharmaceutist, who would have thought himself richly rewarded with £400 or £500. No doubt the contentions between the three colleges about their rival preparations were frequent and severe; no doubt, the debates on such questions, as whether iodine should be called iodum or iodinium, and whether pil. galbani co. should, for the future, be known as pil. assafœtidæ co. or not, were long and fierce. We, however, have only to judge of the results. Although the book has been all these years in preparation, it bears evident marks of having been put together in a hurry. Some of the directions are incomplete and faulty. The bulk of the work is mere compilation. Much of it is taken up with prescriptions such as medical men should be left to write at their discretion; *e.g.*, mist. creasoti, mist. scammonii, pil. plumbi c. opio. The chemistry does not fairly represent the science of the day. Taken altogether, the book, as the production of the collective wisdom of the Medical Council, is far from likely to increase the respect which that learned body has inspired. *(Chemical News.)*

ACTION FOR ALLEGED ILLEGAL DETENTION IN AN ASYLUM. An action for damages for "wrongous and illegal detention," in Saughton Hall Lunatic Asylum, has been occupying the attention of the Scotch Courts. The defenders in the action are Drs. Smith and Lowe, owners of the asylum, in which Angus Macintosh, Esq., was confined for about six weeks in the summer of 1852, under a warrant of one of the sheriff-substitutes of Edinburgh, granted on a certificate of two doctors, that he was of unsound mind. Two or three years ago he had another action of damages against these doctors who signed the certificate, and in that action he was unsuccessful, the jury finding, in point of fact, that he was insane when the certificate was granted. He tried to obtain a new trial and failed, and has brought this action to have the privilege of telling his own story to the jury. And he did tell it very well, and was a most amusing and clever witness, giving his evidence in a frank, nonchalant, gentlemanly way, expressing himself elegantly, and dexterously avoiding awkward admissions. He remembered all his mad-like pranks, had reasons for them all, and ascribed all his extravagances to a three months' spree in London. After a lengthy and able summing up by the judge, the jury, after an absence of three hours, returned a verdict for the defendants, by a majority of nine to three.

THE LATE PROFESSOR VROLIK. Death has recently closed the career of a very eminent cultivator of natural science and an excellent man, Professor Willem Vrolik, who died on December 22nd, at the age of 62. He was the eldest son of Professor Gerardus Vrolik, and was born at Amsterdam, April 29th, 1801. He studied first at Amsterdam, and afterwards at the University of Utrecht, and then at Paris, from October 1822, to April 1823. On his return to Holland he took the Degree of Doctor of Medicine at Utrecht, June 10th, 1823. After his marriage with Theodora Cornelia van Doorn, he travelled in Germany, visiting Berlin and Saxony. Being established at Amsterdam in the practice of medicine, he exercised this profession until 1829, when he accepted the appointment of extraordinary Professor of Anatomy in the University of Groningen. He was occupied in the campaign on the frontiers of Holland and in Belgium from the end of 1830 till November 1831, serving with the volunteers of the students of Groningen and Franeker. In the latter year he received an invitation to the chair of Anatomy, Physiology, and Zoology in the Athenæum of Amsterdam. He occupied this chair with distinction for more than thirty years, having, in the spring of 1863, on account of his declining health, been compelled to resign. The works of Professor W. Vrolik are numerous. They are mostly on comparative anatomy, chiefly of the mammalia, and upon morbid anatomy. In the first science the principal are :—*Recherches d'Anatomie comparée sur le Chimpansé*, fol., 1841, with fine plates ; and *Natuur-en Outleedkundige Beschouwing vander Hyperoodon* (Delphinus edentulus), 1848. Printed in the *Natuurkundige Verhandelingen van de Hollandsche Maatschappij der Wetenschappe te Haarlem.* On morbid anatomy, or teratology, his works are important, and valuable on the origin of Cyclopy. His chief work is *Handboek der zichtekundige Outleekunde. Aangeboren Getreken*, 2 vols., 1840-1842 ; and *Tabulæ ad illustrandum Embryogenesin Hominis et Mammalium, tam naturalem quam abnormen*, (100 plates, 4to.) For this work he received the Montyon prize from the Academy of Sciences, at Paris, in 1850. English medical literature contains specimens of his researches in both these departments of science. In the fourth volume of Todd's *Cyclopædia of Anatomy and Physiology* appear his articles, *Quadrumana*, and *Teratology*. Willem Vrolik was Knight of the Military Order of William (after 1831), of the Order of the Dutch Lion, 1855, and a member of many learned societies. (*Athenæum.*)

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Edward Smith. Lettsomian Lectures on Physiology. Lecture II, "The Evolution of Carbonic Acid by the Lungs and Skin, and other Phenomena of Expiration and Excretion, under the influence of various agencies."

TUESDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Savory, "On the Absorption of Dead Bone"; Mr. Nayler, "Observations upon Alopecia."—Zoological.—Ethnological.

WEDNESDAY. Royal College of Physicians, 5 P.M. Dr. Markham. Gulstonian Lectures. "The Uses of Blood-Letting in Diseases."—Pharmaceutical Society, 8.30 P.M. Professor Bentley, "The British Pharmacopœia."—Geological.

THURSDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal Society.

FRIDAY. Royal College of Physicians, 5 P.M. Dr. Markham. Gulstonian Lectures. "The Uses of Blood-Letting in Disease."—Royal Institution.

SATURDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.— Great Northern, 2 P.M.— London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

FRIDAY. ..... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

GRATUITOUS SERVICES.—When "A Country Surgeon who gives advice to the Poor" will tell us what his views really are on gratuitous medical services, we shall be happy to notice them.

P. L.—Self-supporting are the best kind of medical charities. There are many dispensaries of this kind—partly self-supporting, at all events—in different parts of the country: at Northampton, and, we believe, at Coventry.

CHAUCER thus renders Hippocrates' famous aphorism in the opening verse of his *Assembly of Foules :*

> "The lyfe so short, the craft so long to lerne,
> Th' assay so hard, so sharpe the conquering."

A DISFIGURATION.—SIR: I should be very glad if any of your readers could suggest a remedy for a rather disfiguring, and therefore, especially in the female sex, a not unimportant affection. I allude to a condition of the skin of the face, characterised by a dilated state of the capillaries or minute arterial twigs immediately below the surface. It occurs in persons of fair complexion and delicate skin; and is most observable on the forehead, where it is considerably disfiguring from the red blotchy appearance that it imparts, and yet neither the epidermis nor cutis is in the slightest degree raised or roughened.

I have in one or two instances, when such blotches were well isolated, destroyed them by drawing a slender thread by means of a fine needle through the course of the dilated vessel, the thread having been previously soaked with nitric acid for half an inch of its length. But when the blotches are many and of a tortuous ramifying character, this proceeding (affording a perfect cure when applicable) cannot be carried out. Ordinary astringent lotions of all kinds I have tried in vain. I am, etc.,

February 13th, 1864. PULCHRA.

COMMUNICATIONS have been received from :—Dr. WILLIAM ADDISON; Dr. SANKEY; Dr. A. T. H. WATERS; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. ROUTH; Mr. WILLIAM BOWMAN; Mr. A. B. STEELE; Mr. J. R. HUMPHREYS; Dr. JOHN LORIMER; Mr. LOWNDES; Dr. C. L. ROBERTSON; Mr. JONATHAN HUTCHINSON; Dr. MEADOWS; THE HONORARY SECRETARIES OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. WILLIAM COPNEY; Mr. T. P. TEALE; Dr. M. ROOKE; Dr. J. W. OGLE; THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT; Dr. GOODE; Mr. W. C. BURDER; Mr. W. G. WALKER; Mr. WILLIAM B. KESTEVEN; Mr. W. COOKE; and Mr. E. M. GLEESON.

BOOKS RECEIVED.

1. Three Hundred Consultations in Midwifery. By Robert Lee, M.D., F.R.S. London: 1864.
2. The Roman or Turkish Bath. By James Lawrie, M.D. Edinburgh: 1864.
3. Twenty-Fourth Annual Report of the Suffolk Lunatic Asylum. 1864.
4. The Hunterian Oration for 1863. By George Gulliver, F.R.S.
5. Proofs of the Non-Existence of a Specific Enthetic Disease. By D. Macloughlin, M.D. London: 1864.
6. The Mechanism of Parturition. By W. Leishman, M.D. Glasgow: 1864.
7. Restoration of a Lost Nose by Operation. By John Hamilton. Dublin: 1864.

Remarks

ON

CRIMINAL RESPONSIBILITY IN RELATION TO INSANITY.*

BY

JOHN A. SYMONDS, M.D., F.R.C.P., F.R.S.Ed.,

CONSULTING-PHYSICIAN TO THE BRISTOL GENERAL HOSPITAL.

I COMMENCE this paper by saying, that I propose to discuss the criminal responsibility of the insane under such aspects only as are necessarily presented to all practitioners of medicine. The consideration of the subject under all its bearings would be more appropriately undertaken by those who have made the phenomena of insanity their especial study, and the care of the insane the main business of their lives. I need not remark, that our Branch has the honour of numbering among its members some very eminent representatives of this class of observers and practitioners, one of whom, in his presidential address last year, imparted to us some highly valuable information on points connected with his particular experience; and another has promised us a paper for this evening, to which my own may, perhaps, serve as a very slight introduction. The only other remark that I have to make in the way of preface is, that this paper was written just after the trial and conviction of Townley the murderer, and before the various discussions had appeared in journals and newspapers; which, could I have foreseen them, would very probably have deterred me from bringing before the Society a subject which, however important, has become trite and all but exhausted.

Among medical writers and medical witnesses in courts of law, there have been great differences of opinion as to what constitutes a man irresponsible for a criminal act. But these differences may be arranged under two or three heads.

1. There are those who think it must be proved, that the person under consideration was the subject of a delusion, an insane belief, the result of a morbidly erroneous action of the comparing faculty, and that this delusion originated the act for which the person is brought to trial.

2. There are those who would not limit irresponsibility to so narrow an issue. They say, that there may be no evidence of any particular delusion; but that the man before he committed the act manifested so much disorder in his feelings, disposition, character, and general conduct, that he ought to be held irresponsible.

3. A third class hold that, if a man were one of whom it might be said that he was in any way insane, whether in judgment, or in feeling, or in propensities, no matter whether or not there be any evidence of connection between the act and the special form of mental derangement, still the mere proof of diseased mind ought to excuse the person from the legal consequences of his act, even though there might be evidence of an adequate motive for the act; the theory in this view being that, when it is once admitted that a man's mind is in any way unsound, no one can deny that this unsoundness may have extended to the feelings, motives, judgment, power of self-control, etc., so as to put the act out of the category of crime. In other words, the holders of this view do not require that, in order to exempt from responsibility, the delusion, or the known morbid state of the emotions and moral sentiments, should have been mixed up with the crime.

Now, the view which the law takes of this subject is briefly this. It is a mistake, according to Judge Maule, to speak of the "plea of insanity." It is not that a man is tried and convicted of a crime, and then that a plea against judgment is presented on the ground of insanity, like the plea of a general pardon or a previous acquittal. The issue is, whether, say in the case of murder, the man committed the act wilfully and maliciously. The prosecutor alleges that he did. The prisoner, in his defence, gives evidence that wilfulness or malice cannot be predicated of his act, because of the unsoundness of his mind.

Now, the stress of the evidence is all on this point. The jury have to decide whether the prisoner's act was wilful and malicious. The judge explains to them that he committed it wilfully and maliciously, unless he was in such a condition of mind at the time as not to know that he was doing wrong; or, as some put it, not capable of knowing the consequences of his act. It has been held by some great lawyers that, if the person committing the act know that it is illegal, he is responsible for the act. But the Judges, in their answers to questions put to them some years ago by the House of Lords, in the case of Macnaughten, for the solution of this point, decided that the jury have to find whether the prisoner acted wilfully, and knew that he was doing wrong, and thereby incurring the punishment of the law; or, as it might otherwise be expressed, that the law cannot allow acquittal, unless it be proved that the person was disabled by mental disease from knowing that his act was wrong. I think that, as the lawyers use the word wilfully as well as maliciously, their proviso ought to include those cases in which men, being driven by irresistible and motiveless impulse to crime (as in homicidal insanity), cannot be said to have committed the crime wilfully.

Some have contended, that it is unreasonable to ask a jury to solve problems so difficult as right and wrong. But, after all, it is only a common-sense view that is required of the jury; it is not a metaphysical subtlety. The law is founded upon right and wrong—principles which people decide upon and act upon in the common affairs of life; and it is presumed that most persons know that such principles are the foundation of the law.* The great difficulty, as I have hinted, which the jurors have to meet, is that of determining whether the prisoner was disabled by mental disease from knowing that his act was wrong. Medical witnesses are summoned to give evidence on this very point. One, as we have already seen, would say that it is enough to prove any unsoundness of

* A paper read at a meeting of the Bath and Bristol Branch of the British Medical Association, held at Clifton on Feb. 18th, 1864.

* For a luminous statement of the legal aspect of this subject, I beg to refer to a paper by Mr. Fitzjames Stephen, published in Part I of the *Transactions* of the Juridical Society.

mind, because this may vitiate, more or less, all its judgments, feelings, or motives. Another, with more limitation, would say that the man's insanity bore particularly on his feelings, disposition, emotions, and motives to action; and, therefore, that it was specially liable to lead to an act of violence; and that as our feelings, in our soundest condition, affect our judgment, so, when morbidly perverted, they are particularly liable to warp it and disable a man from perceiving the quality of his act. A third will maintain that there was a special delusion which led to the act in question, and made it of a quality claiming irresponsibility. But this argument of delusion must be accompanied by proof of its emanating from a diseased mind; for, without this qualification, the strange opinions held by sane men might exculpate any criminal act. Again, others have argued with considerable justice, that you may grant the delusion, and that the act flowed from it, but yet it does not follow that the man did not know his act to be wrong. The lords put this question to the fourteen judges. "If a person," ask the lords, "under an insane delusion as to existing facts, commits an offence in consequence thereof, is he thereby excused?" The judges answer: "Assuming that he labours under such partial delusion only, and is not in other respects insane, we think he must be considered in the same situation, as to responsibility, as if the facts with respect to which the delusion exists were real."

This judgment leaves it open to the jury to take in the delusion as a part of the evidence as to the prisoner's mental condition, though the delusion itself does not justify the act. In the case of Hadfield, his delusion consisted in his belief that he was our Lord; that his death was necessary for the salvation of mankind; and that, though he ought not to kill himself, yet for firing at George III he would be hanged, and so the world would be saved. It is clear, here, that he did not feel that, in acting on his delusion, he was doing wrong, but quite the reverse. In Bellingham's case, he was under the delusion that Mr. Windham had injured him; and, having mistaken (which any sane person might have done) Mr. Perceval for Mr. Windham, Bellingham shot him. There was no evidence to prove that he did not know that he was doing wrong, so he was convicted; for, if Mr. Windham had indeed injured him, and Bellingham in revenge had shot him, he (Bellingham) would, of course, have been convicted. The feeling that followed upon the delusion or upon the real fact, and which feeling brought about the murder, was the same in either case. But still it might have been argued, that such a delusion was so absurd as to indicate great unsoundness of mind; and the jury in such a case would have to settle in their own minds, whether it was enough to disable the subject of it from knowing that his act was wrong.

Cases are not uncommon in which persons have been afflicted with a false impression that they heard voices maligning, denouncing, and threatening them. Under such an impression, they have taken loaded pistols and rushed out of their houses in search of the imaginary offenders. Supposing that such a person had met some one on the spot, and, under the influence of rage at the fancied insult, killed the unoffending individual, was the insane man answerable for his action? A man under any violent passion does not consider much the consequences of his act; and even had the insane man been really insulted in this way, it would not justify his act. In such a case, the medical witness may give an opinion that so strong a delusion indicated a diseased brain, and that the man was disabled by the state of his brain from knowing at the time that his act was wrong; or that he was for the time so mastered by the delusion as to have lost all power of self-control; so that, though his act was malicious, it was not wilful.

If the delusion proved to exist in a case had nothing to do with the act, the quality of the act must be judged on other evidence. In Buranelli's case, it was pretty clear that his delusion had nothing to do with his crime; and that there was sufficient evidence of malicious motive. But there were eminent psychopathologists who thought that, independently of those delusions, the prisoner presented other evidence of unsoundness of mind sufficient to make him irresponsible. In a recent case (Townley's), the prisoner was held responsible because he knew the consequences of his act, and he was actuated by evil passion, and he premeditated the crime. But a question might be raised whether he knew that he was doing wrong, seeing that he held the notion that an engagement made the lady his property, and that he might dispose of her as he liked. Though I should have joined in the verdict of "guilty" on the whole evidence, I confess that there is a difficulty in distinguishing what one might call a strange eccentric individual belief or crotchet from what another would call an insane belief in this case. But, seeing that the object of punishment is prevention, it would be dangerous to admit that a young lady's life might be left to the mercy of a lover's crotchets.

It may be worth while to dwell on the instances of delusion to which I have just alluded. In all but Buranelli's the delusion was mixed up with the act. In Hadfield's case the delusion was not only an utterly wild and absurd belief, but it also affected his sense of the morality of his act, and his act had little or no personal passion mixed up with it. In Bellingham's case the delusion, though concerned in the act, did not affect the right or wrong of the act, and natural passion entered largely into it. In the hearer of imaginary voices, the delusion *per se* again might not justify the act (for it is wrong to shoot a man for abusing you). In Townley's case, his particular notion did affect his view of the quality of his act in a pre-eminent degree, but it was combined with violent personal feeling. And the delusion, if so to be called rather than an eccentric notion, was not enough to prove a diseased state of mind.*

What is delusion or insane belief? Let us take one or two examples. Suppose a man proposes to you to form a company for draining the Mediterranean Sea, and making of the recovered land a magnificent cherry-orchard; this proposal is so contrary to all your notions of what is probable or practicable, that you pronounce it at once to be insane. Another comes to you, and avers that he can produce a change in your body by administering to you decillionths of a drug, and persists even when you have explained to him the numerical meaning of a decillionth, which is equivalent to *reductio ad absurdum*. This is quite as opposed to your notions of what is possible or practic-

* Since the above was written, it has been made highly probable by the investigation of this case by the special commission, that the alleged notion was an after-thought set up in vindication of the crime. See a very able medico-legal commentary on Townley's case, entitled *Insanity and Crime*, by the editors of the *Journal of Mental Science*.

able as the former notion, but do you call it an insane belief? A third tells you that he believes that a *clairvoyante* girl can read a writing placed on the epigastrium, or form a judgment of the bodily and mental condition of a person hundreds of miles away, by means of a lock of hair. Is this an insane belief? and if insane, is it so insane as to argue disease of the mind which entertains it? A fourth tells you that he was justified in killing his betrothed, because a marriage engagement gives a man absolute possession of the woman, and the right to deal with her life. There is nothing more insane in this belief than in the others which I have noticed. The first and the fourth are the most dangerous; the one to the property of the speculator; the other to the life of the affianced lady. The second and third may be only dangerous in the way of superseding more reasonable and salutary methods of medical investigation and treatment.

I think that the more we consider delusions, the more surely we shall come to the opinion that a delusion, like a symptom of a disease, must be viewed in connection with other mental facts before we can arrive at a correct notion of the unsoundness of the mind, and the correlative irresponsibility of its owner; and it will be found that different species of insanity, like the groups of diseases in our nosological classifications, run into each other. Not the less, however, do we recognise the value of such classification. There is a class of cases in which delusions or intellectual aberrations are the prominent phenomena; but they are rarely, if ever, unattended by an abnormal condition of the emotions and feelings. There is another class in which the feelings and sentiments which constitute disposition, temper, and character, and which incite and govern actions, are disordered without marked disturbance of the understanding (the moral insanity of Prichard, the *manie sans delire* of Pinel); but if we examine them carefully, we may often discover indications of impaired or disordered judgment. And the same may be said of the group characterised by violent disturbance of the lower propensities, while mania may present in the same person manifestations of all the forms of derangements which characterise the above groups.

Our excellent associate Dr. Davey, in an interesting pamphlet on *The Law of Lunacy in Relation to Crime*, gives it as the result of his observation and experience, that mental disorder generally, and especially that which is likely to be mixed up with criminal charges, has its beginning, and betokens itself mainly, in the emotions and propensities.

To return to the principal question of this paper. How far does mental unsoundness affect a man's responsibility? Perhaps we may get a little additional light by looking at the question from a fresh standing ground. Instead of looking at it from the side of insanity, let us regard it from that of the rights, liberties, and interests of society. Was the criminal under trial a free agent, enjoying all the advantages and privileges of a person at large? If he was, can the law distinguish between him and other members of society? Law is a social contrivance for the preservation of life and property. As at present constituted, it cannot without difficulty enter nicely into the motives and antecedents of crime. It views the acts of men as they are done, and deals with them according to its prescriptions. The legal judge is not the maker and searcher of hearts. It is hard for him to decide what motives or passions are irresistible; or what temptation was unduly yielded to, what bias was pardonable. If the biography of every criminal could be fully unfolded, if his original organisation could be laid bare, if the outward conditions of his moral life could be described in detail, showing how every influence that should educe and nourish the moral sense, was wanting, while all that could feed and foster and develope the tendency to evil, was working upon him from the cradle up to manhood, it might appear that, on a righteous and equitable survey of the agencies and instincts to which the criminal had been subject, he was perhaps a less culpable person than nine-tenths of the members of the court at whose bar he is arraigned—persons whose propensities to commit legal offences have been held in check by, or received no encouragement from education, position, habits, customs, conventions, and worldly interest. Much of temptation is hidden under social propriety. And, were hearts to be unveiled, perhaps more might appear than might be pardonable even among the most respectable members of society. But such adjudications are not for human tribunals, at least in the present imperfect state of society. Men must be tried by their acts; and the known consequences of certain acts are the preventives to crime set up by society in its own defence. Society does severe things. It is hard, though perhaps unavoidable, to send brave, ignorant peasants to incalculable suffering, and with the certainty of a large percentage of deaths, in fighting battles for the defence of pestilent territories acquired on most questionable titles. It is hard to imprison, and it ought to have been felt very hard (in a former state of our penal code) to hang men for crimes prompted by the most primitive of human needs. "You are not hanged," a humane judge might say, "for stealing a sheep in behalf of your craving stomach and famishing children, but you are hanged in order that henceforth sheep may not be stolen. Your fate must conform to the necessities of society."

But though society cannot nicely balance and allow for the natural incentives to vice and for the faults of education, may it not allow for morbid aberrations of judgment or for morbid propensities? Unquestionably, when they amount to a certain degree. But what is that degree? This question we have already in part considered. But let us ask another question. Why was the criminal at large? Why was he in the enjoyment of the privileges of society, if he were not answerable to the law which protects those privileges? This question points out to our minds a test that may be a help to us as medical witnesses, whatever may be the value of it to the public, or to the deliberations of a court. If we are considering whether a prisoner is responsible or not for his act, let us ask ourselves whether the facts testifying to his unsoundness of mind were such as would have justified us in certifying him as a person fit to be confined. And if we can satisfy ourselves that we should not have judged him to be a person who could be entrusted with his liberty, we may safely pronounce him irresponsible for his actions. But if we must have left him at large, then he must be treated as a free agent, and one who was not disabled by mental disorder from knowing that his act was wrong.

I think my fellow-members will give due consideration to this suggestion. And were it brought before the attention of the public as likely to be carried into practice, it might probably have an indirectly bene-

ficial operation on those unfortunate persons about whom is the question. Were the partially insane to know that so long as they have liberty they are answerable to the law, I believe that this knowledge would lead them to that self-restraint which is the object of deterrent penalties. And as to the public, they would take more heed of those individuals who, by reason of their unsoundness of mind, are dangerous possessors of liberty. The test would not only diminish the odium or obloquy which at present is so often attached to those who place such persons under control, but it would impel the friends of such persons to the performance of a duty from which it is often natural to shrink. But here comes a difficulty which must be familiar to all who have had to deal with these debateable cases. There is no friend or relation willing to incur the responsibility and the expense of consigning the case to an asylum. What is to be done? This difficulty points to a great public want, which will, I trust, be some day supplied. I mean the appointment of public medico-legal functionaries, whose business it shall be to investigate and take the responsibility of determining upon, and providing for, the seclusion of the cases alluded to. I think it would eventually appear that it is better, nay, that it is fiscally and economically preferable to deposit a brain-sick man in a hospital for the insane, where he may be *cured* as well as kept out of the way of harm to himself or others, than to allow him to remain at large till he has committed some crime which will cause him in one case to be maintained at the public expense as a convict or prisoner for life, or in another to be executed as a doubtful criminal.

There are two obstacles, but not, I think, insuperable, against the practical utility of the criterion which I have proposed. One is presented by such cases of madness as begin abruptly, and are, indeed, first betokened by the very act for which the perpetrator is under trial. Such are the cases of impulsive mania, called Phonomania, Pyromania, and Kleptomania. Now, I think, if these cases are studied carefully, it will be seen that they are so flagrant as to prevent any question about them; that, although the person affected manifested no such indications of mental unsoundness previously to the act as would have justified any one in depriving him of liberty, yet the act itself was so motiveless, so obviously the result of an irresistible impulse, as to take it out of the legal category either of wilfulness or of malice.

Another difficulty would be offered in cases in which a delusion, though long held, has only been manifested by the act itself. If it be plain that the delusion did exist at the time of the act, then we may consider whether, had we known of such delusion, we should have deprived the person of his liberty. But if the delusion would not have been strong enough to justify such interference, then let the criminal be held responsible.

But here I beg to remark that, in debating these questions of responsibility, we are taken somewhat beyond our strictly medical functions. Sometimes, we willingly, almost officiously, pass out of our province; but oftener we are dragged out of it. I do not think, that it is our business to say what is moral, much less legal, irresponsibility. It might be well for us to resolve and agree to say no more than what we know as medical practitioners. Let us declare the man to be, in our judgment, sane or insane; just as, in examining for an insurance-office, we pronounce the candidate to be sound or unsound in body. Having declared him to be unsound in mind, let moralists and legal judges settle the question whether he was responsible for his actions. For my own part, I do not hold that, in the abstract, unsoundness of mind should, necessarily and in all cases, exempt from culpability. Every case must be examined on its own merits; and the questions on which the individual case must turn are, as it seems to me, legal and moral, not medical. We have enough burthens on our minds; enough of difficult problems to solve; and it is hard to have forced on us those which do not belong to our calling.

But whether we like it or not, we shall still have these troublesome questions pressed upon our consideration. Was the prisoner insane to such a degree as to take his act out of the category of malice and wilfulness? Was he ignorant that he was doing wrong and breaking the law? Had his disorder deprived him of the power of self-control? I repeat what I have said, that, in determining these points, we must study the whole man; and consider, whether had we known his history, we should have allowed him to be in possession of his liberty. And we must remember that, while it is our duty, on the one hand, to save an irresponsible man from punishment, we must not, on the other, push our theories as to human actions so far as to weaken that check which punishment gives to crime; ever bearing in mind that, while one man may be so overmastered by morbid propensity, and another by wilfully indulged passion, either of which may set all fear of punishment at defiance, there are vast numbers of persons with feeble moral sense, moderate passions, and exposed to strong temptations, whose premeditation of crime is arrested by the dread of punishment. For, putting aside the fear of criminal punishment, are we not all aware that even minor penalties are strongly operative? What would be the safety of virtue and what of integrity, were there no such punishment as social loss of caste and social dishonour?

In conclusion, and to gather up the more important practical points of this paper. It will be our duty to inquire in any case: 1. As to delusions, whether they were of so gross a nature as in themselves to argue a diseased state of the understanding; or whether, though of an insulated nature, and not involving the whole mind, they had a direct bearing on the crime, or whether they were mixed up with morbid emotions and sentiments. 2. As to cases without manifest delusions, whether the state of the emotions and moral feelings was so perverted, either with reference to the ordinary standard, or with reference to what was the patient's former temper and character, as to indicate a morbid condition, that condition telling in particular on the power of self-control. In distinguishing such cases, it will be a help to view the inordinate emotion in relation to the object which excited it—as in the common cases of revenge, hate, jealousy, and cupidity; and to consider the proportion between the passion and its provocation. 3. As to the impulsive forms of mania, these ought not to be admitted but on the strongest evidence. But luckily, in such cases, the evidence is usually very convincing; or if not so to the merely legal mind, it is conclusive to those who have any practical acquaintance with the great variety of the forms which mental disorder can assume.

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

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LECTURE III.

On the Pathology and Treatment of Certain Forms of Delirium. Therapeutics. The Physiological and Therapeutic Action of Alcohol. The Present State of Therapeutics, and the Direction which Therapeutical Inquiries should take, etc.

MR. PRESIDENT AND GENTLEMEN,—At the termination of my last lecture, I had referred to two pathological conditions of the body as illustrative of the general bearings of the subject of these lectures. Before passing on to the special object of the lecture of to-night, I wish to direct your attention, very briefly, to certain other pathological phenomena of great practical importance.

I pointed out, in a former lecture, some of the difficulties with which the study of the structure and functions of the nervous centres is involved; and I endeavoured to show the influence which our imperfect physiological knowledge has had in retarding our progress with reference to the pathology and therapeutics of the diseases of the nervous system. But it would be easy to prove that, in regard to those particular morbid symptoms which are essentially referable to a perverted function of the organ of consciousness and intellectuality, important advances have been made, both in the discrimination of the different conditions under which the phenomena occur, and the treatment to which they are submitted. Is it not true that we are now aware that two of the most formidable symptoms with which we have to deal, delirium and coma, are caused by various and differing conditions of the brain? And has not this knowledge been acquired as the result of our improved physiology, and the careful observation of facts in clinical medicine and morbid anatomy?

These symptoms, delirium and coma, were once thought, and that not long ago, to be essentially connected with an inflammatory state of the brain or its membranes; but, careful *post mortem* examination of cases in which the symptoms had occurred revealed the fact that no such inflammation had existed. Indeed, we have now learned that acute inflammation of the brain, or of its membranes, occurring in adults, is a very rare disease; and that, in the vast majority of cases, in which we meet with delirium, and even coma, there is no structural change of an inflammatory kind going on within the cranium.

It is especially to the subject of delirium that I wish to direct your attention. I do not, however, intend to enter into any lengthened consideration of its nature, but rather to confine my remarks to the pathology of the phenomenon, when it occurs in connexion with some general malady or some distant disease—when, for instance, it arises in the course of a specific fever, or of a local inflammation, as pneumonia, pericarditis, or erysipelas.

It seems to me that, step by step, we have arrived at conclusions, with reference to this symptom, which have materially modified our treatment of it.

The occurrence of delirium from the imbibition of alcohol or the inhalation of chloroform, and of coma as a consequence of the administration of opium in large doses, has taught us that these symptoms do exist without any structural change in the organ of consciousness and intellectuality. Further, the condition of the brain after death from delirium tremens, and as a consequence of Bright's disease attended with coma, shows that a poisoned state of the blood is alone sufficient to give rise to the symptoms to which I am referring.

When, therefore, we meet with delirium in the course of a specific fever, as scarlatina, or in the progress of pneumonia, pericarditis, or erysipelas, may not the symptom be due to a like cause? Nay, has not clinical experience shown the strong probability that such is the case? And when an opportunity has been afforded of making a *post mortem* examination, have we not seen that not only has there been no congested or inflamed condition of the brain, but that the only morbid change occasionally found has been a somewhat anæmic state of the grey matter of the cerebral convolutions?

I believe these facts are becoming recognised and acted on by us; but yet I doubt whether they have been sufficiently impressed on our minds, and whether they have yet led to the general adoption of a practice in accordance with the indications they afford; whether, in fact, we are not too apt to consider delirium, occurring in such cases as I have referred to, as the result of organic changes going on within the cranium, and to direct our remedial measures in accordance with this view.

I am unwilling to trouble you with unnecessary details; but, in order to make my position clear, I must illustrate my views by reference to a single case.

I attended, in the spring of the present year, a gentleman of middle age attacked with scarlatina. I saw him on the fourth day of the attack. The rash was not well out; the throat was sore; the pulse 120; and the fever rather high. The symptoms may be characterised as, at that time, severe, but not urgent. On the following day—the fifth of the disease—the general symptoms were much the same, except that there was great excitement in the patient's manner, with restlessness, flushed face, and injected conjunctivæ. Moreover, the urine was albuminous. On the following day—the sixth of the disease—I was told my patient had passed a bad night, and had been very restless and delirious. He was excited, talked in a rambling manner; but, when spoken to, answered sensibly. He complained of violent palpitation of the heart, which he said was a steam-engine working in his inside. I examined his chest, and found no evidence of inflammatory mischief. On the next day—the seventh of the disease—he had passed rather a better night, but still had been delirious. In the afternoon of this day, he began to talk in an incoherent manner; got up and crawled to the bottom of his bed, and was obliged to be pu

back by his attendants. When I saw him at night, he was more quiet, and the pulse was less frequent; but there was extreme prostration. From this time, no delirium occurred; and, with the exception of a threatening of diphtheria which manifested itself on the eighth day, and a somewhat alarming prostration, the patient progressed satisfactorily to recovery.

Now, I wish to refer briefly to the measures which were adopted in this case, under which the delirium disappeared, and a favourable issue resulted. I must here remark, that the delirium was of a severe type; it was not the mild delirium we so frequently meet with, but such as to require, for two or three days, constant watching, and, on more than one occasion, actual personal restraint.

On the day on which I saw the patient, he was taking chlorate of potash and steel, with small quantities of wine. On the following day, the steel was omitted, the wine and potash were increased, and free nutrition was ordered. As soon as the delirium occurred, notwithstanding the flushed state of the face, I considered the symptom to be due rather to a poisoned condition of the blood, and perhaps an anæmic state of the brain (for, although the pulse was quick, it was weak), than to any congestion or inflammation of the contents of the cranium; and, acting on this view, the only modification I made in the treatment was to increase the quantity of stimulants, and to insist more urgently on the free administration of nourishment. These measures were fully carried out, and the quantity of stimulants given was large. The chlorate of potash was continued up to the eighth day of the disease, when two grains of quinine were given every four hours.

I have referred to this case, because it is an instance of severe and alarming delirium occurring in the progress of a specific fever, not met by any abstraction of blood, nor by any remedy addressed to the head itself, but by free stimulation and nutrition; and with the most satisfactory results. To the early, persistent, and regular carrying out, night and day, of these measures, I attribute the patient's recovery; for, in spite of all the stimulants that were given, on the eighth and ninth days of the disease, when the fever-symptoms and delirium had subsided, the pulse became intermittent, and the patient lay for some time in a semi-syncopal condition, from which he was roused by a very liberal administration of brandy. I have mentioned that the urine was albuminous. On the fifth day, it was smoky, and gave a large deposit with heat and nitric acid. The alcohol did not seem in anywise to be prejudicial to this condition; on the contrary, during its administration, the smoky colour became daily less, the albumen diminished in quantity, and both conditions soon disappeared. No dropsical symptom followed the attack.

Cases of this kind we are probably all familiar with. I might relate others; but the one I have mentioned is perhaps sufficient to illustrate the principle to which I have directed your attention. Had the delirium been dependent on inflammation or congestion of the brain, the treatment adopted might have endangered, or even destroyed, the patient's life. The result, I think, afforded a strong proof that no such condition existed.

But, to pass on to the delirium which we often meet with in the course of a local inflammation. It not unfrequently happens that, during the progress of pneumonia or pericarditis, the patient becomes more or less violently delirious. Several such cases have come under my notice; but, without occupying your time by referring to the details of them, I may remark that, as far as my experience goes, the symptoms come on, for the most part, in patients who have indications of general malnutrition, in whom the pulse is quick and feeble; and I consider that the delirium partakes very much of the nature of that which is called traumatic.

An acute disease, like an accident, interferes with the usual habits of life, and when there has been an over-indulgence in alcoholic liquids, severe mental exhaustion, or anything which has led to impaired nutrition, it is very probable that results, similar in their character to those which often follow an accident, will arise in the progress of an acute attack, unless they are anticipated by the practitioner.

But there is, further, in these cases of inflammation, and more especially in some, as rheumatic pericarditis, an additional cause of the symptom in the poisoned state of the blood; this—together, perhaps, with the feeble action of the heart, consequent on its impaired nutrition, and often the mechanical interference with its movements—becomes the exciting cause of the delirium.

The remarks I have made as to the nature of the delirium in rheumatic inflammation will assuredly apply to that which occurs in erysipelas. In my own experience, I have seen a large number of cases of this disease, and I can safely say that, often as I have seen it attacking various parts of the body, I have never seen an instance in which there has been a metastasis to the brain or its membranes. Delirium I have seen very frequently, varying in degree from the slightest possible disturbance of the normal function of the brain, to that which required constant watching; but I have never seen actual inflammation within the cranium as revealed by the scalpel. And does not the treatment with which we meet these cases, even when delirium exists, bear out the view I have taken of the pathology of that phenomenon? Do we not find, that the purely sustaining and stimulating treatment is that on which we can most safely rely, to carry our patients through a severe attack of the disease.

And to return to the point on which I have often insisted in these lectures—*the importance of studying slight deviations from normal actions, if we would understand the graver aberrations*—I think we may gather valuable indications as to the nature and treatment of the phenomenon to which I have directed your attention, from a consideration of the conditions under which it occurs in its milder forms. There is no difference, except in degree, between the mild delirium, if I may so term it, which we so frequently meet with, and those violent paroxysms which characterise some specific diseases. Have we not all experienced the symptom to a greater or less extent? Have we not felt and noted the access of the phenomenon, the gradual passage from the healthy action of the brain, to one which has stepped into the confines of pathology? Have we not, under the influence of over-work, over-anxiety, irregular hours, suffered from that malnutrition which always follows as the result of malassimilation? Under these circumstances, or depressed, perhaps, by some prevailing epidemic—even

the mildest attack of influenza,—have we not felt a sort of wandering of our thoughts when we ought to have been healthily sleeping? Have we not found ourselves dwelling on fantastic images, and weaving curious combinations? Have we not felt the occasional involuntary start, or the uncontrollable twitching of some muscle? Have we not, in fine, found that the central, regulating, coordinating agent, that by which our thoughts are elaborated, our ideas conceived, and by which our will exerts its power, has passed from a condition of vigour to one of feeble and uncertain action? And have we not found, as our anxiety has ceased, our work diminished, as our food has been better assimilated, and, in fact, as the nutrition of the brain has improved, that these symptoms have disappeared, and that the normal vigour has returned to the organ of our thought, our intellect, and our will?

And it is by studying these phenomena in their early stages, or their slight manifestations, by watching the steps which mark the passage from health to disease, and from disease back to health, that we gain an insight into their pathology, and the clearest indications as to their treatment.

But in referring to the cases in which this perverted function of the brain occurs, I would distinctly guard my hearers against a hasty generalisation as to its causes or its treatment. It would be far beyond the scope of this lecture for me to attempt to define the peculiarities of delirium as caused by an inflammation of the brain, and of that which results from a mere functional disturbance. My object has been rather to show that, in the majority of cases, the phenomenon is due, not to inflammatory change, but to faulty nutrition, the result of a poisoned state of the blood, or an impairment of the general circulation, or of both these causes combined; and that, in our treatment, we should direct our efforts to the relief of the general malady, and not specifically to the symptom itself.

[*To be continued.*]

A Recent Invention. The Graduated Compression Suspensory Bandage is designed for the relief, prevention, and cure of the various diseases connected with or in relation to the spermatic cord, the testes, and the envelopes. This bandage, invented by Dr. G. Miliano, of New York, has been so constructed and arranged as to make equal pressure upon the whole surface of diseased testes and their envelopes. The pressure can be graduated at the pleasure of the surgeon or the wearer, according to the circumstances of the case, by drawing sufficiently upon the braids so as to contract the bandage and compress the disease; then crossing them at the back of the scrotum, at the perineum, and tying them in front under the penis. (*American Medical Times.*)

Inside a Monitor. Only think of the sanitary prospects of eighty or a hundred men shut up in a submerged iron encasement, with only about sixty-five cubic feet of air-space to each person, and that sepulchral atmosphere unchanged, except by the very imperfect process of "blowing" a feeble current from the "turret." According to our own rough estimate, each man during battle, or in a sea at all rough, when scuttles and hatches must be closed, would receive *less than two cubic feet per minute* of fresh air for respiration. Add to this the inevitable humidity and the excessive heat and darkness of the monitors, and you have the elemental and *inevitable* causes of a fearfully high invalid-rate. (*American Med. Times.*)

Original Communications.

A CASE OF MANIA, WITH ALBUMINURIA, CURED BY THE ROMAN BATH.

By C. L. Robertson, M.D.Cantab.; Medical Superintendent of the Sussex Lunatic Asylum, Hayward's Heath; Editor of the *Journal of Mental Science.*

M. W. (No. 720) was admitted at Hayward's Heath on February 23rd, 1863.

History. He was married, aged fifty; was coachmaker at the Brighton railway works; a man of intemperate habits. He was stated to have shown symptoms of mental disease for a twelvemonth, with a tendency to suicide. There was no hereditary taint.

State on admission. a. Bodily. He was very weak. The tongue was furred and tremulous; the whole frame in a state of tremor. He was restless, and did not sleep. *b. Mental.* The mind was quite confused; he was unable to understand or answer questions. There was difficulty of articulation. He was unable to tell his name; and was disposed to be destructive and dirty.

February 25. Want of sleep and restlessness continued. He was very nervous and tremulous. Pulse feeble, 90; pupil contracted. He ate slops. He was ordered to have a glass of whisky at bed-time, and to be packed in the wet sheet for two hours, with two cold pails afterwards.

March 2. He had improved rather under the treatment; pulse 72; tongue cleaner; pupils contracted. The mind was incoherent; memory deficient. He was very restless—taking down the pictures; and was disposed to be dirty in his habits.

March 18. He was not so well. Pulse 120; face pale; surface cold. Restlessness increased; he was incoherent and noisy. The packing and cold pails were omitted, and 3j of the sedative mixture* ordered to be given at bed-time, and he was directed to continue the whisky and extra food (chops, porter, and ordinary diet), of which he ate well; and to have an occasional warm bath for half-an-hour at bed-time.

May 10. He had lost ground; the restlessness and incoherence continued. He was noisy at night; his habits were dirty; he was feebler. Œdema of the legs had set in. The urine† was found laden with albumen, abundant in quantity, specific gravity 1025, clear, no deposit. The heart was healthy; pulse 110. He was rambling in his conversation; he spoke also of his strength and ability, and that he would build me a carriage, and provide four horses for it, and drive it himself. He was very troublesome, secreting things, etc. He was ordered to have the Roman bath at 150°; to omit the sedative mixture. He was so feeble that he could hardly stand. He had to be carried to the bath. The skin acted feebly; pulse 70, on his return.

May 21. The Roman bath was continued twice a week at 170°. The skin acted better. He was still very feeble. The œdema of the legs was less. His mind was no better; he had delusions, and was incoherent. The albumen was less in quantity.

June 17. He was in every way better. His conversation was more rational. He was gaining strength daily. He still entertained rather an exaggerated

* The following is the formula of the sedative mixture. R. Tincturæ digitalis, tincturæ cannabis Indicæ, liquoris opii (Taylor), ætheris chlorici, singulorum unciam. Dose 3ss to 3j.

† Unfortunately, the urine was not microscopically examined.

idea of his ability and strength, and had a propensity to secrete and collect trash as before. He was ordered to continue the Roman bath twice a week, and to go to the carpenter's shop. The œdema of the legs was quite gone. His appetite was hearty. Albumen was slightly present only.

October 5. A steady improvement had taken place. There had been no trace of albumen for some weeks in the urine. He was convalescent. The mind was clear and rational. He worked steadily in the carpenter's shop, and was allowed to go about the premises alone, satisfied with his position and care, and prospect of discharge.

November 30. He was discharged on trial for a month. During the month, he came to Hayward's Heath to ask for a Roman bath. I found him sound in mind and body, and working for the Brighton Railway Company, in their carriage factory, at thirty-three shillings a week.

December 30. He was discharged cured.

Remarks. The therapeutic uses of the Roman bath have yet to be studied. I believe them to be very great. Of its curative power in the early stages of phthisis I have had several examples, and I can confirm all that Dr. Leared reports of its action in the early stage of that disease. I long to see the Roman bath fairly tried in zymotic diseases. I believe, if used at sufficiently high temperatures (170°-200°), that the results will astonish us all. If anything ever can cure hydrophobia, it will be the Roman bath, at 200°, continued for many hours.

Yet, strange to say, although three years have elapsed since it was fairly and fully brought to the notice of the profession by Mr. Erasmus Wilson, and although the public are building baths, and using them eagerly and ignorantly, no London hospital has thought it worth while to add this potent agent to its armoury. The Newcastle Infirmary, and the Sussex and Devon Lunatic Asylums, are the only hospitals in England (so far as I know) provided with a Roman bath.

In the *Journal of Mental Science* for July 1861 I gave an account of the Roman bath at Hayward's Heath. A similar bath, capable of accommodating six bathers at a time, can be built for £150 to £200 complete. The cost of heating it is about one shilling a day. In the same journal, for July 1862, I published some cases of melancholia (with refusal of food) successfully treated by the Roman bath, and I have since then regularly used the bath in my practice at Hayward's Heath.

In the case above recorded, I have little doubt that the Roman bath saved the patient's life and restored him to reason. He steadily lost ground until he began its use; the delusions increased; the bodily health gave way; œdema of the limbs set in, and he was so weak that he had to be carried to the bath, and could hardly stand when he came up from it. In six weeks he was at work at his trade, and in six months he was discharged from the asylum sound in mind and body, and able to earn a comfortable living. This cure was the only possible result which I did not foresee. I thought first that the case was tending to permanent dementia; then it looked as if general paresis of the insane would be the end; then it seemed as if he were to die from dropsy and albuminuria. I cannot but think that the Roman bath was the agent which rescued him from all these perils, and restored him to health of mind and body. The danger which awaits him is a recurrence of the disease, should he revert to his intemperate habits.

Socrates was the son of a midwife, and himself practised the art of midwifery.

Transactions of Branches.

SHROPSHIRE ETHICAL BRANCH.

CASE OF ARTIFICIAL ANUS IN THE LEFT LOIN: DEATH FOUR-AND-A-HALF MONTHS AFTERWARDS.

By J. R. Humphreys, Esq., Surgeon to the Salop Infirmary.

[*Read September 21st*, 1863.]

I was requested on June 21st, to see Samuel Davies, aged 31, who had been an out-patient of mine at the Infirmary for some time, suffering from a tumour of the rectum, diagnosed to be malignant.

The commencement of his illness he dated about twelve months previously, when he experienced a difficulty in passing his motions; this increased, and about two months since he lost all control over his sphincter. I did not see him for some weeks, and when I visited him on Sunday the 21st, he told me that he had been suffering much since he saw me last both night and day, he had been most of his time in bed, and that nothing whatever had passed from his bowels for three weeks. His belly was enormously distended. On passing the finger into the rectum, it came into contact with the tumour, which was hard and of considerable size; in fact, the bowel was completely blocked up. The poor fellow was in great agony, and begged me to do what I thought proper to relieve him. I explained to him the nature of the obstruction, and what I proposed for his relief; viz., opening the bowel in the left loin. He readily assented to it, and that afternoon I proceeded to the operation,

He was put under chloroform by my friend Mr. W. Eddowes, the house-surgeon of the Infirmary. An incision about four inches long was made in the left loin, midway between the short ribs and the ridge of the ilium; the skin, cellular-tissue, fasciæ, and muscles were divided in turn, and the descending colon reached behind the peritoneum; the bowel was secured by two ligatures at top and bottom, and opened for about an inch and a half long between them; a great quantity of gas immediately rushed out, followed by a stream of dark coloured fæces, which continued for some considerable time; the ligatures of the bowel were passed through the respective edges of the external opening, so as to bring the outlet of the bowel continuous with the skin; some brandy and water was given to the patient, a moist flannel placed over the wound, and a towel pinned round his waist; he was put to bed, and expressed himself greatly relieved. A marked change was noticed in his countenance, which was less anxious, and showed clearly that he had been relieved of much suffering.

June 22nd. He passed a comfortable night. A copious discharge of wind and fæces had escaped from the opening during the night, and the belly was softer and more natural. He had taken ample nourishment, and expressed himself in grateful terms for the relief which he had experienced.

June 25th. I found him dressed, and lying on the couch downstairs. He had passed a comfortable night, and took solid food. The vent was acting well.

July 10th. As the opening in the loin closed up more rapidly than I wished, I passed a full sized rectum-bougie into the bowel, and afterwards injected a pint and a half of cold water into it with an elastic enema apparatus; by this means the bowel was emptied much more effectually and more comfortably. I instructed his nurse to do the same thing every morning. He was able to take all kinds of food; dressed himself daily, and walked about the house. He was

free from pain, excepting when he took stimulants, which invariably caused pain and a burning sensation in the rectum.

July 17th. He had a difficulty in passing urine; he was obliged to sit on a chamber-pot half full of hot water, before he could pass any. He continued much in the same state during the remainder of July and August.

September 5th. On my return home after a fortnight's absence, I found him weaker and thinner, and suffering much pain in the lower part of the back. He did not sleep at night. His legs were swollen, particularly the right. On examining the groins, I found the inguinal glands enlarged on both sides. The countenance looked haggard, and wore the malignant aspect. The pulse was weak and small, and losing power. Five grains of soap and opium pill were ordered every night. Nothing whatever had passed *per anum* since the stoppage took place.

September 17th. He was decidedly easier since he took the opium, which he repeated two or three times a day as he required it. He had slept well.

November 7th. He had been gradually becoming weaker, and died this morning.

Post Mortem Examination. November 8th. On opening the abdomen, the omentum and peritoneum were found studded with cancerous deposit. The inguinal and mesenteric glands were enlarged from the same cause. The rectum was closed about its middle with the same matter, so that it was with difficulty that the tips of the fore-fingers could be made to meet, one being passed *per anum*, and the other down the rectum, which was divided from the colon at its sigmoid flexure. The opening in the descending colon was patent, and the bowel continuous with the external skin. The liver was full of cancer, and there was some in the spleen.

This poor fellow's mother died, at the age of 50, of the same disease.

Reviews and Notices.

On the Diseases of Women. By Fleetwood Churchill, M.D., M.R.I.A, Professor of Midwifery and Diseases of Women and Children to the King and Queen's College of Physicians, Ireland, etc. Fifth Edition, carefully revised and enlarged. Pp. 937. Dublin: 1864.

After an interval of seven years, Dr. Churchill's classical manual on the *Diseases of Women* is again brought before the profession, enlarged in size, partly by the adoption of a larger and more easily legible type, partly by the addition of new matter. A work so well known does not require us to say much concerning it; and our only duty will be to point out some of the newer portions of it.

Stricture of the Urethra—a rare affection in females—is noticed at page 85, where Dr. Churchill describes two cases which have come under his notice, in which symptoms believed by him to be those of spasmodic stricture occurred in patients between 60 and 70 years of age. A cure was effected by the introduction of a series of gradually increasing bougies, more rapidly and permanently, in Dr. Churchill's opinion, than would have been the case had structural disease been present.

Reflex Irritability of the Bladder is spoken of at page 87 as a highly distressing condition, but as having received very little attention from writers. Its most familiar illustration is the frequent desire to pass urine in early pregnancy; but it may be connected with menstrual irregularities; with acute non-gonorrhœal vaginitis; with menorrhagia; with congestion, chronic inflammation, or erosion of the cervix uteri. That it is reflex, Dr. Churchill is led to believe because, even though the irritation be of long standing, the urine preserves its natural composition. The diagnosis of the disease is generally easy, if moderate care be taken; but sometimes it is more difficult, especially as similar symptoms may be produced by the presence of a calculus in the bladder. For the treatment—the absence of stone or of organic disease being ascertained—the indication is, to cure the primary affection on which the irritability depends.

At page 90, there is a new chapter on Cancroid and Cancer of the Vulva, Lupus, etc. Dr. Churchill here gives an account, derived principally from the able memoir of M. Huguier, of the Rodent Ulcer of the Vulva, or *Esthiomène* of the above named French surgeon.

Cancer of the Labium and Vulva is also noticed. This is a rare disease; for Dr. Churchill has been able to meet with but few cases in the practice of others, and until last year had never himself seen one—since which time three cases have come under his care. He also reproduces, with illustrative plates, the description of three cases brought before the Dublin Obstetrical Society by Dr. McClintock.

A chapter on Vaginismus is introduced at page 123. This condition, "the result of spasmodic contraction of the vaginal orifice occasioned by unusual sensitiveness," was brought before the notice of the profession in a paper communicated to the London Obstetrical Society by Dr. M. Sims of New York (*Trans. of Obstet. Society*, vol. iii). It has also been noticed by MM. Debout and Michon in France. Dr. Churchill says that the condition has frequently come under his notice; and he gives some practical observations as to its causes and treatment.

A chapter on Encysted Tumour and on Polypus of the Vagina is given at page 138.

Encysted Tumour the author does not find described in books; and he gives an account of four cases which have come under his notice, and refers to one recorded by Mr. Lane. In his cases,

"The tumours have all been situated in the anterior parietes of the vagina; they do not take on a polypoid form; are perfectly painless; give rise to no symptoms beyond the feeling of fulness and bearing down. The projection of the tumour, its pearly colour and semi-transparency, its evidently fluid contents, and its not being connected with the bladder, will sufficiently guide our diagnosis, which may be rendered conclusive by a puncture with an exploring needle."

The treatment which Dr. Churchill prefers is to evacuate the fluid, and snip out a portion of the walls.

Of Polypus of the Vagina, Dr. Churchill has seen only one or two instances, and he avails himself of the description of several cases given by Dr. McClintock.

Retro-Uterine, Peri-Uterine, or Pelvic Hæmatocele, which has received so much investigation within the last few years, has a chapter devoted to it at page 160. Dr. Churchill has little apparently to add to the descriptions already given of the disease; but as to treatment, he suggests that,

"If the distress from tension be not very great, we may fairly try the effect of time, absorbent doses of mercury, the application of poultices, iodine, blisters, etc.; but if the tension be considerable, and there is a sense of fluctuation in any parts within reach, it will surely be better to puncture by means of a fine trocar, and, if necessary, to enlarge the opening by the bistoury, so as to empty the sac of its fluid contents. I confess that I have grave doubts as to the propriety of injections.

"If we are fortunate enough to be called to a case in process of formation, it will be well to try some hæmostatic remedy in addition to cold applications and absolute rest. The succeeding monthly periods will of course require anxious care; absolute rest, quiet, laxatives, and, if necessary, a few leeches to the ovarian region, will probably be sufficient."

At pages 526 and following, the operation of Ovariotomy receives a much fuller consideration than in former editions of the work. Dr. Churchill lays fairly before the reader the arguments for and against the operation, and gives his conclusions as to the circumstances under which it should be undertaken, deferred, or abandoned. As to the mode of operating, he adopts that of Mr. Spencer Wells, whose description he quotes.

In the course of the remaining parts of the book, Dr. Churchill has made such additions as have seemed to him fitted to bring it up to the present state of knowledge of the subject; and he has increased the number of woodcuts from thirty-one to fifty-seven. The book is, in its present form, a complete practical treatise on diseases of women, wherein the reader may find a thorough digest of opinions and observations, made by men at home and abroad, connected and enriched from his own experience by one of the most worthy representatives of the Dublin school of obstetric medicine.

A Manual of Popular Physiology; being an Attempt to Explain the Science of Life in Untechnical Language. By Henry Lawson, M.D., Professor of Physiology in Queen's College, Birmingham, etc. Pp. 168. London: 1863.

Among the books which have been written in late years with the view of instructing the public in physiological science, Dr. Lawson's *Manual* must take a creditable position. The author has in it endeavoured to avoid the use of technical terms, and has written in a plain, familiar, often amusing style; and he has, withal, given a very complete account of all that is necessary for a popular knowledge of how we live.

Many who think physiology too dry a study, will, if they take up this book, find that they can read it nearly, if not quite, as easily as a newspaper article, and will thus, with little labour, imbibe a deal of very useful knowledge.

Manchester Air. Dr. Roscoe, who has lately investigated the amount of carbonic acid in the atmosphere of Manchester, says: "We may conclude that the combustion of coal and the respiration of animals exert no appreciable influence on the quantity of carbonic acid contained in the town air of Manchester collected in an open situation; gaseous diffusion and the great motions of the atmosphere serving completely to disperse the millions of tons of this gas which every year are evolved by the above mentioned causes in this neighbourhood."

British Medical Journal.

SATURDAY, FEBRUARY 27th, 1864.

LUNACY AND MEDICAL EXPERTS.

It is a great misfortune, we again repeat, for the country, as well as for our profession, that no medical man who is personally acquainted with their sentiments, and with the practice of their art, sits in the House of Commons, to point out the remarkable errors, or rather the profound ignorance, touching medical men and medicine, which are so frequently exhibited there. We last week referred to this in connexion with the discussion on criminal lunatics. The animus displayed by many members of the House against the evidence given by medical men in cases of lunacy was really surprising; and it was deplorable, because founded upon a complete misconception of the merits of the case. We must once again refer shortly to this matter, in order to point out the fallacies upon which these erroneous notions of so many members of the House are founded.

In the first place, the evidence of all medical men in matters of lunacy was condemned because, it was said, doctors are so biased by their medical theories as to be unable to give rational evidence on the subject. Now this error arises wholly from the fact, that the legislators in question did not distinguish between the one-sided advocate-evidence of lunacy doctors paid and retained like barristers to save their clients from punishment, and the evidence of solemn judicial experts appointed by the Crown to do absolute justice to the best of their skill—neither to save the guilty, nor to exaggerate the charge against him. Surely this only requires being stated to be understood. It would, in fact, be just as reasonable to condemn the opinions of the whole legal profession in the matter of lunacy, because Townley had a skilful barrister and lawyer, who did their best to make him appear a lunatic. Does not the fact stand patent before us, that five experts in lunacy were appointed by the Crown to give a medical judicial report on the state of mind of Townley; and that these experts, thus appointed and unbiased, at once reported the man to be sane? Is not the fallacy above alluded to demonstrated by this fact? And, in truth, how is it possible to do without skilled medical evidence in these cases? The House of Commons, if it were wise, instead of attempting to do that which is impossible—viz., give the go by to medical evidence in such cases—would ascertain how to use rightly the medical evidence which is at their disposal; and this is, in fact, what Government is compelled to do. Sir George Grey knows well enough that he *must* fly to medical evidence in the difficulty; and his new law provides

for the appointment of proper persons by the Crown to make the inquiry, and those persons will undoubtedly be medical experts.

Practically, therefore, it is certain that, in all cases in which the lunacy of the criminal is doubtful, and the Government is appealed to, the decision must be made by medical experts appointed by the Crown. We are surprised that men in the House of Commons can shut their eyes to the fact; and that there should be men found there to propose that medical lunacy experts, who have made the subject of lunacy the study of their lives, should, by the very fact of their being doctors and learned in the ways of lunatics, be excluded from all such commissions of inquiry!

Again, members of the House of Commons have attempted to show that there is a fatal distinction between the legal and medical dictum of insanity; and that, therefore, the medical evidence is worth less than nothing. But this supposed distinction is really merely nominal; that is, as regards its effect upon the criminal lunatic's case. Thus, for example, the medical man may say and believe the criminal knew right from wrong when he did the fatal act, but believe he did it under an impulse which he could not control. Well, the law takes this evidence and deals with it, and says: "I know nothing about your uncontrollable impulses; it is enough that you say he knew right from wrong, for me to proclaim him guilty of the crime." Now, we ask, what opposition is there *practically* here between the medical dictum and the legal dictum? The doctor has his opinions and crotchets, as they are called; and the law its written decrees; and his opinions cannot upset the law, so long as it is law, although his definition of insanity may differ from the law's definition of it, and may be the truer definition. The law wants simply to know this: Did the man know right from wrong when he committed the act? and on the yes or no to that question hangs all the practical virtue of the medical man's evidence in the eye of the law. The law takes no cognisance whatever of his particular opinions about lunacy. How, then, can his opinions *in practice* be really opposed to the law?

In these few considerations seems to us to lie the whole pith of the matter. Sir G. Grey no doubt sees as well as we do, for he has studied the subject, that the skilled medical evidence of the Crown must decide in such cases as Townley's; and we sincerely trust that the Crown will in future, in all doubtful cases of criminal lunacy, appoint its own responsible and unbiased experts to examine into the matter. In this way, all undue influence exerted by skilled medical advocates in behalf of the prisoner will be properly counteracted; and in this way also will the public conscience be satisfied that no injustice is committed, by misadventure, on persons of truly lunatic mind.

And, in conclusion, we would say this one word, suggestively, to men of reasonable minds: If the medical dictum or theory of insanity differs from the legal dictum or theory of it, is it not just possible that the medical dictum may be nearer the truth than the legal one? The law admits that its definition of insanity is an imperfect one—not absolutely true and all-comprehensive. The justice, therefore, which is founded on such an imperfect definition, must of necessity also be an imperfect or rough sort of justice, one into which error may possibly creep. It is evident that, in such a case as this, the Allwise alone can administer absolute justice. We mortals must be content to get as near to perfect truth and perfect justice, as our limited powers to read the inward springs of action of the human mind will permit. But surely mercy and truth require that we should never forget the possibility of our doing injustice here through this admittedly limited knowledge of ours; and therefore is it, as we see the case, that plain reason bids the law, in doing justice here, to seek earnestly for all aid to guide it through the labyrinth and horrors of a lunatic mind; and therefore, again, is it the plain and reasonable duty of the law, or of those who make the law, to be fully satisfied that what are so often regarded as the crotchets of lunacy doctors—the medical dictum of insanity—may not be much nearer truth, and therefore to justice, than what is called the legal—the common sense—dictum of insanity.

LIMITED LIABILITIES.

Mr. W. G. Walker calls our attention to an act of gross injustice of which he has been made the victim. Mr. Walker, as Union medical officer, attends certain midwifery cases on the order of the overseer, and is thereafter refused payment for such attendance by the Board of Guardians, on the ground that the cases were not "of sudden and urgent necessity." He takes his case into the County Court; and Mr. Parry, who administers what is called justice there, decides against the validity of his claim. Mr. Parry's decision may be law; though we very much doubt if it be. If law be the quintessence of common sense, assuredly this decision cannot be law. But if it be bare law, it is manifestly the cause of a shameful injustice done to Mr. Walker.

Mr. Parry's verdict is based upon the assumption, that attendance upon a woman in childbirth is not a matter of urgent necessity.

"I am clearly," he said, "of opinion that an ordinary case of midwifery, is not one of sudden and urgent necessity, and therefore not one to which the Guardians would be liable to pay."

Now, does this worthy judge really mean to say that, if his wife be taken in the pangs of parturition, it is not a "matter of sudden and urgent necessity" that she should have proper attendance during that critical period? Oh! says the judge, what I term "urgent necessity" is when a woman is "taken in

childbirth on the road or in a field." Judge Parry was evidently for the ratepayers; if we encourage this sort of thing (he said), we shall have all the country coming here to be confined. Mr. Walker again cited what lawyers like so much; viz., precedents. He said that the Guardians had previously paid him in such cases. But it was of no avail.

Until better informed, we must decline to believe Judge Parry's decision to be law, it being so opposed to justice. And really we are astonished, that the judge could find no word of sympathy with Mr. Walker, who evidently was the victim under any circumstances. He obeys the overseer's order. He is obliged to obey the overseer's order; and when he asks for his fee, is refused the same by the Guardians, whose agent the overseer is. Well may Mr. Walker ask, "How, then, am I ever to tell when an order is a proper or an improper one?" The decision, we must confess, strikes us as doing no great credit either to the judge's head or heart. Even if his decision be the real legal one, why did he not, in delivering it, exclaim against the manifest injury done to a member of an honourable profession; and suggest that no medical man ought to be exposed to such injustice? We sincerely hope that Mr. Walker, if so advised, will take the case into a higher court; or, at all events, apply to the Poor-law Board for advice in the emergency.

OUR MEDICAL PRIZE SYSTEM.

[*Communicated.*]

VERY much has been said and written in reference to the system of prize-giving for many years adopted in our medical schools. Alterations have been made, and undoubtedly a certain amount of good has been effected; but it is well to consider whether something further may not be done to improve a system, to say the least of it, of doubtful tendency. Education is a topic to which the attention of the whole country has been, more especially for the last few years, drawn. And, naturally enough, our own profession feels a strong interest in the course of study laid down for those desirous of admission within our portals.

Much time and trouble have been spent upon the subject; and the result is, that the plan of education has been considerably remodelled. In the first instance, every care has been taken, by preliminary examination, that its members shall have the amount of general and scientific knowledge required to fit them for a high and liberal calling.

In many of our large schools, special prizes have been abolished; and scholarships requiring a general knowledge of several subjects substituted, in one or two instances with the addition of a certain amount of practical knowledge; but this is the exception. And even this plan has defects; for it tends to substitute reading for practical study, and, consequently, as it were, cramps the student, whose time for the acquirement of practical knowledge is far too limited. The men who generally "go in" for these scholarships are, as a rule, aspiring students; and how many of these do we meet in a large hospital—fine fellows, whose only drawback is that their bankers' account is not proportioned to the amount of their intellectual capacity, who are anxious to get through their curriculum with the greatest amount of honour and in the least amount of time, in order that they may cast their intellectual bread upon the troubled waters of an assistantship, with the faint hope of finding it in the course of time in some ameliorated condition. These, as a rule, are the men who gain our scholarships; they read hard; practise little and irregularly; reap their momentary reward; get through the College; pass away from the hospital; and, in many instances that have come under our observation, are heard of no more. Thus, in fact, stunted in their growth just at the time they are sending forth their branches.

Perhaps one or two of them are fortunate enough to secure a house-surgeoncy—for which, in a few rare cases, they have to pay; but even this is at an end in the course of a year, and they have to leave to make room for others.

Now, can anything be done to improve this condition; and to enable intelligent and industrious men to continue their course of study at the hospital to which they have attached themselves, where the minds will fully develope, and, in return for the advantages they have derived, shed a bright lustre upon the *Alma Mater* that has fostered them? Let us glance at the Universities of Oxford and Cambridge, and see what provision is made there to induce "good men" to continue their study and connection. Fellowships of various value are provided for them when the drudge of the B.A. is over. They can still remain at their university, subject to certain conditions, one of which is that the fellowship must be given up on the marriage of the owner.

These fellowships come more especially in the way of those entering the Church and the Law; and if for these professions it was considered advantageous to induce students to continue their education, how much more so is it necessary in our own that we should endeavour to make some provision for so laudable an object. Which, we ask, requires the most prolonged study and undivided attention to attain to little more than ordinary excellence, divinity, law, or medicine? We say emphatically, the profession of medicine.

How, then, can an alteration in our prize system assist in carrying out an object calculated to give further facilities for the study of scientific medicine? At several of our large schools, books, medals, and scholarships, are given away to the amount of £200 to £300 *per annum*. The real good that is done is very small, and not commensurate with the amount

of money. Would it not be better to abolish *in toto* the present system, and give the amount in the form of a fellowship, or under any other name, in such a manner as to enable even two or three students to take advantage of a more prolonged attendance?

The hospital which is bold enough to give up the old and useless system, and devote their money to the object we have alluded to, will soon find especial favour in the eyes of that class of students which each are so anxious to obtain, and for whom, in so many instances, this present system is only used as a bait; but from which no permanent benefit can possibly accrue.

ANOTHER examination for assistant-surgeons in the Queen's Army will take place on March 21st. All men legally qualified and under *thirty* years of age will be admitted to examination. This examination is a sign of the times; it is occasioned by the fact of the want of medical officers in India. The difficulty of procuring the necessary supply is plainly indicated by the extension of the age of the candidates from twenty-six to thirty. All this is evidence unmistakable that the service is not in favour with the profession; and the necessary result will be, that the Government, to secure fitting men, must offer better terms for the services required.

WE lately called attention to a letter in which the attorney of Townley stated, that none of the doctors concerned on behalf of Townley had received any fees. If that remark meant anything, it suggested the idea to the public, that the doctors in question had been stimulated solely by philanthropic motives and a love of immutable truth and justice, to come forward and save a lunatic from the gallows. Now, it does so happen that this suggested view has been to a certain extent accepted in the House of Commons; and especial weight has been in that sense given to Dr. Winslow's evidence, on the supposition that it was the evidence, not of a paid witness of Townley's, but of an unpaid philanthropist. We can scarcely believe that Dr. Winslow, or any other member of the profession, would undertake, any more than a famed advocate would undertake, the defence of Townley without fee or reward; and therefore it is that we, as members of the profession, object to the public being in any way blinded on this point. Has it really come to this, that medical evidence is to be considered as worthless unless it be given gratuitously? that paid medical evidence is, *ipso facto*, suspicious and worthless evidence? Our readers may remember that, a few nights ago, in the House of Commons, Dr. Forbes Winslow's evidence was referred to as being of especial force, because it had been given gratuitously. Consequently, are we to conclude that paid medical evidence is, as we have said, worthless? We recommend this to the attention of the profession; and, in the meantime, until better advised, must hope and believe that the report of the doctors of Townley receiving no fees is what we before called it, simply dust thrown in the eyes of a sensitive public. Let the profession reflect upon the position we occupy as witnesses in law courts, when they find a clear-headed man of business practically recognising the fact, that the evidence of his witness-doctors is diminished in value according to the size of their fees; or rather, that its value is recognised because it is said they gave it gratis.

A WARRANT recently issued by the War Office restores a provision made in the medical warrant of 1858, which, as our readers will remember, has been in so many particulars ignored and superseded. By this new warrant, army surgeons are to draw forage, or money in lieu thereof, according to rank. The very fact of the restoration of this item of the warrant of 1858 is a condemnation of the action of those who abrogated it. Justice will never be done to the army and navy surgeons, nor will the army and naval medical services be placed on a right footing, until there is established a Board of independent medical men of high position, whose business it would be to regulate all matters medical in the army, and to advise with the Commander-in-chief. At present, as it seems to us, there is no responsible medical head to whom the profession can look as to an authority who has to give an account to the profession of the treatment of their medical brethren. The Commander-in-chief, of course, is the responsible authority in all army matters; but he is perfectly incapable of supervising the medical service, of knowing its wants, and how to carry out best its duties. He must seek advice thereupon. And of whom does he now get advice and assistance in the matter? Who pulls the medical strings which regulate the army and naval medical services? Where is the Board of grave, experienced, and responsible men, whose advice should and would be law to the Commander-in-chief?

IF the Army Medical Board has the gift of a very moderate prescience, it will note with anxiety which way the wind is blowing with the part of the service over which it presides. The late examinations show plainly that the number of candidates for appointments is continually falling off. It is also remarkable that, on this occasion, as on former late occasions, the number of English candidates is remarkably small. By far the larger number of candidates are medical men from the Emerald Isle.

DR. ROGERS, Poor-law medical officer, lately made an application to the Guardians of the Strand Union for an increase of salary, on account of the large addition made to his labours. We are glad to find

that his application has been successful, the Board having passed a resolution to the effect, that in future the drugs used by the sick poor in the union house should be provided by the union, and not by the medical officer. It is also very gratifying to find that Dr. Rogers's application to the Board was backed by a very strongly worded memorial from a large number of the influential ratepayers of the parish.

The chemists (as they are called) and druggists of the country are up in arms against the Medical Council, for attempting to regulate the sale of medicines in the country by Act of Parliament. It is probable that, at all events during the present session, no new Act will be obtained for the purpose. They will, therefore, have plenty of time to ventilate their griefs. It must, however, be clear to all reasonable people, that the public requires some kind of protection against the dangers which arise from ignorance on the part of the drug-compounder. The army and navy and all public medical offices in the country are filled only by qualified medical medical men. Why, therefore, should we not require that the compounder of drugs should also show his competency for the work? It may be difficult to hit upon the right course to follow in this case; but the health of the public has as much right to be considered as have what is called the vested interests of druggists. The number of deaths which happen yearly in this country through the ignorance or carelessness of drug-compounders is very considerable; and what is the use of the Medical Council having powers to make a grand national *Pharmacopœia*, if it have no power to see that the articles ordered by it are properly served up, or served up by competent people to the public? The establishment of a class of skilled and recognised pharmacians would, moreover, we believe, greatly conduce to the credit of the profession. It would be the first step to doing away with the dispensing of his own medicines by the medical man. It would remove from the profession the only appearance of a trading character which still hangs about it. The truth is, that medical men have at the present time a good deal of power in their hands in this matter, if they chose to exercise it. For example, why should not they always give a preference (in the making up of their prescriptions) to those druggists who are members of the Pharmaceutical Society, and who do not prescribe over the counter? It is not, we believe, the Pharmaceutical Society which objects to legislation in this question. The opposition comes from the body of petty tradesmen, who are, as a rule, very ignorant of the nature and properties of the drugs they deal in.

The wisdom of our legislators has placed our Scotch brethren and ourselves in an unequal position in the matter of registration of deaths. In England and Ireland, the signing of certificates of the cause of death is optional. In Scotland, the practitioner is compelled, under penalties, to sign such certificates. Naturally, medical Scotland exclaims against such injustice, and will very wisely once again try to obtain from Parliament an equalisation of rights in this particular.

The Medical Congress of Spain is to meet on the 24th of next September, at Madrid. It is to last for six days. Foreigners must speak in French or Spanish. Papers must not exceed twenty minutes in the reading, and verbal communications not more than ten minutes. Speakers must say their mind in fifteen minutes, and speak but once. The questions designed for discussion are: 1. The Importance of Quarantine and Lazarettos; 2. The Value of Surgery in the Treatment of Cancers; 3. The Causes of Pulmonary Phthisis, and the Means of Avoiding or Diminishing its Ravages; 4. The Test of Moral Liberty in the Commission of Crime. Any one possessed of the title of Doctor in Medicine may have *entrée* to the Congress on the payment of 15 *francs*, which will entitle him to a copy of the *Compte Rendu*.

Professor Lusala of Parma tells the French Academy of Sciences, through M. Velpeau, that section of the pneumogastric nerve prevents poisoning by strychnia; whilst, on the other hand, symptoms of poisoning rapidly appear when emulsine and amygdaline is introduced into the stomach. Professor Lusala accounts for the fact thus: emulsine and amygdaline will not produce hydrocyanic acid in the stomach if the gastric juice is acid; but when the nerve is cut the juice is no longer acid, and then prussic acid is produced.

M. Delcroix, a veterinary surgeon, assures the Academy of Sciences that hydrophobia is a curable disease. In a communication to the Academy, he relates several cases of cure in dogs. He has even experimented on himself. He swallowed, sixty-nine days ago (before February 3rd), a piece of raw meat soaked in saliva taken from a dog dead of hydrophobia. "The intrepid" (foolhardy, we should say) "experimentalist admits that on several occasions, and markedly when writing his remarks which were read to the Academy, he had felt a constriction of the throat, and a difficulty in swallowing."

The consumption of Vichy water is becoming enormous. In 1863, the thermal establishment dispatched 1,460,000 bottles of the water, and provided 180,000 baths. Paris consumed 900,000 bottles, Marseilles 110,000, Bordeaux 70,000, Lyons 60,000, and Nantes 15,000.

Medicine appears to stand as a liberal profession, in the estimation of the Spanish people, next to the law. There are ten universities in Spain. From 1860 to 1861, there were matriculated 5311 medical students, and 676 pharmaceutical students.

DR. GARROD'S LECTURES

ON THE

BRITISH PHARMACOPŒIA,

Delivered at the Royal College of Physicians.

The fifth and last lecture of his course was delivered by Dr. Garrod on Wednesday, February 10th. He said that, as the time was now limited, he would merely notice those new articles of the materia medica whose action he had himself investigated, and would then make some brief remarks on the general arrangement of the preparations in this work.

Lithia. The salts of lithia are now for the first time introduced into the Pharmacopœia. They have been only recently employed in medicine; and Dr. Garrod had been instrumental in effecting this. It was not, however, on his proposal, nor on that of any of the London members of the Committee, that they found a place in the Pharmacopœia.

Lithium has been supposed to exist only in the mineral kingdom. It is the lightest solid known, being capable of floating on naphtha. It has a very low combining equivalent, 7; whereas those of sodium and potassium are 23 and 39 respectively; and hence a smaller quantity of it than of the other alkalies is required for combination with acids. It is valuable in consequence of forming with uric acid a salt which is much more soluble than those with the other bases; and of hence readily holding uric acid in solution or preventing its deposition.

Two salts of lithia are mentioned in the Pharmacopœia—the *Carbonate* (*Lithiæ Carbonas*); and the *Citrate* (*Lithiæ Citras*). The formula of carbonate of lithia is LO, CO^2; that of the citrate, 3 LO, $C^{12} H^5 O^{11}$. Both these salts can be obtained in a crystalline form, but are usually met with in a white amorphous or granular powder.

From observations on the preparations of lithia, extended over five years, Dr. Garrod had arrived at the following conclusions. Lithia is readily absorbed by the stomach and eliminated by the kidneys. In this process, the carbonate is unchanged; while the citrate and other salts with vegetable acids are converted into carbonate. In combination with carbonic acid or vegetable acids, and well diluted with water, lithia acts as a powerful diuretic. It renders the urine neutral or alkaline more readily than potash or soda. The administration of lithia is of much advantage in cases where there is a liability to the deposition of urate of soda. Lithia has been found, by the spectrum analysis, in small quantities, in the ash of blood and muscle. Its prolonged use is not attended by any injurious consequences. The dose of citrate of lithia is from three to six grains; that of the carbonate from five to ten grains. The action of this alkali is aided by dilution.

Hemidesmus. This is the dried root of the *Hemidesmus Indicus.* As imported from India, it is "yellowish-brown, cylindrical, tortuous, furrowed, and with annular cracks, having a fragrant odour and a very agreeable flavour. A *Syrup* is ordered in the British Pharmacopœia. Hemidesmus has been supposed to be a cheap substitute for sarsaparilla; but little or nothing is known of its action, and Dr. Garrod observed that it might well have been omitted. The syrup has a pleasant aromatic odour.

Matico (*Matica*). This is the dried leaves of a kind of pepper—the *Artanthe elongata,* or, according to some botanists, *Piper angustifolium.* The leaves have a peculiar appearance, being tesselated on the upper surface and downy on the opposite. There is no accurate chemical analysis of matico; but it appears not to contain much true astringent matter. It was first used externally, to check hæmorrhage; and is now introduced as an astringent. Its hæmostatic property was supposed to be dependent on the structure of the leaves; more recently, however, it has been found useful when given internally, and the British Pharmacopœia orders an *Infusion* to be made. There appears to be some evidence in favour of its efficacy in internal hæmorrhages; and also in some cases of diseased bladder. Since the introduction of matico into the Pharmacopœia, it has become very scarce; in consequence, it is said, of the American war.

Salts of Potash. The neutral *Citrate of Potash* (*Potassæ Citras*) contains three equivalents of potash and one of citric acid (this acid being tribasic). Its formula consequently is 3 KO, $C^{12} H^5 O^{11}$. It is an useful salt in medicine, possessing the advantages of having but little tendency to purge; of being readily absorbed (appearing in the urine as a carbonate); and of being pleasant to the taste. It may be employed in cases where it is desired to produce the remote effect of potash; *i.e.,* where the object is not to act on the stomach, but to render the urine neutral or slightly alkaline. Citrate of potash may be well given in a kind of lemonade, as a drink, in some cases of gravel, etc.

Permanganate of Potash (*Potassæ Permanganas*) has been introduced into the Pharmacopœia; and a *Solution* (*Liquor Potassæ Permanganatis*), containing four grains in each ounce, is ordered. The formula of the salt is KO, $Mn^2 O^7$. It is a very powerful oxidising agent, yielding its oxygen rapidly in contact with organic matter; it is also a deodoriser and antiseptic. It is intended more for external than for internal use; and is a valuable ingredient in gargles and lotions. Some years ago, it was proposed to use permanganate of potash in diabetes, under the idea that this condition is dependent on defective oxidation. Dr. Garrod, however, failed to perceive any effect produced in cases in which he tried it.

Salts of Zinc. The *Acetate of Zinc* (*Zinci Acetas*) is considered by some surgeons as more advantageous for the purpose of injection than the sulphate.

Valerianate of Zinc (*Zinci Valerianas*) is a compound of valerianic acid and zinc (ZnO, $C^{10} H^9 O^3$). Valerianic acid is supposed to be the active principle of valerian root. It is not, however, produced from this root; but is obtained by the oxidation of amylic alcohol or fusel oil. It has been supposed by some, that

valerianic acid does not possess the properties of the valerian root; and that the efficacy of the valerianate of zinc is rather due to the metal. To determine this point, Dr. Garrod had been using valerianate of soda—the soda not being likely to serve any special action. He had not yet, however, arrived at any definite results.

Passing over several substances, Dr. Garrod made some observations on the Pharmacopœial

Preparations of Opium. All the medicines containing opium in the British Pharmacopœia are so named as to contain the name of that drug; for example, the Opium Pill (Compound Soap Pill of the London Pharmacopœia); Pill of Lead and Opium; Powder of Kino and Opium (formerly Compound Kino Powder); Camphorated Tincture of Opium (instead of Compound Tincture of Camphor). Opinions will doubtless be expressed as to the propriety of this change. The subject had, however, engaged much of the attention of the Pharmacopœia Committee; and it was thought that any inconvenience arising from patients becoming acquainted with the nature of their medicine, would be more than balanced by the absence of any attempt at concealment.

The *Hydrochlorate of Morphia* (*Morphiæ Hydrochloras*) is the only salt of this alkaloid admitted into the British Pharmacopœia.

Morphia is *par excellence* the important principle of opium. It contains certainly the anodyne and soporific properties of the drug; yet it cannot be its only active ingredient. Turkey opium yields one part of morphia in eight; but, from experiment, Dr. Garrod had arrived at the conclusion that hydrochlorate of morphia has only four times the strength of an equal quantity of opium. Which of the other ingredients of opium is the active one?

Codeia has been prescribed in this country and in France as a substitute for opium and morphia, being said to produce a soothing effect without any uncomfortable sensations. Not long after hydrochlorate of morphia was first used in medicine, it was found that in some cases it produced irritation of the skin; and this was attributed to the presence of codeia. It has been shown, however, that morphia free from codeia does produce cutaneous irritation in some cases; while codeia has no such effect. Dr. Garrod had endeavoured to test the efficacy of codeia. In a patient with a severe painful affection, half a grain of hydrochlorate of morphia always produced relief; but hydrochlorate of codeia was ineffective, even when given in five-grain doses. Similar results had been obtained by him in other cases; and in no instance had he found codeia to act as an anodyne or to produce sleep. He hence inferred that it has slight, if any, curative powers.

Narcotine, when first discovered, was supposed to be the sedative principle of opium. Afterwards, it was believed to be stimulant. Both these opinions, however, have been shewn to be wrong; and, if narcotine possess any property, it is that of a tonic.

Meconic Acid appears to have no particular properties.

In addition to these substances, opium contains a *resinoid matter*; and to this a part of its effects must probably be attributed. Dr. Garrod had found it to produce some of the effects of opium, such as contraction of the pupils; but it did not procure sleep. He was inclined to attribute the action of opium, not accounted for by the morphia, to the resin; but further inquiries on this point are demanded before a conclusion can be arrived at.

Acetate of Morphia has been omitted from the Pharmacopœia; and, as has already been stated, the only salt of the alkaloid now admitted is the *Hydrochlorate*. Many practitioners consider that each salt of morphia has its own peculiar powers. Some, for instance, regard the acetate as determining powerfully to the cutaneous surface. There are, however, reasons for doubting the correctness of such suppositions. Dr. Garrod had endeavoured to examine the matter thoroughly; and had carefully selected subjects for testing the relative value of the morphia salts. He had failed to discover the slightest difference in their effects—provided quantities containing equal doses of the *alkaloid* were administered. This result, indeed, ought perhaps to be inferred from the small quantity of acetic, hydrochloric, or other acid, in combination with the morphia; a quantity so small that it could not be supposed to produce any marked effect. Why, then, should there be more than one salt of morphia in the Pharmacopœia? Hydrochlorate of morphia has been retained, having properties that peculiarly recommend it; being readily made and crystallised, possessing well defined chemical and physical properties, and being easily preserved.

Tincture of Opium is somewhat less in strength than before; viz., in the proportion of the avoirdupois to the apothecaries' ounce, or 437.5 to 480. There is a very prevalent error as to the strength of this preparation, arising from estimating it by the amount of residue left after evaporation; whereas the strength of the tincture must be dependent on the quantity of opium used in making it.

Among the substances omitted, are *Lactucarium* and *Extract of Lettuce*. The lettuce plant contains a milky juice, which, when dried, has a brownish colour, and somewhat resembles opium. This is the *lactucarium* of the Edinburgh and Dublin Pharmacopœias and the *extract of lettuce* of the London Pharmacopœia. It is a generally received idea that lettuce is soporific, and allays irritation; and hence lactucarium has been supposed to be a substitute for opium. Dr. Garrod had tested the remedial powers of lactucarium, giving it in doses of from five to ten grains; but had found it to fail, even up to doses of sixty grains, in producing sleep or allaying spasm or pain. Some have supposed that lactucarium may be given in cases where the stimulant property of opium is objectionable; but, from the preceding remarks, its efficacy may be questioned, even if it do no harm.

Dr. Garrod now proceeded to notice briefly that part of the British Pharmacopœia which describes the

Preparations and Compounds. Here, in contradistinction to the attempt at classification made in former Pharmacopœias, a strictly alphabetical arrangement has been followed. It will, however, still

be found that the more important preparations are classed together. Processes are given for the preparation of almost every chemical substance mentioned in the materia medica list, and also of the Galenical compounds. In the last edition of the London Pharmacopœia, the chemical processes were expunged. Many are still of opinion that all such processes should be omitted from the Pharmacopœia, but that tests of the purity of the drugs should be introduced. The Pharmacopœia Committee, however, decided on retaining the directions for making the chemical preparations, unless there were good reasons to the contrary—as where the substance is extensively manufactured, and therefore easily procured. An advantage arising from this decision, is the dissemination of a certain amount of chemical knowledge among the profession. On the other hand, the bulk of the book has been increased by the insertions; and it cannot be expected that the directions given will always be absolutely followed. Objections are likely to be raised as to some of the processes directed for preparations which are manufactured on a large scale, such as the Citrate of Iron and Quinine; the object is, however, not to give formulæ which *must* absolutely be followed, but processes by which the substances *may* be made.

Waters (*Aquæ*). In the class of distilled waters, no great change has been made; except that the Camphor Mixture of the former Pharmacopœia is now *Camphor Water* (*Aqua Camphoræ*), and is directed to be made simply by suspending half an ounce of camphor broken into pieces, in a muslin bag, in a gallon of water.

The *Vinegars* and *Cerates* of the London Pharmacopœia have been abolished. A modified vinegar—that of Cantharides—now has a place among the Liniments.

Among the *Confections*, the Aromatic Confection, and the Confections of Orange, Cassia, Opium, and Rue, have been omitted; and three new ones, those of Scammony, Sulphur, and Turpentine, have been added. The Confection of Almonds is transferred to the Powder, where it appears as *Compound Powder of Almonds* (*Pulvis Amygdalæ Compositus*).

Decoctions. The Decoction of Starch (*Decoctum Amyli*) is now described as a mucilage. The Decoctions of Chimaphila, Pale Bark, Red Bark, Quince, Dulcamara, Galls, Senega, Elm, and Uva Ursi, have been omitted; and for those of Dulcamara and Senega, their infusions have been substituted.

In the *Plasters*, those of Assafœtida, Cumin, and Iodide of Potassium, have been omitted. A new one, Warm Plaster (*Emplastrum Calefaciens*) has been introduced.

An important alteration has been made in the introduction of *Liquid Extracts*—those of Bael (*Extractum Belæ Liquidum*), Yellow Cinchona (*Extractum Cinchonæ Flavæ Liquidum*), Ergot (*Extractum Ergotæ Liquidum*), Fern Root (*Extractum Filicis Liquidum*), Opium (*Extractum Opii Liquidum*), Pareira (*Extractum Pareiræ Liquidum*), and Sarsaparilla (*Extractum Sarsæ Liquidum*). In making the "green extracts" (as hyoscyamus), care has been taken in the processes to remove the albumen from the juice. Several extracts have been omitted, which appeared in the London Pharmacopœia; among them are those of the Barks, of Lettuce, Poppy, and Uva Ursi. The Extract of Elaterium is now simply and properly termed Elaterium. The Compound Extract of Colocynth, described in the London Pharmacopœia among the Pills, is now restored to its place among Extracts. The Extract of Jalap is somewhat modified; cold instead of boiling water being used in the maceration, so that the starch is left.

Liquid Extract of Yellow Cinchona is intended to be made so that four ounces shall be equal to sixteen ounces of bark. It has, however, been found that the residue after the operation is rich in quinine, which is very difficult of removal.

Liquid Extract of Ergot is made by first removing the oil (which was formerly thought to be the active principle of the drug) by means of ether; then digesting the residue in water, and adding rectified spirit. The result is, that one part by weight of ergot is equal to one fluid part of the extract. Many practitioners have made trial of this extract, and consider it a very convenient preparation.

Liquid Extract of Opium is supposed to be of the same strength as the tincture.

Liquid Extract of Pareira is a very convenient means of giving this medicine. One fluid part is equal to one part by weight of pareira. Dr. Garrod had been informed that it possesses all the properties of the root of the plant, and is an useful preparation.

The new extracts are those of Calumba (*Extractum Calumbæ*), Rhatany (*Extractum Krameriæ*), and Quassia (*Extractum Quassiæ*).

Of the *Infusions*, some are now directed to be made with cold water; viz., those of Calumba (the starch being thereby not taken up), Gentian (compound), and Quassia; and water at 120° Fahr. is directed to be used in making the infusions of Chiretta and Cusparia. The new infusions introduced are those of Chiretta, Dulcamara, Kousso, Ergot, Matico, and Senega. The Compound Infusion of Roses is now termed Acid Infusion of Roses (*Infusum Rosæ Acidum*).

Dr. Garrod here observed that the word *compound* has been omitted from the designation of many of the preparations; the Committee having determined not to use the term unless in preparations containing more than one active medicinal ingredient.

Infusion of Dulcamara has been substituted for the Decoction; for what reason, Dr. Garrod was not aware. Several years ago, he gave large doses of the decoction to a patient who had psoriasis, and recovery soon followed; but three years afterwards, on a return of the disease in the same individual, the remedy failed to produce any result. He had given large quantities of the dulcamara without producing any physiological effects; and he had known as much as five pounds of the ripe berries to be taken, in preserve, in the course of ten days, without any symptom resulting.

Five new *Liniments* have been introduced; namely, those of Aconite (*Linimentum Aconiti*), Belladonna (*Linimentum Belladonnæ*), Chloroform (*Linimentum Chloroformi*), Iodine (*Linimentum Iodi*), and the Lini-

ment of Turpentine and Acetic Acid (*Linimentum Terebinthinæ Aceticum*). Two have been omitted—those of Ærugo and of Sesquicarbonate of Ammonia.

Liniment of Cantharides is intended as a blistering agent. It is made by macerating cantharides in acetic acid, and then causing ether to pass through in a percolator. Dr. Garrod had found a single application always successful.

Iodine Liniment contains 109 grains of iodine in each fluid-ounce, with some iodide of potassium. When undiluted, it readily causes blistering.

In the *Solutions* (*Liquores*) there are some changes worthy of being noted.

Solution of Hydrochlorate of Morphia (*Liquor Morphiæ Hydrochloratis*) has about half the strength of the preparation of the same name in the London Pharmacopœia, and resembles those in the Edinburgh and Dublin Pharmacopœias in containing four grains of the active principle in each ounce—this being the strength generally adopted in the British Pharmacopœia in making solutions.

The *Solutions of Potash* and *of Soda* (*Liquor Potassæ* and *Liquor Sodæ*) are somewhat diminished in strength. Dr. Garrod suggested that it would be useful to make some clinical observations as to the relative efficacy of potash and soda.

In *Saccharated Solution of Lime* (*Liquor Calcis Saccharatus*) the solubility of the lime is increased by the addition of sugar, so that each pint of the solution contains 140 grains of lime.

Solution of Chlorine (*Liquor Chlori*) is a solution of chlorine gas in water. It is useful when the administration of free chlorine is desired; but it may be questioned whether it is superior to the solutions of chlorinated lime or soda.

Having made a few general observations, Dr. Garrod here concluded his course.

Dangerous Lamp Oils. At a recent meeting of the Association of Medical Officers of Health, a paper was read on the recent petroleum accidents, and on the ready detection of dangerous lamp oils. It was shown that these accidents had invariably resulted from the employment of oils capable of being ignited at a very low temperature; one very severe accident being traced to the employment of an oil giving off inflammable vapour at a temperature below the freezing point of water. The author of the paper, Mr. Tegetmeier, exhibited a very easy and practical mode of detecting dangerous oils. Two teacupfuls of boiling water and one of cold water (at the ordinary temperature of a sitting-room) were mixed together in a small basin; a cupful of the water was then taken, and a teaspoonful of the oil to be tested poured on its surface; in a few seconds a light was applied to the oil. The dangerous oils, those capable of igniting below 128 degrees, immediately took fire, whereas it was shown to be impossible to ignite those which were of a safe and non-explosive character. In the conversation that ensued Drs. Letheby, Lankester, and R. D. Thomson took part, and the desirability of raising the standard of the Petroleum Act from 100 to 125 degrees was discussed, many accidents, some of a fatal character, having arisen from the employment of oils having a higher inflaming point than 100 degrees Fahrenheit.

FRENCH ACADEMY OF SCIENCES.

SPECTRUM ANALYSIS OF MINERAL WATERS.

Signor Vopicelli has submitted the residues of certain Italian waters to spectrum analysis. In the residue of the mineral water of Tivoli he found potash, soda, lime, lithia, and strontia. The lithia and strontia have escaped detection by several chemists in the ordinary way. Pozzulano showed potash, soda, and lithia. For examination with the spectroscope, he says, a residue should not be too dry, nor very long prepared, otherwise the state of molecular aggregation prevents the production of the lines. Arsenic and arsenious acid, he says, give a continuous spectrum, and their presence may be proved by this mode of analysis with a single prism. The spectrum of a hydrocarbon flame, he adds, gives five lines in the blue band, or one more than those found by Dr. Attfield. Lastly, he details experiments, which go to prove that the vapour of water has nothing to do with the production of the lines in the solar spectrum.

ABSORPTION OF IODIDE OF POTASSIUM.

A memoir presented by M. Deschamps goes to prove that friction with an ointment is a very good way of introducing iodide of potassium into the system. He found that more was absorbed by this means than when a bath, with a much larger quantity of the iodide, was employed.

ACTION OF INFUSORIA IN GERMINATION.

M. Lemaire has endeavoured to show that infusoria play an important part in germination. If beans, lentils, barley, or oats be placed upon powdered porcelain or a wet sponge, in the course of twenty-four hours, while the above seeds are still hard and horny, numerous *bacteria* make their appearance; after forty-eight hours, vibrios and monads appear. If to the distilled water used one or two *milligrammes* of phenic acid be added, which prevents the development of the infusoria, germination is prevented, but recommences when the phenic acid has evaporated.

SPONTANEOUS GENERATION.

Some time ago M. Pasteur, in reply to MM. Pouchet, Joly, and Musset, who had filled glass balloons with air from the glaciers of the Maladetta in the Pyrenees, and found these balloons peopled with microphytes, such as mould, and with microzoaria, such as *bacteria* and vibrios, had objected that of their eight balloons only four were fruitful. MM. Joly and Musset state that, M. Pasteur having written to them to learn whether only the four balloons mentioned by them were fruitful, or whether all eight were so, they replied immediately to inform him that the latter was the case; but that he, without waiting for their answer, at once founded an argument before the Academy on the contrary supposition, coming to the strange conclusion that his adversaries' experiments, far from weakening his theory, which is contrary to spontaneous generation, only tend to strengthen it. MM. Joly and Musset state that, while M. Pasteur found the air at the top of the Jura mountains free from germs, or nearly so, they had gone up 1,000 *mètres* higher, and found that, although, by M. Pasteur's own showing, that air *must* be pure, they yet found the balloons filled with it fruitful; whence they contend that the microphytes and microzoaria found therein were *generated spontaneously*. M. Pasteur having objected that they had opened their balloons with a file, while he had used a pair of tweezers, they ironically regret that they had not only used a file, but even one without a handle! and, lastly, they sug-

gest to the Academy the propriety of appointing a commission, before which the principal experiments of the two contending parties might be repeated. After the reading of this paper, M. Flourens rose and declared that he considered spontaneous generation not to exist, because M. Pasteur had brought together air and putrescible liquids, the necessary elements for ascertaining it, and had obtained nothing.

PURIFICATION OF AIR BY THE VAPORISATION OF WATER.

A communication by M. Morin to the French Academy of Sciences suggests that in the evaporation of water caused by a current of air a certain amount of electricity is developed, and some active oxygen produced. He did, in fact, by making air artificially moistened pass through tubes containing strips of ozone paper and reddened litmus obtain evidences of the presence of ozone and some acid which he supposes to be a nitrogen compound. He does not, however, appear to have tested the air before he moistened it. The tubes containing the test-papers were well protected from the light, and could only receive moisture from the air. M. Morin was led to the consideration of the subject by seeing how much English writers on ventilation insist on the advantages of introducing a certain amount of moisture into the air, whether heated or not, supplied to inhabited places; and he describes the way in which this is effected at our Houses of Parliament.

POISONOUS PRINCIPLE OF CORIARIA MYRTIFOLIA.

The leaves of this plant are sometimes used to adulterate Alexandrian senna. They contain, according to M. Ribau, an extremely poisonous glucoside, *coriamyrtine*, two *decigrammes* of which produced horrible convulsions, and killed a strong dog in an hour and a quarter.

DECOMPOSITION OF CARBONIC ACID BY LEAVES.

M. Cloez has made some experiments with variously coloured leaves. All the results, however, led him to the conclusion already expressed, that leaves only decompose carbonic acid by virtue of the green matter they contain. The yellow and red parts have no share in the decomposition.

EFFECTS OF COMPRESSED AIR.

During the building of the new bridge at Kehl the labourers had to work in compressed air. Bucquoy made observations of the effects of that air upon himself and others. He found that in getting into the reservoir the respiration lost its regularity; restlessness was soon felt, and pain in the ears set in. It was as if a foreign body was driven with force into the external meatus. This pain was so intense that some people could not help crying. After a while it went off, then came back again, till it at last entirely ceased. The breathing grew also quiet; the inspiration was shorter than usual; the expiration longer; the pulse was more frequent than normal; hearing was impaired, and it felt as if an expanding body was lodged in the interior of the ear. The voice sounded as if it came through the nose, and it required an effort to speak out. At a pressure of two and a half atmospheres it was impossible to whistle, and there was much perspiration. On returning into the open air the breath formed a cloud; there was a sharp feeling of cold; the pain in the ears returned; there was palpitation of the heart; and the respiration got again irregular. On analysing the air it was found to contain 2·37 per cent. of carbonic acid; the remainder consisted of 19·23 per cent. of oxygen, and 80·77 per cent. of nitrogen. Those who had to work for a long time in the compressed air became emaciated. Many labourers lost their appetite, and looked as if they were just recovering from a severe illness. Muscular and rheumatic pains often occurred, and sometimes the effects of congestion of the lungs and of the brain were observed. The blood which was taken from veins presented in some instances a bright red colour; and this was especially the case when the person had remained long in the condensed atmosphere. The movements of the limbs appeared to be more easy than in the normal air.

ACTION OF OXYGEN ON ANIMALS.

MM. Demarquay and Leconte have observed that nearly two *litres* of oxygen might be injected into the veins of an animal without killing it. They found, too, a dog might inhale thirty or forty *litres* with no other effects than putting him in good spirits and creating a large appetite. They noticed, also, that the respiration of oxygen produced remarkable, and, up to a certain point, beneficial effects on large wounds which they made on animals.

AMMONIACAL FERMENTATION.

By ammoniacal fermentation, M. Van Tieghem means the conversion of urea into carbonate of ammonia under the influence of water, a ferment, and a proper temperature. The cause of the transformation of urea is the development of a special organised vegetable ferment. Under the influence of apparently the same ferment, hippuric acid splits up into benzoic acid and glycollamine. Beer-yeast, it is said, will not provoke the transformation of urea in the presence of sugar.

ACTION OF OXYGEN ON WINE.

An experiment has been lately made by M. Berthelot. It was he who first discovered that there is a particular oxydisable principle in Bordeaux and Burgundy wines, to which he attributes their flavour. In pursuing his studies, he was induced to examine the influence which oxygen exercises over wine. The result convinced him that this action is most unfavourable, and that it entirely destroys the bouquet, which is replaced by a most disagreeable flavour. M. Berthelot found it sufficient to pass a current of oxygen into the choice wines of St. Jean and Thorin to produce this result, and demonstrate experimentally that a very small quantity is sufficient to destroy the bouquet of a quart of Thorin, and that the absorption of oxygen by wine, accelerated by the elevation of the temperature, is rendered almost immediate by the addition of an alkali. The observations of this distinguished chemist prove how necessary it is to preserve wine in a perfect state from the action of the oxygen contained in the air, since the prolonged contact of 10 cubic *centimètres* of oxygen — that is, fifty cubic *centimètres* of air, is sufficient to destroy the bouquet of a quart of wine. It is to the slow penetration of oxygen into bottles that M. Berthelot attributes the destruction of flavour which every wine experiences at last. The reason that the racking off of new wine from the vat to the cask does not produce a similar result is that new wine, being saturated with carbonic acid, disengages a portion of it when exposed to the air, so that it is in a great measure preserved, a very small volume of air disengaging a considerably greater volume of carbonic acid. The decomposition of wine in bottles half full, and the diminution of the flavour, well known to all connoisseurs, are caused by the action of oxygen. The complete destruction of the flavour of wine by the addition of an alkaline mineral water, such as that of Vichy, is explained by the preceding facts.

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on THURSDAY, the 10th of March, at a quarter before Three o'clock P.M., *for Three precisely.*

Business.—To receive the Treasurer's Financial Report.

To appoint Adjudicators of the Annual Prize Essays.

To fix the time of the Annual Meeting.

Any other business which may be brought forward.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, 23rd February, 1864.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the session was held in the Victoria Rooms, Clifton, on Thursday, February 18th, 1864, at 8.30 P.M.; FRANCIS K. FOX, M.D., President, in the Chair. There were present about seventy members and visitors.

The minutes of the last ordinary meeting were read and confirmed.

New Members. Thomas Crocker, M.D., Bristol, and R. Carter, Esq., Bath, were elected members of the Association and of this Branch of it.

Papers. The following papers were read and discussed.

1. A Case of Ovariotomy. By W. Michell Clarke, Esq.
2. Criminal Responsibility in Relation to Insanity. By J. Addington Symonds, M.D.
3. The Plea of Insanity. By J. G. Davey, M.D.

Other papers had to be postponed on account of the lateness of the hour; and the meeting broke up at about 12.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 9TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

SOME ACCOUNT OF THE AMPUTATIONS PERFORMED AT ST. BARTHOLOMEW'S HOSPITAL FROM JANUARY 1ST, 1853, TO OCTOBER 1ST, 1863. BY GEORGE W. CALLENDER, ESQ.

THESE amputations were so arranged in a series of tables as to show for a number of consecutive years the totals of deaths and of recoveries in male and female patients. The operations comprised all the principal amputations, arranged as primary and secondary, and as amputations for disease. After some general remarks, certain deductions from the several tables were detailed.

Of 93 primary amputations, 78 recovered, and 15 died. Thus 16·1 per cent. of all these amputations proved fatal, or 1 in 6·2; and if the age of the fatal cases, which averages 47 years, be taken into consideration, it appeared for children and for adults under 40, that an unfavourable result after these amputations was an exceptional occurrence.

The secondary amputations numbered 37, and of these 24 recovered, and 13 died; so that 35·1 per cent., or 1 in 2·8 of all these operations proved fatal.

Taking primary and secondary amputations together, 7·1 per cent. of those of the upper extremity, and 32·4 of those of the lower extremity, proved fatal; and 21·5 per cent., 1 in 46, of the total of traumatic amputations.

There were 228 amputations for disease or for malformations; 182 recovered, and 46 died, or 20·1 per cent. Of those performed at the upper extremity, 18·5 per cent. died; whilst of those which involved the lower, 20·3 per cent. ended fatally.

It followed that of the total 358 amputations the ratio of mortality was, after all primary amputations, 16·1 per cent.; after all secondary, 35·1; after all amputations for disease, 20·1; after all amputations at the upper extremity, 10·8; after all those at the lower, 23·6; and after amputations, 20·6 per cent.

Causes of Death. Old people were little able to resist the shock of the more severe amputations, the influence of age being most marked with primary operations. Females did not rally so easily as males after the severe shocks which precede and accompany primary amputations, nor after the depression consequent upon amputation at the thigh. The rate of mortality on the totals of cases was 18·9 per cent. for males, and 21·6 per cent. for females. The totals of deaths and of recoveries, as influenced by the age and sex of the patients, were shown in a separate table.

After primary amputations, traumatic complications proved fatal at the rate of 40 per cent., and exhaustion at the rate of 20 per cent. of the total number of deaths.

After secondary amputations exhaustion was the chief cause of death, 38·4 per cent. sinking in this way; 23 per cent. died from secondary hæmorrhage.

Of the total of traumatic amputations ending fatally, 28·5 per cent. sank from exhaustion, 25 per cent. from traumatic complications, 21·4 per cent. from hæmorrhage, and 7·1 per cent. from pyæmia.

After amputations for disease ending fatally, exhaustion was the cause of death in 28·2 per cent.; pyæmia in 31·9 per cent.; and visceral complications in 15·2 per cent.

Taking the four chief causes of death after all amputations, the following rates of mortality per cent. in the totals of fatal cases were obtained.

Amputations.	Hæmorrhage.	Pyæmia.	Exhaustion.	Visceral Complication.
Primary	20·0	—	20·0	6.6
Secondary ...	23·0	15·3	38·4	15·3
All traumatic.	21·4	7·1	28·5	10·7
For disease ...	4·3	39·1	28·2	15·2

Of the total 74 fatal cases, 24·3 per cent. died from exhaustion, 27 per cent. from pyæmia, 12·1 per cent. from hæmorrhage, 16·1 per cent. from visceral complications.

After giving the particulars of the cause of death in each fatal case, and the injury or the disease for which the operation was performed, the days in which 74 cases terminated fatally are shown in a tabular form. From this it appeared that deaths from shock, or from other injuries, or from both combined, took place within the first twenty-four hours, and within forty-eight hours the deaths from recurrent hæmorrhage occurred. Exhaustion was most fatal about the fourth day; secondary hæmorrhage was a cause of death from the fifth to the twelfth day; pyæmia from the seventh to the twenty-fourth.

Three cases of amputation were referred to, in which death was not accelerated by the operation, the patients dying on the 109th, the 102nd, and the 93rd day respectively; and the paper concluded with

an account of certain cases, and of certain sequences of fatal cases and recoveries, showing how necessary it is to mass together a considerable number of consecutive operations before we have a chance of arriving at tolerably just conclusions.

Mr. Spencer Wells said that, the Surgeons of St. Bartholomew's and Guy's Hospitals might very justly cite the facts brought before the Society by Mr. Callender and Mr. Bryant, to prove that the mortality after amputations was very much less in these London hospitals than in the large hospitals of Paris and other continental cities. There the mortality ranged from 40 to 50 per cent., while here it was 20 to 25 per cent. The surgeons of our hospitals might regard this comparison with great satisfaction, but still the mortality here might be excessive. Mr. Wells believed that it was excessive. A mortality of one in four or five after amputations, including those of the fore-arm and leg, must be much larger than it would be if hospital patients were placed more nearly in the condition of those operated on in private houses. It might be difficult to prove this by statistics, because any conclusions drawn from the few cases of amputation which any one surgeon could bring forward from his experience in naval, or military, or private practice, would be met by some such facts as those adduced by Mr. Callender. If he (Mr. Wells), or any one else, were to say, that of ten, or twenty, or thirty amputations, not one had died within six months after operation, the answer would be, that such a result was as purely accidental as the fact, that all the women who underwent amputation in St. Bartholomew's in one year died, and all in the next year recovered; and it would not be easy to reply to this argument, however firmly a surgeon might be convinced that his success was due to the care which he bestowed upon his patients, and that many of the causes of the excessive mortality in hospital practice might be avoided. A private patient clearly escaped any contagious influence from other patients in the same ward, and arrangements might perhaps be made to give greater protection against contagion to hospital patients. First year's students acting as dressers and dissecting on the same day, might explain a portion of the avoidable mortality in hospitals from erysipelas and pyæmia. By attention to such matters as these, and by careful study of all minor details which, though apparently trivial, assist in turning the scale one way or the other, it was well known that some important operations had been performed much more successfully in small than in large hospitals. A great deal had been gained already, but a great deal more might be done; and when it is done, he (Mr. Wells) felt certain that the mortality after amputations would fall very far indeed below the present proportion of 20 per cent.

MEMORANDUM OF A CASE OF STRANGULATED FEMORAL HERNIA WHERE, ON A FORMER OCCASION, THE NECK HAD BEEN TORN FROM THE BODY OF THE SAC IN THE TAXIS, AND THE EXTRUDING BOWEL HAD FORMED A LARGE POUCH OUTSIDE THE PERITONEUM. BY J. W. HULKE, ESQ.

A woman, aged 70, was admitted into the Middlesex Hospital on October 12th, 1863, with a strangulated femoral hernia of moderate size. The strangulation was relieved by herniotomy, but the bowel could not be fairly put back into the belly. Death occurred about seventeen hours after the operation. At the *post mortem* examination, the body of the sac was found *in situ*. The femoral ring opened into a large subperitoneal pouch, which contained eight feet of gut, and communicated by a round aperture, the original neck of the sac, with the peritoneal cavity.

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

Wednesday, December 9th, 1863.

E. Lund, Esq., President, in the Chair.

Three new members were elected, and two proposed.

Adulteration of Copaiba, as met with in Capsules. Mr. Lund made some observations on the adulteration and consequent inertness of copaiba, as found in capsules; and produced specimens procured from British and foreign sources, in which the volatile oil of copaiba had been found, by analysis, to be absent.

Fibrinous Bronchial Casts. Dr. Thorburn exhibited a specimen of fibrinous casts from the bronchi of a child, aged 11 years, who had suffered for some time from paroxysmal cough.

Blepharoplastic Operation. Dr. Samelson introduced a female patient, aged 60, on whom he had performed Dieffenbach's blepharoplastic operation for epithelial cancer of the right upper lid. The triangular gap resulting from the operation had been greatly reduced in size, by the use of sutures after dissection of the parts had been made. The right interpalpebral fissure differed little from that of the left eye (nearly three months after the operation); and in other respects the operation had resulted in complete success.

Three Cases of Laminar Cataract. Dr. Samelson brought three cases of laminar cataract for the members to examine. The first was a boy, aged 16, in whom the cataracts, apparently quite stationary, were so transparent as to allow him to read No. 1 (Jäger), and to admit of an ophthalmoscopic examination. Iridodesis might be indicated. The second case was in a girl, aged 16. The opacity here was much more dense, light being perfectly borne, and atropine of decided advantage. The peripheral portions were slightly striated. The operation for solution will be resorted to. In the third case, a scrofulous girl of 13, the right eye only was affected. The anterior surface of the cataract presented a greyish hollow disc, regularly intersected by a number of whitish ribs. Dilatation of the pupil produced no marked improvement.

Case of Embolism. Dr. J. S. Fletcher read an account, the notes of which had been drawn up by Dr. A. Ransome, of a case of embolism occurring in the course of convalescence after confinement attended with a good deal of *post partum* hæmorrhage. The embol was supposed to have emanated from the left side of the heart, and to have divided into two portions, one of which had coursed along the left carotid artery, and the other along the left brachial artery. The principal symptoms were, collapse without loss of consciousness, dropping of the lower jaw, etc., and stoppage of the radial pulse of the left side. The adoption of Dr. Richardson's method of treatment, by ammonia and stimulants, had been found the best, and the patient recovered. The case will be published *in extenso*.

Annual Meeting, January 13th, 1864.

E. Lund, Esq., in the Chair.

Annual Report. The annual report was read and approved of. It stated that the Society continued to be in a very prosperous state, notwithstanding the increased annual subscription. A considerable diminution in the number of members had been anticipated, but the actual decrease was only four. Through the voluntary subscriptions of many of the members, the Society, since the last report, had been entirely cleared of debt. It was with great regret that the Committee had to announce the resignations of Dr.

W. Roberts, Honorary Secretary, and Mr. T. Windsor, Honorary Librarian, to whom the Society was much indebted for its present flourishing condition. The Treasurer, Dr. Borchardt, submitted his report, which showed a small balance in favour of the Society. The report of the Honorary Librarian stated that an addition of 772 volumes, besides pamphlets, etc., had been made during the past year; and that, in August 1863, there were 6,594 volumes, and nearly 6,000 pamphlets, etc., belonging to the library. It was the opinion of the Librarian, that the library ranks in advance of any other provincial medical library.

Office-Bearers and Committee for 1864. The following gentlemen were then elected office-bearers :— *President:* Dr. Noble. *Vice-Presidents:* Sir James Bardsley; J. Jordan, Esq.; T. Turner, Esq.; and J. Windsor, Esq. *Treasurer:* Dr. Borchardt. *Secretary:* Dr. Thorburn. *Librarian:* Dr. J. Roberts. *Editor:* Dr. Lorimer. *Committee:* A. Aspland, Esq.; Dr. J. O. Fletcher; Dr. Ledward; Dr. Lorimer; E. Lund, Esq.; Dr. Medd; T. Mellor, Esq.; Dr. W. Roberts; Dr. Samelson; Dr. Stone; Dr. Wilkinson; and T. Windsor, Esq.

WEDNESDAY, FEBRUARY 3RD, 1864.

D. NOBLE, M.D., President, in the Chair.

Two new members were elected, and several proposed.

Syphilis in Monkeys. Mr. LUND exhibited the skull of a male monkey said to have died of syphilis. The bones of the cranium and face and the lower jaw were worm-eaten, as if from recent caries, there being no true scaly exfoliation. During life, the penis was extensively ulcerated, and the hair had fallen off in patches from the skin. Condylomatous disease existed about the vulva and anus in the female confined in company with the animal whose skull was exhibited. This fact, along with the decided opinion of the keeper that a disease of the nature of syphilis is communicated by sexual intercourse, was considered by Mr. Lund of great importance and interest, seeing how frequently monkeys die of tubercular disease of the lungs, and tending to confirm the idea that struma is syphilis diluted through many generations.

Rupture of Aorta into Œsophagus. Dr. HOWARD sent a preparation showing a communication between the last portion of the arch of the aorta and the front of the œsophagus, produced by ulceration of these parts, and subsequent rupture of the attenuated inner coat of the artery, causing death by hæmorrhage. It was supposed that the patient had swallowed a piece of bone, which had become impacted opposite the seat of disease, by having had a probang passed to relieve the symptoms. A week before his death, he suffered dysphagia and a pain under the right nipple. Hæmatemesis commenced two days before death. He had suffered from chronic bronchitis for years.

Cystic Tumour of Thyroid Gland. Dr. LORIMER exhibited a specimen of a cystic tumour of the thyroid gland, taken from a man aged 50, who had died from double bronchopneumonia. The patient had had syphilis, and had been treated with large doses of mercury. He had also been very subject to quinsy for four or five years. The growth of the tumour had been observed, taking the difficulty of breathing as the main evidence, for three years. The prominent symptoms during life were loud, laborious, and hissing or whistling inspiration, with dyspnœa. The signs were, gradual deviation of the trachea and larynx from the middle line towards the right side, without observable bulging about of the neck, without thrill or cardiac *bruit*, but with circumscribed post-sternal dulness. The tumour was as large as an average adult male fist; it was unilocular, with thin parietes, and contained limpid serum. It was attached to the lower two-thirds of the trachea down to the point of bifurcation, and was connected superiorly with the left base of the thyroid gland. The tumour, being bound down by the sternum and clavicle, as well as by the fasciæ, disturbed the calibre and position of the trachea, and thus eventually occasioned death.

Rheumatic Fever: its Dangers, and its Treatment. Dr. ROBERTON commenced his paper by stating it as his impression, that the disease was more successfully managed in Manchester than elsewhere. He then referred to Dr. Fleming's *Medical Statistics of Life Assurance*, to illustrate the frequency of heart-complications of a fatal tendency, and its frequent occurrence in early life. Dr. Roberton stated his treatment to be, and to have been for thirty years, calomel and opium in the first stage of the disease, followed by a saline aperient, with colchicum; then the administration of Peruvian bark or quinine, after pain and fever have subsided. His local application is uniformly warm cotton wool. Dr. Roberton never bleeds under any circumstances. He avoids diaphoretics; he forbids all liquid applications to the joints or to the surface of the body; and stated that he had never known heart-affection follow rheumatic fever, when his patient had been seen early, and treated as above.

A discussion ensued, in which many of the members, senior and junior, took part, which seemed to decide in favour of the alkali treatment.

LIVERPOOL MEDICAL INSTITUTION.

FEBRUARY 4TH, 1864.

A. STOOKES, M.D., Vice-President, in the Chair.

Disease of the Knee. Dr. NOTTINGHAM shewed a specimen taken from a patient who had died at the Southern Hospital. Some months ago, the patient, a man, aged 27, received an injury of the upper part of the fibula, and disease of this bone ensued. Excision of the upper part of this bone, or of the knee-joint, if found necessary, was contemplated. The joint admitted of considerable movement without pain or grating. However, an attack of inflammation came on; the knee-joint became diseased and rapidly destroyed; and abscesses formed up the thigh. There was most severe pain, which opium did not much relieve; the was also some chest-affection, with hæmoptysis. The patient sank and died. There was now shewn to be a communication between the tibio-fibular articulation and the knee-joint. The cartilages of the knee-joint were destroyed; and the ends of the bones were extensively carious. In this case, Dr. Nottingham would have had to remove very large portions of bone if he had performed resection, and so the chances of firm anchylosis would have been lessened. Three other cases of diseased knee, in which he had recently performed resection of the joint, were going on favourably.

Mr. HIGGINSON observed, in reference to this case, that he was satisfied from numerous dissections which he had made, that the tibio-fibular articulation is generally found to communicate with the knee-joint.

Calculi Removed from the Bladder. Mr. HAMILTON shewed three small concretions that had formed around separate portions of the quill of a feather that had slipped into a man's bladder. The patient, a man aged 46, applied at the Southern Hospital last June. He had a stricture; and, as the urine came with difficulty, he had been trying to improve matters by passing a feather down the urethra; it slipped from his hand, and the house-surgeon did not succeed in extracting it. He came again six weeks ago,

when a small sound was passed, and the stone was felt. He came again, and was admitted into the hospital; and as the stricture would not admit of a lithotrite being passed, Mr. Hamilton performed the lateral operation, a week ago. The patient has since done well; and all the urine comes now by the urethra.

Mr. Higginson observed that, some of the feathers remained on the portions of the quill that formed the nuclei, and thought the direction of these feathers might account for the quill passing up the urethra, and also for it being so difficult to remove from the urethra.

Dr. Nottingham said the patient had stated that the feathery end was introduced first, so that this explanation would not suffice; he thought the stricture would sufficiently account for the difficulty of extraction from the urethra.

Clot in the Cerebellum. Dr. Waters shewed a portion of the brain of a man, aged about 30, who had died at the Northern Hospital the preceding evening. He was admitted about 7 P.M. perfectly comatose, with a slow irregular pulse, and his breathing slow and laboured. He died in the course of a few minutes. In the morning, he had been seen sitting on a large stone close to some school, and was supposed to be drunk. He was seen to fall off the stone, and was taken into the school and kept there all day under the impression that he was drunk. There was found to be a great effusion of blood into the cerebellum, and a portion of the blood had made its way to the base of the brain. The kidneys were healthy; the stomach was distended with flatus, and its coats were congested, and in parts a little inflamed. There was a slight bruise on the head.

Dr. Shearer regretted so little was known of the state the man was in before he was taken to the hospital; as he would have expected some of the phenomena that accompany lesion of the cerebellum.

Dr. Waters explained that this was not like a case in which the cerebellum alone was affected; here there had been considerable extravasation at the base of the brain.

The New Pharmacopœia. Dr. Nevins read an interesting paper on the New *Pharmacopœia*, entering pretty fully into the various changes that have been made in nomenclature, in the construction of the book, and in the composition of the preparations.

Some discussion followed, in which Dr. Waters, Dr. Nottingham, Dr. Bailey, Dr. Gee, and Dr. Nevins took part.

HARVEIAN SOCIETY OF LONDON.

Thursday, February 4th, 1864.

W. Adams, Esq., F.R.C.S., President, in the Chair.

Ophthalmic Instruments. Mr. Zachariah Laurence exhibited a *Strabismometer* of his own designing. This instrument was designed to measure the exact linear deviation of the eyes in cases of squint. It consisted of an ivory plate, corresponding in shape to the curve of the lower eyelid. The middle line of this plate was marked zero. The centre of the lower border of the cornea of a normally placed eye, regarding a distant object in the horizontal median plane, corresponded to zero; but in the case of a squinting eye, to some graduation to the inner or outer side of zero. He also exhibited a *Pupillometer* or *Coreometer*, for measuring the size of the pupil. It consisted of a metallic plate, graduated into lines, half, and quarter lines, at one end of which was a fixed vertical knife-edged bar, and a second similar moveable bar, which could be separated or approximated to the former by a horizontal screw. With this instrument, the author remarked, the diameter of the pupil could be easily ascertained to the quarter of a line.

TRANSVERSE FRACTURE OF THE PATELLA. BY WILLIAM ADAMS, ESQ.

Mr. Adams read a paper upon Transverse Fracture of the Patella in its ordinary form, as generally produced by muscular action. The author's attention had been first directed to the present subject in 1850, when he was engaged in describing the preparations in St. Thomas's Hospital for a new catalogue, and the series of specimens collected by Sir A. Cooper came especially under his examination. Amongst these specimens was one described by Sir A. Cooper as an example of ligamentous union, in which the fragments were separated to the distance of five inches (No. 123 Museum Catalogue), and figured by Sir A. Cooper in his *Treatise on Dislocations and Fractures of the Joints* (plate 15, fig. 1); but the conclusion to which Mr. Adams came after examining this specimen was, that no attempt at reparation had ever been made, and that it afforded a good illustration of non-union of transverse fracture of the patella. In this specimen, the fragments were connected only by a thin, expanded layer of fibrous tissue, passing from the periosteal surface of the upper fragment to its connection with the lower fragment. The fractured surface of the upper fragment projected as a square or rectangular surface into the joint, and the connecting layer of fibrous tissue had no relation whatever with this fractured surface. This fact, the author considered, was fatal to the idea of the connecting tissue being an elongated condition of any fibrous connecting structure formed between the fractured surfaces for the purpose of union; and Mr. Adams considered that it consisted only of the fascia and aponeurotic structures naturally passing over the surface of the patella, in a thickened condition.

Mr. Adams exhibited this specimen, together with one of true ligamentous union of a transverse fracture of the patella, which he happened to meet with in a subject in the dissecting room of St. Thomas's Hospital, now preserved in the museum (Nos. 121 and 122 Museum Catalogue), to the Pathological Society in May 1850; and in the second volume of the *Transactions* of this society these specimens are described, together with the conditions presented by thirty-one other specimens of transverse fracture of the patella, preserved in the museums of London.

The author considered that we must recognise three conditions as possibly resulting after transverse fracture of the patella, viz.: 1. True bony union; 2. True ligamentous union; 3. Non-union, or ununited fracture,

In proof of the possibility of obtaining true bony union, specimens in the museums of Guy's and St. Bartholomew's Hospitals were referred to, together with others described by various authors.

With regard to the second method of repair—true ligamentous union—the author observed that he included in this series the specimens only in which a mass of fibrous or ligamentous tissue passed directly between, and connected the fractured surfaces of, the upper and lower fragments. In such cases, the separation of the fragments is generally from half an inch to an inch, the fragments being somewhat everted, especially the lower one, so that the fractured surfaces are directed, more or less, towards the skin; the gap between the fragments is, therefore, of a triangular form, the base being towards the skin, and the apex towards the joint. By a gradual elongation of the ligament, after the limb has been brought into use, the separation of the fragments may extend to an inch and a half; and in one specimen, shown to

the Pathological Society by Mr. Holthouse, this had extended to two inches and a half.

With regard to the third condition, above mentioned, as the result of transverse fracture of the patella—complete non-union, or ununited fracture—the specimens included in this series are those in which there is an absence of fibrous or ligamentous tissue passing directly between and connecting the fractured surfaces; and in which the fragments of the patella are connected only by a thin, expanded, fibrous, and aponeurotic structure, passing from the periosteal surface of one fragment to the periosteal surface of the other, and consisting essentially of the fascia and aponeurosis naturally passing over the joint in a thickened condition. The relation of this aponeurotic structure to the separated fragments may be modified by its being folded in between, and becoming adherent to its fractured surfaces, so that it may appear to pass from the centre of one fragment to the centre of the other, or even between their articular edges; and this is generally produced by the folding in of the skin and fascia between the fragments; or, by the eversion of the lower fragment, the aponeurosis may become adherent to its fractured surface, so that it then appears to pass from the periosteal surface of the upper to the articular edge of the lower fragment. In this condition, described as ununited fracture, the separation of the fragments is not necessarily more considerable than in cases of true ligamentous union, and it may be even less, so that the separation is not to be depended upon as indicating the mode of union, which must be judged of by the immobility of the fragments and general feeling of firmness, together with the absence of any depression between the fragments.

With respect to the relative frequency of true ligamentous union, and the condition described as ununited fracture, no reliable data exist; but Mr. Adams found that in thirty-one specimens which he examined in the six principal museums in London, fifteen were cases of ununited fracture; twelve were true ligamentous union; and four were obscure from being dried, etc.

In reference to the object and methods of treatment, with the view of obtaining either a true bony, or a short ligamentous union, the indications are—1. To subdue any inflammation which may follow the injury, by cold lotions, etc.; 2. To approximate the fragments as soon after the injury as possible; And 3. To retain the fragments in close apposition for a period sufficiently long to obtain either a true bony, or a short ligamentous union.

After pointing out the causes of the inefficiency of the various appliances in general use, Mr. Adams stated his belief that the only apparatus capable of fulfilling all the indications in the treatment of transverse fracture of the patella, was the instrument devised for this purpose by Malgaigne, and described by him, in his *Treatise on Fractures and Dislocations*, in the year 1847. It consists essentially of four hooks, two of which are implanted in the superior border of the upper fragment of the patella, penetrating a little way into the tendon of the rectus muscle, and the other two hooks are implanted into the inferior border of the lower fragment, at the insertion of the ligamentous patellæ. The fragments are then drawn into apposition, and the hooks are fastened to each other by means of a screw working in a slide. This instrument has been extensively used in France with the greatest success; serious inflammation does not appear to have been excited by it in any case, and there is ample testimony to prove that, as a general rule, the hooks can be borne without inconvenience or pain. In May 1853, M. Malgaigne informed Mr. Adams that he had employed the hooks in eleven cases of transverse fracture of the patella with complete success.

The author stated that his own experience of the hooks had been limited to a single case, in which he applied them at the Great Northern Hospital two years ago. The case was one of ununited fracture of the patella of long standing, and with wide separation of the fragments. Mr. Adams detached the connecting aponeurotic structure by subcutaneous section, and approximated the fragments by means of the hooks, which were borne for a fortnight without inconvenience, and the case was greatly improved.

In the *Medical Times and Gazette* of January 23rd, 1864, Mr. G. E. Pyle, House-Surgeon of the Middlesex Hospital, has published the details of eight cases of transverse fracture of the patella treated by Malgaigne's hooks in that institution, and the results, as compared with eight other cases treated in the ordinary way, and also published, were most satisfactory.

In no case did the hooks give rise to local inflammation, or injury to the joint.

Dr. Cleveland related the case of a healthy-looking lady, age fifty, who ruptured both of her patellæ transversely. The distance between the fragments was found to be from one to two inches. She was laid on a mattress, and the shoulders and legs elevated. For ten days no bandage was applied, in order to allow the parts to rest. After this a contrivance, sold by Weiss, called *Cooper's Patella Band*, consisting of leather bands well padded above and below, was applied. At the end of six weeks the lady could get up; and now, at the end of three months, she walks well, and the lines of junction of the fragments are scarcely perceptible. He did not feel inclined to have recourse to Malgaigne's apparatus after so good a result.

Mr. Curgenven mentioned a successfully treated case of double fractured patella occurring in a stout gentleman. Bandages were employed.

Dr. Griffith and Mr. Sedgwick also mentioned cases which had done well under the ordinary treatment.

Mr. Allingham, in a letter to the President, mentioned a case which he had seen at the Great Northern Hospital of double fractured patella in a woman. She had been for this thirty years ago an inmate of St. Bartholomew's Hospital, where she remained three months. When she left, she wore an apparatus which anchylosed the knee, and when she wished to sit down, a trigger was drawn. Lately she had gone about with bandages.

Mr. Adams stated that he had, in 1856, in Dr. Druitt's surgery, mentioned the instrument devised by Malgaigne, and he believed it to be the best method for obtaining bony union, and to be exempt from danger.

Purification of Air. The following is the arrangement for purifying the atmosphere at the Palace at Westminster, and is given here as being a subject which would interest our readers. The outer air penetrates into a large chamber situated immediately beneath the House of Commons, through some very large bay windows, before which are hung a kind of canvass curtain intended to arrest the fuligneous particles always contained in London air. Before this curtain, by means of a pipe pierced with a few capillary holes, the turning of a cock determines the fall of the finest possible shower of water, which, mingling with the entering air, is dissolved so completely, that the ground is scarcely moistened with the downfall. Besides adding to the hygrometricity of the air, it is also a process of air filtration of the most perfect kind. (*Dublin Medical Press.*)

Correspondence.

MEDICAL EDUCATION.

LETTER FROM SAMUEL MARTYN, M.D.

.... "Have a very great care, then, of your medical student, and how you guard him at starting. Now especially is the time for good advice. Take him into the wards of the hospital at once." (Dr. Latham's *Word or Two on Medical Education.*)

SIR,—While I agree with your leading article on Education, in thinking that the student requires relief from "intolerable courses of lectures", I do sincerely hope that, if these be diminished, some *other system of education* will be devised in their stead. For it seems to me, after twelve years' experience as lecturer, that our difficulty lies in this, that a large majority of medical students study no more than is required by law; so that, for them, listening more or less to lectures is all the medical education which they obtain before "passing", except, perhaps, a previous "cramming".

Since the number of lectures has, during the last few years, been so very much lessened, chiefly by desire of the College of Surgeons, have the students employed the time so gained in practical study and research? As a rule, certainly not. The fact is, there has been an obvious falling off in the attention given to the practical means of study. One hears every where the same story. Few hospitals can now obtain resident pupils. Dissecting is no longer (as when subjects were so difficult to get) pursued eagerly, as a matter of course. Mr. Syme says he is told the "preliminary" studies produce this result in Edinburgh; but I am sure this is not the cause of a similar neglect in Bristol, nor in other schools I could name. Men used to be surgical dressers for years; now such a thing is never heard of. Clinical clerks are hardly to be had; the few who do take clerkships are really the only students who thoroughly attend the medical practice. Proportionately, these points hold good of large as well as of the smaller or provincial schools. Then the art of compounding physic is quite neglected. One sees the most absurd prescriptions by men who have perhaps graduated with honours. A short time since, in a neighbouring city, the medical officers of a dispensary determined to examine the candidates for the house-surgeoncy; when those who presented themselves were obliged to be rejected on the ground of ignorance as to the contents—*e.g.*, of the commonest powders! They possessed the best diplomas.

I might multiply examples; but the best illustration is perhaps afforded by the very small percentage of students who regularly attend the physician's hospital practice; because those common *medical* ailments are such as the practitioner will have to treat, in immense preponderance over the rare instances exhibited in the dead-house or operating-theatre.

And now, sir, I come to the point; and would direct particular attention to the above quotation from Dr. Latham's excellent paper. That the student is to have "good advice" and be "taken" to practical study, there can be no doubt; but what I ask, is: *Who is to take him, or advise him?* The old apprenticeship system, stupid as it was, provided for this. The art was taught, like all other arts, by a master, who told his pupil what to do, and at what to look, firstly and subsequently. Universities and colleges may have tutors; but hospitals, in which the chief learning of the art is to be done, have no hold on the student in that sense. If the apprentice refused to work, the master refused to give the indenture, and the student could not "go up". So he worked; and, *con rispetto*, most of the great lights of our profession have been under this or a similar training. Now, the student enters the hospital, fee in hand; he walks about; may or may not become a dresser; may or may not be clinical clerk; may look in mostly at the operations; now and then at autopsies; or may even condescend to go into the dispensary: but for one or two who do these things thoroughly, there are the most who do not. And why should they? With a few noble exceptions, the examinations are in the book-science; and of hospital practice, all that is asked is some general statement of having "attended", which is quite formal.

I can conceive no other remedy than that the student should have *a responsible master or masters;* for instance, should be absolutely required to become dresser (for surgery), and clinical clerk (for medicine). Then a precise certificate from those holding somewhat the position of actual teachers and personal advisers could be required, as to his practical studies in hospital, before admission to any professional examination. I am, etc.,

S. MARTYN, M.D.

Clifton, February 10th, 1864.

SIR,—It may not be altogether unprofitable if, in addition to the remarks of leaders like Professor Syme and Dr. Latham, the experience of two sufferers from the present system of medical education be at this period offered to the consideration of those who desire to remedy existing evils. We imagine that we fairly represent the average of the better class medical students; yet we are both now in our fourth year of by no means idle attention to the prescribed subjects of study under the existing system. At the end of the third year one of us, without any difficulty, became legally qualified in medicine and surgery, the other being prevented from qualifying by a severe temporary illness. The majority of our contemporary students are now in practice. From a painful consciousness, however, of the insufficiency of the knowledge gained in the time allotted by the Examining Board, we have felt compelled voluntarily to continue our practical work.

We need hardly specify how our first years were passed. It will be enough to say that, we diligently attended, and to a great extent mastered, the rudiments of those sciences which were pointed out to us in introductory lectures as of paramount importance, if not essential, to the well educated practitioner. At the same time we never omitted to visit the wards, but owing to the great variety of subjects that necessarily occupied the attention, we had no time for reflection on the cases; we ate, but assimilated not. It was towards the close of the third year that we began to appreciate the value of that armoury of outlying science with which we were to attack disease. We then could not help feeling grateful to our lecturer upon chemistry for having taught us in a short way to prescribe a mixture of sulphuric acid and carbonate of magnesia; yet, somehow, we are at a loss to conceive the relation between the happy change which in our time has come over the profession with regard to the exhibition of calomel, and the progressive struggle and ultimate triumph of chemists in proving to students by elaborate formulæ the necessity of the change from the names of chloride to that or subchloride.

To be brief; the main defects which from our experience we conceive characterise medical teaching, are the following:—

1. It obscures by a cloud of details the clear apprehension of principles, thereby unduly taxing the memory and exercising but little the reflective faculties.

And that, further, the details are taught as subjects in themselves important, not, as they should be, in subservient relation to the grand object—the successful treatment of disease.

The means (lectures) of teaching these details are in themselves bad.

3. The time left for the actual study of disease by means of cases, clinical instruction, and books, is meagre and insufficient.

Much that is valuable has been already suggested by yourself and others as to the remedies for the evils deplored. We do not presume to offer a detailed plan of study, but we conceive that our position gives us a right to expound broadly the system which we have found necessary to adopt for our individual advantage, and as the wants are undoubtedly real, the utterance of our opinions as students may be of some value as an indication, even though the system adopted to supply those wants shall be defective.

Our method has been for some time as follows. Feeling the want of classes and supervising tutors more than of systematic teachers, we have worked together thus. We visit the wards, in the time allotted, by ourselves, make our independent notes of new cases, compare with each other the actual symptoms, the meaning of those symptoms, and the indication for their treatment. We then resort to the pathological museum, and examine specimens which we conceive are examples of, or are allied to the cases under consideration, and finally refer to our books. The next day we go round with the physician, and note the discrepancies between his opinions and ours. Eventually, when possible, we follow the case to the *post mortem* room. We have made, and are making comparatively rapid progress since the adoption of this method, which we were driven to devise by feeling the difficulty of concentrating our ideas when our systematic teacher was discussing perhaps on pneumonia, while the ward teachers were instructing in nervous diseases.

We venture, then, humbly to suggest, that each physician and surgeon should have a special class allotted to him; that as early as convenient after the examination of the cases in the ordinary way, and with the ordinary tedious remarks, the teacher should regularly in the class-room, comment upon the special features of individual cases in relation to the systematic views of the same disease, exhibiting, of course, specimens and drawings,* and that he should then test the actual knowledge of each member of the class, or of certain members in rotation should it be large. And one of the customs found so beneficial by Dr. William Hamilton may, we think, with great advantage be adopted, viz., encouraging the students at stated times to reverse positions, to question the reasoning of the lecturer, or to ask explanations of, to them, inconsistent statements.

By carrying out the above principles to other and more subsidiary branches of study which it may ultimately be decided to retain, in fact, by substituting apparently the *tutor* in all cases for the *lecturer*, or in other words the *trainer* for the *crammer*, a quicker, easier, and surer means of ariving at a most important end will be obtained.

For the sake of brevity, we have omitted to record any opinion save that founded on a small portion of our experience; but we are the more assured of its soundness, from constantly seeing with pain studious young men dragged into errors from which we have with difficulty, and of our own endeavours, released ourselves. We are, etc., TWO STUDENTS.

* By specimens, we include microscopic demonstrations, so far as they can be made, of urinary deposits, sputa, morbid tissue, etc.; museum preparations, models, diagrams, and book-illustrations.

SIR,—I go further in Utopia than you do. I look forward, not to the amalgamation of our present medical schools, but to their total abolition. Of all systems that could have been invented amongst a free people to keep down free inquiry and the advancement of medical science, I believe our London system is the best. How does it act? A medical student is obliged to select some one of some ten or eleven schools at which to study. At that school he must attend all the lectures required by the examining bodies. To attend these lectures alone is the life of his life. He has no time to think, no opportunity of hearing opposite opinions. He drones on upon the mill-wheel that the examining boards place him, in order to get his certificate signed. Does this fit him for examination, or qualify him for his diploma? Not a bit. Behind the scenes sits the grinder, mocking all the display of lectures and hospital attendance, and giving the assurance to the pupil that between his lectures and his examination there is a great gulf, which only grinders can bridge.

Now, sir, how and why is this? Because the examining boards require an attendance upon lectures which is altogether unnecessary, and the only object of which is to keep before the public a number of individuals, who think that, because they are "recognised teachers", they are better than the rest of their profession. This system is a sham from the beginning to the end; and the sooner it falls, the better. But how are we to get rid of it? *The only way is by abolishing at once and for ever all certificates of attendance upon lectures.* This has been the source of all our grievances and the melancholy condition of our medical education in London. I dwell not on the proofs of this. They are obvious to all observers. What, then, should be done, if attendance on lectures is not required? *Let examinations be the real test of qualification and of merit.* Ask no man where or how he got his knowledge; see that he possesses it. Put him to the proof; and let the examination be conducted in the laboratory, the dissecting-room, and at the bedside; and our professional knowledge will then take a stride such as it has never known before.

As to preliminary examinations, I say, abolish them. What has surgery or medicine or modern science to do with Latin and Greek? The best men we ever had in our profession knew nothing of Latin and Greek, and would have been rejected by every modern board. Away, then, with this old-fashioned conceit about dead and utterly useless languages as necessary to the study of inductive science. I wish, sir, this thought of mine might produce some impression where most needed; but I despair. We shall have to dawdle over another century yet, and the precious arts of surgery and medicine must still submit to the fetters of Latin and Greek and lectures.

I am, etc., F.R.S.

London, February 8th, 1864.

SIR,—The subject of education is being much and earnestly discussed; and, to judge from the conflicting opinions delivered, it might be supposed that the past—the experience of centuries—had evolved little to guide us in the exigencies of our own times. It is certainly of paramount importance, and to be hoped that any action taken by the Medical Council to reform existing regulations will receive that serious deliberation which the vital interests involved in the question demand.

I do not think that we can dispense with any of the professorial chairs at present established. Our neighbours, the French, who are generally considered leaders of intellectual progress, have lately increased their number. I am at issue with the opinion expressed in a recent leader of the JOURNAL, that at-

tendance on many and various lectures encourages the student not to read on the subject discussed before the classes. Such cannot be the case, if weekly examinations, as ought to be, are held.

The system of medical education pursued by a northern university, of which I had experience, is, I conceive, so far as teaching is concerned, all that could be desired. The roll of each class was called daily at the commencement of lecture; and the *bonâ fide* attendance only certified at the termination of the session. There was a weekly examination in every class; and, at the end of each session, competitive examinations for prizes or certificates of merit. Regular clinical attendance was secured by the medical superintendent being most strict in not allowing students who were irregular to sign the album whence their future hospital certificates were derived. In the examinations for degrees, there was first a preliminary for those students who did not possess a degree in arts (the majority at the school referred to did), which was a fair test that the candidates possessed the proper mental cultivation to become students of medicine. There were three divisions in the professional examinations, which precluded in a great measure the cramming so much deprecated. The first, which was at the end of the second year's study, comprised the subjects of botany, chemistry, and institutes of medicine. The second, at the end of the third year, comprised anatomy, surgery, and materia medica. The third, at the end of the fourth year, was in practice of medicine, midwifery, and medical jurisprudence. To pass such examinations, written and oral, by nine professors, was no doubt trying and difficult. But ought it to be otherwise?

I have still to notice the subject of medical probation. A student may have been educated in the manner indicated, passed all his examinations with honour, obtained his degree or license, yet be found defective when called upon to apply his previously acquired knowledge to the treatment of an accident or case of disease. What I venture to propose, as a remedy for this deficiency, is to institute a period of probation between the time of graduation and registration—say twelve months as the minimum: this time to be occupied in the position of assistant to a general practitioner, house-surgeon to a hospital, dispensary, or similar office. I believe the majority of licentiates already adopt such a course; but I would make it imperative on all. It would afford opportunities of acquiring self-confidence, and practically qualify for acting on individual responsibility. This regulation would entail no pecuniary loss; for the remuneration afforded an assistant is generally more than he can reasonably expect to derive by his own efforts in first or second year's practice. After this period of probation, not before, the candidate should be allowed to register, and admitted to all the rights and privileges of a fully qualified practitioner of medicine. I am, etc., V. V.

February 1864.

EFFERVESCING BISMUTH WATER.

LETTER FROM JOHN W. OGLE, M.D.

SIR,—In your number for February 6th (p. 163), I notice a small paragraph inserted with a view of drawing attention to a soluble preparation of bismuth manufactured by Mr. Schacht of Clifton. I shall be glad if you can find room for the following remarks, intended to assist in carrying out your intention of bringing more prominently before the profession this (I believe) very valuable preparation, and to describe a form of it which will be found, I think, of great service. I can bear some degree of testimony to the utility of this preparation, having, in common with so many others, frequently felt the want of a "*soluble*" preparation of the metal, and having found in that of Mr. Schacht one which, as compared with the old insoluble powder (the trisnitrate) commonly in use, combines the advantage of being pleasing to the taste, especially convenient as being in a soluble form, and possibly as being (in consequence) more certain and reliable in its action. I was induced to give it a trial in several cases of dyspepsia and so-called irritable mucous membrane of stomach and bowels, in the course of last year, partly owing to the recommendation of Dr. Martyn of Bristol, and with very satisfactory results. In reply to certain questions which I put to that gentleman at the time, who, along with other medical men in the neighbourhood, had used it, as I was told, Dr. Martyn informed me that "the small dose of one grain (in solution) seems to do as much as a much larger quantity of the powder."* Dr. Martyn proceeded to observe, that Mr. Schacht was making the bismuth free from arsenic—an ingredient which Dr. Herapath has recently found to exist in the bismuth commonly prescribed.

During the time that I was trying the "liquor bismuthi", Mr. Schacht was so kind as to forward me some particulars regarding this new preparation; and these, for the instruction of others, I now beg to communicate, as they will doubtless help to a better understanding of the remedy.

After expressing a wish that the profession should give a trial to the preparation, Mr. Schacht observes, that "the difficulty hitherto attending the employment of any fluid preparation of bismuth has been the well known tendency of these solutions, unless *strongly acid*, to throw down subsalts when diluted. In my 'liquor', this difficulty is entirely overcome. I hold the bismuth oxide in *permanent* solution by means of a vegetable acid, itself medicinally inert, and yet obtain a preparation *slightly alkaline*. It can be diluted to any extent without change. It is compatible with the carbonated alkalies, and with ammonia; but caustic potass and soda in excess, and mineral acids, produce a deposit. Combination with other medicines is, however, not always necessary; for I have myself seen it prescribed many times, with the happiest results, entirely alone—simply diluted with water. Each fluid drachm contains one grain of bismuth oxide; and that dose is found, in the form of permanent solution, to be equivalent to a full dose of fifteen or sixteen grains of the trisnitrate."

Having in many cases prescribed this soluble form in a diluted condition, it occurred to me that the dyspeptic patient might find it an useful and agreeable preparation, if administered along with the meals, or at other times, in an effervescing draught; and most comfortably, perhaps, if given along with the ordinary aerated water, in the same way as lithia is now administered. Accordingly, Messrs. Bullock and Reynolds prepared for me, about the middle of last year, a quantity of the "effervescing bismuth water", each bottle holding in solution one drachm of Schacht's "liquor"; and this form has proved in all respects satisfactory. The taste of the bismuth is almost perfectly neutralised by the solution in effervescing water, the only flavour left on the palate being an indefinable one, of the nature of sweetness, anything but disagreeable. After the draught, a pleasant sensation of warmth is felt at the stomach. The solution is not in the least decomposed by the fixed air, remaining perfectly limpid and bright after having been made for several months

* The dose of Schacht's "liquor bismuthi" is one drachm, which contains one grain of bismuth.

(as I have found). This, the effervescing form, in bottle, has answered so well, that Messrs. Mayo and Watson, mineral-water manufacturers, of Berners Street, have undertaken to manufacture it, and to keep it in readiness, as they do soda, potash, and other waters. I know of no reason why it should not be given also in combination with magnesia, potash, soda, etc. In reply to my inquiry on the subject, Mr. Schacht states that the "granular effervescing" form of his preparation of bismuth would not be applicable, inasmuch as, if once brought to the dry condition, it refuses to redissolve.

I must not omit to mention that the "liquor", as sold by Mr. Schacht at present, costs about one farthing per dose (of one drachm). Of course, should the profession find it generally useful, its increased use would lead to a considerable reduction in its price.

I am, etc., JOHN W. OGLE.

Upper Brook Street, Grosvenor Square, February 11th, 1864.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged for space for the annexed letter, which will inform the Poor-law medical officers that the Select Committee on Poor Relief have been reappointed; and now, I trust, we shall have such resolutions passed as will induce Parliament to amend the laws relating to the medical relief of the poor. Since last July, I have only received the following subscriptions: W. Smith, Bromsgrove, 5*s.*; C. C. Claremont, St. Pancras, 10*s.* 6*d.*; W. H. Pilkington, Blackburn, £1; medical officers, Rotherham, £1. I need scarcely say that, having already expended over £20 more than I have received, it cannot be expected of me to take any very active measures, unless the Poor-law medical officers will come forward in the same liberal manner as they did three or four years since.

The Select Committee must, I feel sure, recommend something; but a mere recommendation will do nothing, unless we place ourselves in a position to compel its being carried out. You are probably aware that a Superannuation Bill has been put in circulation amongst the guardians by the Poor-law Board; and, although it is only a permissive, and not a compulsory measure, the guardians have in many unions objected to it; and so they will to any Bill that may be sent them. If the Poor-law Board desire to shelve a measure, they have only to send it to the guardians for their opinion, and the affair is at once settled. The registrars throughout the kingdom have lately been in correspondence, and are endeavouring to obtain one shilling for each vaccination registration, instead of the threepence now paid. I wish them success; but I think that, when their measure comes forward, we ought to get a clause inserted that our 1*s.* 6*d.* for vaccination should be increased; but, unless we have a fund in hand of at least £100, we can do nothing. I am etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, February 23rd, 1864.

Mr. Griffin to the Right Hon. C. P. Villiers, M.P.

12, Royal Terrace, Weymouth, February 22nd, 1864.

SIR,—I have the honour to forward to you, by railway, evidence on the medical relief of the poor, supported by an extensive series of tables, which I respectfully beg you will lay before the Select Committee on Poor Relief, which, I perceive by the newspapers, has been reappointed. The evidence which I now submit to the notice of the Committee will, I feel confident, convince them that the evidence laid by me before them in 1861 is substantially correct; and that the evidence of Mr. Cane in April 1862, in respect thereof, is most incorrect, and tends to conclusions which, if uncontradicted, must mislead the Committee, and prevent them coming to a right decision on the question. I will give you an instance of the errors committed by Mr. Cane. He says: "In 1858, there were 3,307 medical officers; and in 1861, 3,479;" whereas at this moment there are not more than 3,102, or thereabouts; Mr. Cane having confounded the medical districts and appointments with officers.

Mr. Cane says (3,887): "In 1840, the medical relief was £151,781; and in 1861, £238,222." (3,839) "It has been constantly and largely increasing up to last year." But he omits to inform the Committee that, since 1840, the area and population of the places brought into account have largely increased; and that, in reality, the main increase in the payment arises from the formation of new unions and the addition of extra-parochial places to the old unions, parishes, and incorporations. Mr. Cane has thought fit to impugn my figures; but I can assure the Committee they are in the main correct. A few places, no doubt, are erroneously spelt—Retford, for instance, which Mr. Cane has most unfairly commented on, although he must have known the place referred to was Thetford; for, had I meant Retford, I should have called it by its right name, East Retford, and not have dropped part of the name, as Mr. Cane has done.

These quotations will prove how little his evidence is to be relied on. I therefore respectfully trust the Select Committee will admit my evidence in refutation of that of Mr. Cane; not only in justice to myself, but to the large body of medical officers I have the honour to represent, and, I may add, in justice to the poor; for I feel confident that, if the views advocated by me be fairly carried out, much good will accrue to the poor, and ultimate benefit to the ratepayers.

There is one point I wish should be brought before the Committee, which is, the establishment of dispensaries in all populous places, and that the drugs should be found by the Poor-law Board; and in thinly populated places, where dispensaries could not be established, an allowance, say two shillings per case, should be paid to the medical officers for drugs. In payment, I would advise that the money now voted by Parliament for half the salaries should be applied to this purpose; the guardians being compelled to pay a sum not less than two shillings per case in towns as salary, with mileage in addition in country places. I have the honour to be, sir,

Your most obedient servant,

RICHARD GRIFFIN.

The Right Hon. C. P. Villiers, M.P.,
Chairman Select Committee Poor Relief.

THE IRISH CENSUS. The part of the Irish census just issued on the religious professions, etc., contains interesting information on the education and employments of the different denominations. In the medical profession in Ireland there are 2,358 physicians and surgeons; and of this number 1,219 are Churchmen, 761 Roman Catholics, and 293 Presbyterians.

A BIG PUFF. A model certificate is the following:—"Dear Doctor—I will be one hundred and seventy-five years old next October. For over eighty-four years I have been an invalid, unable to step except when moved with a lever. But a year ago I heard of the Granicular Syrup. I bought a bottle, smelt the cork, and found myself a man. I can now run twelve miles and a half an hour, and throw nineteen somersaults without stopping."

Medical News.

Apothecaries' Hall. On February 18th, the following Licentiate was admitted:—

Carpenter, Edward, St. Thomas's Hospital

At the same Court, the following passed the first examination:—

Bell, William, King's College Hospital
Boult, Edward Farrington, King's College Hospital
Griffith, Griffith, University College
Rayner, Alexander Clement, Charing Cross Hospital
Rigden, George William, University College
Taylor, Francis Henry Wickham, St. Thomas's Hospital
Wilson, M. S. W., King's College Hospital

APPOINTMENTS.

*Bull, Henry G., M.D., appointed Physician to the Hereford General Infirmary, in the place of the late J. Bleeck Lye, M.D.

Royal Navy.

Bishop, John, Esq., Assistant-Surgeon (additional), to the *Victory*, for the Marines at Fort Elson.
Campbell, John, M.D., Assistant-Surgeon, to the Woolwich Division of Marines.
M'Swiney, John, Esq., Surgeon (additional), to the *Duncan*, for Bermuda Hospital.
Moore, F. H., Esq., Assistant-Surgeon, to the Plymouth Division of Marines.
Stables, William, Esq., Acting Assistant-Surgeon (additional), to the *Princess Royal*, for the *Penguin*.

Militia.

Oldman, J., Esq., to be Surgeon Huntingdonshire Militia.

Volunteers, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Adams, D., Esq., to be Honorary Assistant-Surgeon 1st Huntingdonshire Light Horse Volunteer Cavalry.
Moore, E., Esq., to be Assistant-Surgeon 4th West Riding R.V.
Porter, H., M.D., to be Honorary Assistant-Surgeon 1st Huntingdonshire Light Horse Volunteers.
Thompson, J. B., Esq., to be Honorary Assistant-Surgeon 1st Cinque Ports A.V.

BIRTH.

Brown. On February 8th, at Ealing, the wife of *G. Dransfield Brown, Esq., of a daughter.

DEATHS.

Davis, Henry R., M.D., at 12, Addison Road North, on Feb. 16.
Hall. On February 15th, at Clifton, Bristol, aged 68, Ann, wife of Stephen Hall, M.D.
Headlam, T. E., M.D., at Newcastle-on-Tyne, aged 86, on Feb. 18.
Taylor. On February 17th, at Sandgate, aged 20, Margaret J. L., wife of J. M. Taylor, Esq., Assistant-Surgeon Royal Artillery.

New Medico-Ethical Society. The medical men of North Lonsdale have established a Medico-Ethical Society.

The Hunterian Oration is now delivered every second year; consequently there has been none this year.

Cambridge University Wranglers. The President of the Royal College of Physicians, and the President of the Medical Council, both held places in the list of wranglers of their year at Cambridge.

Lunatics in Private Houses. It is believed that there are about 12,000 lunatics in England and Wales who are living in private houses, and not under the supervision of commissioners.

Collodion in Combination with Perchloride of Iron. The perchloride of iron combined with collodion is a good hæmostatic in cases of cuts, leech-bites, etc. The proportion in which they should be mixed is one part of the crystallised perchloride of iron to six parts of collodion. Some care is requisite in dissolving the iron-salt, as the heat which is developed during the process will produce ebullition of the collodion, if it be pushed too far.

Bath and Bristol Branch. The attendance at the meetings of the Bath and Bristol Branch of the Association is now very large. Not fewer than seventy members and visitors were present at the last meeting of the Branch.

The Air of Manchester. Dr. Angus Smith says that in the air of Manchester there is contained an average of one part of sulphuric acid in every 100,000 parts; but that in the central parts of the town the quantity rises to 25 parts in 100,000.

Death from Dissection-Wound. We regret to have to announce the death of Dr. Campion of Liverpool, who died from a dissection-wound, received in making a *post mortem* examination under the order of the coroner.

Captain Phelps, of the 14th Regiment, who was lately mortally wounded in New Zealand, was originally a medical officer in the army, and served as such in the Crimea. He was a native of New South Wales. "We write of him," says a friend, not only as an officer, a gentleman, and an artist of conspicuous merit, but as an estimable acquaintance whom it was our privilege to call friend." Captain Phelps was shot through the abdomen. He at once pronounced his wound to be fatal.

Health Affairs of New York. The recent grand exposé of the fraud, corruption, ignorance, and inefficiency which reign in the New York City Inspector's office, created no surprise among our citizens. The humblest citizen has long regarded it as the very sink of official malfeasance. It is a frank, full, and candid confession of "guilty" to the charges so frequently brought forward by the friends of reform. (*American Medical Times.*)

Towle's Preparations of Chloroform. Mr. Towle of Manchester has for some time sold, under the name of chlorodyne, a compound of which, he asserts, the composition is not a secret. Lately, he has brought forward a modification of this preparation—one simple ingredient being omitted—under the more comprehensible name of *Liq. Chloroformi Co.* It is only fair to Mr. Towle, that we should note this fact of his abjuration of secrecy. As to the name "chlorodyne," it is a very absurd word. Cannot Mr. Towle manage to abandon it altogether?

Death of Dr. Headlam. Dr. Headlam, uncle of the Right Hon. T. E. Headlam, M.P., Judge Advocate-General, has died at Newcastle-upon-Tyne, in the 86th year of his age. His death is attributed entirely to his advanced years, as he expired without any disease, and in full possession of his faculties. He was a native of Gateshead, practised with great success in early life in the north of England as a physician, and took an active part in the social and political reforms of the country up to within a few years of his death. He was early appointed a justice of the peace for the borough of Newcastle, and was twice elected mayor for that town, once in 1838, and again in 1846.

New Truss. At a Branch meeting recently held in Birmingham, Mr. T. P. Salt (surgical mechanist in that town), exhibited a truss that he had lately invented. The chief improvements, and at the same time novelties, appeared to consist in: 1. The mode of articulation of the pad, with that portion of the spring round the body in front of the pubes, giving to it a new force: viz., a *lifting* pressure, similar to that exerted by a patient himself when endeavouring to keep his rupture within the abdomen. 2. The springs by which this force is applied freely permit all *intended* changes of the position of the pads, whether for the greater comfort of the patient, or for their position over a more apposite site on the abdo-

minal walls, at the same time that they admirably prevent any accidental or chance displacement. 3. The "fixedness" of the truss around the body is still further increased by a support consisting of two pads placed one above and one below the body-spring at the back. 4. The pads themselves are almost perfectly flat, tending to render the *constant* wearing of the truss both as comfortable, and as ultimately curative, as possible.

University of Cambridge. An examination for four minor scholarships will be held in Downing College on Monday the 30th of May next, and the two following days, and will begin at 9 A.M. on Monday. The examination will be chiefly in Classics and Elementary Mathematics, but some weight will be given to proficiency in French and German. Two additional papers will be set, one on Moral Philosophy in connection with the Principles of Jurisprudence, the other on the Elements of the Natural Sciences in connection with Medicine; and in awarding two of these scholarships considerable importance will be attached to any special proficiency in the legal or in the medical subject. Foundation scholars will, by the same examination, be elected from among the undergraduates of the college. Persons who have not been entered at any college in the University, or who have not resided one entire term in any such college, are eligible to these minor scholarships, which will be of the value of £40 *per annum*, and tenable for two years, or until their holders are elected to foundation scholarships. No one elected minor scholar will receive any emoluments until he has commenced residence as a student of the college. Satisfactory testimonials as to their moral character must be sent to the master by all candidates for these minor scholarships, on or before Wednesday, May 25th.

Varieties.

The Final Struggle. With the approach of spring the tocsin of war again rings through the land, and the people are called to fill up the ranks of our wasted armies. There are many indications that the end of this terrible civil strife is approaching. The government is evidently about to put forth strength adequate to overcome all opposition, and terminate in a single campaign a war that has already lingered too long. An army of a million of men, the fabulous tale of Xerxes, is about to be realised on this continent. In this final onset upon rebellion, nearly every household in the land is to be represented. The loyal people have already given their Josephs to their country, and now they are called upon to give their Benjamins. And we do not doubt the kind of response which the people will make to this final summons of the President. A million of men will gather at his bidding within the appointed time. (*American Medical Times.*)

Fees. The payment of professional men is often regulated by custom rather than competition. The doctor's guinea was well known long before modern gold discoveries, and it is difficult to believe that it will ever be much altered. There are, however, ways and means, as all professional men know, of evading this. The lawyer's fee is supposed (at least in many cases) to be as unelastic as the doctor's; but this is not really the case. Briefs are "marked," as the phrase is, on a very different scale in different cases. It may not be quite so easy for a doctor to add to his guineas; but with a little management the thing may be done. A physician must be very dull if he does not find ways and means of informing you when you have had your guinea's worth of advice, and when another dose at the same price would be advisable. Many physicians, especially in the country, refuse their fee every alternate visit. Should gold fall much in price, they would be less modest; and for the credit of the profession, to which we all owe so much, it ought to be said that most physicians have a considerable margin of voluntary services for which many of their patients would be too happy to pay if the guinea sank to fifteen shillings. The truth about all payments by fees is that they differ from other wages of labour only in form. They are contrivances by which men of such a position in life as to be averse to the details of a bargain are enabled to avoid the unpleasantness of abating the price of their services, whenever they are rendered; but in fact they are regulated, like other services, by supply and demand, though in rather a roundabout way. It is the rich patient who sends for the doctor, and though prosperity is usually healthy, it is more watchful over its health, and much better able to pay for fortifications of it, than poverty. Dives has not so many sores as Lazarus, but he is an infinitely better customer to the physician. (*Cornhill Magazine.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Dr. Edward Smith. Lettsomian Lectures on Physiology. Lecture II, "The Evolution of Carbonic Acid by the Lungs and Skin, and other Phenomena of Expiration and Excretion, under the influence of various agencies."

Tuesday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Pathological.

Wednesday. Royal College of Physicians, 5 P.M. Dr. Basham. Croonian Lectures. "On Dropsy: its Significance as a Symptom in Renal, Cardiac, and Hepatic Diseases."—Obstetrical Society of London, 8 P.M. Dr. Tyler Smith, "Cases of Ovariotomy"; Papers by Mr. Squire and others.

Thursday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Harveian Society of London, 8 P.M. Mr. Weeden Cooke, "On the Tumours affecting the Female Breast."—Royal Society.—Linnæan.—Chemical.

Friday. Royal College of Physicians, 5 P.M. Dr. Barclay. Lumleian Lectures. "Fallacies in the Application of the Inductive Method of Reasoning to the Science of Medicine."—Western Medical and Surgical Society of London, 8 P.M. Practical Evening for the Narration of Cases and the Exhibiton of Specimens.—Royal Institution.

Saturday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

COMMUNICATIONS have been received from:—Dr. Henry Marshall; Dr. J. G. Davey; Mr. W. C. Burder; Mr. J. C. S. Bywater; Mr. A. P. Towle; Mr. Brodhurst; Dr. J. Addington Symonds; Dr. G. Bodington; The Honorary Secretaries of the Western Medical and Surgical Society; The Honorary Secretary of the Harveian Society; Dr. P. W. Latham; Mr. T. P. Pick; Mr. G. Gaskoin; Dr. J. Wolfe; The Honorary Secretaries of the Obstetrical Society; Dr. Parkes; Dr. Morgan; Mr. Redfern Davies; Dr. J. W. Ogle; The Registrar of the Medical Society of London; and Dr. Falconer.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture IX.

ON CURVATURES OF THE SPINE.

(*Continued.*)

Treatment.

Constitutional Treatment. Those in whom lateral curvature is observed are, for the most part, feeble from birth; or general debility has been developed; or there is an hereditary tendency to spinal curvature. In all who enter into this class, and it is a very large class, there is either inherited or acquired weakness. It is required to give strength of body, together with a straight spine.

Doubtless, much may be done with this view; the digestive powers may be strengthened, the circulating fluids may be enriched, the respiratory organs may be placed under more healthy influences, than, for the most part, obtain in cases of this description.

Instead of hot and ill-ventilated rooms, the admission of pure air is to be encouraged. Exercise in the open air, sufficient for health and without fatigue, is essential to the re-establishment of health; and if exercise on foot is too exhausting, then it must be taken on horseback or in a carriage. To breathe the free air is not simply a luxury in these cases; but it is absolutely necessary for the prolongation of life and for the restoration of health.

It is of small advantage to remove disease if you kill your patient in the process. And yet there are those who, recommending the recumbent position, together with the use of instruments, to be observed unremittingly for years perhaps, do all in their power to impair digestion and every other function of the body to the utmost. In some affections, it is necessary that a recumbent posture shall be observed; but as it is a necessity, and the least of two evils, we must accept it. It is not so in lateral curvature of the spine.

It is of the utmost importance to consider the condition of the thoracic viscera in scoliosis, since muscular weakness and the form of the thorax prevent that free exercise of the lungs which is essential to health; for whenever a portion of the body ceases to perform its healthy functions, the approach of disease is to be feared. And, although phthisis is not common among those who are affected with lateral curvature of the spine, yet the recumbent position cannot be long maintained without imminent danger being incurred of becoming phthisical.

Sea-air and bathing are, in almost all cases of this description, highly to be recommended. The general health is thus improved; and with this improvement, the power to bear mechanical treatment increases. And, for the same reason, an animal diet, as much as possible, is to be encouraged. Cod-liver oil, also, may be given, together with preparations of iron, if a sufficiency of meat cannot be taken. Stimulants are only necessary to enable animal food to be digested more easily.

The *Mechanical Treatment* is that on which we chiefly rely for the removal of lateral curvature of the spine.

After what has been already said, it will not be doubted that the treatment of spinal curvature must vary as the cause which induced it varies. Unfortunately for orthopædic surgery, it has been too much the habit to treat every form of spinal curvature, whether induced by immoderate use of an upper extremity, or by deficient length of a lower extremity, or by thoracic disease, or other cause, after the same fashion; to ignore the cause, in fact; and to treat the affection entirely irrespective of cause and position; so that—whether the curve be primary or consecutive—whether it depend on affection of a lower extremity, or on the use of an upper extremity—the dorsal curve is treated without reference to cause or consequences—without knowledge—and, I might say, without honesty—until it has become matter of doubt, among members of the profession even, whether spinal curvature is curable.

Spinal curvature is curable; but only when all the circumstances which gave rise to it are taken into consideration.

In Lecture IV, an instance of spinal curvature is represented in Figure 6, which is a sigmoid curve, consisting of a primary lumbar curve and a consecutive dorsal curve; and the cause of the lumbar curve is obliquity of the pelvis, occasioned by genu valgum. The ordinary treatment of such a case would consist of a spinal instrument to act on the convexity of the dorsal curve, with, perhaps, a second plate to act on the lumbar curve. Let no one suppose, however, that such treatment would be effectual to remove the spinal distortion. Not only would it not be removed; but distortion would increase, notwithstanding that the spinal instrument might be worn, so long as the cause remained. The treatment should first be directed to the cause of curvature; namely, to the knee. For, until the inversion of the knee is removed, the spinal distortion must remain. In this instance, the treatment was as follows. An apparatus was applied to the leg to restore the straight line of the limb; the recumbent position was much observed; and slight pressure was made on the lower part of the lumbar curve, while the dorsal curve was supported.

Again, Figure 7 illustrates a case in which the pelvis was rendered oblique through standing much on one foot, and where, consequently, was developed a strongly marked lumbar curve, which was compensated by a dorsal curve. In this instance, as in the last, it was necessary first to remove the cause by obliging the patient to recline in a spinal chair during several hours in the day. When this first point had been accomplished, the removal of the lumbar curve was easy; and, as would be expected, the dorsal, or compensating curve, was removed even before the primary curve. Thus, the recumbent posture must be considered a very important adjunct to other and more direct treatment, in all those cases which depend primarily on affections of the lower extremities.

Again, Figure 10 represents a case in which the dorsal curve had been induced by using inordinately the left arm in carrying a burden. The treatment was commenced by removing that burden; and a

spinal instrument was then applied, so as to act on the lower portion of the convexity of the dorsal curve, as well as on the upper portion of the convexity of the lumbar curve. Subsequently, attention was given to the right shoulder, that the muscles, by suitable exercise, might be developed.

The cause of lateral curvature is rarely to be found in the spine itself. Generally, it must be sought for remotely; or the cause may be, and it often is, general debility, when the spine partakes with the rest of the organism.

Nothing has been more abused than the mechanical treatment of spinal curvature. Let the case be curable or incurable, and let distortion arise from whatever cause, the treatment in each instance has been the same. "Dans l'art de guérir, tout est bon, tout est mauvais; c'est un arme à deux tranchants—sublime si l'on s'en sert avec science, méthode, ordre, et sens commun; absurde et dangereuse autrement."

Common sense alone would indicate that, in the treatment of spinal curvature, the primary curve should first be acted on; and, further, that it is of little use to act on this primary curve without first attending to the cause which gave rise to curvature. Having, then, treated the cause, the question is, how best to act on the primary curve.



Fig. 26.

It has been shown how the curves are formed, and that compensating curves are necessary for equilibrium. If the cause of curvature is removed, as genu valgum, for instance, the pelvis will regain its natural position; and the spinal curves, when distortion has been of short standing, may then be removed even without mechanical support of any kind.

But, the cause being removable, it will not require argument to prove that, to act with effect on a series of curves, the curve which was first formed must first be acted on. The other curves are merely compensatory of the first; so that to treat one of these, in lieu of the primary curve, is much the same as with disease to treat a symptom only.

In Figure 15, the lumbar is the primary curve. To act on such a series of curves so as to restore the spinal column to a straight line, a slight knowledge of mechanics alone is necessary to make it quite certain that pressure should not be made on the greatest convexities of the curves. Pressure in this position is quite unequal to remove a curve: it will flatten the ribs, but it will never lessen the spinal curve. Figures 26 and 27 were taken from two unfortunate patients

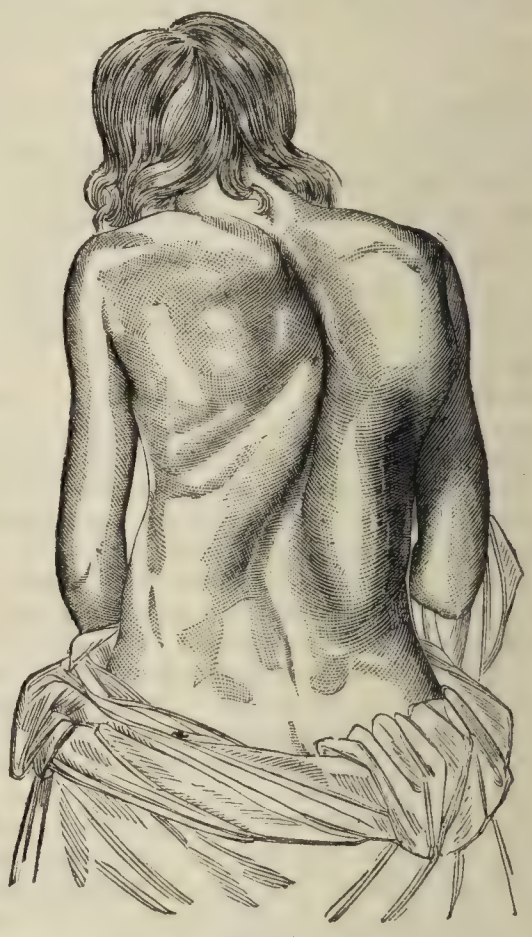


Fig. 27.

from whom I had occasion to remove spinal instruments, which had been used after the manner above indicated; namely, on the greatest convexities of the spinal curves. By dint of excessive pressure, through daily screwing the instrument for a space of three years, the ribs were flattened, and the plates of the spinal instruments were entirely imbedded in the ribs. Any treatment more barbarous, and termed surgical, I never before witnessed.

It is evident that such pressure as is necessary to be made should be so applied that it may produce the greatest effect in straightening the spine, with the least injury to the parts which are immediately acted on. This may best be done by acting on the lower portion of the convexity of the primary curve obliquely upwards, and on the upper portion of the secondary curve obliquely downwards. This rule must be observed when the curves are formed from above downwards. But when they are formed from below upwards—for instance, lumbar and dorsal, or lower dorsal and upper dorsal, etc.—it is necessary to act on the lower portion of each curve.

This pressure should, as much as possible, be made

to follow the course of deviation of the parts themselves; and, consequently, it should never be directly lateral. By using extension in the manner indicated, curves, which cannot otherwise be treated, may be unfolded. This unfolding process is slow; and this will not excite surprise, when it is remembered how short are the ligaments, and how closely fitting are the bones which are to be acted on. Rapid changes are impossible, and should not be expected.

When the instrument fits well, frequent changes are unnecessary; great pressure is never required, and it may even be hurtful. Modifications are necessary from time to time, to keep up the action of the instrument, and to vary the pressure, as the curves unfold.

Spinal instruments may be portable, when, if well fitting, they will be worn with great comfort and advantage; or they may be fixed to a couch. In the latter form, being used in the recumbent posture, when the weight of the body is removed from the spine, they are necessarily much more efficient to remove distortion than portable instruments. Not only is the recumbent position most favourable for the action of the instrument, but the instrument itself is infinitely more powerful to remove spinal curvature than any portable instrument can possibly be. The principle on which both of these instruments are constructed is similar; but the couch, acting with powerful machinery, instead of a slight cog and pinion motion only, is so powerful to effect the purpose in view, that it will remove distortion in cases where the portable instrument is utterly useless. In cases of severe distortion, I always recommend the combined use of the couch and the portable instrument, the employment of one alternating with that of the other.

After curvature has been removed, attention should be directed to the development of power by means of exercises which shall bring into action the muscles of the trunk and extremities; such as swinging, dancing, riding, swimming, and the like. These exercises, alternating with rest, will, if judiciously employed, rapidly produce a marked increase of muscular power, as well as improvement in the general health. Friction also, as in shampooing, is very useful, not only in gaining a better condition of the skin, but in conducing to that suppleness of body which, after the removal of spinal curvatures, is most difficult to acquire.

The *palliative treatment* of spinal curvature is applicable to such cases as are not curable. In Lecture v, Figure 16, is an instance of severe curvature, and well portrayed, arising from inflammation within the thorax and its consequences. To attempt to cure such a case would be fatal to the patient; but a support to the enlarged side and to the sunken shoulder will give immense comfort to the wearer.

Again, caries of the bodies of the vertebræ, destruction being irregular, is not unfrequently followed by lateral curvature above and below the seat of disease, after anchylosis is complete. These curves are formed for the sake of equilibrium; and it will probably not often occur that the surgeon shall desire to disturb this effort of nature. I have seen, however, pressure with a spinal instrument made on such curves; the disease re-established; lumbar abscess form; etc. It need not be said here, that efficient support is all the instrumental treatment that ought to be permitted in such a case.

Cases, also, very frequently occur in which, through excessive distortion, rotation being very great, or anchylosis having taken place, the cure is impossible; yet, where well adapted support gives to the patient not comfort only, but power. Without such support, there may be extreme weakness; but with it, strength to follow the ordinary courses of life.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

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PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture I. (*Continued.*)

On Some Points connected with the Pathology and Etiology of Fibrous Tumours of the Uterus.

Changes undergone by Uterine Tumours.

The *intrinsic changes* which these tumours undergo in the process of growth are most important; not only because they are of moment in enabling us to judge of the character of the growths, but also because they are useful as indications to guide us in the treatment. These changes, of course, have no relation to the extrinsic changes in the symptoms produced by the growth of the tumours, and by their connexion with surrounding parts.

The intrinsic changes may be classified into three varieties.

I. A process of *softening*, which includes five kinds: *a.* Conversion of the body into a more fleshy mass—a sort of sarcomatous transformation; *b.* Interstitial deposition of watery matter—œdema; *c.* Conversion into a cyst containing liquid matter; *d.* Suppuration; *e.* Fatty degeneration.

II. A process of *hardening*, which depends on the chemical composition of the tumour, and may be peripheral or interstitial.

III. A process of *absorption*, under which a tumour disappears in part or altogether, and this without the assistance of medicine.

I. Softening. *a.* The *sarcomatous state* has been usually regarded as the earliest stage of uterine fibrous tumours from the time of Hunter and Bayle, during which period they were spoken of as "the fleshy tubercle". Guyon, however (an excellent authority on uterine fibrous tumours), implies that this softening is not so often an *early stage* as a *progressive stage* or decay; although he admits that it is occasionally also the incipient stage of fibrous tumour. Moreover, in the softening from decay, the feeling of softness is more marked. Such tumours are generally redder in colour and more full of vessels; and the uterine tissue, especially the muscular, is more marked.

b. Softening by *œdema* may come on suddenly; and then, according to Guyon, it is accompanied with great vascularity of the tumour. These cases, he believes, generally prove fatal. The disease is probably inflammatory, and closely resembling acute œdema of the scrotum. Luys gives an example

where a capillary puncture was made, which gave issue to about a tumbler of albuminous fluid. Death resulted two days afterwards, although no peritonitis was observed at the *post mortem* examination. More frequently, however, œdematous softening is a chronic disease. The occasional and temporary growth of fibrous tumours is due to this cause. A tumour will sometimes, if coarsely handled, become larger and softer. This may, it is true, be due to engorgement; but in one case in which this occurred, where I made an exploratory puncture, nothing but serum came away. There was also an absence of inflammatory symptoms. Cruveilhier thinks that in some cases the œdema is dissociated into numerous small masses, which, being congregated together, come to constitute the greatest part of the fibrous tumour.

c. Softening by *cystic transformation* takes place in three ways.

1. *Irregular cavities*, without parietes properly so called, are formed. These are called by Cruveilhier *geodes*, and would probably correspond to the alveolar disease of the ovary. They resemble very closely the last variety of œdematous swelling before referred to, only they appear to be chiefly restricted to the intercellular spaces. The œdema becomes localised, and so constitutes large cavities between the fibroid masses.

2. *Pseudo-cysts* are formed; *i. e.*, the solid fibrous mass itself undergoes local softening or liquefaction. The softening is described by Costello (*Cyclopædia of Practical Surgery*) as beginning (in *fibromas*) in the centre of the tumour by one or more points. This softening is often associated with some degree of transparency that gives to the structure a gelatinous aspect. As it advances, it so entirely puts on the appearance of jelly, that tumours in this state have been designated *fibro-colloids*. But there always remains enough of the external layer to set one right as to the nature of the tumour. Exceptionally, but rarely, they are found in an *hæmatode* state.

3. *True cysts*, or cavities lined by epithelial membrane, as in cystoid disease of the ovary, may be formed. Mr. Paget describes this change as one of cyst-formation, similar to what occurs in the breast; well defined cysts, lined with smooth membrane, being produced. Accordingly, we read of *fibro-cystic disease* of the uterus as an affection of not unusual occurrence. I believe, however, it is very rare. I learn from a communication made through my friend Dr. Greenhalgh, that Mr. Savory of St. Bartholomew's Hospital (no mean authority) denies the existence of this disease in the uterus altogether; the so-called examples of it in the College of Surgeons being simply pseudo-cysts without lining membrane. Two cases are on record, in which gastrotomy was lately performed by Mr. Brown and Mr. Wells. In the first case, examined by Messrs. Nunn and Holmes, the tumour was stated to be multilocular, and the cysts lined by membrane. It was found incorporated with the fundus uteri, but probably originated in the subperitoneal tissue in the neighbourhood of the uterus. This alone would show that it might have had an origin extraneous to the uterine tissue. The examination was carefully made before the tumour was declared to be fibro-cystic. In Mr. Wells's case, recorded in the same volume of the *Pathological Transactions* (xiv, 198), I learn from inquiry that he is not prepared to say that the fluid was contained in cysts with distinct lining epithelium. Most probably, therefore, it was contained in a pseudo-cyst. One case only appears more difficult of interpretation; and that is Dr. Wilson's case, published by Mr. Hewett, and quoted by Mr. Brown in his work. The disease here entirely originated from the right side of the fundus uteri by a pedicle, and the cysts were lined by a smooth delicate-looking membrane.

Pseudo-cysts may undergo other changes; viz., a salutary one, *i. e.*, where the occurrence of the change is only a prelude to the final absorption of the tumour; or the tumour enlarges, and attains such proportions as to become dangerous to life.

To trace these changes during life is by no means an easy or satisfactory task; because we cannot, in the ordinary run of cases, see them in the earlier stages, and our manipulation and external palpation of them is at most only to be made through the abdominal parietes. If the female be corpulent (a not unusual occurrence in cases of fibroid tumour), but little correct information is attainable. Again, a vaginal examination is often nugatory, if the tumour be in or about the fundus, the most common locality in which they are found. And all this is especially the case at early periods, or when the tumours are small.

But we can get at the fact by collateral and strong presumptive evidence. Fibrous tumours undoubtedly do liquefy, as before stated; and soften in the centre, becoming changed in a pseudo-colloid mass. Usually, also, there is enough of the external fibrous matter to explain the nature of the tumour. But we as undoubtedly find pseudo-cysts about the uterus, occupying the position which fibrous tumours usually do. In nearly every such case, fibrous tumours of the ordinary kind are found in other parts of the organ. Some of these are in a transition state, containing fluids or semifluids in different states of viscosity.

In one remarkable example of fibroid disease given by Atlee, the truth of this proposition was proved by ocular demonstration. The case is important. It is the case mentioned in his interesting paper on the Surgical Treatment of Fibrous Tumours of the Uterus, in the *Transactions of the American Medical Association* (vol. v, p. 586).

The subject of this case was a young lady, who in July 1845 first noticed a tumour in the right side, midway between the ribs and pelvis. It was then as large as the fist, and oblong in shape; could be pushed over to the linea alba, depressed, and elevated; but, upon removal of pressure, returned to its usual position. Three months after this, she was seen by a medical man at Rhode Island, who described the tumour as decanter-shaped, with a narrow attachment to the right side of the uterus. He could play it about, and considered it an ovarian tumour. The succeeding winter (1845-6), it grew to twice the size which it had when Dr. Atlee first saw the patient, having enlarged gradually. The following spring (1846), it again gradually diminished to about one-third of its previous size, without treatment. The next summer, it again increased; and continued to do so until the latter part of the fall, when it again diminished without treatment. It remained stationary now until the next fall (1847), then increased gradually to a greater bulk than ever.

In the spring of 1848, she placed herself under the care of another medical man at New York, who used

chiefly the electro-magnet, and croton oil with other purgatives. The flatulence diminished; the tumour but slightly.

In March 1847, she was under the care of a physician at Albany, who, believing it to be ovarian, tapped her, and came against a hard substance. Nothing flowed except a teaspoonful of blood. The trocar was introduced about two inches, and required considerable force to enter it. On putting a probe through the cannula, it came against a hard unyielding substance. The wound healed kindly.

It was in May 1847 that she came under Dr. Atlee's care. A tumour then occupied the left iliac, hypogastric, umbilical, and right hypochondriac regions, part of the right lumbar, and part of the right iliac regions. It was firm, slightly elastic; did not fluctuate; could be moved in all directions by using considerable force.

On examination *per vaginam et anum*, the patient on her side, it was found to occupy a large portion of the pelvis; the uterus could not be distinguished. It was believed, therefore, that the tumour was entirely uterine. The os could not be felt. The tumour could be played before the finger in the vagina, through the abdominal parietes. When placed on her *back*, the os could be detected by the index finger placed far back, but not the cervix. The sound penetrated only two inches and a half in the normal direction. But this was, however, accidental; for when, in the subsequent history of the case, she had recovered from gastrotomy, the sound passed a considerable distance. Very little motion could be made with the point of the sound, owing to the fixed position of the uterus at this point. The sound introduced into the bladder took a direction towards the right side.

Owing to the obscurity of the diagnosis and the wishes of the patient, it was thought advisable to try an exploratory incision—*i. e.*, to perform gastrotomy.

The abdomen was opened. Now, gentlemen, I wish you to note the appearance of the tumour. The diseased mass was turned entirely outside the abdominal cavity. It consisted of the uterus itself, which was either hypertrophied or else distended by a solid body within it. The peritoneal coat was elevated in several places from the surface of the tumour into cystiform bodies filled with a yellowish fluid. One of these, of about the size of a walnut, was at the top of the fundus; another, larger and more irregular, on its left side; and a couple of smaller ones lower down. The right ovary was enlarged to the size of a small orange; and the left was about three times its original bulk. Both ovaries were attached low down to the uterus.

In this state of things, nothing more could be done. The tumour was returned. The wound healed rapidly.

The subsequent history relates to an attempt afterwards made to relieve the patient in June 1849, two years afterwards, by enucleation *per vias naturales*. This proved unfortunate in result, for on Nov. 3rd she died. On *post mortem* examination, there were found to be adhesions of the cicatrix to the anterior part of the womb. Purulent serum was effused within the cavity of the abdomen, indicating *recent* inflammation. The tumour itself had very much the same appearance as when seen during gastrotomy. But *all* the cystiform bodies had disappeared, save one at the fundus, which was not altered in size, but was less fluid. The ovaries had not changed in appearance. The firmness of the tumour had much diminished; and, when it was cut open, large masses of it had degenerated into a brain-like substance.

Now, the inference I would draw from this case is twofold. In the large tumour, there was the process of softening in an earlier stage; a brain-like substance took the place of the fibrous tumour—the pseudo-colloid softening before referred to. The more solid cystiform body was, again, in a later stage than the large one, more liquid, and yet less fluid than the other cystiform bodies, which had undergone a process of more decided liquefaction, as seen during the operation of gastrotomy, before their final disappearance.

That these liquefied tumours have a decided relation to the more solid is manifest from the fact, that we scarcely ever meet with the former, unless the uterus contains at the same time some of the more solid fibrous bodies.

The very description of some of these tumours, although made from the naked-eye appearances, is characteristic of their fibrous character. In the case of a fibro-cystic tumour described by Dr. Jackson (*Boston Medical and Surgical Journal*, No. 64), each cyst was said to contain, 1, a pale amber-coloured fluid; 2, a gelatinous substance of the same colour, but varying in consistence; 3, semi-organised masses, varying in different cysts from the colour of cream to that of clots as they occur in the heart, and in size from an almond to that of the female hand.

The liquid contents of these fibrous tumours have, so far as I know, not been very accurately examined.

In one case reported by M. Louis Blin, where the tumour was evidently an hysteroma, occurring in the anterior wall, the tumour contained a very brown-coloured thick fluid, and floating within it numerous gelatiniform flakes. The cyst itself was lined by an internal layer of this same gelatiniform matter, and a distinct muscular coating, analogous to uterine muscular fibres. M. Robin found, on microscopic examination, that both in the liquid and solid portions of tumour there were muscular fibres of Kölliker disseminated through an amorphous mass. M. Broca, who also examined the same specimens subsequently with much attention, discovered, besides these muscular fibres of Kölliker, which were long, swollen in certain parts, and containing granular particles, some very short fusiform fibres, not granular, which he looked upon as a form of fibro-plastic element. In fine, it was clear that everywhere here were found the large fibro-cellules (of the Germans), which are evidently muscular fibres; and by their side, which had a very particular aspect, small elongated corpuscles of fibro-plastic tissue, with their central nucleus. (*Bull. Soc. Anat.*, vol. xxviii, pp. 54-56.)

In another case recorded by M. Rotureau (*Bull. Soc. Anat.*, vol. xvii, p. 139), in a pedunculated uterine tumour, the fluid contained a yellowish material, rather offensive, of the consistence of a soft bouillie, which flowed out of the cyst when cut open. This fluid contained, floating in it, pieces of half-fleshy reddish friable fibrous masses, evidently the *débris* of the fibrous mass.

I am fortunate in having obtained some particulars of such fluid contents from so excellent and known an observer as Dr. A. Clark. That gentleman divides uterine cysts into four kinds: 1. Adventitious cysts, or hydatids; 2. Autogenous cysts; solutions of continuity in the uterus, independent of adventitious growths; 3. Glandular cysts; dilatations of the normal gland-follicles, common in the neck of the uterus, and not very uncommon in the body of it just below the mucous surface; 4. Cysts occurring in morbid growths as local solutions of continuity, and named from the

growth which they exhibit, as fibro-cystic, collo-cystic, encephalo-cystic, and so on. I wish only to refer to the second variety—autogenous—corresponding to the alveolar before noticed, or *geodes*, and the fibro-cystic of the fourth variety, as bearing on my subject.

The fluid contents of the second variety, Dr. A. Clark states, have obviously arisen from extravasations of blood breaking up a portion of uterine substance. They have contained serum ; variously corrugated and contorted blood-discs, isolated and in heaps ; corpuscles like the white ones of blood ; granular cells ; bits of coagulated albumen, oil-globules, and cholesterine. In an instance which Mr. Defricz of Bethnal Green sent to Dr. A. Clark, there were several cysts of this kind formed by successive extravasations of blood, *said to have been felt* by the patient at the time of their occurrence.

Whether the change in pseudo-cysts is or is not of an analogous character, in so far it is remarkable, that I have found, on microscopical examination, exactly the same bodies mentioned by Dr. A. Clark here in the serum taken from the meshes of an infiltrated fibroid, excepting only cholesterine. I also found crystals of uric acid.

Dr. Clark has also informed me that he has on several occasions examined the fluid of the cysts of fibro-cystic uterine tumours, but entirely without reference to their size. The fluid has been either sanguinolent, serous, or gelatinous.

When *sanguinolent*, he found the elements 1, 2, and 3, before referred to as found in the juice of succulent fibrous tumours, with blood-crystals, *amorphous hyaline* lumps, and bits of fibrillated lymph.

When *serous*, it was coagulable by heat, but very feebly so, compared to ordinary albuminous effusions. The structural elements resembled in character those given in a diagram, with the qualification, that Nos. 1 and 6—*i. e.*, the elements before described as found by him in the same juice of fibrous tumours—were few in number.

When *gelatinous*, the contents were of two kinds. In one, the gelatinous appearance was due to the infiltration of a fine *fibrous* network with ordinary serum ; in the other, to the infiltration of a fine network of *mucin fibres* with a very feebly albuminous and somewhat viscid fluid. The *fibrous* network disappeared under the action of acetic acid, while the *mucous* network was unaffected by it, or rendered more distinct.

The structural characters of both kinds of gelatinous contents were much the same, and consisted of the elements already described, with the addition of mucous vacuolating and proliferating cells. These were the contents of (Dr. Clark's third variety) glandular cysts, which, not forming part of my immediate subject, I did not refer to.

This feebly albuminous character of the fluid, and the absence of hairs and epithelium, together with the presence of fibro-plastic ingredients, are characters which contrast in a remarkable manner with those found in ovarian tumours, and as such may be very useful in a doubtful case of diagnosis.

My friend Dr. Greenhalgh has informed me that Mr. Savory of St. Bartholomew's has also examined the fluid contents of these growths. The cavities contain more or less fluid, which is made up of disintegrated fibrous tissue-cells and oil-globules floating about in serum or dilute liquor sanguinis.

In true fibro-cystic disease, the epithelium-particles found in the fluid are exactly similar to those found in ovarian cystoid disease. The intensely albuminous character of the liquid, and the absence of *débris* of fibrous tissue, would make up the other chief differences.

When the fibro-cystic disease was in the ovary, we might expect to find, in addition, the large compound nucleated cells, and hairs, besides the cholesterine crystals.

Pseudo- and fibro-cysts, however, should not be mistaken for other cysts occasionally found in connexion with the uterus, but which have a different origin. These are cases where a Graafian vesicle has fallen into the cavity of the abdomen, instead of passing downwards into the Fallopian tubes. They appear to contain hairs, teeth, etc., or contents occasionally found in ovarian tumours ; or, by falling somewhere within the abdomen, it may be upon the uterus, Fallopian tube, or elsewhere, they may develope true fibro-cystic disease. A remarkable example of the first kind is that which occurred in the Salpetrière, and was mentioned by M. Blot before the Société Anatomique.

The tumour, which was attached inferiorly to the uterus, and closely adherent to surrounding parts, was found to be partly ossified, and to contain at one part four little bodies ranged in a row, having the aspect of incisor teeth ; one of these showed a free tricuspid border, as is often observed in teeth of this kind. They were very hard and ossified, but without enamel. This case was brought before the Société Anatomique, and the discussion elicited a very able paper by M. Pigné, in which he proved that bodies were shown to be monstrosities by inclusion. In a subsequent *séance*, M. Grivot Grandcour exhibited some uterine cysts taken from a woman aged 60. These were placed behind the organ, and formed a tumour as large as a child's head. One of these was partially ossified. The others were soft and transparent. On the opposite side—*i. e.*, anteriorly—a unilocular tumour existed, containing in its cavity hair and a butyraceous-looking matter. These bodies were, however, stated by M. Barth to be only found in the woman, and in the neighbourhood of the uterus, and were attributed by him to the escape, at the moment of fecundation, of an ovule, which then developed imperfectly : in fact, an extrauterine pregnancy. The ossification was a process of age. (Vol. xxii, p. 3.)

It is in this way that I should explain Mr. Nunn's case of fibro-cystic disease before referred to, and Mr. de Méric's late case of cystoid disease, for which he successfully performed ovariotomy, and which grew, not from the ovary, but from the Fallopian tube.

The coexistence of these pseudo-cysts in fibrous tumours is not observed very uncommonly ; and their occurrence should be borne in mind in some cases where the diagnosis is difficult. Let me allude to a few examples by way of illustration.

Dr. Tanner has related a remarkable case (*Obstetrical Transactions*, vol. iii, p. 11).

An oval cyst, about nine inches broad, apparently subperitoneal, was stretched upwards from the fundus uteri, containing about a pint and a half of mucous fluid. The cavity of the uterus contained a fibrous tumour, of about the size of the half of a small orange.

Several such are mentioned by Mr. Paget in his

Lectures on Surgical Pathology. Dr. Atlee mentions a very interesting case where this change had taken place in a fibroid.

He first saw the case in July 1852, when a large fibrous tumour, of the size of a seven months impregnated uterus, was diagnosed. In the September following, the tumour had greatly enlarged, and exceeded in size that of gestation at the full period; and the upper part of the abdomen had become elastic, and fluctuation was evident. In the October following, two large cysts were tapped, giving exit in the first to three pints of a dark coloured fluid, with a small quantity of blood. From the second cyst, the same quantity of clear transparent fluid was drawn. On manipulation now, the original fibrous tumour was readily felt. Although several mishaps occurred in the progress of this case—air entering within the sacs, and subsequently fœtid serum and gases were drawn out by tapping, it ultimately did well, all traces of the tumour having disappeared. (Surgical Treatment of Fibrous Tumours, *Transactions of American Medical Association*, vol. vi, p. 558.)

Dr. Jackson (*Boston Medical and Surgical Journal*) relates an example of multilocular cyst developed in the fundus of the uterus.

The symptoms during life were those of a fibroid. This patient was tapped several times. The cysts varied from the size of a walnut to that of a fœtal head. These cysts contained variously coloured fluids.

The French authors mention several examples of this disease also.

M. Barth (*Bull. Soc. Anat.*, xxvii, 55) found an abdominal tumour attached, and taking origin in the posterior wall of the uterus, which was very large. It was a fibrous tumour, furnished also with a cyst in its interior, and holding within it about half a gallon (3 *litres*) of a citrinous albuminous liquid. There were two other small fibroids in the anterior wall, one in the fundus.

M. Gaubier (*Bull. Soc. Anat.*, xv, 234) describes a case, also mistaken for ovarian disease, in which a large three-lobed fibroid, of two pounds weight, filled the greater part of the iliac fossa, in which cysts were found containing a bloody serosity. M. Rotereau (*ib.*, p. 135) mentions another case, also mistaken for ovarian disease, where a fluctuating tumour existed in the right iliac fossa, and was found after death to be a pedunculated fibroid, with cysts attached to the fundus. Another is mentioned by M. Icery (*ibid.*, xxviii, 135), where ovarian and uterine cysts coexisted. The uterine cyst was very large, with thick parietes attached to the organ. M. Rieux (*ib.*, xxiv, 19) gives an account where cysts of the uterus were found. The patient was tapped three times. The diagnosis during life was cancer with ascites. The *post mortem* examination revealed a fibrous tumour, with a unilocular cyst, filling the abdominal cavity.

In the table which I have prepared to illustrate the effects of gastrotomy in fibrous tumours, several cases by Messrs. Brown, Wells, Hakes, Fletcher, etc., are recorded, and, with those before given will suffice as examples occurring in British practice.

[*To be continued.*]

Deaths from Fever. Within the brief period of seven months three physicians, who have successively occupied the responsible position of medical superintendent of the Dundee Royal Infirmary, have been cut down by fever; and of this disease the matron has quite recently died. The professional loss sustained by the deaths of Dr. Glen Dr. Hamilton, and Dr. Grant is very great. (*Edinburgh Med. Journal.*)

Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

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Lecture III. (*Continued.*)

On the Pathology and Treatment of Certain Forms of Delirium. Therapeutics. The Physiological and Therapeutic Action of Alcohol. The Present State of Therapeutics, and the Direction which Therapeutical Inquiries should take, etc.

But, passing from this subject of pathology, I must come to the more direct object of my concluding remarks, therapeutics; and, perhaps, I could have no better example of the improvement that has taken place, in their practical application, than in reference to the very symptom to which I have just referred. Is it not true that fewer cases of violent delirium are met with at the present day than was formerly the case? that in our surgical wards the occurrence of traumatic delirium is comparatively rare? and are not these results to be attributed to that modification in treatment, which has led both the physician and the surgeon to maintain a due nutrition of the body, wherever injuries are to be repaired, or disease controlled? And here I would remark on the importance, not only in disease, but in the treatment of all accidental lesions, of endeavouring to anticipate symptoms which may arise and complicate the case, by an early recognition of the pathological state of the various organs of the body. In the treatment of all cases of acute disease, a knowledge of this kind is of the greatest importance to the physician, for upon it will depend the nature of the treatment by which the local affection shall be met; and is not this knowledge of equal importance to the surgeon in dealing with an accidental lesion? Do we not sometimes see that a patient, ignorant of some existing organic disease, nay, thinking himself in a state of perfect health, meets with an accident of a more or less grave character, but which necessarily confines him to his house, his sofa, or his bed; that this interference with his usual habits of life, and the depressing influence which necessarily ensues, becomes the means of accelerating the progress of the existing disease, or, if there be a feeble or fatty heart, acts as the determining cause of sudden death. Nor should we forget, in the application of therapeutic measures, the way in which this fatty disease of the heart may complicate certain more chronic ailments. Its frequent association with various gouty affections shows us the importance of caution, in the administration of depressing remedies in these conditions, and the danger we may incur by the sudden withdrawal of their habitual stimulants from those who suffer from these gouty attacks.

And here I would remark that one of the great aims of the practice of medicine should ever be to postpone the approach of death. The modes of dying have always formed a subject, not only of phi-

losophical interest, but of great practical importance; and is there one amongst us who will not say, that he is often guided, in his treatment of disease, by a knowledge of the way in which, by the derangement of some physiological process, death is threatened? It is easy to see the application of these principles, in reference to diseases of an acute character; but, perhaps, we are too apt to lose sight of them, in relation to diseases of a more chronic nature; and yet it is probably in these latter, that, although we could not produce results occasionally so striking, in the main our practice would be most successful.

It would be simply impossible, in the scope of a single lecture, to dwell at any length on so large a subject as therapeutics; and the only alternative which remains to me is, to glance in a very cursory manner at some of the leading features which characterise the practice of the present day. And, amongst these, there is nothing more striking than the adoption, especially in the treatment of acute diseases, of a more generous system of diet, and the more frequent administration, in various inflammatory affections, of alcoholic stimulants.

The whole question of the action of alcohol is so closely connected with the subject of my lectures, the remedy is so essentially what I would call a physiological one, it is used in so great a variety of diseases, and under pathological conditions apparently so diverse, but really having therapeutically similar indications, that I have felt I could not pass it over without something more than a mere cursory notice.

Whatever may be our views of the physiological action of alcohol, our belief of its therapeutic value rests on no mere speculative notions, but is supported by the testimony, the observation, and the experience of almost all practitioners of medicine. Like many other remedies, however, our knowledge of its action is imperfect, and we greatly stand in need of correct principles as to its administration. Its general applicability to various conditions of the system, as a potent health-restorer, has been almost universally recognised; and in all ages, physicians have resorted to its use. It is only, however, of late years that it has risen to the position of one of the most important, and most freely used, of our materia medica; and that its employment has been sanctioned, and its value demonstrated, in numerous diseases, in which, not only was it previously considered altogether useless, but in which it was thought it would be highly injurious. Both in medical and surgical practice, there can be no doubt that, for some years past, a larger quantity of alcoholic fluids has been used, than during any other equal period in the history of medicine in this country. The statistics of our hospitals would at once prove this. As to the influence it has had on the rate of mortality in these institutions, we cannot now stop to inquire. It would be very satisfactory, if statistics on a large scale could be drawn up, which would show the rate of mortality and the duration of diseases during two given periods—one before, the other since, the present system of treatment has become more general.

But, whilst unable to test the effects produced by alcohol by a direct appeal to statistics, I may, perhaps, be allowed to offer an opinion, founded on a careful observation for some years past of cases, both in hospital and private practice. Speaking generally, I believe it may be said, that the early administration of alcoholic stimulants has reduced the rate of mortality of some diseases; and that, in a far larger proportion, it has diminished the intensity of the disease and accelerated convalescence.

In expressing my own opinion of the value of alcohol as a therapeutic agent, I would do so with feelings of diffidence. There are, probably, many here who may have had larger opportunities than myself of judging of its value; and they may have arrived at conclusions at variance with my own. At all events, my views have not been formed without careful study and observation. I have seen alcohol used, and I have used it myself, largely. I have given it under circumstances when I could carefully watch its effects; and I have noted the influence it has produced both in acute and chronic diseases.

And here I would lay down a general principle, which is, I think, applicable to all remedial agents; viz., that the therapeutic value of alcohol does not rest on its supposed use as an article of diet, nor on any supposed chemical change it may undergo. It would be very satisfactory to know, by incontrovertible evidence that, after, or whilst, performing its therapeutic action, it was used up in the system, either as a heat or fat producer, or in affording nourishment to the nervous tissue. The establishment of such a fact on a sound basis, would increase our estimate of the usefulness of alcohol; but its value as a therapeutic agent rests on no such assumption, and may be altogether independent of any such assumed action. We may grant all that some chemists have of late advanced; that the substance is not oxidised in the system; that every particle of it is eliminated unchanged; that, contrary to our long cherished notion, it does not form fuel for the combustion process going on in the body—but we do not, by all this, in anywise impugn its therapeutic value, nor is our confidence shaken in its applicability to various conditions of the body, even when taken as an article of habitual use.

Amongst the most important, if not the most important, of the actions of alcohol, in a therapeutic point of view, is the influence it produces on the circulating system. That the administration of alcohol increases the power of the heart, diminishes the frequency of its beat, and augments the force of its contraction, under conditions of debility, are facts which must be familiar to all who are in the habit of prescribing it. And there is nothing more striking, and I will add more satisfactory, than to watch the effects of the remedy in those cases of inflammation, which are denominated asthenic, and which are marked by a rapid and weak pulse.

But the effects which alcohol produces on the circulation cannot be accounted for, I think, simply on the ground that it acts as a stimulant and tonic to the heart. It has been proved by some physiologists, that the introduction of certain substances into the blood has a tendency to increase the rapidity of the circulation, whilst the introduction of others has a directly opposite effect. Amongst the latter is alcohol; and, according to the observations that have been made, when this substance is injected into the vessels of a living animal, there is a retardation of the circulating current, apparently from some physical influence which the alcohol produces, either on

the blood itself, or on the coats of the vessels, or on both. And I would here remark, that when alcohol is taken into the stomach, although we have evidence of increased action of the heart, this by no means proves that the blood is circulating more rapidly through the capillaries of the body. Nay, the very symptoms which follow the administration of a small dose of alcohol — namely, a sensation of fulness and heat of skin—and the congestion which ensues when the dose is increased, tend to prove that there is some impediment to the peripheral circulation. Such a state of capillaries must necessarily give rise to an increased tension of the arterial system, and a fulness of the pulse; more especially when taken in connection with the effects produced on the heart itself by the local action of the alcohol.

It appears to me, that a knowledge of this local action of alcohol on the capillaries, serves to explain, in some measure, the effects which we witness, in certain cases of disease, from its administration.

Is it not true, in certain wasting diseases, in various forms of acute inflammation, where there are rapid changes going on in some particular organ or part—a rapid development of inflammatory products, of serum, of lymph, of pus; that, under the influence of alcoholic fluids, these changes are checked, and the wasting processes arrested?

Now, there can be no doubt that, in these cases of inflammation, the vital changes of the part involved are *too active*. I do not say that the vital powers are *too high*—that there is *increased vitality*; but that the molecular changes of the part are *too rapid*.

When, in such cases, we administer alcohol, we often see a rapid arrest of these changes, and an absorption of the effused products; and I cannot but think that this result is due, not simply to the general influence of the remedy in improving the nutrition of the body, and in giving increased power to the heart; but, also, to its local action on the capillaries and tissues of the affected part.

It is very remarkable to see the large quantities of alcoholic liquids—wine, brandy, etc.—that are borne in disease, and that by persons who have previously taken, whilst in health, but little or none, without any of the ordinary physiological effects being produced—without the occurrence of intoxication, of headache, of furred tongue, or of disturbance of the stomach.

It would take me far beyond the limits of this lecture, were I to attempt to consider the effects produced by alcohol in certain chronic affections; but I cannot dismiss the subject without one or two as to the ordinary use of the agent.

From the influence which it exercises in certain states of disease, indications may be gathered for its use in conditions of health. From the various circumstances of constitution and habits of life, the moderate use of alcoholic beverages appears, in many persons, to be attended with great benefit. Those who argue against the proper use of alcohol from the ill-effects produced by its abuse, appear to me to miss the question entirely; and they might, on like grounds, attack the use of tea or coffee. No doubt, the highest devolopment of physical strength can be obtained without the use of spirits in any form whatever. Could we, indeed, all live the life of the athlete—breathe pure air, take exercise largely, and keep our digestive organs in such a state as to enable us to digest all the food which the system requires—we might dispense with alcoholic fluids. Whilst, however, men lead sedentary and laborious lives; working their nervous system, and breathing an atmosphere itself depressing; whilst the organs of digestion are scarcely able to perform the work which is required of them in order to supply the waste of tissue which is going on; whilst, even constitutionally, the circulation is languid, and the assimilative processes are weak; a substance, like alcohol, dietetic or medicinal, whatever we may call it, may be used in moderatlon by many, not only without disadvantage, but with decided benefit. And in forming an opinion of the value of alcohol, we must never lose sight of the fact, that just as the pathological conditions of certain acute diseases modify its physiological action, so the various constitutional defects which, in a large proportion of the population, detract from the standard of perfect health, may be indications for its habitual temperate use.

But, whilst I have expressed my opinion of the value of alcohol in disease, and as an article of diet, I would warn against the danger we may run of indiscriminately using it. It was impossible, in the scope of these lectures, to refer specifically to many modes of treatment, or to the therapeutical value of many remedies; and although I have singled out this particular remedy for a few remarks, in consequence of its present prominent position as a medicinal substance, I would emphatically protest against any extremes with reference to our practice, or any careless administration of the remedy without due consideration of the particular pathological conditions to which it is applicable.

But passing from this subject of alcohol, there is one point in connection with therapeutics on which I cannot refrain from expressing an opinion. I think it is, to a certain extent, a fault of the present day, that we sometimes lose the full benefit of our remedial agents from the simple fact that we prescribe them in too small doses; that the existence of a certain amount of scepticism with reference to the power of drugs, which has crept in, perhaps, as the necessary result of an overweening confidence in their value, has produced, with some, a more or less timidity of practice, which, I venture to think, is injurious. It must often have occurred to most of us, that, in the treatment of a particular case, after trying the ordinary doses of various remedies, all of the same character, without any beneficial results, we have given one in increased doses, and have rapidly produced a therapeutic effect. I have frequently found in cases of ague, that the ordinary doses of quinine have utterly failed; whereas a larger dose has effected a rapid cure. I might illustrate this principle by a reference to cases; but I must not trespass on your time with unnecessary details; one case, however, I cannot refrain from giving, as it shows, in a remarkable manner, the effects which may be produced by pushing a remedy far beyond the ordinary limits.

I had under my care in the Northern Hospital a case of chylous urine, in which I determined to try the effects of gallic acid. I gave it in gradually increasing doses, beginning with ten grains three times a day. But little effect was produced on the disease until the quantity given was two drachms daily,

and then a marked result followed. For nine days, the patient took two drachms of the acid daily; and then, the urine being still slightly turbid and milky, the quantity was increased to two drachms and fifteen grains daily, and was continued for seven days. On the fourth day of this dose being taken, the urine became perfectly natural, and the chylous condition did not return.

Now, had I been content with the ordinary dose of the remedy in this case, I believe that, although I might possibly have cured my patient, the time occupied in the cure would have been much longer than it was. And a very remarkable circumstance occurred in the case, showing the tolerance of the system of this large quantity of acid under the influence of the disease—a tolerance which ceased when the disease was cured. As soon as the urine assumed a healthy character, lithic acid appeared in it in large quantities, a circumstance which had never happened whilst the urine was chylous. The diminution, and subsequent stoppage, of the gallic acid caused a disappearance of the lithic acid deposit, showing the relations which the administration of the one bore to the formation of the other.

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

HISTORY OF A RECENT EPIDEMIC OF PHAGEDÆNA OR HOSPITAL GANGRENE.

By Thomas P. Pick, Esq., late Surgical Registrar.

Many writers have observed that, individual epidemics of phagedæna differ essentially in their characteristics; it becomes, therefore, of interest to the surgeon to note each attack of this disease, so that he may be prepared for any phase in which it may show itself.

St. George's Hospital has, within the last few months, been visited by an epidemic of phagedæna which presents several points of interest, and which differs in many particulars from recorded accounts, particularly those of recent writers, and more especially from those cases recorded by Dr. Macleod as having occurred after the storming of the Redan, in June 1855, and by Dr. Hennen during the Peninsular War.

In order to discuss the subject systematically, it will be advisable to consider it under three heads; 1, the Cause; 2, the Symptoms; and 3, the Treatment of the disease.

1. *Cause.* In 1785, the first accurate description of this disease was given by Mr. Gillespie; and about two years later, Dr. Trotter described the same disease, and distinctly denied its contagious nature; more modern writers, however, have not agreed with this gentlemen. Mr. Blackadder, who wrote largely on this disease, believed in the complaint being *only* communicable by the direct application of the infectious matters to some part of the body from which the cuticle had been removed. The observations of Professor Thomson convincingly prove that hospital gangrene may be communicated by direct contact. He adduces the following arguments. 1. It may be communicated by sponges, bandages, and clothing to persons at a distance from those infected with it. 2. It has been observed to attack the slightest wounds of surgeons, nurses, and others who were employed in handling and dressing infected persons, and that even in circumstances where the medical man so employed lived some distance from the patient. 3. We are often able to trace its progress distinctly from a single individual through a succession of patients. 4. We are able to prevent the progress of the disease in particular situations, by removing the infected person before the contagion has had time to operate. 5. It continues long in one ward or room without infecting others, if pains be taken to prevent intercourse between the infected and the non-infected.

Though these observations, if correct, remove all doubt as to the contagious character of this disease, there can be no doubt, at the same time, that it is also often due to the agency of some unknown poison, which finds for itself a soil fit for propagation; and I shall endeavour to prove that the late outbreak we have had in this hospital has been entirely due to infectious causes.

And to me there seems nothing incongruous in saying that a disease may be both contagious and infectious; since in all cases the disease is conveyed from one person to another by particles of matter, whether those particles be in a solid or in a gaseous form, whether they be imparted by direct contact of the two human bodies, or wafted through the air.

But the epidemic at present under notice appeared to partake most of an infectious character; and in order to prove this, I shall take the same arguments that Professor Thomson adduced to prove its contagious character in the cases he observed. 1. In no instance was it proved that it was communicated by sponges, bandages, or clothing to persons at a distance from the infected. 2. In no case did it attack any surgeon or nurse, though no special care was taken to guard any slight wounds in those dressing the patients. 3. The disease could not be traced from a single individual through a succession of cases. 4. We were not able to prevent the progress of the disease by removing patients from an infected spot. 5. It did not continue in one ward particularly without infecting others, but invaded the whole house.

The following is a brief sketch of the history of this epidemic, as it occurred among the patients who fell more especially under my notice.

In the early part of March 1863, a woman was admitted into the Hospital for necrosis of the tibia; she was placed on the operating table, and the diseased bone removed; a few days afterwards, the wound took on a phagedænic character; this, however, soon yielded to treatment. Nothing more was seen of this disease for four months. On July 14th, 1863, a patient was admitted into the accident ward, with a slight wound on the leg; on the 21st, seven days after admission, phagedæna attacked the wound. This was the first case which had occurred since March. The following day an out-patient *was admitted* with phagedæna. Two days afterwards, July 24th, two more cases were admitted, and were placed in separate wards. On the 27th, another case was admitted, and on this day a case broke out in the house; but, strange to say, it did not occur in any of the wards where there were phagedænic patients, but in a private room, where a patient had been totally isolated from the other patients, after undergoing amputation, for fear of the supposed contagious nature of the disease. The next case which was admitted, was on August 3rd (a large gangrenous sore on the back of the arm.) On August 5th, two cases were admitted; on

August 7th, a case broke out in the house; on August 9th, another case was admitted; on August 11th, another; on August 12th, another; on August 14th, a case broke out in the house; and so on, taking an average, three cases being admitted for every one which broke out in the house. Out of the total number of cases; viz., 92, 73 occurred out of the hospital; and of these 33 were treated from first to last as out-patients; so that out of 92 cases, only 19 broke out in the house. These rough facts are, to my mind, sufficient evidence of the epidemic nature of the disease.

One word ought here, I think, to be said upon an objection which might possibly be raised; the following theory might be proposed. Might not all the cases which were admitted have come from the same neighbourhood, and so explain how the disease might have been contagious, the virus being communicated from one person to another, possibly through the intervention of a third? The idea suggested itself, and careful inquiries were made as to the residence of the patients, and it was found that they came from all parts of the surrounding neighbourhood; from Westminster on the one side, and from Hammersmith and Barnes on the other, and between the two, from Pimlico, Chelsea, Fulham, etc.

Another objection might be raised; and that is, that the morbific matter might have been communicated from one out-patient to another, during the process of dressing, on sponges, etc.; but this fallacy has also been guarded against. For instance, in August of last year, a man was admitted with a crushed foot, for which amputation was performed. He was discharged with the wound nearly healed; he went down to Henley-on-Thames and remained there perfectly well, with the stump healing, till October 23rd, when phagedæna appeared in his stump, and he returned to London, and was readmitted. Again, a man was admitted suffering from phagedæna, who resided at King's Cross, and who had not been near the Hospital. Many other cases might be cited. It appears to me, then, that sufficient evidence has been adduced to prove that this epidemic did not arise from "overcrowding the hospital, want of cleanliness, ventilation, or from that accumulation of animal exhalations, arising from the sick and wounded, which is the source of various low forms of fever and allied diseases;" but that it was entirely due to some morbific matters in the atmosphere, some poison or ferment in the air, aided, no doubt, by want of cleanliness and ventilation among the poorer classes.

2. *Symptoms.* Regarding the symptoms, in different works, we find great diversity of opinion; and more especially as regards the constitutional symptoms, which, according to Blackadder, were secondary to the local disease, whilst Macleod and Hennen assert that the disease was always ushered in by premonitory febrile symptoms, such as pain in the head and eyes, loss of sleep, want of appetite, and quickness of the pulse, etc. In no instance, in the cases under review, was any constitutional fever observed, which might lead one to suspect the advent of phagedæna, before the local symptoms manifested themselves. The only premonitory sign which I observed was, in some cases, a total cessation of pain twenty-four hours prior to the attack; but this was by no means constant, and could not in any way be relied upon.

The constitutional symptoms, when they did appear, which was for the most part about the second or third day, were inflammatory in the first place, but quickly subsided into irritative fever, especially characterised by an extremely rapid and weak pulse.

The local symptoms presented themselves in two perfectly distinct forms, which for the sake of clearness and distinction, may be designated the gangrenous and the ulcerative.

When a wound, which has been previously healthy, is about to take on the gangrenous form, it becomes dry, and, losing its florid colour, becomes of an ashy grey; the surrounding parts are swollen, tumid and tense, of a bright red hue, and present a glossy and shining appearance; the colour soon becomes darker, and eventually black; the ulcer now spreads rapidly, and has a tendency to assume a circular form; the edges become hard, everted and rugged, and the surface covered with a thick dark grey or blackish spongy slough, which can only be compared, in appearance, to a yeast poultice. There is great tendency to œdema of surrounding parts, and in some instances, to inflammation of the absorbents, and even the veins. The pain is often extremely severe, of a sharp, stabbing character, but sometimes it is comparatively slight. The disease may extend, principally, however, confining itself to the skin and cellular tissue, until large surfaces of bone and muscle are exposed; it rarely, however, attacks these structures; vessels may be ulcerated into, and alarming hæmorrhage take place. After a time, however, its progress is arrested; upon visiting our patient, we notice a little row of tiny bead-like projections around the margin of the sore, or it may be in one part only; wherever these little granulations, for such I take them to be, are found, we may rest assured that the disease is stopped. Soon, now, the sloughs are thrown off in the form of reddish-brown, or greyish viscid masses, leaving a very sensitive surface, covered with pale flabby granulations, and it is astonishing with what rapidity these ulcers heal, when there is no bone implicated; they have, however, a tendency to a recurrence of the disease.

Case. William W., aged 24, labourer, was admitted as an out-patient, on October 1st, under Mr. Hewett. Three days before admission, he crushed his finger with a heavy stone, lacerating it very much; he applied water-dressing, but did not attend at the Hospital.

On admission, there was found to be a compound fracture of the middle phalanx, with considerable laceration and bruising of the soft parts, the injuries being such as to preclude the possibility of saving the finger. Amputation was therefore performed, and water-dressing applied.

The wound went on well, discharging healthy pus, till the sixth day, when he came complaining of intense pain in the part. The wound was found to be dry; it had lost its florid colour, and assumed a glossy coat. He was directed to apply a lotion, consisting of a drachm of solution of diacetate of lead and half an ounce of tincture of opium, with water to six ounces; and to take ten grains of chlorate of potash in an ounce and a half of distilled water every four hours, and five grains of compound soap-pill every night.

On the 9th, the whole of the flaps were black, and separated from the surrounding parts by deep excavated edges. The skin around was purple; and he complained of intense pain. He was ordered to take, every six hours, a cinchona draught with twenty minims of tincture of opium and ten grains of chlorate of potash; and to use a lotion of a drachm of carbolic acid, an ounce of glycerine, and a pint of water.

Oct. 12th. The whole of the finger was gangrenous, and the sloughing extended rapidly. The sore, which completely surrounded the finger, had acquired hard, prominent edges, the bottom of the cavity being lined with a blackish slough. His constitution had become affected; he suffered from cold sweats, had an anxious expression of countenance, and a quick, weak pulse. He was admitted into the Hospital. The

treatment was continued. He was ordered to have ordinary diet, two pints of porter, and one pint of beef-tea daily.

Oct. 15th. The sloughing did not appear to have spread since his admission, but there was no tendency to a separation of the sloughs; and there was still considerable tumefaction and purple discoloration of the surrounding parts. He was ordered to have four ounces of brandy daily.

Oct. 17th. There were two or three black spots formed in the finger beyond the line of demarcation, which had been set up. The medicine was ordered to be taken every four hours.

Oct. 19th. The sloughing was again extending. He was in great pain; tongue furred; pulse very quick and weak. There was considerable redness and swelling of the arm, and the absorbents were inflamed as far as the axillary glands, which were enlarged. Fifteen grains of sulphite of soda were added to each dose of his mixture.

October 22nd. The gangrene still continued; the whole of these tissues were destroyed down to the bone, which protruded through the end of the wound. There was still great swelling of the arm. The dose of tincture of opium was increased to twenty-five minims.

Oct. 23rd. There was still no appearance of arrest of phagedæna. The dose of laudanum was increased to thirty minims.

Oct. 25th. There was very much less swelling of the arm; and the sore had not extended during the last twenty-four hours. He did not appear to suffer at all from the large doses of opium; in fact, he slept very little.

Oct. 27th. All sloughing had ceased, and a line of demarcation had been set up. Green ointment and a linseed-meal poultice were ordered.

No further extension of the disease took place. The process of separation, granulation, and cicatrisation, ran their ordinary course; the exposed bone was removed; and he was discharged on Nov. 14th.

This form of disease which I have attempted to describe, and which I have termed the gangrenous, because it is always accompanied by the formation of a slough, is the one commonly described in our works on surgery; but there is also another form of this disease, in which there is no slough formed, in which there is rapid molecular death, or in which there is simple melting away or liquefying of the parts. When a healthy sore takes on this form of disease, it assumes a greyish appearance; the surface is covered with a semi-gelatinous, greyish-blue fluid, without any appearance of slough; the edges, instead of being hard, rugged, and everted, are levelled and are gradually lost in the ulcer, melting away as it were, so that one is almost at a loss to say where the skin terminates; the discharge is very profuse, and covers in a thick layer the surface of the sore; no doubt giving it its peculiar appearance, which once seen could not be mistaken, but which it is difficult to describe. There is no redness or œdema of the surrounding parts; in fact, they are usually possessed of an unnatural pallor. The constitutional symptoms are of a very low, asthenic type, and the disease spreads with fearful rapidity; the parts liquefying, as it were—melting away much in the same way as a lump of ice in a warm room. The same appearance of a row of minute granulations around the sore, as in the gangrenous form, indicates the arrest of the disease; when these are once formed, the sore begins to lose its greyish-blue tinge and assume a reddish colour; granulations spring up; and the ulcer cicatrises in the ordinary manner.

Case. Joseph Short, aged 59, a pensioner, was admitted June 13th, 1863, under Mr. Lee, for necrosis of the great toe, for which amputation was performed. On July 9th, sloughing and secondary hæmorrhage supervened, necessitating the ligature of the dorsal artery of the foot, and afterwards, upon a recurrence from another source, of the posterior tibial artery. As a consequence of this, gangrene occurred, for which amputation was performed in the lower third of the leg on July 25th. Secondary hæmorrhage again came on, owing to the atheromatous state of the vessels, in the evening of the same day, and required the application of several ligatures. On the 27th, two days after the operation, the edges of the wound were found to be extremely pale, of a greyish ashy appearance, covered with a semi-gelatinous layer, which swayed backwards and forwards on being touched, but was adherent to the structures beneath. There was no defined edge; but the skin, where it adjoined the sore, became gradually shaded off, till it eventually assumed the colour of the sore. There was no swelling or tension of the limb, which was unnaturally pale. He was in no pain; the tongue was very dry; pulse 120, very weak, and occasionally intermittent. He was ordered to apply a lotion of permanganate of potash; to take a cinchona draught with ten grains of carbonate of ammonia every six hours, and ten minims of tincture of opium in camphor mixture every two hours; and to have daily six ounces of brandy, eight ounces of port wine, ordinary diet, and one pint of porter.

July 28th. The ulceration was extending with great rapidity. The whole of the anterior flap had gone, and the skin and cellular tissue of the lower, leaving the muscles exposed, and the bone projecting out of the end of the wound. He felt better and stronger in himself. The tongue was moister; the pulse stronger. He took all his nourishment. The medicine was continued; the wine was increased to twelve ounces daily; and he was ordered to have six ounces of brandy mixture (*Pharmacopœia*) in place of the brandy.

July 29th. The extension of the disease was now arrested. Around the margin of the bone, some granulations were springing up.

From this time the disease stopped; the wound gradually cicatrised; the bone exfoliated; and the stump was all but healed, when, unfortunately, he was attacked with erysipelas, from which he died.

3. *Treatment.* In considering this, we shall pass briefly in review the various modes of treatment, both local and constitutional, which were adopted here during the late outbreak; and then sum up with a few facts gathered from the cases under observation.

Local Remedies. Of these remedies, the one which usually ranks first, and is most highly extolled, is *nitric acid.* We are told that "the extension of the sore must be stopped by the free application of fuming nitric acid." If this application did stop the disease, we should be justified in using it; but, unfortunately, it appeared to be perfectly inert to effect this end. In spite of a thorough destruction of the sides and edges of the sore with the strongest acid, the disease still progressed. In one case in which it was used, the edges were destroyed twice, and still the disease continued; and, as it causes excruciating pain, it does not seem to me advisable to use it.

Carbolic Acid, as a remedial agent, has been brought before the profession during the last two years; and two eminent French physiologists, MM. Gratiolet and Lemaire, have made the important observation that, whilst it does not interfere with chemical fermentation, it completely arrests all vegetable and animal fermentations which arise from cryptogamic life. This remedy has been much extolled in checking sloughing and altering the character of ill-conditioned ulcers; and, though it does not appear to

have any power of arresting phagedæna, it is an extremely useful application in these cases in destroying the offensive smell of the secretion, and in accelerating the separation of the slough. In several cases, this remedy was applied locally, all general treatment being avoided; and in no one instance was there sufficient evidence to justify one in assuming that it arrested the disease.

The transfusion of a stream of *chlorine gas* through the ward was tried in one or two instances, though not sufficiently often to establish any definite result. On August 6th, there were three cases of phagedæna in the Fitzwilliam Ward of this hospital. They were of different duration, and were all spreading, though in one there was some slight tendency to arrest. A gentle stream of chlorine gas was passed through the ward for eighteen hours, at the end of which time the phagedæna was arrested in all three cases. A man, having undergone amputation, was placed in a separate apartment. Two days after, he was attacked with phagedæna, which rapidly extended. A stream of chlorine was passed through the ward, and in forty-eight hours the disease was arrested. Though these facts are satisfactory, they are not conclusive, and are far too meagre to arrive at any just conclusions. Whether this remedy has any control over the disease, or not, there is no doubt that it must act beneficially, if in no other way, at least in destroying the disgusting effluvia, which it does in a preeminent degree, and is thus especially useful, particularly in hospitals, where so many sick are collected together in one room.

General Remedies. There is no doubt that *opium* is our sheet-anchor. After watching the wonderful effects of this drug, not in one or two cases, but in dozens, and after every other conceivable remedy had been tried and failed, I am confident that, if there is such a thing as a specific, opium is a specific for phagedæna, if properly administered, and in sufficient quantities. I have never seen it fail. The most obstinate case was that of William W., whose history is given above. He took laudanum in gradually increasing quantities for fifteen days, till at last he was taking nearly half an ounce in the twenty-four hours. This, however, subdued the disease. But this must not be regarded as a typical case. Instances have been seen in which a rapidly spreading sore has presented a perfectly clean and healthy surface under twenty-four hours' treatment by opium; and two or three days may be generally considered as ample time to stop the most rapidly spreading sore.

Chlorate of Potass. This remedy, from its known properties in checking unhealthy and gangrenous ulcerations, was largely tried in phagedæna, and with some amount of success; for, though it did not appear to arrest the disease, at all events not with the same certainty as opium, still it appeared to act beneficially in the cleaning of sores and the separation of sloughs; and, from a knowledge of its properties, it was supposed that it might act as a prophylactic, and prevent a recurrence of the disease, and was accordingly prescribed largely.

Ammonia possesses no power over the disease, but was often a necessary addition, on account of the very rapid prostration and the great deficiency of nervous power which is often observable in these cases.

Dr. Polli of Milan has lately introduced a class of medicines before the profession, as having the power of arresting putrefactive fermentation; viz., *sulphurous acid*, in combination with potass, soda, and lime. These remedies were tried in phagedæna; and the drug did not appear to exert any influence. It was given in several cases, and in no one instance was the slightest benefit obtained.

Case. A man was admitted with a fracture of the leg on August 26th. On September 4th, phagedæna set in. He was ordered to take fifteen grains of sulphate of soda in water every three hours; and to use, for a lotion, a drachm of sulphite of soda to four ounces of water. He went on steadily with this treatment till September 12th, the disease still progressing; on that day, he was ordered opium, and the disease was entirely arrested in forty-eight hours.

The treatment, then, that has been adopted during the late outbreak, has been in the main opium, sometimes combined with ammonia or chlorate of potass, at other times alone; and a liberal diet. And, whatever may be the result of treatment in other epidemics, there is no doubt that, in the one under consideration, this plan was followed by the best results; in fact, it was the only one which really subdued the disease. Of forty-seven cases of which accurate records are kept, the average time which the opium took to subdue the disease was forty-eight hours, the shortest being twenty-four hours.

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GERMANIC MEDICAL EDUCATION.

As the subject of medical education is at present exciting so much interest in the profession, our readers will be doubtless interested to know how they manage these things in foreign countries. We, therefore, introduce a summary of a report by Dr. Jaccoud, who was last year sent by the French Minister of Public Instruction into Germany to study the organisation of the Faculties of Medicine in that country. His report—the result of his labours in that direction—has just been published. In an introduction, he shows that the term of dreaminess no longer applies to Germany, in so far at least as the study of the sciences, and of medicine in particular, is concerned. Germany has thrown off the transcendentalism of Schelling and of Hegel, and is now steadily following in the footsteps of Locke and Condillac.

A German University is formed by the union of the four faculties—theology, law, medicine, and philosophy. Of such universities, Germany has now twenty-five; viz., six in Austria, six in Prussia, one in Hanover, two in Saxony, three in Bavaria, two in Baden, one in Würtemberg, one in Mecklenburg-Schwerin, one in Holstein, and two in Hesse.

In each Faculty of Medicine, the instructors consist of three kinds of masters: ordinary professors, extraordinary professors, and private masters.

The number of ordinary professors is limited. The highest number varies between twelve and fourteen, and is only found in Berlin, Vienna, Prague—that is, in first-class faculties.

The mode of nomination of an ordinary professor is the same in all universities. The presentation is made by the ordinary professors themselves, and the nomination made by the crown. The faculties are

proud and jealous of this privilege; and never has it happened that the sovereign has refused to ratify their choice.

The ordinary professors are nominated for life; and, at the end of thirty years' service, are entitled to a pension, which usually equals the professorial salary. The funds for payment of the professors are derived from fixed emoluments paid by the state, or by the university, if it be rich enough; from fees paid by the students; and from fees paid for lectures. The fixed salary varies with the importance of the university. At Vienna, it is 5,500 *francs* (£220). This sum is generally doubled or trebled by fees from the other sources of revenue indicated. Moreover, the fixed salary is increased every ten years from 500 to 1,500 *francs* (£20 to £60), according to the success and scientific value of the professor. With respect to this mode of payment, M. Jaccoud says:

"Through this variableness in the salary, the university and the state reserve to themselves the power of considering the personal value of the professor. Through that part of his salary which comes from fees paid by the student, the professor is materially interested in the prosperity and growth of his Faculty; and through the sums derived from the payment of his lectures, he is directly interested in the success of his course."

In Vienna, there are thirteen ordinary professorial chairs; viz., one of descriptive anatomy; one of physiology and microscopical anatomy; one of general pathology; one of pathological anatomy; one of pharmacology; two midwifery chairs; two of surgery, clinical and pathological; two of medicine; one of hygiene and legal medicine; one of ophthalmology. Berlin has twelve chairs.

M. Jaccoud remarks, that in Germany there are no chairs for specialities, with the exception of that of ophthalmology at Vienna; and he hereon says:

"Specialities, from a professional point of view, may be reasonable enough; but, from a scientific point of view, no Faculty should admit them. There is a chair of medicine and of surgery, and it is the business of the teachers thereof to satisfy all the eventualities of their programme. No special instruction is admitted into the classical and traditional circle of *ordinary instruction*. But then, on the other hand, the branches called special are largely represented in the instruction of the *extraordinary professors* and private masters."

The duties of the ordinary professors are heavy. All of them lecture during the two semesters, and none give less than five hours of lectures per week. The clinical professors have at least ten hours a week of lecturing, and sometimes fifteen or eighteen hours. Thus Virchow has seventeen hours a week of it!

The extraordinary chairs are not rigorously limited, as are the ordinary chairs. This system, under which several professors may hold forth on the same subject, leads to emulation—not always, we should think, of a desirable kind—between the professors. In Vienna, there are no less than thirteen extraordinary chairs; viz., dermatology; bandages, etc.; history of medicine; histology; diseases of children; midwifery; psychology; comparative anatomy; veterinary surgery—each of which has one chair. Syphilis and ophthalmology have each two chairs. Odontology alone is wanting. These studies are all required of the student; at least, at their examinations, they have to prove their knowledge of these special subjects of instruction.

The extraordinary professors are nominated by the Minister, on the proposal of the Faculty. Their nomination is for life. For the most part, they have no fixed salary, touching merely the fees derived from their lectures, which fees they themselves fix. Exceptionally, when the course is not of an attractive character, a fixed allowance is made to the professor. Thus, for example, the extraordinary professor of medical history and the clinical professor of diseases of children have each 2,500 *francs* (£100) per annum. Like the ordinary professors, the extraordinary are called upon to lecture during ten months of the year.

In addition to these professors, ordinary and extraordinary, there are private teachers (*privat-docenten*) engaged in the medical instruction of the Faculty. The position of private teacher is open to all Doctors of Medicine, and is obtained after special examination. The nomination to the office is made by the Faculty. The private teachers are obliged to give courses of lectures, choosing any subject for their discourse which belongs to the particular branch of study to which they were appointed. They are not, however, allowed to give a gratuitous course on any subject upon which a professor gives a paid course. Their term of office is not fixed; and out of their number the extraordinary professors are selected. They have no fixed salary, their pay being derived from the fees paid by the students who attend their lectures. Their lectures are official, however, and are given in the lecture-rooms of the university. These private teachers are very numerous. The Faculty of Vienna possesses twenty-seven, and Berlin twenty-two. In Prague there are thirteen, twelve in Breslau, and so on.

The Faculties, it must be observed, have a complete monopoly of education. No one outside the three classes of instructors spoken of has the right of giving lectures on any branch of medical science. The Faculties alone have the privilege of granting degrees, and alone have the privilege of giving instruction. There is no such thing as extra-academical—no free teaching.

"To sum up," says M. Jaccoud, "ordinary professors nominated by the Sovereign, extraordinary professors nominated by the Minister, private masters nominated by the Faculty, form the three classes of professors, whose combination constitutes the official corps of instruction. All of them are obliged to lecture throughout the year, and all belong to the Faculty. The result of this organisation is to give to education a remarkable character of multiplicity and variety, and to excite an incessant activity in the

Faculty. Moreover, a constant emulation is excited by it amongst the different members of the educating body; and this emulation is the corner-stone of the building. What more could be desired? True, there is no free teaching; but then this official teaching, conceived in a spirit of perfect liberality, supplies all that can be desired."

The monopoly granted under the old conservative system to the professors alone has been thus in a great degree removed by the introduction of the other two classes—the extraordinary professors and the private teachers.

On another occasion we will give our readers an account of the organisation of the students for whom this system of instruction is prepared.

ST. THOMAS'S REDIVIVUS.

St. Thomas's Hospital has at last arrived at a local habitation. The Court of Chancery has decided in favour of the Governors' site of Stangate. In some indefinite number of years from the present date, and when the foundations of the Stangate site have been laid in the muddy banks of the Thames, St. Thomas's Hospital will rise once again into an actual fact; we trust, a lasting monument of architectural skill and beauty, and perfect in its hygienic arrangements. Vice-Chancellor Wood does not seem to have had much difficulty in deciding upon Stangate site. It was impossible to withstand the certificates of the medical men who testified to its remarkable salubrity. Milbank Penitentiary and the *Dreadnought* Hospital were adduced as being healthy, even during the hot summers of 1857 and 1858. And then, again, it was said, is not the Hôtel Dieu on the banks of the Seine? One of the medical witnesses, indeed, went so far as to say:

"I regard Stangate as not only the best possible site to be procured in London, but also as the noblest site possessed by any hospital in Europe."

Besides, the river, when purified (according to future expectations), will be a splendid means of ventilation.

"After mature deliberation," said Mr. Rolt, for the Governors, "and relying upon the mass of medical testimony, not got up for the purpose, but given by their own officers and staff, who had examined and studied the hospitals all over Europe, the governors had come to the conclusion that the Stangate site was the best that could possibly be obtained for the new hospital. The objections to the Stangate site seemed to resolve themselves into the following: 1, that the hospital would be placed on the banks of a common sewer; and 2, that the banks of a tidal river, however unpolluted by sewage, were injurious as a place of residence, especially to hospital patients. As to the first objection, the answer was that the legislature would have cured the pollution of the Thames before the new hospital could be completed. As to the second, the theory of the unhealthiness of tidal rivers was now completely exploded. Without alluding to the case of the Hôtel Dieu at Paris, on the banks of the Seine, the healthy state of the *Dreadnought* at Greenwich, and especially of the Milbank Penitentiary, immediately opposite to the bone-boiling and other works, proved conclusively that any objections from proximity to the river were wholly unfounded. As to Bethlehem Hospital, the cost was more than double that of Stangate; and the governors were not agreed on the question of selling it. The Surrey Gardens were sunk in a well and in a most inaccessible position, the only advantage being a larger quantity of ground, which could hardly be utilised for hospital purposes. It was submitted, therefore, that on the grounds of accessibility and suitability for persons requiring the benefit of the hospital, convenience to the medical staff, and suitability for the health of the inmates, the Stangate site was the best that could be procured, and that the choice made by the acting governors ought to be sanctioned by the court."

"The proposed sites were reduced by elimination to four: 1. The Stangate site, between Lambeth Palace and Westminster Bridge, immediately fronting the river, comprising about 8½ acres, at a price of £95,000; 2. The site of Bethlehem Hospital, in St. George's Fields, comprising 11 acres, at the price of providing an equally good hospital, or £200,000; 3. The Surrey Gardens, of about 14½ acres, for £77,500, with immediate possession; 4. A tract of ground, partially built upon, at the back of Newington Church."

But the Vice-Chancellor remarked:

"The real question was between the Surrey Gardens and Stangate; for the much larger price asked for Bethelem, without any corresponding advantages, put that site out of consideration." . . . The Governors, "with the unanimous consent of the Grand Committee and of their medical officers, had come to the conclusion that Stangate would be a proper situation for the new hospital. It was not, therefore, the function of the court to interfere with a choice thus deliberately and unanimously made, when no improper motive or influence could be shown to have prevailed. His Honour then proceeded to consider the evidence and the objections raised to Stangate, and came to the conclusion that the objections raised were not sufficient to show that that site ought not to be sanctioned. The Milbank Penitentiary, immediately opposite the bone nuisance and on the banks of the Thames, showed, by its healthy state, the results that might be obtained in such a situation by good management. The death-rate proved that Stangate was rather more healthy than other parts of the metropolis. The situation was very accessible, and would have the large river area in front, which could never be built over. The objection to the river situation was also answered by the success of the Hôtel Dieu on the banks of the Seine, one of the largest hospitals in Europe. It appeared upon the evidence that, although a model hospital had been recently established in Paris with a much larger area around it, the Hôtel Dieu had still retained its rank and success.* No doubt, as to size, cheapness, proximity to the original hospital, and more immediate occupation, there was evidence in favour of the Surrey Gardens; but, unless persuaded that the Stangate site was absolutely improper, and that there were overwhelming reasons for preferring the Surrey Gardens, he ought not to disturb the deliberate choice of the governors. He was not so persuaded, and the choice of the Stangate site would therefore be sanctioned by the Court."

* We should be curious to see the data upon which the Vice-Chancellor has been led to make a comparison between the salubrity of Stangate and the salubrity of the Hôtel Dieu of Paris. It reminds us of the resemblance between Monmouth and Macedon: "There is a river at Monmouth and a river a Macedon." Editor.

THE BRITISH PHARMACOPŒIA.

The *British Pharmacopœia* does not appear to have taken by storm the hearts of the profession, of pharmaceutists, and of chemists. Whether this is a good or a bad sign of its merits, we cannot say: time will show. At present, the novelties and recommendations of this national drug-compendium meet with little favour. Critics are abundant, and friendly spirits few. Physicians who have been bred up in one certain alphabet of pharmacy naturally do not feel inclined to go to school a second time to learn their A, B, C. They seem to think that they already possessed sufficiently numerous and sufficiently powerful weapons before the days of the *British Pharmacopœia;* and being accustomed, in their attacks upon disease, to the use of the old *London Pharmacopœia* instruments, having taken their measure and felt their weight, and thus got the hand broken in to the handling of them, they may well be pardoned if they hesitate in resorting to novelties. If we may judge from what we hear to be the experience of respectable druggists in this matter, it will be a long day indeed before the *London Pharmacopœia* preparations are forgotten for the new British ones. And when we find the torrent of adverse criticisms with which the *British Pharmacopœia* is assailed on all sides, we need not be surprised at this. If the meaning of all this opposition were closely investigated, there would perhaps be found to lie at the bottom of it something much more serious than appears *primâ facie*. It strikes us that the profession, as a scientific body, view this *Pharmacopœia* as somewhat of an anomaly at the present moment. At the moment when men are all crying out for information as to the near effects and actual virtues and mode of operation of some of our most honoured, best known, and favourite remedies, they naturally regard with suspicion and hesitation what one may call the "last new thing" in the drug line. Every one knows that the more experienced a practitioner becomes, the fewer are the articles of the *Pharmacopœia* which he employs, or to which he pins his faith. What the practitioner really wants is a better knowledge of the weapons he already possesses, and not the introduction of a heap of new and doubtful articles into his *Pharmacopœia*.

Many will probably think, as we feel inclined to do, that the concoction of the *British Pharmacopœia* has been too much in the hands of those who are over deeply versed in the nature and qualities, chemical and botanical, of our materia medica; and that the presence amongst them of a few professors of medicine would have been of service. The eagerness of a certain number of the profession after new remedies (as they are called) is really marvellous at this advanced age of pathology and physiology; and still more marvellous is the ready credence which is often given, and on the most insufficient evidence, as to their alleged virtues. Who does not remember the tale of that romantic production from the backwoods of America—pucoon—and the clever Yankee cancer-curer? Then lately, again, we had the full assurance of an arrival from the same quarter of a positive cure for small-pox. Epilepsy, also, not long ago had its perfect counterblast discovered (for the three hundredth time) by a house of religious sisters in France; and the cure, or a knowledge of it, was duly imparted for our instruction.

What seems to us so much to be desired is, not an enormous compendium of the modes of manufacture and elegant preparations of all the remedies or supposed remedies which doctors have employed and patients swallowed, but a careful and solid investigation into the actual properties of the leading pharmaceutical articles which we employ. It is very well for the systematic writer to tell the student all about the history, chemical and physical properties, modes of preparation, etc., of any item of the *Pharmacopœia*, and to detail its *uses*, just as if he were doing a simple sum in arithmetic; but this is not what the practitioner requires. The practitioner of 1864 wants to get at the actual uses—not the mere book-descriptive uses—of the aforesaid articles. He soon discovers, when he gets to the bedside of the patient, that the remedies he employs do not in actual use exactly answer the description given of their operation in his books. The fact is, that, as regards the instruments of our attacks upon diseases, we are at present somewhat in the same position as our men of war seem to be in the matter of artillery. We have an overabundance of weapons, but a defective knowledge of their real and relative value. What a happy thing it would be, if the Medical Council would expend a few thousands in ascertaining the effects of all the splendid category of drugs which it now offers to the consideration of the nation.

The thanks of the profession are due to the Edinburgh College of Physicians for attempting to secure to medical men proper protection in the performance of their duty of signing certificates of lunacy. At a meeting of the College on February 19th, the following resolutions were agreed to:

"1. That the Royal College of Physicians of Edinburgh recognises it to be its duty, in accordance with its original Charter (1681), to promote medical science, and also to protect the interests of the medical profession and of the public; and that, accordingly, the College has endeavoured, on various occasions, to establish a sound relation between the profession and the public in the matter of certificates in lunacy.

"2. That the duty of signing certificates in lunacy is one at all times painful and disagreeable, and one peculiarly liable to bring the medical man discharging it into collision with the patient or his friends; and, therefore, one of which, were it practicable, the Col-

lege feels satisfied the profession would gladly be relieved.

"3. That the duty of signing certificates in lunacy appears, nevertheless, to the College, indispensable as a part of medical practice; and that both the public interest and the welfare of the insane themselves require that it shall be performed as freely as is consistent with proper securities against abuse.

"4. That the peculiarity of the position of medical men in signing such certificates is, that they are thereby brought in contact with persons who are not in full possession of their senses, and who, even after their discharge from an asylum, frequently retain a prejudiced or revengeful feeling against those by whom they were placed under treatment.

"5. That the Royal College of Physicians approves of every reasonable security being given to patients and their friends, in regard to confinement in asylums; and, therefore, was in favour of Section xxxviii of the Lunacy Act (Vict. 20 and 21, cap. 71) which provides that, "If any person shall grant any such certificate or statement as aforesaid without having seen and carefully examined the person to whom it relates, at the time and in the manner specified in such certificate, with a view to ascertain the condition of such person to the best of his knowledge and power, he shall be guilty of an offence, and shall for every such offence be liable in a penalty not exceeding fifty pounds; and if any person shall wilfully and falsely grant any such certificate, to the effect of any person being a lunatic, the person so granting such certificate shall be guilty of an offence, and for every such offence be liable in a penalty not exceeding three hundred pounds, or be liable to imprisonment for any period not exceeding twelve months.' Prosecutions for these offences would be undertaken by a public prosecutor, who may be supposed to act without prejudice in the matter.

"6. That the Royal College of Physicians has repeatedly endeavoured, during the progress of recent legislation in lunacy, to secure the introduction into bills before Parliament, of clauses extending to medical men some protection, unless in cases where they have signed certificates in lunacy without 'probable cause.'

"7. That the Royal College of Physicians is still of opinion that the legislature, which imposes by statute on medical men the duty of signing certificates in lunacy, is bound to give them some protection in honestly endeavouring to discharge that duty. The College, therefore, instructs the Council to spare no efforts to secure the introduction of a clause affording some protection, into any measure which may be brought before Parliament during the present session."

The Committee appointed to manage the fund collected for the purpose of defraying the expenses of the late trial, in which Dr. Lingen was so unjustly made defendant, have resolved, after paying all the legal costs, to expend the balance of the sum collected in the purchase of a valuable piece of plate, to be presented to Dr. Lingen. We must say, that we regret this decision of the Committee, for two reasons especially; first, because we cannot think that this is the occasion on which to present a testimonial to Dr. Lingen; and, secondly, because such an expenditure of money may operate in future in deterring the profession from assisting their medical brethren on occasions of this kind. The managers of the Fraser Fund have, as we deem it, much more wisely given the balance of their subscriptions to the Fund of the Widows and Orphans. The present occasion would have been an excellent one for the establishing of a fund for the purpose of assisting any of our medical brethren who may, on any future occasions, fall into such cruel difficulties as those referred to.

The Council of the Royal College of Surgeons has, as is stated in an advertisement which appears in this day's Journal, rescinded the regulation under which graduates in medicine of Oxford, Cambridge, and London, were admitted to the fellowship after an examination in surgery only. Consequently, all university graduates who intend to present themselves at the next examination for the fellowship diploma, must be prepared for having their knowledge tested in all the other subjects, an acquaintance with which is required from other candidates for the diploma. The change appears to have been made very suddenly, and will doubtless cause much agitation among university men who have been intending to compete for the fellowship under the hitherto existing regulations.

In 1862, 19,545 soldiers of the Prussian army were vaccinated. Of these, 16,669 had cicatrices of former vaccinations; 1852 indistinct traces of cicatrices; and 1024 no trace at all. The vaccination was regular and normal in 12,272 soldiers; irregular in 2738; and unsuccessful in 4534.

M. Delpech has been elected a member of the Section of Hygiene of the Academy of Medicine.

The journals announce the death of M. Ribes, Professor of Hygiene, at Montpellier.

MM. Demarquay and Lecomte, as the result of the second part of their researches concerning the effects of oxygen, tell us—that oxygen, when applied to old or recent wounds, produces little pain, but that it eventually gives rise to considerable reaction; that it may be injected into the mucous or serous cavities without causing any accidents; that it may be respired for a long time in doses of from twenty to forty *litres* per day without causing accidents; and that its peculiar properties are to increase the animal forces—exciting the assimilating powers and increasing the appetite.

Every one has heard of the industrious fleas; and now we are told, in *Cosmos*, of the industrious spiders. M. Duchesne-Thoureau has so managed these animals as to make them weave a piece of tissue, of which he sends a fragment to the *Cosmos*. "The specimen sent us," says *Cosmos*, "considerably resembles amadon." M. Thoureau is certain that, by the aid of these animals, warm and soft carpets, equal to our largest ones, may be obtained!

Progress of Medical Science.

SURGERY.

HÆMORRHAGE FROM THE EARS. Discharge of blood from the ears, M. Triquet observes, is very common; its causes are numerous and varied; the difficulty of distinguishing them is great; the prognosis requires caution; and the treatment requires particular care on the part of the surgeon. Hence he proposes to sum up his experience on the subject.

The *causes* of otorrhagia are various.

A. The hæmorrhage may be traumatic; and its source may be—I. Accidental; or II. Surgical.

B. It may occur pathologically from disease.

C. Otorrhagia may substitute or supplement other discharges, as the catamenia.

A. I. *Accidental Traumatic Hæmorrhage.* 1. *Fracture of the Petrous Bone.* In fracture of the skull by indirect cause, or by *contre coup*, the petrous bone may be broken across. If, in this case, the sinuses be opened and the membrana tympani ruptured, the injury is immediately followed by a discharge of blood on the affected side, which may continue during several days. In cases of double fracture, the hæmorrhage takes place from both ears. The nature and suddenness of the accident—for instance, a blow, or a fall on the head or on the feet—and the instant flow of blood from the ear, leave no doubt as to the nature of the injury. In fact, otorrhagia may in such cases be regarded as a symptom of fracture of the petrous bone. Sir A. Cooper, however, gives the case of a pugilist, who lost a considerable quantity of blood from the ear after receiving a violent blow from the fist on the side of the head; the membrana tympani alone was ruptured. Blows on the lower jaw (on the chin) are also sometimes attended with fracture of the temporal bone and discharge of blood from one or both ears. Cases of this kind would doubtless be more frequent if the effect of blows and of falls on the chin were not deadened by the tempora-maxillary interarticular cartilage. In old persons, in whom the anterior wall of the auditory canal is thinned and perforated, a fall on the chin may readily produce fracture and hæmorrhage from the ear. Cases in which blows or falls on the lower jaw have been attended with otorrhagia have been mentioned by Dr. Morvan (*Arch. Gén. de Méd.*, 1856), and by Voltolini of Dresden (*Virchow's Archiv*, vol. xiii).

2. *Wounds of the Auditory Canal and of the Tympanum.* *a.* Foreign bodies in the ear, animate or inanimate, may wound its membrane and produce a discharge of blood. An examination of the history of the case, and direct inspection of the ear, will lead to an easy recognition of the situation and cause of the hæmorrhage. When the hæmorrhage has been caused by insects, the previous history is of great value. Thus, it has been found that a patient had been long subject to otorrhœa; that he lived in the country during the summer, and sometimes slept in the fields; that he had been awakened by a violent pain in the ear, and that a sanguineous discharge had soon appeared. If the auditory canal be examined by means of a speculum, the presence of a foreign body attached to the walls of the canal or of the membrana tympani may be readily detected.

b. Otorrhagia is often produced by rupture of the membrana tympani; (1) during the paroxysms of hooping-cough or of asthma; (2) during sneezing; (3) during strangulation or hanging; (4) during catheterism of the Eustachian tubes; (5) in ascending high mountains or descending into low valleys. In all these cases, the mechanism of the rupture is easily understood. Thus, in hooping-cough, asthma, etc., the air is driven with violence through the Eustachian tube into the tympanum, the membrane of which, being delicate and incapable of offering much resistance, is ruptured at its weakest point—near the insertion of the handle of the malleus. The laceration was triangular in one, and linear in seven, of eight cases noticed by M. Triquet. Fabricius Hildanus relates, and M. Triquet has seen, instances in which the membrana tympani has been ruptured, with considerable otorrhagia, during vomiting by intoxicated persons. M. Triquet has seen the same accident occur in bathers, from throwing themselves into cold baths from a great height. In artillerymen, the membrana tympani is ruptured by the column of air which is thrown violently into the auditory canal during the discharge of large pieces. M. Triquet has also seen rupture of the tympanic membrane and otorrhagia produced by a violent clap of thunder.

c. Discharge of blood from the ears in strangulation and hanging is attributed by Wilde and Geoghegan of Dublin (who first directed attention to the subject), to simultaneous rupture of the mucous membrane of the middle ear and of the membrana tympani. In a figure given by Wilde, the laceration is cordiform, and is situated close to the tubercle of the malleus. In this same category must be placed the otorrhagia experienced in ascending mountains or descending valleys. The sudden diminution or increase of the atmospheric pressure on the tympanum may produced its rupture, or may permit the blood to escape from its thin capillaries.

II. *Surgical Traumatic Causes.* In sounding the Eustachian tube, however little the membrana tympani may have been softened by chronic inflammation—generally strumous—its rupture readily takes place, and gives rise to an immediate and abundant discharge of blood. In other cases, the surgeon produces a discharge of blood for therapeutical purposes; as in puncture of the membrana tympani to evacuate mucous or purulent collections in the middle ear; or in scarification of the mucous membrane of the external meatus. Discharge of blood may also arrest the surgeon's proceedings in his attempt to extract foreign bodies from the ear, either in consequence of the membrane being lacerated by his instrument, or more frequently because, by attempting to seize the foreign body, it has been roughly pushed back into the middle ear, through the membrana tympani, which has been lacerated or destroyed in the attempts at extraction made by the surgeon himself or without his knowledge.

B. *Pathological Otorrhagiæ.* 1. First among these comes the discharge of blood, often mixed with pus, which takes place from the ear during severe attacks of fever, as typhoid, small-pox, etc.

2. Granulations of the auditory canal, which almost always accompany chronic catarrh, often give rise, in weak, lymphatic, or strumous subjects, to discharges of blood, sometimes rather abundant. M. Triquet was lately consulted by a student, who had, in this way, lost at one time more than two ounces of blood. The source of the hæmorrhage is readily ascertained by examination with the speculum in a good light.

3. When old ceruminous concretions, condensed, and almost as hard as flint, have for a long time pressed against the walls of the canal, on which they are moulded, the epithelium, softened and adherent to the morbid mass, is ordinarily detached with it, either whole or in pieces, under the influence of means employed for this purpose. The sudden exposure of the papillary layer of the lining membrane of the meatus very often produces slight hæmorrhage, which is indeed of no importance, but frightens the

patient, and may cause him to lose confidence in his surgeon.

4. In chronic otitis, generally in scrofulous cases, accompanied by destruction of the membrana tympani, with granulations of the mucous membrane of the middle ear, rather obstinate hæmorrhage is apt to occur during coughing in bronchitis or pertussis, or during crying in children, etc. The sudden flow of blood which then takes place towards the head produces congestion of the granulations of the middle ear, and produces rupture of some of the capillaries. Hæmorrhage is also produced in attempts to explore these granulations by a fine instrument, for the purpose of discovering their number, consistence, seat, etc.

5. In the same manner, hæmorrhage from the ear is produced in the exploration of polypi and fungous growths in the ear by means of a stylet or sound. It is, however, impossible to gain an accurate idea of their depth, or of the number of their roots, without employing this method of exploration.

6. Caries and necrosis of the petrous bone, scrofulous abscesses, and the secondary otitis which attends severe attacks of fever, may produce fatal hæmorrhage from the ears. Thus, when the necrosis involves the carotid canal, blood escapes in abundance through the ear if a spiculum of bone wound the internal carotid. In such cases, hæmorrhage has always been followed by death, notwithstanding the application of all the resources of surgery, including ligature of the common carotid. Cases of this kind have been related by Porter (Graves's *Clinical Medicine*), by Syme (*Edin. Monthly Journal*), and by Toynbee (*Descriptive Catalogue*).

7. Fungous growth of the dura mater may, after destroying the membranes and the bone, penetrate into the cavities of the ear. A prolongation of the growth may project into the external meatus and give rise to hæmorrhage, and thus mislead even an experienced practitioner, as happened in some cases mentioned by Thibault.

C. *Supplementary or Substitutive Hæmorrhage.* Hæmorrhage from the ear may replace a normal flux, such as the catamenia; or it may follow accidental discharges, as those from piles, old ulcers, etc.; or it may supplement imperfect menstruation. Hæmorrhages from the nose, mouth, or eyes, have also been observed to bear the same relations to the catamenia. M. Triquet was once consulted by a young lady 17 or 18 years of age, who had a discharge of blood from the left ear at each menstrual period. On careful examination, the right ear was found to be perfectly healthy. In the left ear, the membrana tympani was almost entirely destroyed; and the middle ear was filled with large reddish granulations, from the surface of which the blood escaped. The patient's mother stated that, when a child, she had had a purulent discharge from the left ear; that it existed at the time of her first menstruation, and was then replaced by the sanguineous discharges. In the intervals between the catamenial periods, the purulent discharge reappeared—the two discharges thus alternating. M. Triquet has since observed two similar instances.

The *differential diagnosis* of discharges of blood from the ear under various circumstances often presents great difficulties. In otorrhagia attending fracture of the petrous bone, the surgeon is guided by the history of the case, in which there has been a fall or blow, immediately followed by a sanguineous discharge from the ear; and his diagnosis is confirmed by the presence of other signs of injury of the head. The same course of investigation is to be followed in the case of foreign bodies in the ear. The surgeon will find that the patient has introduced into his ear a pin, a needle, a piece of glass, etc.; or that he has slept in the fields during the summer, and that on awaking he has felt pain, accompanied by a flow of blood. In this case, we may be certain that an insect has entered the auditory canal, and that the puncture made by it is the source of the hæmorrhage. Moreover, a careful examination with the speculum will render the diagnosis certain. When the hæmorrhage arises from rupture of the membrana tympani during hooping-cough, catheterism of the Eustachian tube, strangulation, etc., the nature of the case will be readily learned.

But the difficulties of diagnosis become far more serious, when we have to determine the cause of the discharge which sometimes accompanies chronic diseases of the ear. If there be an indurated ceruminous mass, simple examination with the speculum will be sufficient; but if granulations, a fungous growth, or a polypus come into view, the differential diagnosis is sometimes very obscure. If, however, the patient be scrofulous, and have chronic otorrhœa, the discharge of blood will have its source in granulations of the mucous membrane of the middle ear; and this fact may always be ascertained by examining the ear with a speculum, and introducing a probe, which, on touching the granulations, will at once produce hæmorrhage, as it will also do in the case of polypi or fungus. In cases where fungus of the dura mater projects into the ear and gives rise to hæmorrhage, the diagnosis is surrounded with very great difficulties; and the existence of a fungus of the dura mater cannot, in truth, be rationally suspected until a projection is seen on the skull. The other symptoms, such as headache and pain, may be absent; and other signs are too uncertain. Hæmorrhage arising from caries or necrosis of the petrous bone, or from secondary scrofulous abscesses, may be easily recognised by examination with the speculum and a probe: the greatest gentleness, however, is necessary, as the sequestrum of the petrous bone may be very readily displaced, and perhaps produce a fatal wound of the internal carotid. In otorrhagia supplementary to menstruation, the coincidence of the discharge with the catamenial period will remove all doubts as to diagnosis, and will afford sure indications as to treatment.

The *prognosis* is grave in all cases; because the life of the patient may be endangered, as in fractures of the skull, in fungous growths, and in necrosis of the petrous bone. And, even where life is not threatened, there is still room to fear that the patient will become more or less deaf, as in laceration or destruction of the membrana tympani, which necessarily deranges the arrangement of the auditory ossicles, and more or less complete abolition of the sense of hearing. (*Gaz. des Hôp.*, Jan. 19, 1864.)

Diagnosis of Embolism. At a meeting of the Surgical Society of Paris on December 23rd, M. Broca communicated some observations which he had made on the temperature of limbs in which the principal artery has been obliterated. [Some previous observations made by him on this subject are noticed in the British Medical Journal for February 22nd, 1862.] His object was now to relate a case, showing that thermometric examination will determine when gangrene in a limb is not due to embolism. An old woman had on her foot a slight sore, which became covered by a persistent cicatrix. On December 4th, severe pain was felt in the leg; she had fever, and a black phlyctæna was formed round the crust. On application of the thermometer, it was ascertained that there was a fall of 1° cent. in the entire limb; whereas in embolism the temperature is only affected below the seat of obstruction. Death occurred ten

days afterwards. On *post mortem* examination, there was found to be an atheromatous state of the femoral artery; and its calibre was reduced to the size of the radial by the deposition of fibrinous layers in its interior. The artery was completely obliterated by a clot which had lately formed, and which was the cause of the gangrene. The successive deposition of fibrine explained the gradual retardation of the circulation of the limb. (*Gaz. des Hôp.*, Jan. 5, 1864.)

TREPHINING THE MASTOID PROCESS. M. Follin has communicated to the Surgical Society of Paris the history of a case in which the mastoid process was trephined, for abscess of the mastoid cells consecutive on inflammation of the middle ear. The patient, aged 44, was habitually of good health; but from his youth had been subject to throat-affections, and latterly scarcely a year had passed without his having one or two attacks of acute angina, generally ending in abscess. After one of these attacks, occurring in March 1863, he was seized suddenly, early in April, with severe pain in the right ear. Three days afterwards, there was an abundant purulent discharge from the ear; and he was deaf. During six weeks, the pain was incessant and unbearable; it extended to the whole of the right side of the head, and was accompanied by fever and delirium, especially at night. During the next six months, the discharge and deafness continued, but the pain diminished slightly, presenting exacerbations and remissions. At the end of first month of the disease, a slight swelling was observed in the right mastoid region; and pressure on this part caused pain. Latterly, the skin here had assumed an erysipelatous redness; and the pain had increased. A medical man applied a seton below the mastoid region; this had no effect on the main disease, but seemed to allay the pain a little.

The patient now came to Paris to consult M. Follin. At this time, the mastoid region was swollen, reddish, and tender to the touch; pus escaped abundantly from the ear; and the patient, tormented by incessant pain in the right side of the head, had sleepless nights. There was no abscess apparent externally, nor any fistulous passage. M. Follin arrived at the conclusion, that there was pus in the mastoid cells, and advised the use of the trephine. Accordingly, on November 18th, a crucial incision was made over the mastoid region; and the four flaps were carefully dissected back so as to expose the bone. The periosteum having been also divided and raised, a small trephine was applied, and a piece of bone, seven *millimètres* (rather more than a quarter of an inch) in diameter was removed. The mastoid cells were then seen to be filled with a large quantity of pus. M. Follin then enlarged the edges of the opening in the bone so as to give it a conical form, and introduced some charpie; the edges of the incision were kept apart to prevent too rapid cicatrisation; and simple dressing was applied.

The next day, pus had ceased to be discharged from the ear, and the pain in the head ceased. The wound suppurated gradually, and granulations soon appeared. The pus contained in the mastoid cells escaped regularly; and the otorrhœa entirely disappeared. The only accident during the patient's recovery was very slight inflammation of the cervical glands. A month after the operation, the opening was entirely cicatrised; and the patient was relieved of all his symptoms, continuing, however, deaf in the right ear—which is not astonishing, when it is considered what an extensive amount of disease must have existed prior to the operation.

In two other cases, formerly communicated to the same Society by M. Follin, trephining of the mastoid process was performed successfully in similar circumstances; but in these there were also fistulous openings in the mastoid region. (*Gaz. des Hôpitaux*, Jan. 5, 1864.)

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on THURSDAY, the 10th of March, at a quarter before Three o'clock P.M., *for Three precisely.*

Business.—To receive the Treasurer's Financial Report.

To appoint Adjudicators of the Annual Prize Essays.

To fix the time of the Annual Meeting.

Any other business which may be brought forward.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, 23rd February, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BIRMINGHAM AND MIDLAND COUNTIES. [Ordinary.]	Medical Department of the Birmingham Library.	Thursday, March 10th, 6 P.M.
NORTH WALES. [Intermediate.]	Dr. Davies's House, Holywell.	Tuesday, March 22nd, 1 P.M.

Reports of Societies.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FEBRUARY 5TH, 1864.

A. W. BARCLAY, M.D., President, in the Chair.

VESICO-UTERINE FISTULA: PREGNANCY AFTER CLOSURE OF THE OS UTERI BY OPERATION.

BY JAMES R. LANE, F.R.C.S.

IN November 1862, the author had read a communication to the Society, on the subject of Vesico-Uterine Fistula, embodying the earlier history of the case in question, the sequel of which had been most singular and unexpected.

The patient, who stated her age to be 45, was first admitted into St. Mary's Hospital in May 1862, with incontinence of urine, the result of a protracted labour four months previously. On investigation, the escape was found to take place through a fistulous communication which had been established between the bladder and the canal of the cervix uteri, about half an inch above the os. In consequence of the inaccessible position of the fistula, the only safe and feasible mode of relieving her appeared to be to close the os uteri by a plastic operation, leaving the fistula itself uninterfered with, and depending upon it to afford an outlet through which the menstrual fluid could escape into the bladder. This was accordingly done on May 14th, 1862, the patient having been told that it would render future pregnancy impossible. The edges of the os uteri were denuded and brought together with silver wire sutures; and the success of the operation was complete. The incontinence of urine was arrested from that moment; the wound healed soundly; and she left the hospital quite well in three weeks. About a week after the operation, menstruation came on; and the discharge took place through the bladder, mixed with the urine, without pain or inconvenience. This was continued in the same way

for three sucessive periods, in July, August, and September; after which she ceased to menstruate, and the extraordinary part of her history commenced.

Towards the end of the year 1862, she again applied to Mr. Lane, informing him that she had ceased to menstruate since September, and that she was increasing in size. She had still perfect control over her urine, and the os uteri appeared firmly closed; but there was an evident tumour in the hypogastric region, which appeared to be an enlarged uterus. The conclusion arrived at from these facts was, that the fistulous opening had spontaneously closed, or had become in some way blocked up, and that the menstrual fluid had accumulated within the uterus, and was the cause of the enlargement. Pregnancy, with the os uteri firmly closed, seemed to be out of the question. The appropriate treatment, therefore, appeared to be to re-open the os uteri, to allow the accumulation to escape; when, supposing the fistula to be really closed, she would be restored to her original and normal condition. This was accordingly done on January 10th, 1863, but not without some difficulty, owing to the firmness and thickness of the uniting medium. Nothing but a few drops of blood appeared when the puncture was made; but a considerable quantity of watery fluid escaped during the same afternoon. It, however, ceased in a short time, and was not repeated. On the second night after the puncture, she was taken ill; and, to the surprise of every one, a fœtus of about four months date made its appearance. The watery discharge which followed the puncture was, therefore, doubtless the liquor amnii, and was thus clearly accounted for. The patient recovered rapidly from her miscarriage; but the cicatrix of the operation was of course completely broken down, and the os uteri widely reopened. The urine escaped through it precisely as before the first operation, thus showing that no change had taken place in the condition of the fistula.

She left the hospital after this; but soon returned, with an earnest desire to have the original operation repeated. This was done on March 4th, 1863, in the same way as before, and with the same result. The incontinence was again completely cured; she again menstruated through her bladder, and continued to do so regularly for six months after the operation; since which time she has not made her appearance at the hospital.

The question was, how impregnation could have been effected in this case. It had been suggested, that the semen might have passed through the urethra and bladder into the uterus. The author, however, was more inclined to the belief that some minute capillary communication might have existed through the os uteri, or in its neighbourhood—possibly along the tract of one of the wire sutures. If this were the true explanation, it was a very curious and interesting fact, that an aperture, which was so minute as to be quite undiscoverable by repeated examination, and which never gave vent to an appreciable amount of urine or menstrual fluid, should have sufficed for the purpose of impregnation.

With reference to the question, whether it was right to repeat the original operation, seeing that it had failed in permanently effecting its object, and had not prevented impregnation, the author observed that, in his judgment, it was the best thing that could be done; first, because he believed that the pregnancy in this case was entirely an exceptional occurrence, and not likely to recur; and, secondly, because it was the only safe means by which the patient could be relieved, with tolerable certainty, from the distressing condition in which she was placed.

Correspondence.

IRIDECTOMY.

LETTER FROM S. BROWNE, L.K.&Q.C.P.I.

SIR,—When at first I read Mr. Bowman's rejoinder to my communication on the subject of iridectomy, I felt disposed not to notice it; but, upon further consideration, I am led to believe that I should not pass it by in silence, lest Mr. Bowman might construe that silence to mean discourtesy, and also lest the readers of your JOURNAL, who might not take the trouble of comparing my letter with the reply to it, should consider the criticism fair and candid; while I cannot regard it in that light, but as based mainly upon assumptions for which my letter does not afford reasonable pretext. With your permission, therefore, I shall now briefly take a survey of Mr. Bowman's contribution which was published in the BRITISH MEDICAL JOURNAL on February 20th.

In limine, I may say that the allusion to me as "so imposing an authority" is not justified by the views which I had endeavoured humbly to set forth, nor by the fact that Mr. Haynes Walton's able work on the *Diseases of the Eye* had been dedicated, in a friendly spirit, to myself. No one should know better than Mr. Bowman that the mere fact of having had a book, though the best of its kind, dedicated to me, gives me no claim whatever to be considered an authority, much less an "imposing authority", on the subject of which it treats! Hence, to use Mr. Bowman's expression, I must "unaffectedly disclaim" the compliment.

In replying to my letter, Mr. Bowman has avoided reference to the pertinent questions which it has raised, and, in his quotations from it, has left out those portions which he perhaps could not conveniently answer; while again, in some instances, he assumes what my letter does not admit, yet thence draws conclusions which are inaccurate.

A few brief references to my former communication will suffice to establish the preceding observations. "For several years I have devoted considerable time and attention to learn, if possible, the *exact* nature of the disease of the eye named glaucoma by the iridectomists"—so far Mr. Bowman quotes, but he omits "and to comprehend the *rationale* of the operation said to be successful in restoring sight which had suffered injury, or had been lost, through that affection. Well, the result of my inquiries and experience is, that the so-called glaucoma has not yet been accurately defined, not has the operation for its 'cure' been yet based upon the recognised principles of scientific surgery. It is true that various writers upon the subject have endeavoured to enunciate the one and to expound the principles of the other; but these have differed so widely, both in the pathology of the disease and in the *rationale* of the operation, that it must be obvious to an unprejudiced observer, which I claim to be, that in the school of the iridectomists there is not yet any settled understanding, no determinate principles upon which its disciples fully agree." Thus it will be seen that Mr. Bowman has left untouched the *very question which it behoved him to reconcile when he noticed the sentence.*

Again, I wrote: "In some of those cases I have referred to as glaucomatous, I performed, with all the care I could exercise, the operation of removing a portion of the iris—about a sixth of its extent; and although, by this step, I have alleviated, in some cases only temporarily, the suffering of the patient, I regret that I have not in any instance been able to

restore the sight to a more perfect condition than I had produced by medical treatment and by evacuating the aqueous humour." Now, will it be believed that Mr. Bowman's notice of this paragraph amounts to the assertion that "the natural conclusion is, that this destructive disease had virtually run its course before the tardy remedy was applied, and that his operation must have been performed when little or no rational hope could have remained of the recovery of sight? So that no one need be at all surprised, when Dr. Browne insists upon his own experience of iridectomy in the treatment of glaucoma having only afforded him negative results. We might rather have been surprised had it been otherwise." Now, what evidence does my letter afford that the cases which I selected for operation were those in which "this destructive disease had virtually run its course"? There is none.

Again, because I have not specially referred to the "premonitory signs" of glaucoma, Mr. Bowman assumes that I cannot have yet recognised them. Just so! And thus, throughout his *critique*, he fully realises the expectations that I had formerly expressed; viz., "that after all these observations, I may be told, *as others have been*, that I am incapable of recognising a truly glaucomatous condition of the eye, and hence that I cannot appreciate the *nice* principles of iridectomy"! In fact, take his letter throughout, and he complacently ignores my knowledge, and by implication, in more than one paragraph, he infers that I know very little about the subjects of glaucoma and iridectomy. I may make bold to ask Mr. Bowman this question: Does he consider himself and those of his school to be the only ophthalmic surgeons who are competent, careful, and truthful observers? And are the several writers who have disputed his views, among whom are several distinguished English and Irish surgeons, held by him to be incapable of recognising the true features of glaucoma? If they are all ranked in the same category with myself, then I am in respectable company, and may rest contented.

I hope, however, that Mr. Bowman will endeavour to reconcile the following statement with the fact that the acute stage of glaucoma, *not the "premonitory"*, has been frequently recommended by the iridectomists as that in which the happiest results might be anticipated from their "brilliant operation". He says: "It is also very well known *now* that the acutely inflammatory glaucoma is, in the greater number of instances, preceded by a *premonitory period*" (the italics are mine), "in which there is either *no apparent inflammation*, or but very little; and that *it is particularly important* not to overlook *the disease at this stage*, inasmuch as iridectomy *is especially valuable before the severe inflammation sets in*, which is attended by its own special hazards of spoiling the structures it involves"! The illogical character of this sentence I may let pass; but I must inquire about this change in the views of the iridectomists; for while, some time back, the acute stage of glaucoma was stated to be *the proper* time for operating, "now *we*" (the iridectomists) "know better", and the *premonitory period* is the occasion when the surgeon should interfere to prevent the eye from being "*spoiled*". I very much fear, however, that any such interference would be, and is, when carried out, unwarrantable, and would be also the certain method, not the mere hazard, of "spoiling" the eye. The recommendation, in fact, amounts to this: *Mutilate* the eye that has only slight "premonitory signs" of glaucoma, in anticipation of the hazard that might possibly spring from the "spoiling" process of inflammation—inflammation that may never arise!

"Concerning the *ophthalmoscopic signs* of glaucoma, Dr. Browne is absolutely silent." So writes Mr. Bowman, and implies that I am not, consequently, acquainted with the use of that valuable instrument. My silence leads not legitimately to any such conclusion, and I must deny the impeachment. I may, however, say that until the *exact* pathology of the so-called glaucoma shall have been more clearly defined and *settled* among the iridectomists than it is at present, *ordinary* observers will labour under considerable difficulty with regard to the value of these "*ophthalmoscopic signs*".

Then, again, "concerning *tension*," Mr. Bowman says, that Dr. Browne has taken "pains to explain that he is unable, by means of touch, to discriminate between glaucomatous and various other diseases"—I presume, he means of the eyes. Well, I have no hesitation to repeat the confession, and to express my belief also, that no other person can make any such discrimination by the sense of touch alone. In a foot-note, on this question, he says, "I allow *augmented tension* in certain forms or stages of these"; viz., "acute choroidal, corneal, and iritic inflammations"; but then comes the saving clause; for he adds, "*where there is glaucomatous complication.*"

Oh! then Mr. Bowman *does "allow"*—I presume he means he admits—that "*augmented tension*" is to be found in "acute choroidal, corneal, and iritic inflammation"; but always "where there is glaucomatous complications." Now, may I ask, how he discovers, in a case of acute inflammation of the deep tissues of the eye, when these "glaucomatous complications" exist, and when they are not present? To the uninitiated, of whom I am one, the exact method of making the discovery would be important information.

And now, sir, before I conclude, I beg to remind Mr. Bowman, with all respect, that while, as I have already said, I do not demur to his holding his own views regarding my competency or incompetency of dealing with the subject under discussion, I must be permitted to say, that he exceeds the limits of courtesy when he proceeds to lecture me thus: "It appears to me probable, that glaucomatous diseases in Belfast must pretty much resemble those of other places; and that, by *laying aside natural prejudices*"—why not add *national?*—"*and taking some moderate pains to acquire a practical acquaintance with the physical and other signs of glaucomatous types of disease*—as they have been very graphically and now repeatedly described—any surgeon, *and particularly one accustomed to* (*query*, the study of?) *eye-diseases, may easily master the diagnosis.*" In other words, I am to sit down at the feet of Mr. Bowman, and learn the *a b c* of ophthalmic surgery from him. I have no objection to be taught; but I object to be taunted in the terms which I have italicised in the preceding quotation. Let Mr. Bowman lay aside the style in which he at present combats the views of those who do not agree with him, but who are not personally his opponents; let him endeavour to reconcile the conflicting opinions which have appeared among the writers who have taken part in this discussion, and who are of the school which he leads, though he "unaffectedly disclaims" the leadership. Let him give us a *plain, brief, unequivocal* description of the exact pathology of the disease now called glaucoma; and, above all, let us hear how it is that iridectomy—an operation that must, more or less, mutilate the eye—effects a "cure" of glaucoma in its several stages, from the premonitory period to the stage of the disease when the eye has become considerably altered in structure. All surgery, worthy the name of scientific surgery, is based upon definite principles; let us know what are the definite principles of iridectomy, and then we are likely to listen to its advo-

ates; then, and not till then, shall I believe that I ave held "mistaken views" of glaucoma and its cure"; then only, and not till then, could I alter the ethod of treating diseases of the eye which I have itherto conscientiously pursued.

I am, etc., S. Browne,

Surgeon to the Belfast General Hospital, and to the Belfast Ophthalmic Institution.

Belfast, February 27th, 1864.

FELLOWSHIPS OF COLLEGES AT CAMBRIDGE.

Letter from G. M. Humphry, M.D., F.R.S.

Sir,—In the (communicated) leading article of last week, reference is made to fellowships at Oxford and Cambridge as examples of what medical prizes ought to be; but sufficient account is not taken of the advantage which these fellowships might be to the medical profession, if a greater number of those who propose to enter it sought to obtain them. True, they are not directly prizes for medical study; but they are prizes for excellence in those branches of general education which form the best foundation for medical study.

The writer remarks, that "they come more especially in the way of those entering the Church and the Law." This is chiefly because these constitute the great proportion of the candidates for them. The fellowships are given without reference to the future profession or walk in life, simply to the best men—the men who excel in the classical or mathematical examinations—increasing respect being paid to natural science; and one would think the studies and mental training which lead to them would be as advantageous to the medical as to the clerical or legal aspirant; and that the proceeds of a fellowship would be no less appreciated by the one than by the others. Some have been alive to this. The President of the Medical Council, the President and the Treasurer of the College of Physicians, Drs. Budd, Herbert Davies, and Henry Thompson, of London, Dr. Piggott of Halifax, Dr. Ogle of Derby, Drs. Clark, Paget, Drosier, and Latham, of Cambridge, besides others whose names do not occur to me, are, or were, Fellows of Colleges in Cambridge; and, doubtless, their fellowships contributed not a little to the acquirement of their several positions, and that partly in the manner desired by the writer of the article above mentioned—viz., by enabling them to continue their education longer, and attain to greater excellence than they could otherwise have done. At the present time, two Fellows of Colleges are pursuing their medical studies in Cambridge. They commence those studies rather later in life than is usually done; but they are more than compensated for this by the vantage-ground from which they start of superior general education, high mental training, a good prestige, and £200 or £300 a year.

It has always been a matter of surprise and regret to me, that a greater number of those who are intended for our profession do not avail themselves of the educational and other advantages offered by the Universities; of surprise, because the expense involved in so doing is not great, not so great as usually supposed, and is often more or less repaid by exhibitions, scholarships, fellowships; of regret, because we lose in quality and status for the want of a larger infusion of university blood into our body. For the intelligent and industrious student, the Universities are, I believe, the very best entrance to the profession. Even if he fail to gather those golden apples, of which there is so abundant a crop, he is sure to bear away still more valuable fruit, that will stand him in good stead for the remainder of his life.

It is not altogether correct that "a fellowship must be given up on the marriage of the owner"; for, within the last few years, an alteration has been made in the statutes of several of the Colleges, permitting the Fellows to marry and retain their fellowships for a certain period (ten or twelve years), or for life. Two of the physicians resident in Cambridge are married Fellows of Colleges.

I am, etc., G. M. Humphry.

Cambridge, February 29th, 1864.

INSANE PRISONERS ACT AMENDMENT BILL.

Letter from Septimus Gibbon, M.B.

Sir,—The Committee recently appointed by the Metropolitan Counties Branch, to watch Bills introduced into Parliament affecting the profession, have at present the above under consideration. The interests of psychological medicine are well represented on the Committee; but there is one point on which the practical experience of medical officers to prisons would be of assistance to the Committee—viz., whether it would be for the interests of truth and justice to have an extra and statutory fee, defined by the legislature, for deciding as to a prisoner's sanity before or after conviction. This is responsible work, and in many cases would involve much labour on the part of the medical assistants of the two visiting justices. Is it desirable that a proper or minimum fee for each case should be fixed by Parliament? or that the medical officer of the gaol and the medical superintendent of the asylum, with their respective coadjutors, should trust to the liberality and discretion of the justices or Home Secretary to award a fee proportionate to the difficulty of each case? After the recent scandal of Townley's case, surely the legislature would not object to enact that a minimum fee of £2 : 2 or £3 : 3 should be paid in every case. Unless this be done, I fear that some members of the profession may have extra labour of a very responsible nature thrust upon them, without any addition to their salaries as surgeons to prisons or superintendents of asylums.

If associates interested in this or any other feature of the Bill will transmit their opinions to me before the 10th inst., I shall be happy to lay them before the Committee. I am, etc.,

Septimus Gibbon.

3, Finsbury Square, February 29th, 1864.

Insane Prisoners Act Amendment Bill. On the motion in the House of Commons for agreeing to the report of committee on this bill, Mr. Hunt said that when the bill was in committee he had stated that "Dr. Forbes Winslow had based his opinion of Townley's insanity chiefly on his extraordinary perverted moral sense." It had been represented to him that this was not a correct statement of Dr. F. Winslow's theory of the case, which was that there was great moral obliquity in Townley, and with this a mental aberration; and, viewing these conjoint conditions, Dr. Forbes Winslow came to the conclusion that he was not of sound intellect. He (Mr. Hunt) did not see much variance between this correction and what he had himself stated, but he was anxious not, in any degree, to misrepresent Dr. Forbes Winslow to the House. He protested against moral obliquity being taken into consideration at all in estimating the sanity or insanity of a prisoner. This bill was read a second time in the House of Lords on Monday last.

Medical News.

APPOINTMENTS.

ROYAL NAVY.

ACHESON, John J., Esq., Staff-Surgeon, to the *Cornwallis*.
DEVONSHIRE. Charles J., Esq., Assistant-Surgeon, to the *Ranger*.

HIDE, John, Esq.
MOSS, Edward L., M.D.
POWER, William M., Esq.
PURSELL, Thomas, Esq.
TERRY, Septimus, Esq.
WRIGHT, George V., M.D.
} Acting Asssistant-Surgeons, to the *Victory*, for Haslar Hospital.

BURGESS, Richard, Esq.
MITCHELL, Alexander, M.D.
PRINGLE, John, M.D.
REDFERN, Thomas, M.D.
SWEETMAN, Richard J., Esq.
} Acting Assistant-Surgeons, to the *Royal Adelaide*, for Plymouth Hospital.

BIRTHS.

MACKENZIE. On March 2nd, at Sidmouth, the wife of *J. Ingleby Mackenzie, M.B.Cantab., of a son.
SHAW. On February 26th, at Sutton Coldfield, Warwickshire, the wife of *H. E. F. Shaw, Esq., of a daughter.

DEATHS.

BRISTOWE, John S., Esq., Surgeon, at Camberwell, aged 70, on February 29.
HIFFERNAN, Richard P., Esq., Assistant-Surgeon R.N., at Newport, county Tipperary, on February 25.
JACOB, John, M.D., of Maryborough, at Falmouth, on Feb. 26.
MURRAY, Peter, M.D., at Scarborough, aged 81, on February 27.
STILWELL. On February 26th, his birthday, aged 28, Edward, third son of *George Stilwell, Esq., Epsom.

DISEASES OF CATTLE BILL. The second reading of this bill is postponed until Wednesday, March 9th.

UNIVERSITY COLLEGE HOSPITAL DINNER. Mr. Dickens has promised to take the chair at the annual festival of the University College Hospital on April 12th.

THE ZAMBESI EXPEDITION. The Cape mail, just arrived, brings no news of Dr. Livingstone. Dr. Meller, of the Zambesi exploring expedition, has returned to England by the steamer Saxon.

BIRTHS IN LONDON. Last week the births of 1019 boys and 981 girls, in all 2000 children were registered in London. In the ten corresponding weeks of the years 1854-63 the average number (corrected) was 2057.

DEATHS IN LONDON. An infant, aged 3 weeks, was last week poisoned by a lozenge which contained the forty-eighth part of a grain of morphia. A child, aged 2 years, died from the scratch of a kitten. Nine nonagenarians died in the week.

HEALTH OF THE METROPOLIS. The deaths in London were more numerous in the week that ended last Saturday than they had been in any previous week since January. They rose to 1677. The average number of deaths for the eighth week of ten previous years is 1467. While the mortality from phthisis (157) is considerably less than it was in previous weeks, that from bronchitis is greater. The present season has developed bronchial affections with unusual effect.

VACCINATION OF SHEEP. In the House of Commons some days ago, Sir J. C. Jervoise asked whether the experiments in vaccinating sheep were yet concluded. Mr. Lowe said that the experiments in vaccinating sheep concluded last Michaelmas, and the result was unsatisfactory. The experiments had been of two kinds. One had consisted in vaccinating sheep with lymph taken from the human subject, and this had succeeded in some measure. The sheep took the disease, though in an irregular and abnormal form; but still the sheep took the virus either by inoculation or in the natural manner from other sheep, so that vaccination thus accomplished appeared to be futile. The next plan was to inoculate cows with matter taken from sheep, in order, if possible, to produce a vaccine disease in cows which would stand in the same relation to sheep as cow-pox does to the human subject. But this also entirely failed; and therefore the result of the experiments was altogether unsatisfactory.

PRESENT TO THE PRINCESS OF WALES. Sir John F. Palmer, President of the Legislative Council of Victoria, has forwarded, for presentation to her Royal Highness, through his grace the Duke of Newcastle, Secretary of State for the Colonies, a magnificent casket, richly wrought, in pure silver. Sir John Palmer, who is a member of the Royal College of Surgeons (1826), practised for some time in this country, and is well known as the editor of John Hunter's works.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY. The annual general meeting, for the election of officers and other members of the council for the ensuing year, and to receive the auditors' report and the report of the council, was held on March 1st. The following gentlemen were elected officers:—*President*—R. Partridge, Esq., F.R.S. *Vice-Presidents*—Arthur Farre, M.D., F.R.S.; W. R. Basham, M.D.; J. Hilton, Esq., F.R.S.; W. Fergusson, Esq., F.R.S. *Treasurers*—H. A. Pitman, M.D.; J. Dixon, Esq. *Secretaries*—H. W. Fuller, M.D.; J. Birkett, Esq. *Librarians*—A. P. Stewart, M.D.; H. Lee, Esq. *Other Members of Council*—S. J. Goodfellow, M.D.; W. W. Gull, M.D.; W. Jenner, M.D.; E. Meryon, M.D.; F. Sibson, M.D., F.R.S.; H. Coote, Esq.; G. V. Ellis, Esq.; C. H. Moore, Esq.; E. Newton, Esq.; J. Toynbee, Esq., F.R.S.

INDIAN MEDICAL SERVICE. On Thursday week (February 25th), Mr. Leslie asked the Secretary of State for India upon what grounds the Royal warrant for her Majesty's Indian medical service had been so long delayed, and when the said warrant would be issued. Sir C. Wood replied that a warrant had been prepared for the purpose of placing on the same footing medical officers in the Queen's military service and in the service of India; but a doubt having been suggested whether the warrant did not involve an infringement of an act of parliament, it had been referred for the opinion of the law advisers of the Indian Council.

POISONING BY ABSORPTION. On Saturday last was concluded an inquiry into the death of a child named Boatman. The deceased was aged 9 years, and lived with her father and stepmother in a lonely situation. The child was taken ill, gradually got worse, and died soon after a medical man was called in. The surgeon (Mr. Haward) believing that the child had died from the effects of some irritant poison, probably arsenic, refused to certify the cause of death. The stepmother stated that about ten days before the death of the child she applied some precipitate powder and a little poison in the shape of an ointment to the head to kill the vermin. The coroner ordered a *post mortem* examination, and the appearance of the intestines and stomach pointing to arsenical poison in some form or other, it was felt important to ascertain whether the child died from arsenical poison, and if so, how it was administered. The viscera were accordingly sent to Professor Taylor, at Guy's Hospital, and that gentleman stated at the inquest on Saturday that the child died from arsenic applied externally and absorbed into the system. The condition of the viscera, in their appearances, in the nature of their contents, and in the minute imponderable quantity of arsenic present in them, was not consistent with the supposition that arsenic had been given in a solid form or-

a liquid form by the mouth, but it was quite consistent with the absorption of the poison through the skin of the scalp, and its subsequent diffusion by the blood. The scalp of the deceased was found to contain a large quantity of arsenic associated with a quantity of mercury (white precipitate) which had been applied as above stated in the form of an ointment. The jury returned a verdict to the effect that the deceased died from the results of an ointment containing arsenic applied to her head by Mrs. Boatman, she being ignorant of the consequences, and intending merely to heal disease of the scalp; at the same time the jury desired the coroner to express to Boatman and his wife their sense of the neglect and ill-treatment of the deceased.

Guy's Hospital Biennial Festival. This biennial festival, which is always eagerly looked forward to by Guy's men, was held at the London Tavern, on the 24th ult., under the presidency of Dr. Alfred Taylor, F.R.S., and was one of the most successful meetings which has ever taken place. Nearly two hundred of the past and present pupils assembled on the present occasion, numbering amongst them many of the most respected and successful practitioners of London and the country. Amongst them were the Messrs. Toulmin of Clapton, Mr. Lord of Hampstead, Dr. Ward of Huntingdon, Mr. G. Cooper of Brentford, Dr. Ray of Dulwich, Mr. Faircloth of Newmarket, and many others. Amongst the visitors were the new President of the Hospital, Sir Laurence Peel, Mr. Thomas Turner, the Treasurer, and Mr. Thomas Chambers, the Common Sergeant of the City of London. Mr. Cazenove, one of the governors, was singled out for notice, and was called on to make a speech, this gentleman having taken great interest in the school, to which he gives annually a handsome prize. Mr. Critchett and Mr. Pollock were also present as guests; and nearly all the medical and surgical officers of the hospital. The dinner was excellent, and went off most successfully. The musical arrangements also were very good. It is a pity that such gatherings as the above are not more general amongst the medical schools; for they tend much to maintain the feeling of friendship and *esprit de corps* which is so desirable, and which is so strongly developed amongst all Guy's men.

Site of St. Thomas's Hospital. The question between the Corporation of London and the Governors of St. Thomas's Hospital has been raised by the filing of a bill in Chancery by the Governors against the Corporation of London, to restrain the Corporation from affixing the hospital seal to any instruments without the previous consent of the governors. This proceeding involved the question of the power of the Corporation to interfere in the matter of the future site of this charity. The selection of Stangate and the new ground to be gained by the Thames Southern Embankment as a site for the new hospital, received the sanction of Vice-Chancellor Sir P. Wood on Saturday. By the act of Parliament which authorised the sale of the old hospital to the Charing Cross Railway the governors of the hospital were empowered to select a site for another, subject to the approval of the Court of Chancery. Against the selection the Corporation of the City of London intervened, alleging that by ancient charter they had the control over the hospital, and further that the site selected was unhealthy. The Vice-Chancellor held that the rights of the City were, so far as the selection of site was concerned, set aside by the terms of the act of Parliament authorising the sale of the old hospital; and that no such presumption of unhealthiness in the site had been made out as to warrant the interference of the court on that score.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday.....Westminster Ophthalmic, 1·30 P.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London. 7 P.M., General Meeting; 8.30 P.M., Dr. W. Tilbury Fox "On the Classification of Skin Diseases."—Odontological Society.—Epidemiological Society, 8 P.M. Dr. Milroy, "Notes on the Epidemic Diseases of some of the Nations of India; also, on Certain Recent Epidemics Abroad"; Dr. Archibald Smith, "On the Tabardillo of Peru."—Entomological.

Tuesday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Bickersteth (Liverpool), "On a New Operation for obtaining Union of Ununited Fracture."—Zoological.—Ethnological.—Medical Society of London. 5 P.M., Anniversary, at Willis's Rooms; Oration by Dr. Thudichum; 6.30 P.M., Dinner.

Wednesday. Royal College of Physicians, 5 P.M. Dr. Barclay. Lumleian Lectures. "Fallacies in the Application of the Inductive Method of Reasoning to the Science of Medicine."—Geological.—Society of Arts.—Microscopical.

Thursday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal.

Friday. Royal College of Physicians, 5 P.M. Dr. Barclay. Lumleian Lectures. "Fallacies in the Application of the Inductive Method of Reasoning to the Science of Medicine."—Astronomical.—Royal Institution.

Saturday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Letters of Mr. Gaskoin and Dr. Bodington shall appear next week.

Physicians and their Fees.—Surely our correspondent will see, on reflection, that the College of Physicians would have only been too glad to have included under the bye-law, which prevents its Fellows having a legal claim for fees, both its members and licentiates. If the members or licentiates had shown any wish to be exempted from the power of claiming fees, there is little doubt that their wishes would have been attended to. But in the absence of any expressed wish on the part of the members and licentiates, it is very certain that it would have been an act of simple injustice for the Fellows, who legislate, to have included in the by-law the members and licentiates who have no voice in legislating.

COMMUNICATIONS have been received from:—Mr. Oliver Pemberton; Mr. Brodhurst; Mr. Nunneley; Mr. D. Kent Jones; Mr. H. E. F. Shaw; Dr. Bodington; Mr. J. Sladden; Mr. J. D. Hill; Mr. W. W. Morris; The Honorary Secretary of the Royal Medical and Chirurgical Society; Mr. Gaskoin; J. K. S.; Mr. William Martin; Dr. Leslie; Dr. G. M. Humphry; Dr. C. Holman; The Honorary Secretaries of the Epidemiological Society; The Registrar of the Medical Council; Dr. Routh; Mr. F. Haward; Dr. J. Ingleby Mackenzie; Mr. James Cole; The Registrar of the Medical Society of London; Mr. T. M. Stone; Dr. Sieveking; and Mr. J. Parsons.

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University of London, etc.—A

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Lectures

ON

CERTAIN MUTUAL RELATIONS OF PHYSIOLOGY, PATHOLOGY, AND THE PRACTICE OF MEDICINE.

BY

A. T. H. WATERS, M.D., M.R.C.P.,

PHYSICIAN TO THE LIVERPOOL NORTHERN HOSPITAL, ETC.

Lecture III. (*Concluded.*)

On the Pathology and Treatment of Certain Forms of Delirium. Therapeutics. The Physiological and Therapeutic Action of Alcohol. The Present State of Therapeutics, and the Direction which Therapeutical Inquiries should take, etc.

I MIGHT mention further illustrations of the principle to which I am referring, in regard to other remedies; but I must pass on to the consideration of another point in relation to therapeutics—the direction which our therapeutical inquiries should take. And I would observe that, valuable as the numerical method is in many questions relating to medicine, it is, perhaps, of least value in reference to therapeutics. That we shall ever arrive at any correct principles of treatment of a particular disease—such as pneumonia—by a system of tabulating mere results, I venture to express a doubt. Without the context of a case, the mere details of treatment are utterly useless as to the value of that particular plan in regard to other cases. Two cases of pneumonia—and I merely speak of this disease for the sake of example—lying side by side in the same ward, may require modes of treatment which differ materially from each other, as, by different constitutional symptoms, they show the different pathological states under which they occur.

Are we then wrong in tabulating our cases of disease, and in recording the results of our practice? By no means; but let us not be satisfied with a mere statement of the disease and of the result which follows our treatment. Rather let us give the symptoms which characterise the cases we relate, and the phenomena attending their progress, that others may judge as to the value of our therapeutic measures.

I think we should be wrong—that we should be attempting to put the practice of medicine on a narrow basis, a basis that would crumble under a superstructure of ever-accumulating facts—were we to endeavour to reduce the treatment of a particular disease, especially of an inflammatory kind, to one particular line of practice, or one particular set of remedial agents. It is not in this direction, except in regard to a few specific ailments, that our researches should be made. Rather we should endeavour to ascertain the therapeutic measures which are applicable to different pathological conditions, whatever be the individual disease with which they are associated. And is not this characteristic of a large portion of our practice—except, perhaps, in those cases of the pathology of which we are ignorant, and in which our treatment bears the stamp of much that is empirical?

There is a wonderful catholicity in disease; and to the recognition of this is due the fact, that in a vast variety of affections, we administer, not merely similar, but identical remedies. And to the ignorant and uninitiated a practice of this kind might seem simple, easy, and to savour much of mere routine; and yet it is most difficult, and indicates a high development of therapeutics, and a profound knowledge of the nature and causes of disease.

And in regard to another point arising out of the consideration of the subject—the specific action of medicinal substances — I think we shall probably better serve the ends of medicine by a careful investigation of the *modus operandi* of some of the remedies with which we are acquainted, so as to establish on sounder principles the particular pathological conditions to which they are applicable, than by a search after new substances, or new combinations of old compounds. It would, no doubt, be a great boon could we discover some new remedial agent possessing a specific power like that of quinine in ague, or even some decided therapeutic action in any disease whatever; but when we see the failure which has so constantly attended the progress of some vaunted nostrum—an alleged specific for a disease of whose pathology we are ignorant—we may well be excused for exercising a certain degree of scepticism in reference to the value of a remedy, which comes to us recommended by limited experience or hasty generalisation.

The careful investigation of the modes of action of many of the substances in common use might lead us to a more precise knowledge of their value, and teach us to use them in a more definite and scientific manner; and I cannot but hope that the therapeutic inquiry which has been commenced by our Association will meet with the encouragement it deserves, and be the means of establishing important principles of practice.

But whilst deprecating the excessive desire which seems to agitate the minds of some, in their search after new specifics, or new chemical compounds, let us by no means discourage the laudable ambition of enriching our *Pharmacopœia* with articles of sterling value. We must never forget that the present century has given us, through the agency of the chemist, a substance which is capable of annihilating the pangs of the most painful manipulations of surgery, and of obviating the tortures formerly incidental to all operative procedures. In the face of such a fact as this, we must be pardoned if we express doubt whether we have yet arrived at the limits of our therapeutical discoveries; and although we believe that we shall do more for the progress of medicine, by studying the effects of the remedial agents with which we are at present acquainted, than by a search after new ones, we would by no means discourage any legitimate endeavour in the latter direction. For, as with chloroform, so, possibly, with some of the other products which result from the labours of the chemist, and which, as yet, possess scarcely more than a scientific interest, they may, in course of time, and as they pass into the hands of the practical physician, add to our healing powers, and give us means of more effectually controlling certain forms of disease. And I think it is a matter of extreme satisfaction that, although we are not rapidly increasing the number of valuable medicinal materials, in another important direction, one which enables us

to use with greater certainty the remedies we already possess, viz., that of diagnosis, we are constantly adding to the scientific certainties of practical medicine. We need not wonder at the difficulties under which our predecessors of the last century laboured, when we consider how much at fault we should be, in the various diseases which we have to treat, were we ignorant of the practice of auscultation; and surely it is a matter for congratulation that, by the use of other physical means, we are enabled to bring to bear another of our senses to discriminate the healthy and morbid conditions of parts hitherto beyond our reach. What the ophthalmoscope is doing for the diseases of the eye, the laryngoscope is doing for the diseases of the larynx; and there are few of us, probably, who have not had actual experience of the practical value of these instruments; and it is, perhaps, not too much to hope that by a more extended application of similar measures we shall, in course of time, have additional means of discriminating the nature of diseases of organs still beyond the reach of either ear or eye.

With these facts before us, with the knowledge of our increased acquaintance with the nature and causes of diseases, and of the means by which they may be prevented; of the greater precision of our diagnosis, and our more simple methods of treatment, we must be allowed to join issue with those who express a doubt as to the advance of medicine, or assert that there is nothing in connection with it that is characteristic of progress.

Although neither physiology, pathology, nor therapeutics can be ranked amongst the exact sciences, there is much in them that is accurate, precise, and clear. And surely those who boast of the perfection of physical science, and rail against the shortcomings of medicine, would do well to pause in the comparisons which they make. For has it not been shown of late that uncertainties exist even in that most exact of all sciences, that which forms the most complete exemplification of the wonderful genius of man, and of the skill with which he has been able to see into the workings of almighty power? Has not the astronomical world been startled by the assertion that, in calculating the mere distance of our planet from the sun, a serious error, an error to the extent of nearly one-twentieth, has probably crept in?—that, in fact, we are some four millions of miles nearer to the central luminary of our planetary system than has hitherto been supposed? If this be true, our views of the rapidity with which light travels will require modification, no less than the estimated distances, from each other, of the various bodies which we see rolling in space.

If these things happen in relation to physical science, in relation to a question of distance, are we to be surprised that uncertainties should exist in regard to a science like medicine, which deals with the most complex and difficult subjects into the study of which it is possible for the mind of man to enter?

But whilst we claim for medicine a share of that progress which has characterised other sciences, let us not claim too much of the credit for ourselves. We have profited by the experience of our predecessors, and, as we have had additional means of research and observation, we may have avoided some of the errors into which they fell. Let us use these means with diligence. The field of medicine is abundantly large; there is no subject in physiology, pathology, or therapeutics which may not receive additional light from the labours of those who will zealously pursue it, and who may thus contribute to the advance of practical medicine, as they shall more fully reveal the principles of these sciences and their relations to each other.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

LECTURE I. (*Continued.*)

ON SOME POINTS CONNECTED WITH THE PATHOLOGY AND ETIOLOGY OF FIBROUS TUMOURS OF THE UTERUS.

d. These tumours are sometimes the seat of *suppuration.* Dr. R. Lee has stated that this change is a rare complication. Still it occurs more frequently than is generally believed. Such a case is quoted by M. Guyon from Huguier, in which death occurred from this cause about twenty-five days after admission. Another remarkable case, which occurred in the practice of M. Huguier (*Union Méd.*, 1860, p. 331), is the following.

A young woman was admitted into the Hospital Beaujou with a fibrous tumour of several years' duration, and so far painless, in the uterus. It was of the size of an adult head, and had produced œdema of the extremities from pressure on the veins. The vagina was contracted circularly, so as to make it difficult to reach the os uteri. Some days after admission, she was seized with fever, the tumour inflamed. An abscess formed in it, out of which from a tumbler to a tumbler and a half of pus came away. The uterus remained intact. The tumour became so soft, that the finger could be pushed through it. The next week, the patient was progressing most favourably. The tumour had greatly diminished in size, but its progress in this respect was slower. The excretion of pus was diminished. All evidence of compression of the veins has disappeared.

Dr. Robert Lee, in a supplementary paper (p. 281, vol. xxxiii) of the *Medico-Chirurgical Transactions,* gives also a fatal case, where a quantity of greenish yellow fœtid pus was found to exist in the very centre of a fibrous tumour. Dance also quotes another case referred to by Guyon (p. 95), in which an incision, practised upon an interstitial fibrous tumour after death, gave exit to eight or ten ounces of pus. Lisfranc also (*Clinique Médicale de la Hôpital de la Pitié,* Paris, 1843) mentions a case where an abscess was found in a fibrous tumour.

Marshall Hall relates the case of a woman who died after parturition from inflammation and suppuration of a fibrous tumour of the uterus. (*Cyclop. of Practical Med.*, p. 388, vol. iv.)

A remarkable example of hysteria, followed by death, in which a fibrous tumour in a state of suppuration was found at the *post mortem* examina-

tion, is related by M. Cœurderoy, from the service of M. Lebert.

There was in the upper part of the uterus an immense cyst, with thick fibro-cartilaginous parietes, which had contracted close adhesions. Inferiorly was a smaller tumour, in a state of capillary inflammation, with extravasated pus.

In addition, in this case there was apoplexy of the uterus and ovaries.

Cruveilhier has stated that occasionally uterine tumours remain latent; and that suppuration begins around them, often giving rise to cachexia, the cause of which is frequently ignored. The termination is generally fatal; sometimes, however, recovery occurs; and he mentions a case which occurred to him in Montpellier. A colleague brought him a number of bodies which a woman was passing externally from the vulva. These proved to be fibrous tumours. The suppuration set up lasted a long time. Finally, the woman recovered.

M. de Boscredon records a case which occurred in the service of M. Piedagnel (*Bull. Soc. Anat.*, xxix, 332), of suppuration of a fibrous tumour.

It appears to have suppurated in its centre. The tumour was removed after death. This woman, having suffered much from hæmorrhage and cachexia, died at the hospital. During life, the tumour had been recognised as implanted in the anterior lip of cervix and anterior wall of uterus.

A similar case is mentioned by Foucher; but in this, as in a similar one which occurred to M. Dolbeau, there was an external opening of the tumour, distinct from the os uteri, in the vagina. It is important to bear this in mind in making a diagnosis. A cancerous mass might be supposed to exist, where a simple operation would cure, even if nature itself were not able to do so for the patient. Another case of suppuration in portions is given by M. Grelet de Fleurette (same journal, vol. xxviii, p. 154), where a large uterine fibroid was found to contain several cavities, some containing blood, and some pus. M. Kœberle of Strasbourg and M. Pineau have both met with cases.

e. A more innocent change is that of *fatty degeneration*, described by Dr. Humphry in his *Lectures on Surgery* (sect. xxvii, p. 139). Mr. Paget found, in a large pendulous fibrous uterine tumour, a distinct circumscribed fatty tumour, as large as a walnut. (*Lectures on Surgical Pathology*, p. 480.) An analogous example is recorded by Dr. G. Hewitt (*Pathological Transactions*, vol. xi, p. 173), of a widow lady aged 55, a patient of Mr. Cholmondeley, who had been regular up to the present time.

She had expelled spontaneously, after severe flooding, a fibroid tumour. This had been growing for a long period; and had had its growth arrested some years before its expulsion. On examination, the various centres of development in it were found softened down and converted into fatty matter, giving rise to a cystic appearance. The tumour had gradually disconnected itself. The catamenia was probably a simple periodic discharge, provoked by the irritation of the tumour.

Such are a few of the pathological changes which are observed to occur in the progress of fibrous tumours, when the change is one of softening.

II. Hardening. Uterine fibrous tumours, when hardened, were long ago shown by Dr. Bostock (*Med.-Chir. Trans.*, vol. xix) to consist chiefly of, 1, phosphate of lime, which is the salt most abundant; 2, animal matter; 3, carbonate of lime; 4, sulphate of lime in small quantities. Following the general rule of the proportional diminution of animal and the increase of mineral deposits according to age, which is usually observed in such growths, there comes a time when the tumour is converted altogether into a calcareous mass. It is in many instances believed that this calcareous transformation, as in tubercle, is a fortunate and conservative change; and so in fact it is, if the tumour be small. Occasionally, they are spontaneously expelled *per vias naturales*. However, by their pressure on surrounding parts, they produce ulceration, and burst into the abdominal cavity or intestines, it may be the external skin. Cases are on record setting forth these several mishaps. This calcareous transformation is believed by Mr. Paget not to be true ossification, but calcareous degeneration, consisting in an amorphous and disorderly deposit of salts of lime and other bases, in combination with, or in the place of, the fibrous tissue. (Paget's *Surgical Pathology*, p. 479.) This deposit may either be peripheral or interstitial, and may occasionally, in the latter case, constitute a hard coral or ivory-looking mass. (*Ibid.*)

These calcareous tumours are expelled *per vaginam*, a remarkable case of which is mentioned by Dr. Sumpe (*Zeitschrift der Gesellschaft der Aerzte in Wien*, Nov. 29, 1860. Braith., 1861, p. 248.) A considerable number of such examples are also recorded in the *Cyclopædia of Practical Surgery* (fifth vol., in the article on the Uterus and its Appendages). This ossification is much more common in the extra-uterine or subperitoneal varieties of fibrous tumours; and this is so far of importance in diagnosis. The deeper fibroids have not this tendency.

III. Interstitial Absorption. Any one who has seen many cases of fibrous tumours of the uterus must call into mind several in which, either with very little or indeed no treatment at all, a fibrous tumour has disappeared, or has diminished so far in size as to give no longer rise to any inconvenience. That tumours, even in their active stage of growth, do enlarge and subsequently diminish, and again enlarge and again diminish, is a fact commonly observed. Sometimes this periodic increase is synchronous with the catamenial flow. Here, no doubt, it is due to temporary congestion or serous effusion. Sometimes the growth of the body persists for some months, and then diminishes for other months. The case mentioned by Atlee is one of this kind. The temporary enlargement here may be due to œdema.

It is certain that during pregnancy fibrous tumours do enlarge occasionally. Such a case is recorded by Dr. Priestley in the *Obstetrical Transactions;* and others are on record. Dr. Ashwell long since pointed out (*Guy's Hospital Reports*, 1836) that fibrous tumours especially begin to enlarge at the sixth or seventh month of gestation, thus pointing out the advisability of bringing on premature labour in these cases; and the same observation has been made by continental writers.

It is not, however, always easy to determine whether it is the fibrous tumour which diminishes in size, or the hypertrophied uterine structure around it. Cases of enlarged uterus, as a result of pregnancy, often subsequently undergo evolution; so we

may have hypertrophy of the uterus accompanying a fibrous tumour of the uterus, which gives way. Sir C. Clarke, Dr. Rigby, Dr. Ashwell, and others, have mentioned cases where this absorption had taken place, though in some cases there was probably death of the tumour, which preceded its removal.

But I have met with at least two distinct cases of large fibroid, which, I should say, filled the pelvis, and materially interfered with the functions in that cavity, where the tumours have gradually diminished to the size of small apples. One of these women was a matron in a charitable institution, and was obliged to give up her place, being incapacitated for work by the size of the fibroid, and its interference with the due performance of her functions, and by general discomfort. Two years subsequently, the tumour had diminished to the size of an apple; and she was enabled to become the active matron to a workhouse —no sinecure—which serves to demonstrates the recovery. In both these cases, however, this absorption was synchronous with the climacteric change. This fact is not new. It has been observed by several authors, English and French; and, so far, my cases are only corroborative. In no case have I ever seen a distinct fibroid, during the permanence and activity of the uterine periodic discharge, become absorbed without active surgical or medical measures.

[*To be continued.*]

Average Annual Proportion of Deaths. A return shows the average annual proportion of deaths from "specified causes at specified ages," in England and Wales, during the decennial period 1851-60. In the first named year the population was 17,927,609; in the latter, 20,066,224. The deaths at all ages per 100,000 living, of each class referred to, are given as follows: All classes, 2,217; fever, 91; diarrhœa, dysentery, and cholera, 108; scarlatina, 88; and diphtheria, 11.

The Birth of a Prince. The birth of an heir to the British Crown has given rise to the usual amount of congratulation in courtly phrases in the English papers. The extremely commonplace circumstances, however, attending the birth, have not failed to call out a certain degree of vulgar comment. The Prince of Wales and his wife were engaged on the day of her confinement in skating. Her accouchement was not anticipated until two or three months. She had felt some pain in the morning, but it was not ascribed to the true cause. Towards evening the symptoms became unmistakable. There was no preparation for the coming event; the accoucheur was in London; and there were no attendants worthy of the occasion. Dr. Brown, a country practitioner, had the honour of officiating at the birth. The physician-accoucheur, Dr. Farre, arrived from London just too late. The child was wrapped in cotton in the absence of all baby clothing, and from a neighbouring infirmary plain Mrs. Connor was selected to wet-nurse the infant. The medical attendants issued a bulletin announcing the happy delivery by the Princess of a Prince. Thus ended a scene in high life, not at all unlike that which often occurs in the humblest cottage. The *Saturday Review*, in a very sarcastic vein, ridicules the court customs on such occasions, and takes the medical attendants to task for announcing the birth of a Prince, as though a Prince could be born, and states that it was their duty to declare simply whether the child was a boy or a girl. (*Amer. Med. Times.*)

Original Communications.

PATHOLOGY OF BLOOD AND FEVER.*

By William Addison, M.D., F.R.S.

[*Concluded from page* 204.]

Fever. When scarlet-fever is mild—pursuing its normal course—the lips of the patient and spots of eruption are of a florid scarlet hue. But if fever be severe, these parts assume a dusky aspect. And with the darkening hue of the blood, as we have said, cerebral disturbances deepen also. But what are the relations of the fever-poison to the blood-corpuscles? The presumption is that, when the blood is of a florid scarlet, the corpuscles are reacting energetically, expelling the fever-poison; on the contrary, when the hue of the blood is deepening, we say, that the reactions of the blood are languid and diminishing.

In fever, with a greater number of respirations in a given time, the amount of carbon discharged by the lungs has been found below the healthy standard. And: "from my analyses," says Simon, "a decided decrease of urea below the physiological mean is a characteristic peculiarity of the urine in continued fever." In fever, then, the natural excretions of blood are diminished. But a new poison—some form of contagious poison—appears.

The argument is that, the dark hue of the blood, and diminution of the natural excretions (carbon and urea), and the appearance of a new contagious poison, are evidence of disease of the corpuscles of blood, as distinguished from the liquor sanguinis.

In referring phenomena of fever to the blood-corpuscles, it is not difficult to perceive the relation of these cellular bodies to aëriform poisons. The atmosphere is always charged with terrestrial exhalations, which vary with climate, with the season of the year, and with the day and night. A special reciprocal action takes place in the lungs between corpuscles of blood and elements of air, and it is notorious that aëriform miasms give rise to fevers.

On the other hand, local disorders, disorders of diet (gout, scorbutic ulcerations, boils, eruptions, etc.) may be very strongly contrasted with phenomena of fever. The reason is, because the pathology of the liquor sanguinis is different from that of the corpuscles of blood. We have shown that poisons in the liquor sanguinis have a local action. But disorder of the corpuscles of blood is manifested by those general symptoms of distress comprehended under the term fever; because of the great sympathy between corpuscles of blood and elements of the nervous system as shown in drowning, inhalation of chloroform, etc.

It may be objected to this doctrine, which bases the reproduction of contagious poisons upon disease of the blood-corpuscles, and local disorders without fever upon deterioration of the liquor sanguinis, that it must be impossible to discriminate an illness arising from impurity of the liquor sanguinis, from illness occasioned by disorder of the corpuscles of blood; because these two elements are so intimately mingled together, that disorder of the one must be immediately communicated to the other. But this objection has been anticipated by the facts already related, and which are observable by every one; viz: that poisons in the liquor sanguinis act locally; that the brain remains unaffected by a poison in the liquor sanguinis which is severely disturbing some other organ; and, we have said, physiologists explain these facts by re-

* Abstract of two lectures delivered at Brighton, November 1863.

ference to the affinities and resistance of different species of cells.

It may seem a pure assumption to extend to the corpuscles of blood a property of affinity and resistance, but the assumption is corroborated by observation. When blood is examined with a microscope, the corpuscles are seen uniform in size and outline. There are, however, many fluids which, when added to blood, change the outline and appearance of the corpuscles. But they are not all changed in the same degree. Some are greatly, others only a little altered; and others again are not at all affected, notwithstanding an intimate mixture of the blood with the extraneous liquid.

In the same person, blood-corpuscles vary in their resisting power; and, *à fortiori*, we may conclude that the corpuscles of blood in different persons vary in the same respects. Correspondingly, it is well known a number of persons may breathe at the same time a miasmatic atmosphere, and yet only some of them may take the epidemic fever; and of those attacked with fever some have a light, others a severe form of it. Here, we argue, the resistance of the individual is typical of the resistance of the blood-corpuscles.

With reference to disordered sensations in fever, we have already spoken of the intimate sympathy between blood-corpuscles and elements of the brain. The painful feeling of thirst experienced by persons in health when deprived of water is typical of the want of fluid for the blood. The distress occasioned by the least interruption to respiration is typical of the urgent need of the blood-corpuscles for air.

So likewise the rigors, alternate heats and chills, restlessness, headache, and want of sleep, which mark the onset of fever, are typical of commencing disorder in the corpuscles of blood. Moreover, we explain the differences between alcoholic intoxication and the delirium of fever, by distinguishing between the two elements of blood. An alcoholic poison in the liquor sanguinis produces a species of delirium and coma; but this passes off in a few hours without fever: whereas the delirium of fever has a period of duration coincident with the generation and expulsion of a morbid poison, formed in the blood of the fever patient by some cellular action.

We are not aware that any philosopher has assigned a reason why the used materials of blood (carbon and urea) are split up into two divisions. Nevertheless it is quite certain that they are so.

Carbon passes away at once from blood-corpuscles into the air in an invisible state.

Urea or uric acid requires a special secreting organ, the kidney, for its discharge from the liquor sanguinis. And we have already alluded to the pathology of retention of these used materials in the blood.

The same kind of division takes place in contagious poisons. For, the breath of the fever-patient exhales an aëriform contagious poison; but the grosser elements of the poison demand some secreting agency for their discharge from the liquor sanguinis. Such are the pustules of small-pox, the poisonous epidermis of scarlet-fever, and other critical secretions from the skin, kidneys, or bowels in other fevers. And if none of the secreting organs be able to cope with the grosser parts of the poison—to eliminate them from the liquor sanguinis—then it is we witness the extraordinary resources of Nature in fever.

An unusual action is established somewhere in the neutral areolar tissue. This is generally a form of inflammation and abscess. An abscess is a species of cellular growth. Pus consists of cells. And the presumption is, that the cells multiply by eliminating morbid elements from the liquor sanguinis—discharging those grosser parts of contagious poisons, which, according to our interpretation of phenomena of fever, have been previously discharged from diseased blood-corpuscles as morbid forms of used materials. This is the doctrine of *cell therapeutics*.

It would appear, then, that the contagious poisons of fever behave as do the natural exuviæ of blood, inasmuch as they are partly eliminated by the lungs, and partly by cellular action in some natural or preternatural depurating organ; a critical abscess in fever being regarded as a preternatural or temporary depurating organ. The facts are, that the natural exuviæ of blood-corpuscles are diminished in severe forms of fever, and a new contagious poison appears. But how do we connect the reproduction of a contagious poison with the blood-corpuscles? To argue this point, let us take the example of small-pox fever.

A quantity of matter from one of the pustules of small-pox, so small that it may be borne on the point of a pin, is sufficient, if introduced into the blood of a healthy person, to induce small-pox fever. The question is not as to the diffusion of the virus used; it is the augmentation of it a million-fold in the body of the inoculated person which is to be accounted for. It may be said that the virus is generated in the pustules; but we regard the pustules of small-pox as holding the same relation to the fever-poison as the kidneys do to urea; because the person inoculated has symptoms of fever, therefore some disorder of the blood, before the pustules contain any virus. And when the pustules are at their height, the fever-symptoms are passing away. Moreover, it is admitted, the seat of all contagious fevers is in the blood. The pustules, therefore, must be dismissed from an inquiry which has to deal with elements of blood.

All secretions are products of cellular action. The virus of small-pox is a secretion. The corpuscles of blood are cellular bodies. And the primary action of fever is in the blood. We dismiss then, the liquor sanguinis, because the question in discussion has reference to some cellular agency. And there remain for examination the colourless and the red corpuscles of blood.

White cells exist in blood, but they are normally too few in number to account for the very large reproduction of the small-pox virus. And in certain states of disease where the number of white blood-cells is enormously increased, the symptoms are not those of fever, nor is any contagious poison generated. On the other hand, red corpuscles exist in blood at all times in countless myriads; and these, in the performance of their natural actions, liberate poisonous compounds which are discharged from the body as carbonic acid and urea, or uric acid.

Such are the facts and considerations which lead to the conclusion that a contagious poison generated in fever is, as it were, the substitute or representative of the natural poisons which are diminished in fever. If this conclusion be established, it follows that phenomena of fever arise from *disorder of the corpuscles of blood*.

If we review the literature of fever, it will be found that varieties of it are discriminated in various ways: some by the circumstances attending their real or supposed origin, as *marsh-*, *jail-*, *camp-*, and *hospital-fever*: some by the characters of the crisis-action, as *small-pox*, *scarlet-fever*, and *measles*.

Some fevers derive their designation from unusual symptoms or appearances, such as *petechial*, *spotted*, and *yellow* fever. Other fevers, again, have been named from some hypothesis respecting their origin or nature, as *cholera*, *typhus*, and *typhoid fever*. Moreover, we read of *traumatic*, *erysipelatous*, *pyæmial*, *phlebitic*, and *puerperal* fever.

It is not difficult to perceive under these various designations two distinct classes of fever. And these are the distinctions to be made between them.

When a person in health takes fever from a miasm in the air, the poison is exterior to the person; phenomena of fever constitute the first departure from health, and local disturbances are consequent on the fever. On the other hand, when fever supervenes or is a consequent of some antecedent local disease or anatomical lesion, the poison which disturbs the blood is concocted in the body of the patient himself, at the place of the local lesion; and the patient, before fever appears, is out of health, because of the local lesion which precedes and occasions symptoms of fever. Moreover, a person already afflicted with some local anatomical lesion which is the cause of fever, is in a more adverse condition as regards recovery than a person in health taking fever from an exterior poison.

Hence, then, the exanthemata and the continued fever of these latitudes are idiopathic or primary fevers —because derived from an exterior poison; whereas traumatic, pyæmial, phlebitic, puerperal, and other forms of typhoid fever consequent on a prior anatomical lesion, are secondary fevers. Such is the basis upon which we enter on the prognosis and treatment of varieties of fever.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

THE CROOKED CRANIA FROM WROXETER.

By Henry Johnson, M.D., Shrewsbury.

[*Read September 22nd*, 1863.]

Last year I wrote a paper on the distorted skulls found at Wroxeter, which was read before the Royal Society in May 1862. An abstract of that paper was printed in the *Proceedings of the Royal Society* for the same year. The distortion in question has been ascribed, on the one hand to congenital deformity, and on the other to "posthumous pressure". (Dr. Thurnam, *Crania Britannica*.) The conclusions at which I have arrived in the above communication are the following.

1. The distortion of the skulls found at Wroxeter is not *congenital*, but *posthumous*.

2. Pressure alone is not the cause of the deformity.

3. Besides the softening effect of continuous moisture, acting for ages upon the animal matters of the bones, there is proof that free carbonic acid very generally exists in soils, and more particularly in black mould, such as that of the orchard at Wroxeter.

4. Nitric acid may also be discovered in small quantity. But carbonic acid is almost always present in soil where air and moisture come in contact with organic matters in a state of decomposition. This is the principal cause of the solution of bone in the earth, rendering it softer, and more ready to yield to pressure.

5. The distortion must occur at a comparatively early period after interment.

Since my paper was communicated to the Royal Society, I have obtained some additional facts, which greatly confirm the conclusions above arrived at; and I will now briefly state them.

I. The following experiments, taken together, seem to me quite conclusive as regards the solvent action of carbonic acid, and the effect of this action in rendering osseous matter flexible.

Experiment I. (June 19th, 1862.) I obtained a slender piece of ivory, three inches long, and less than one-eighth of an inch square. It was passed through a perforated cork, and parallel with it was fixed a curved piece of watch-spring of the same length. The two ends of the ivory and the spring were then attached to each other by a bit of thin wire. The effect of this arrangement was, that the steel spring kept up a constant strain upon the piece of ivory, but not sufficient to bend or break it, in its present state. This little apparatus was then put into a soda-water bottle filled with distilled water, into which thirty-two atmospheres of carbonic acid were forced by pressure. The bottle was then well corked, and laid aside. It was soon apparent, from the troubled state of the liquid, that the ivory was undergoing solution; and also that it was gradually yielding to the constant gentle strain upon it. On November 13th, I removed the apparatus and the liquid from the bottle. The slip of ivory was bent like a bow; and the liquid, on evaporation to dryness, yielded 6.5 grains of carbonate of lime. There is no doubt, therefore, that the ivory had suffered solution and become bent.

But it may be objected, that pressure along with moisture would be sufficient for this, without the chemical or solvent action of the liquid carbonic acid.

I therefore repeated the experiment thus.

Experiment II. (April 1863.) I obtained another slip of ivory and another steel spring, both as like the former as possible. I fixed them in a cork, and tied their two ends together, as before, with fine wire. This apparatus was then put into a soda-water bottle filled with plain water only; and it was corked up and laid aside. At the end of four months (September 1863), the liquid remained clear, and the ivory remained straight, as at the beginning.

The obvious and fair inference to be drawn from these two experiments is, that the solvent action of carbonic acid upon bone disposes it to yield or become flexible, when moisture and pressure alone would have no such effect. I consider the two experiments together to be quite conclusive.

II. I have the pleasure to show this evening a deformed skull from Wroxeter, which has never been in the Museum, nor has it been exhibited any where. It came into my possession just as I was writing my paper on this subject last year. I bring it forward now, as affording a new and a very remarkable illustration of this peculiar kind of deformity. The occiput and front of the two parietal bones alone remain. But, even from this very imperfect portion of the cranium, it may be clearly made out that the body has rested with the head very much on one side (the right); and that this, being the lowest, most pressed by incumbent soil, and most acted upon by its contained acids and moisture, has been the part to yield the most to the operation of these causes, and become deformed. The right parietal and adjoining portion of the occipital bone appear to be flattened or crushed in, whilst the other side retains its natural convexity. It will be remarked, also, that the lower part of the skull is corroded or eaten away much more than the upper part, which is not deformed.

III. Dr. Daniel Wilson, in his able work on *Prehistoric Man*, has discussed the subject of cranial deformity, both during life and after death. His description of the Hochelaga skull would equally apply to those in our Museum; and his sketch of it might have been actually taken from one in our Salopian collection. He justly ascribes this distortion to posthumous pressure, rather than to congenital deformity or artificial bandaging during life. But he thinks moisture and pressure are the sole causes concerned; and, seeing that the Hochelaga skulls were buried little more than two feet deep, he deems it necessary to suppose that the pressure was aided by superincumbent buildings. (Vol. ii, p. 309.)

I am very glad to obtain an example of cranial dis-

tortion from the New World. But I think my second experiment, here described, shows that pressure and moisture are not adequate to bend bone, without a solvent power to assist them. Immersion in water, with a strain equal to about two pounds, was not able to bend a thin slip of ivory in four months. But, aided by the solvent action of carbonic acid, as in Experiment I, the effect was most decisive in a like period. I am the more anxious to come to a just and satisfactory conclusion on this subject, because my friend Mr. Wright, commenting upon my paper, takes (with some others) an opposite view of the phenomena. He thinks that the weight of earth (eighteen inches deep) would not give sufficient pressure to produce distortion. He says: "They (the Wroxeter skulls) were not buried sufficiently deep to have a weight of earth upon them." (*On the Human Remains found at Wroxeter.* By T. Wright, Esq., M.A., F.S.A. Read at the meeting of the British Association at Cambridge, 1862.)

But the American skulls, which were deformed, were only buried about two feet deep. They had, however, sustained this pressure, inconsiderable as it may be, for about three hundred years; and our Wroxeter skulls from the orchard, probably a much longer period than that. This, with the aid of the solvent action of carbonic acid, which, so near the surface, they would certainly undergo, would, I think, be quite sufficient to explain their distortion.

I think, therefore, that the physico-chemical theory, which I advocated in my paper read to the Royal Society last year, is the true one; and that it is confirmed by all that I have since learned.

BATH AND BRISTOL BRANCH.

INSTANCE OF RECOVERY FROM LEUCOCYTHÆMIA.

By Samuel Martyn, M.D., Physician to the Bristol General Hospital.

[*Read at Bath, January 21st*, 1864.]

When I speak of an "instance of recovery from leucocythæmia," I wish to be understood as using that expression in a very wide and general sense. We know so little of the morbid actions and the resulting anatomical lesions, which, coming together by causal and not accidental connection, go to make up "leucocythæmia," that it must be equally difficult to say what constitutes true recovery from those obscure morbid states. All I can vouch for is, that this patient was suffering two and a half years ago from what would come within the received definition of the disease alluded to, and that now, the patient, as regards these particular points which are held to be characteristic of leucocythæmia, is so much better as to be quite out of range of the definition.

Leucocythæmia is defined by Vogel to be "an extreme numerical increase in the colourless corpuscles of the blood, with a corresponding decrease in the red ones." The name, suggested by Professor Bennett, seems now to have been adopted by France and England in place of that of "Leukhæmia," previously given to the disease by Professor Virchow; the reason for which is doubtless the extensive distribution of the works of the English writer. We cannot but regret the intensity of that personal dispute as to priority of discovery, which must be fresh in the minds of all who are interested in the progress of medical science; a dispute, so tedious and involved that the sources of our knowledge on this subject are extremely difficult to discover. My own impression, after a very impartial investigation, is, in a word, that the idea of the disease, like most other discoveries, underwent a gradual development from an almost imperceptible germ.

In 1841, Dr. John Reid, who was then pathologist of the Edinburgh Infirmary, examined microscopically the body of a patient of Dr. Craigie's, and noted down that "the blood contained globules of purulent matter and lymph." In October 1845, Professor Bennett published another case which he called "suppuration of the blood"; he shewed that there was a probable relation to hypertrophy of the liver and spleen, and that the pus was not derived from a phlebitis or otherwise introduced. In November 1845, Professor Virchow published several new cases, but he demonstrated the corpuscles to be not pus, but an increase in the colourless blood-cells; noted the coincidence of enlarged lymphatic glands, and called the state leukhæmia. In 1849, Professor Vogel diagnosed a case during life. In 1851, Professor Bennett wrote again upon the disease, and proposed the name of leucocythæmia—white cell-blood; because the blood need not be white, as the name leukhæmia implies.

Enough of chronology; if either of these estimable pathologists contend that the idea of this disease sprang from his head in as complete a form as did Athena from that of the Father of the gods, I think enough has been said to shew his mistake. Even before John Reid's quiet microscopical observation, there are obscure notes of cases observed with the unaided eye; and even at the present moment, so little is known of the essentials of leucocythæmia that there is ample work for others, who, by adding to its natural history, may lay claim to the title of discoverers, with perhaps as good a right as any who have preceded in the investigation.

If our knowledge of the nature of this malady is so very imperfect, no wonder that still less is known of its prognosis and treatment. "With regard to treatment," says Professor Bennett, "nothing that I have yet tried has appeared to be of the slightest service in well marked cases of leucocythæmia associated with distinct glandular enlargements." Professor Vogel, in Virchow's *Handbuch*, states that "the hitherto reported cases have been fatal, or the disease still persists. Well authenticated cases of recovery have not become known." These opinions of the best authorities may explain my having thought it important to lay the present case before you. For as, by the aid of the microscope, with careful percussion of the splenic region, etc., we may now detect the disease in a much earlier stage than heretofore, we must feel very anxious to know whether we can conscientiously hold out any hope of recovery. A brief record of the case is as follows.

I was called to see the patient for the first time on May 22nd, 1861. He was a tall grey-haired man of 66, an artist by profession, originally with most robust health, and capable of much exertion in following field sports, never having been ill before. My note at the time was: he has been ill on and off for more than one year, chiefly with inflammation of the left lung (as he calls it.) For a few weeks he has been getting much thinner. He is very prostrate from profuse perspirations near morning. He is much emaciated, and looks pale. There is some dulness and congestion of the lungs behind, with *râles*. The heart is healthy. In the left hypochondrium there is a large convex tumour, smooth, and with a notch at its anterior edge, near the umbilicus; it is not painful.

May 24th. I examined the urine and blood. The former was thick, 1030, loaded with phosphates; no albumen. The blood taken from the finger shewed the white corpuscles in great excess, visible everywhere in the field, and of varying sizes, and in groups. He was ordered ammonia and oxyde of zinc at night.

June 5th. He is improved; and feels better. He can walk two miles with ease; there are no night-sweats. He continues the ammonia, varied with iron and quina; which, however, never suit him, any more than acids, which he once tried.

Nov. 13th. His general condition is worse. He is thinner, but has a good appetite. He has frequent diarrhœa and coughs. Every morning a free expectoration of tenacious mucus, often streaked with blood, takes place. Pulse 72, firm; tongue clean. The chest is slightly dull on the right side behind, and with moist *râles*. The spleen now reaches to the umbilicus. A drop of blood looks watery. The colourless corpuscles are very numerous. There are a few looking normal in size and character. The leucocythæmic corpuscle is a small adventitious one, four thousandths of an inch in diameter. I ordered him wine and ammonia.

May 6th, 1862. He is going to the sea-side. He feels better, having been improving for several months. He coughs now and then, and has often diarrhœa. He looks less ill; the face not so thin, and has a little colour. He walks well. The veins are fuller; pulse firm, 80. His appetite is over good. The spleen is much less; from almost touching the umbilicus it is now difficult to feel it at all, though percussion shews it to extend some way below the ribs. The blood is unchanged.

Nov. 15th, 1863. He has steadily improved this year, with interruptions solely from an attack of bronchitis, and one of red gravel in the urine. He declares himself positively to be well. From the previous emaciation and pallor he has become stout and florid, though he shews age in weak memory, and slow, stooping gait. The temporal arteries are much fuller, corresponding with a firm pulse of 80, and increased vascularity of the entire surface. I do not detect disease of any organ, except a tendency to bronchial catarrh. The splenic dulness is rather extensive, but not so as to attract the least attention if one did not know of the lately enormous size of the organ. The blood contains more white corpuscles than I should expect in typically healthy blood, but not more than are seen in anæmia, and in a great number of indeterminate conditions. The red corpuscles are more numerous, so far as can be made out by judging of the number visible in the field of the microscope at one time.

Now, I think there can be no doubt that this patient, in 1861, was in an advanced stage of "leucocythæmia." There was enormous enlargement of the spleen, emaciation, pallor, chronic diarrhœa, and *great* increase in the colourless corpuscles. These are the concomitants which go to make up the "*leukhæmia lienale*" of Virchow. All these symptoms have now disappeared, so far, *i.e.*, that the size of the spleen and number of colourless corpuscles seem to come within the bounds of variation compatible with health. With regard to the latter point, I wish it could be stated statistically; but it must be remembered that the actual proportion of colourless to coloured cells in the blood is just as little known as their function or mutual relation. I would suggest the employment of a very simple plan for aiding the determination of this point approximately. If thin glass be carefully laid on the drop of blood, it is easy to find a spot where the red discs form a single layer; and then you may count the colourless ones in the field, or, what is better, draw them with the camera lucida. The results of such a process you see in the drawings on the table. In this patient the proportions of colourless corpuscles to coloured is now probably 3-4 per cent.; in perfect health it would be perhaps 2-3 per cent., but during the year 1861 it was probably nearer 40 per cent.

Lastly, a word on the treatment. As we have neither a known cause nor a theory of leucocythæmia, we can have no very rational therapeutics. In a purely empirical way I gave tonics, iron, etc., but without any visible result. The intercurrent bronchitis always yielded to counterirritation and sedatives. One medicine, however, ordered first as an expectorant, viz., ammonia, did so much good that the patient adopted the aromatic spirit for private use, and of his own accord, took for a length of time, large and frequent doses. If the analyses of Dr. Robertson and Scherer express usual conditions, the chemical state of the blood is seriously altered in leucocythæmia, and especially the *fibrine* is found in excess. Whether the result of ammonia treatment may be to affect the solubility of the fibrine, or even to aid the dissolution of these intruding colourless corpuscles and so to do good, can be at present no more than a subject of interesting hypothesis.

Having occupied this meeting so long already, I hasten to conclude, with the hope that the rare course of the disease in this particular instance may have proved a sufficient excuse for its production.

Progress of Medical Science.

ANATOMY, PHYSIOLOGY, & PATHOLOGY.

Ossification of Nerve-Cells. Calcareous transformation of the sheaths of vessels, or of the connective tissue, is not unfrequently found in the brain; but a similar condition of the nerve-cells is rarely met with. This alteration was found by Professor Heschl in a young man aged 26, affected with melancholia, who died in the lunatic asylum at Vienna. On the convex surface of the left anterior lobe, there was a whitish osseous patch of the size of a lentil: a portion of the grey substance was transformed into a small filamentous mass, of the size of a bean, and charged with a reddish serous fluid. The brain was much injected, and its membranes were adherent at several points by small whitish concretions. The small hæmorrhagic mass, on examination, was found to consist of vessels having partially undergone fatty degeneration, and of connective tissue loaded with pigment. Its walls had a greyish colour, and were firmer than the remaining cerebral substance. Several rather extensive groups of nerve-cells, comprising this indurated portion, were ossified, some entirely, others partly. Some were transparent, and presented large round or oval nuclei; while others were entirely opaque, and charged with calcareous matter. This was readily dissolved out by hydrochloric acid, without any escape of gas. The calcareous deposit (phosphate of lime) was present also in the branches which connected the cells one to another. (*Osterreich. Zeitschr. für Prakt. Heilk.*; and *Gaz. Méd. de Paris*, Jan. 2, 1864.)

Monstrosity by Inclusion. The following case is related by Dr. T. Aretæos of Athens. A young woman, aged 22, was taken in labour at the seventh month. A small monstrous fœtus was expelled, and was followed in two minutes by another, completely developed in proportion to its age, on the head of which was a small opening corresponding to the posterior fontanelle. The first embryo was two and a half inches in length; its extremities were rudimentary, and the head was represented by a vesicle of the size of a nut. The second was fifteen inches in length, and weighed two and a half pounds. The head was like that of a hydrocephalic fœtus; the

aperture in the situation of the posterior fontanelle was an inch long, and of a bluish red colour, with torn edges; the first embryo had doubtless escaped through it. On opening the skull, there was found in its interior a third incomplete embryo, which had compressed the cerebral substance towards the base of the skull; and also a mass of organised substance as large as a nut. This third fœtus was adherent to the medulla oblongata; and the small mass contained some bony fragments, one of which had the form of a tooth. (*Virchow's Archiv;* and *Gaz. Méd. de Paris,* 12 Decembre 1863.)

Assimilation of Isomorphous Substances. M. Roussin has performed a series of experiments on hens and rabbits, in order to ascertain whether similarity in form and composition is accompanied by any peculiar physiological properties. In one series of experiments, he investigated this question with regard to the shell of the hen's egg. This contains 90 per cent. of carbonate of lime; and he endeavoured to ascertain whether other isomorphous carbonates could be made to replace the lime-salt in the shell. Accordingly, some hens, some time before laying, were shut up in wooden cages, at a distance from the ground and from walls, and were fed with potatoes and oatmeal, or with oatmeal moistened with water. With their food, the substances with which the experiments were made, were mingled. The result of these expertments was, that carbonates of baryta, strontian, magnesia, peroxide of manganese, protoxide of iron, zinc, copper, lead, cobalt, or the oxides of these metals, were readily assimilated by the hens and eliminated in the coverings of their eggs. Alumina, sesquioxide of iron, manganese, and the oxides of antimony, were never found in the egg-shell.

Another series of experiments had relation to the soft parts of the egg. The albumen and yolk yield, on calcination, a notable proportion of chloride of sodium. As the alkaline iodides, bromides, and fluoxides, are isomorphous with this salt, it was endeavoured to ascertain whether, after their administration, iodine, bromine, or fluorine, would be found in the egg. Not only was this the case, but the quantity of these elements present in the egg was remarkably large. They were apparently distributed in equal proportions between the albumen and the yolk. Eggs containing bromine, iodine, or fluorine, have no peculiarity of taste; and it is suggested that this observation may be made useful for therapeutic purposes.

The administration of the alkaline iodides, and especially of the bromides, was accompanied by a singular phenomenon; viz., the gradual disappearance, in some instances, of the calcareous covering, in proportion to the increase of the above named substances in the interior of the egg. This occurred in hens left at liberty, and having free access to carbonate of lime; and was not generally observed in strong birds with good appetite.

In a third series of experiments, it was endeavoured to ascertain whether arseniate of lime could be assimilated and substituted for phosphate of lime in the bones—the arseniates being isomorphous with the phosphates. The result was found to be that, when small quantities of arseniate of lime are introduced into the food of a female rabbit, the animal gives birth to young whose bony skeleton contains a notable proportion of arsenic, while their muscular tissue contains scarcely any traces. The arsenical compound is also eliminated by the urine in the form of arseniate of ammonia and magnesia.

M. Roussin concludes from his experiments, that substances isomorphous chemically are assimilated and eliminated in a like manner from the animal economy, and may be regarded as isomorphous in a physiological point of view. (*Journ. de Pharm. et de Chem.;* and *Gazette Méd. de Paris,* Jan. 16, 1864.)

Fœtus in a Rudimentary Horn of the Uterus. Professor Luschka, in the *Monatschrift für Geburtsheilkunde,* relates a curious instance of anomalous pregnancy. In the right—and rudimentary—horn of the uterus in a woman who died in the third month of gestation, there was found a fœtus. The left horn of the uterus was normally developed. The left ovary contained a corpus luteum, of appearance corresponding with the period of pregnancy. There was no trace of a corpus luteum in the right ovary; and hence it was evident that the fœtus had proceeded from the left. But, upon most careful examination, no connexion could be traced between the right horn of the uterus and the cavity of the organ. The right horn was rudimentary, and was connected with the uterus by a solid largish cord, in which it had a blind ending. Professor Luschka concludes that the ovum, in order to reach the position in which it was found, must have traversed the peritoneum. (*Wiener Med. Wochenschrift,* November 21, 1863.)

Red Blood in the Veins. Dr. Brown-Séquard arrives at the following conclusions regarding the colour of venous blood. 1. The blood is of a less deep colour in the veins of limbs paralysed by section of their nerves or by destruction of a part of the spinal cord, than in the veins of sound limbs. 2. The diminished depth of colour in the veins of paralysed limbs is due, at least in part, to the state of inaction of the muscles. 3. Paralysis of the blood-vessels may also produce a reddish colour in the venous blood. 4. It is especially through their influence in exciting muscular contraction, that the nerves and galvanism increase the intensity of the dark colour in venous blood. (*Journal de la Physiologie.*)

MATERIA MEDICA, CHEMISTRY, AND PHARMACY.

Citrate of Magnesia. Various methods of preparing this medicine have been devised; two of the latest are those of M. de Letter and M. Hager. M. de Letter advises that the mixture of citric acid and carbonate of magnesia be dried during five days in a stove heated to 104° Fahrenheit, then powdered and sifted. M. Hager mixes the powder with alcohol having a specific gravity of 0·83, and dries it at a temperature of 113° Fahrenheit. M. Parisel says that the first process is tedious, and the second inefficacious, on account of the water which is left by the alcohol during its evaporation. He recommends the following method, which he has followed during two years, as being both simple and effectual. Take of powdered and well dried citric acid, 200 *grammes;* carbonate of magnesia, 120 *grammes;* mix accurately, and enclose the powder in a slightly warmed and well dried bottle, which must be kept well stopped. The mixture thus made is rapidly dissolved in three times its weight of water at the ordinary temperature; and, if the water be pure, the solution in a few minutes becomes perfectly transparent, without any precipitate. The salt preserves its solubility for a long time. (*Bull. Génér. de Thér.,* 30 Dec., 1863.)

Syrup of Iron and Cinchona. The following is described as the process by which M. Grimault has succeeded in making a perfectly limpid syrup of iron and cinchona, having an agreeable taste. Take of pyrosphosphate of iron and soda, 10 *grammes;* dis-

tilled water, 300 *grammes*; sugar, 700 *grammes*. The iron salt is dissolved in the water, and the sugar is added to it in a water bath. The liquid is then filtered, and ought to be perfectly transparent. This is important, as the pyrophosphate of iron and soda met with in commerce, when made into syrup, often give a black colour and an inky taste. The next step is to dissolve 5 *grammes* of hydro-alcoholic extract of red cinchona bark in 100 *grammes* of alcohol, to filter, and to add the solution cold to the syrup of pyrophosphate of iron and soda above described. The syrup contains in each teaspoonful 10 *centigrammes* (about one grain and a half) of extract of cinchona, and double that quantity of pyrophosphate of iron and soda. (*Bull. Génér. de Thér.*, 30 Nov., 1863.)

Chemical Composition of Matico. M. J. Marcotte has subjected matico to chemical analysis, and gives the following general summary of its composition.

Water	2
Vegetable tissue; artanthates of lime and magnesia; phosphate of iron . . .	39
Tannin; nitrate of potash; sulphate of lime; chloride of sodium; resin; volatile oil; chlorophyll; colouring matter; vegetable extractive	59
	100

1. Matico contains tannin. After maceration, infusion, or decoction of the leaves, the resulting liquid always gives a greenish black precipitate with salts of iron. The precipitate is gelatinous; and, when a crystal of sulphate of iron is left for some hours in an infusion of matico, the whole, on cooling, becomes a greenish black jelly. The tannin is not identical with that of galls, but has its analogues in many other vegetables.

2. Matico, although belonging to the natural order *Piperaceæ*, does not contain piperine. No appreciable traces of this substance could be found, after the employment of the procedure recommended by chemists for obtaining it.

3. The odour of matico led M. Marcotte to suppose that camphor may be present. He has endeavoured to isolate it, but has not been able as yet to arrive at any definite results.

4. Matico does not contain starch. A decoction of the leaves, acidulated by a few drops of sulphuric acid, was introduced into a flask, and some yeast was added; at the end of a fortnight, there was no evidence of evolution of carbonic acid.

5. Matico contains nitrate of potass. The presence of this salt is indicated by the manner in which the plant burns; and, in the process for obtaining artanthic acid, sulphate of potash, with nitrate, is sometimes found in the residue.

6. Matico contains a peculiar vegetable acid—the *artanthic*. As obtained by processes which are described at length, this acid is solid, colourless, and readily crystallisable. Its form varies according to the solution from which it has been deposited. From water, it is thrown down sometimes in long lamelliform prisms, apparently derived from prisms with a square base; sometimes in hexagonal plates or large crystals derived from octohedra having the angles replaced by facets. From alcohol, it is deposited in elongated prisms with a square base; its ethereal solution deposits needles or aciculated prisms of variable size. Artanthic acid is very soluble in water and alcohol, and remarkably so in ether. It is inodorous; its taste resembles that of citric and tartaric acids. It forms salts—*artanthates*—with potash, soda, ammonia, baryta, lime, magnesia, manganese, iron, chromium, zinc, cadmium, lead, bismuth, copper, mercury, silver, platinum, and the alkaloids, especially morphia, atropia, veratria, and quinine. In the plant, it is probably in combination with lime or magnesia, forming insoluble artanthates; it is not dissolved out by alcohol or water, either in the free form or in combination, as soluble salts, with potash or soda. The amount of artanthic acid in matico M. Marcotte believes to be very variable. (*Répert. de Pharmacie*, Fevrier 1864.)

Rebiews and Notices.

Phthisis and the Stethoscope; or, the Physical Signs of Consumption. By Richard Payne Cotton, M.D., Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Third Edition. Pp. 104. London: 1864.

In this third edition of his work on *Phthisis and the Stethoscope*, Dr. Cotton has, besides a general revision of the matter contained in the former editions, added a chapter on the Classification and Nomenclature of Physical Signs, and one on the physical signs indicative of arrest or improvement in the several stages of phthisis.

With regard to the nomenclature of physical signs, Dr. Cotton is an advocate for simplicity, so far as is consistent with accuracy. At page 7 will be found a vocabulary of the terms, which he has found sufficient for practical purposes.

In the last chapter, on the Signs of Arrest or Improvement, he treats of these as they occur in the several stages of phthisis. In the first stage, the change may be considered satisfactory if there be a return to mere feebleness of respiratory sounds after the breathing has been bronchial, or jerking, or very harsh; especially if there be, at the same time, an improvement in the general symptoms. The respiratory sound may never recover its former strength; although some weakness, with perhaps harshness, may be the only evidence of the mischief that formerly existed. Jerking and prolonged respiration also may remain for some time stationary; but they generally undergo changes indicating either an advance or an improvement in the disease.

When the first stage is more advanced, it is more easy to determine the occurrence of arrest or improvement; this being manifest by the diminution, and perhaps the disappearance, of rhonchus. At the same time, however, that the respiratory murmurs are undergoing changes indicative of improvement, other signs, as dulness, and vocal and tussive resonance, may remain unchanged, without affording any evidence that the patient is not making satisfactory progress. In this stage, then,

"Loss, or decrease of the secretion-sounds, with improvement in the respiratory murmurs, become the only essential evidence of our patient's improvement."

When the disease has reached the second stage—that of softening of the tubercular deposit—it is seldom, Dr. Cotton observes, that it stops there. Three instances only have come under his notice in which this stage has not gone on to the formation of cavities. The continuance of the hurried and subcrepitant rhonchus, however, indicating this occur-

rence, is not necessarily indicative of an advance in the disease, as the softening and expulsion of tubercular matter appears to be one of the modes in which cure is effected. Improvement may, even when these signs continue, be expected when there are no fresh indications of tubercular deposit, and when the general health appears to be undergoing amendment.

In regard to the third stage, Dr. Cotton considers the following signs in their relation to improvement; the form and movement of the chest; the percussion-sound; the respiration; the rhonchi; and the vocal resonance. Pneumothorax, although it cannot be called a sign of improvement, is not absolutely a sign in all cases of danger.

"Numerous cases occur in which pneumothorax, far from having any immediate ill effect, really affords relief, and prolongs life. At the present time I am seeing a former hospital in-patient of mine, who, whilst under treatment nearly a year back, was seized with severe pneumothorax. After recovering from the immediate shock, he gradually improved in health, and is now so far restored as to undertake light out-door employment, being in a much better condition than before the seizure. It is but too probable that ultimately he will succumb; at present, however, he is doing well. Cases similar to this have been recorded by other writers, and they may be usefully remembered in forming a prognosis after the occurrence of pneumothorax."

Dr. Cotton's little book is an useful manual of diagnosis for those who have cases of consumption brought under their notice.

Annual Report of the Calcutta Eye Infirmary, for the Year ending March 31st, 1863. By Dr. Archer, Superintendent of the Infirmary, and Professor of Ophthalmic Surgery, Calcutta Medical College. Presented to the Indian Government. Calcutta: 1863.

We are glad to find that our medical brethren in the East keep pace with the advanced schools in Europe in ophthalmic surgery. The Calcutta Eye Infirmary was established about forty years ago, and was one of the earliest off-shoots of the London and Westminster Ophthalmic Hospitals. Its utility and success may be estimated when we state that, although it has laboured under great discouragements at times, it has been one of the largest of the kind in existence, and has relieved annually many thousands; the number of in-patients alone, European and native, being often over a hundred in number. As a school of instruction, it has been the means of disseminating, in connexion with the Medical College, the principles of the art widely throughout Bengal and the North-west of India.

We are very glad to find that extraction of cataract has been carried on very successfully of late years, in this hospital. Formerly it was found, that the extraction did not do well in a great number of cases; consequently, the operations for depression, etc., were more commonly adopted. The failure of extraction was apparently owing to the comparatively feeble constitutions of the Bengalese, who constituted, from the locality of the institution, by far the largest number of the patients. Of late years, however, extraction has been more often resorted to; and it is found that, by keeping the patients in full vigour previous to the operation, and avoiding the error, formerly so prevalent, of adopting lowering remedies in case of any irritation supervening upon the extraction, a fair success has been achieved. Dr. Archer proves that his success is at least equal to the average in hospitals at home or on the continent; and he does not hesitate, when circumstances call for and justify the proceeding, to operate upon both eyes at the same sitting.

Transactions of the Medical and Physical Society of Bombay. No. viii. New Series. For 1862. Bombay: 1863.

This volume contains a series of valuable contributions to medical literature. Dr. Carter gives a minute account, with cases, of the Symptoms and Morbid Anatomy of Leprosy. Dr. Leith contributes a paper on Delirium Tremens in the European General Hospital of Bombay. Dr. Grierson makes remarks on Sanitary Subjects; and Dr. Moore on the Sanitary Condition of the Hill Stations. Dr. Peet treats of the Prevalence of Typhoid Fever in the Bombay Presidency; Dr. Haines of the Conversion of Calomel into Corrosive Sublimate by Ammoniacal Salts. Dr. Ballingall gives his experience of the Operations for Elephantiasis Scroti. Dr. Giraud comments upon a Table of the Number of Paroxysms of Malarious Intermittent Fevers that occurred in 146 Medical Charges in Bombay. Mr. Hanbury gives sanitary notes on Colaba, Bombay, as a Military Station; and Dr. Coles, Hospital Statistics, Prisoners in Jails, etc. Mr. Moore gives the Seeming Relation of Dysentery to Abscess of the Liver, from the Records of the Bombay Hospital.

Advice to a Mother on the Management of her Offspring; and on the Treatment of some of their more Important Diseases. By Pye Henry Chavasse. Seventh Edition. Pp. 316. London: 1864.

This useful work has enjoyed a high and deserved degree of popularity, and has now reached a seventh edition. The value of this edition is increased, by the circumstance that it has received corrections and additions suggested by Sir Charles Locock, who has also added to it various practical annotations. Mr. Chavasse's book has our best wishes for a continued career of utility and success.

Testimonial to a Police-Surgeon. Dr. R. B. Painter has been presented by the police at Bow Street with a silver inkstand as a token of their esteem for him, on the occasion of his resigning his office and removing into South Kensington.

Consumption of Coal. At the Académie des Sciences Morales et Politiques, M. Dalloz has given particulars on the consumption of coal. In 1789, France consumed 500,000 tons of coal, 220,000 of which were imported, and in 1863, 15,000,000 tons, 5,200,000 of which were imported. At the commencement of the present century England produced 13,000,000 tons; in 1838 the quantity rose to 26,000,000 tons, and in 1862 to 84,500,000 tons. England alone produces much more than half the coal extracted throughout the world. The production of coal in the United States is valued at 15,000,000 tons; that of Belgium at 9,000,000; the Zollverein produced upwards of 14,000,000 tons in 1862; so that, if England be omitted, France is one of the richest coal producing countries in the world.

British Medical Journal.

SATURDAY, MARCH 12TH, 1864.

MEDICAL EDUCATION IN GERMANY.

NO. II.

WE have already shown the nature of the organisation of the teaching body of the medical faculties of Germany; and will now follow M. Jaccoud in his researches into the condition and organisation of the instructed—of the students.

The number of students in the different faculties of medicine in Germany varies greatly. At Vienna, the number reaches 950; and at Freiburg, it falls as low as 46.

The terms of admission to the faculty require a certificate of examination, which is much of the character as the Parisian double Baccalaureate.

The time required to be employed in medical studies is not everywhere the same in Germany. In Austria and Saxony, it is five years; but in Prussia and the other states of the Confederation, it is four years. M. Jaccoud, however, adds, that it is the intention of all the faculties shortly to adopt the quinquennial period of study.

At Berlin, there is a total of 341 hours of lectures delivered per week; and at Vienna of 317 hours. Of course, attendance on all these lectures is not obligatory on the student. To show what is done in this way, we will give as a specimen the table of lectures delivered at the Berlin Faculty of Medicine during the summer semester of 1863.

1.—*Ordinary Professors' Lectures.*

Professors and Subjects.	Hours per week.
Mitscherlich (Dean).	
Excitant Medicines	2
Materia Medica	6
Dubois-Reymond.	
Organic Diffusion	1
Physiology	4
Physiological Exercises	12
Casper.	
Legal Medicine	3
Practical Exercises	3
The Art of Writing Formulæ	1
Ehrenberg.	
Comparative Physiology of Entozoa, etc.	2
General History of Medicine	1
Frerichs.	
Special Pathology and Therapeutics	5
Clinical Medicine	10
Jüngken.	
Wounds of the Body	2
Clinical Surgery and Ophthalmology	10
Langenbeck.	
Clinical Surgery and Ophthalmology	6
Operations	3
Martin.	
Diagnosis of Female Diseases	1
Clinical Midwifery, etc.	8
Obstetrics	4
Reichert.	
On Generation	1
History of the Development of Man and Mammifers	2
Comparative Anatomy	4
Textural and Structural Microscopy of the Human Body	5
Zootomical and Microscopical Exercises	12
Romberg.	
Practice of Medicine	5
Schultz-Schulzenstein.	
Medical Encyclopædia (?) and Methodology	1
Medical Natural History	5
Medical Botany and Physiology	6
Human Physiology	6
Virchow.	
Special Pathological Anatomy	5
Pathological Anatomy and Microscopy	6
Pathological Histology	6

2.—*Extraordinary Professors.*

Von Bärensprung.	
Exanthematic Fevers	1
Pathology and Therapeutics of Skin-Diseases	3
Boehm.	
Dental Pathology and Therapeutics	1
Surgery	3
Surgical Operations	8
Clinical Demonstrations of the Uses of Coloured Rays of Light in the Cure of Diseases of the Eyes	2
Von Gräfe.	
Pathology and Therapeutics of Diseases of the Eyes	3
Clinical Ophthalmology	6
Operations on the Eye	
Gurlt.	
General and Special Surgery	6
Henoch.	
Special Pathology and Therapeutics	6
Polyclinic of Diseases of Children	6
Kranichfeld.	
Study of the Changes which Fermented Intoxicating Liquids undergo under the Influence of Heat	1
General Therapeutics	4
Operations on the Eye	6
Lieberkühn.	
Syndesnology	1
Osteology	3
Remak.	
Diseases of the Nerves and Muscles	2
Clinical Exercises	6
Traube.	
Elementary Clinical Medicine	12
Troschel.	
Wounds	1
Surgery	5
Bandaging	3

3.—*Private Teachers.*

Albrecht.	
Diseases of the Teeth and Mouth	2
Odontological Demonstrations	6
Angelstein.	
Surgical and Ophthalmological Exercises	12
Bergson.	
Formulæ and Pharmacological Exercises	3
Ebert.	
Theoretical and Practical Obstetrics	4
Clinique and Polyclinique of Diseases of Children	3
Erhard.	
Diseases of the Ear	2

Friedberg.	
Amputations	1
Surgery with Demonstrations	6
Legal Medicine	2
Helfft.	
Balneology and Balneotherapeutics	2
Medical Climatology	1
Kristeller.	
Obstetrics—Theoretical and Practical	4
Laver.	
Medico-Chirurgical Semeiology	3
General Therapeutics	3
Lewin.	
Diseases of the Heart	
Atmiatrique Therapeutical	
Diseases of Respiratory Organs	4
Liman.	
Legal Medicine	3
Mannkopff.	
Physical Exploration of the Body	2
Auscultation and Percussion	3
Meyer.	
Special Pathology and Therapeutics	5
Physical Exploration	3
Munk.	
Physiology of the Nerves	1
Ravoth.	
Herniæ	2
Clinical Studies	6
Fractures and Dislocations	4
Schöller.	
Clinical Obstetrics	3
Schweiger.	
Optics and Optical Instruments	
Anatomy of the Eye	
Disturbances of Vision, which result from defects of refraction and accommodation	
Wagener.	
Entozoa	1
Westphal.	
Psychiatry	3

Of these numerous courses, it is necessary that the student, on presenting himself for examination, should present certificates of attendance on the following:—Encyclopædia and Methodology of Medicine, Special Anatomy, General Anatomy, Pathological Anatomy, Physiology, General Pathology, General Therapeutics, Pharmacology, Special Pathology, Semeiology, Special Therapeutics, Hygiene, History of Medicine, Surgery, Ophthalmology, Midwifery, Operations and Bandages, Jurisprudence, Medical Police, Study of Epizootics, Clinical Medicine, Clinical Midwifery, Clinical Surgery, and Clinical Ophthalmology.

Attendance on these courses is the minimum demanded of the student. At Vienna, for example, a much more extended series of lectures is required. The student who presents himself for examination for his doctorate is required to show written proofs from the professors that he has attended the following courses of lectures.

	Semesters.
Zoology, 5 hours per week	1
Mineralogy, 5 hours per week	1
Botany, 5 hours per week	1
Chemistry, 5 hours per week	2
Physiology, 5 hours per week	2
Descriptive Anatomy (with Dissections), 5 hours per week	2
Topographical Anatomy, 5 hours per week	2
General Pathology, 5 hours per week	1
Pharmacognosis, 3 hours per week	1
Pharmacology, 5 hours per week	1
General Therapeia, 2 hours per week	1
Bandages and Instruments, 4 hours per week	2
Pathological Anatomy, 5 hours per week	2
Exercises in Pathological Anatomy, 3 hours per week	2
Clinical Medicine, 10 hours per week	4
Clinical Surgery, 10 hours per week	4
Ophthalmology, 10 hours per week	1
Clinical Midwifery, 10 hours per week	1
Jurisprudence, 5 hours per week	2
Practical Exercises in Jurisprudence, 3 hours per week	1
Veterinary Medicine, 3 hours per week	1
Formulæ, 2 hours per week	1
Toxicology, 2 hours per week	1
Vaccination ..... weeks	6

Notwithstanding this luxury of lectures demanded of the student, the fees paid by him are not high, varying, in fact, between 900 and 1300 *francs*.

Students are allowed to study in different universities; but they must pass their examinations and take their degree in one and the same faculty.

In the clinical instruction, the student is made to examine the patient; to form the diagnosis; give the prognosis; and prescribe the treatment—of course, under the eye of the master. All the students are obliged to go through this process, which begins about the middle of his student life, and is continued during four or five semesters.

M. Jaccoud, in speaking of the organisation of the clinical departments of hospitals, bears witness to the excellent results of the polyclinical system (*Clinicum ambulatorium*), so called in opposition to the clinical practice in hospitals (*Clinicum stabile*). Gratuitous consultations are given in the hospital; and patients are treated at their own homes under this system—the service being performed by students under the direction of the professors.

On another occasion, we will give M. Jaccoud's account of the examinations required for the doctorate and of the degrees conferred by the faculties.

THE SOCIAL EVIL.

The Government, as lately remarked, has taken the social evil under its especial wing—so far, at least, as the army is concerned. It has made arrangements for the cure of a certain number of females for the Woolwich District, as well as for other garrison quarters.

We will venture to say, that the Government little knows what it is doing in taking this first step towards a governmental supervision of prostitution. Let us suggest a few difficulties. If it be right that the country should undertake the cure of ten prostitutes, why should it not undertake the cure of ten hundred prostitutes? If it be right to protect the health of the soldier, why is it not equally right to

protect the health of the private citizen—of the public generally? If it be right that the country should pay for the cure of one contagious disease, why should it not make equal provision for the cure of all other contagious and infectious disorders? If it be right to spend the money of the public in curing the diseases of the prostitute and of immoral intercourse, why is it not equally right to spend the public money in the cure of the honest diseases which fall upon the artisan through no fault of his own? Why should Miss Flash from Portsea be comfortably housed and cared for in the Lock Hospital, and there obtain a clean bill of health on her return to her trade at Portsea; while poor Mrs. Smith, the honest drudge, who has fallen down sick at the wash-tub, has to fight her way, half dead, into a workhouse? Suppose, also, that Miss Flash publicly announces her return to garrison duty with the certificate of security obtained by the fact of her recent retirement in the Lock Hospital under the care of governmental supervision—will the country be satisfied with such expenditure of its money?

These, and a dozen more such, questions will, we venture to say, be in due time forced on the attention of those authorities who have given their sanction to this particular distribution of the public money.

The following paragraph, taken from a daily paper, is the announcement to which we here make allusion:

"The Social Evil. An order from the War Department has been read to the men on parade, at Woolwich garrison, strictly forbidding them to enter certain streets in the town notorious for houses of ill-fame, with an intimation that sentries had been placed at each end of such streets day and night to enforce obedience to the order. In connection with the same subject, a letter has been received by the Woolwich Local Board of Health from Lord Hartington, informing them that the Admiralty had made arrangements with the Lock Hospital, by which any number of females, not exceeding ten, could be sent from Woolwich to that institution at the expense of the Board of Admiralty."

From the last and previous Annual Reports of the Pathological Society, we have concluded that its pecuniary affairs were in a flourishing condition; but, to judge from its frequent and unseasonable application to the Royal Medical and Chirurgical Society for reduction of house-rent, the contrary state of things might be supposed to exist. At its annual meeting held last week, the Medical and Chirurgical Society was actually accused of practising something like extortion on what was facetiously called its younger sister, and simply because it required the Pathological Society to pay what is a proper equivalent for the accommodation afforded by it to that Society. It is really surprising to note the constant efforts which have been made to make the Medical and Chirurgical Society assist in keeping up the Pathological Society; for really these efforts amount simply to this. We must sincerely hope that, for the credit of the latter Society, the attempt will not be renewed. The Pathological Society has gained greatly in prestige through the mere fact of holding its meetings in the rooms of the Medical and Chirurgical Society. Under such circumstances, to ask or to expect to obtain accommodation for its meetings at less than the real value of such accommodation is really beneath its dignity. The Pathological Society is at perfect liberty, whenever it pleases, to pack up its unsavoury household gods and seek a local habitation elsewhere. But it does not do so, because it knows perfectly well that it at present obtains a cheaper and a superior article for its money than it can get elsewhere. It, therefore, sticks to Berners Street, but grumbles and abuses the old original parent of societies, which kindly gives it house-room—abuses the parent which admits it to its bosom. If the Pathological Society is living, as many other influential people do, beyond its means, it of course must take the consequences usually attendant upon such a mode of living, and has no right to come and ask its "sister" or grandmother to help it out of its difficulties. Surely there are plenty of men of business on the Council of the Pathological Society; and their common sense must tell them that the transaction between the two societies is, and ought to be in this matter, purely commercial. That the rent actually paid by the Pathological Society is a low rent, is proved by the fact that, notwithstanding this repeated annual grumbling, the Pathological Society still sticks to the Berners Street quarters. It evidently can get no such accommodation elsewhere for its money. The Obstetrical Society pays its rent without murmuring. If any of its tenants have claims upon the consideration of the Medical and Chirurgical Society, it is the Widow and Orphan's Fund Society, which has now been for many years its tenant.

Dr. Morgan has drawn up and issued a report for the Sanitary Association on the health of Manchester during the fourth quarter of the year 1863. We take this opportunity of calling especial attention to reports issued weekly by this Association. In the statistics which are thus supplied will be found a rich store of materials for estimating the rise and fall of epidemic disorders, and the particular localities in which they first appear. If some of the other large towns throughout the country adopted a similar method of obtaining information, many useful results might be anticipated from the measure.

"Zymotic diseases, with the exception of measles, proved more general in 1863 than in 1862; scarlet fever cases amounting respectively in the two quarters to 867 and 172, those of small-pox to 144 and 94, fever to 734 and 703, whooping-cough to 215 and 183, and, lastly, measles to 121 and 236."

"As regards the *intensity* of some of the more severe maladies, we find that the disease which proved most fatal was croup, one death occurring in every 2.6 cases; next follows diphtheria, one in 3.6; scarlet fever, one in 6.3; consumption, one in 9.6; small-pox, one in 14.5; measles, one in 15.1; continued fever, one in 26.2; and bronchitis, one in 38."

Infantile mortality is very high in Manchester. Of the 3,286 deaths in the December quarter, 1,622, or nearly one-half, were those of children who had not yet completed their fifth year. In some healthy districts, the death-rate at this age is not more than 4 in 1,000, instead of, as here, 15 in 1,000. An interesting observation is made in reference to scarlet fever, which tends to show that the disease is mainly, if not wholly, propagated by contagion.

"The advance of scarlet fever is in all cases steady and progressive, not sudden or rapid. It does not burst out in different quarters of the town at one and the same time, as though propagated by some obscure but widely diffused epidemic influence: on the contrary, it appears to travel from district to district, and during each successive quarter, and well-nigh during every passing week, steadily gathers strength."

The advancing year reminds us that the election of Councillors of the Royal College of Surgeons will again, in due season, be brought under the notice of the Fellows. We refer to the election at the present moment, simply to remind the country Fellows that, if they desire that one of their number should have a seat at the Board, they must not defer their efforts in that direction to the last moment. We must say, we think it very desirable that a gentleman—a country Fellow—who may be considered to have the confidence of the profession in the provinces, should have a seat at the Board. We, of course, are quite aware of the difficulties with which a country Fellow in practice has to contend in attending the meetings of Committees; but still it is reasonable to suppose that some worthy gentleman in the country may be found who is willing to make the sacrifice in return for the honour he receives, and the good he may do. It is clear to demonstration that, as the election is now carried out, the country Fellows are virtually excluded from recording their votes. It is, indeed, we confess, necessary and expedient that the large body of the Council should be men resident on the spot—in London; but also for this very same reason is it most unfair that the country Fellows should be virtually prevented (by the mode of election) from exercising their choice. In our opinion, the country Fellows are much more likely to take the right measure and value of a London candidate than the London Fellows are; and, most assuredly, they are much less likely to be biased by personal and local feelings in the recording of their votes. We believe it would be impossible to give one single sufficient reason why country Fellows should not vote at these elections by proxy, beyond the fact, that the Charter does not allow of such proxy-voting. But, on the contrary, it may be shown that proxy voting by the country Fellows would be of very great advantage to the College, and would tend to purify the elections. Simple justice, indeed, demands that this power should be given to the country Fellows. The body of Fellows was created, let it be remembered, for the very purpose of carrying out these elections; but under the present system, the largest number of its Fellows—the country Fellows—are excluded (by the force of circumstances) from exercising the function which they are especially called upon to exercise. We must still hope that the College will do this act of justice, even though it should require on their part the obtaining of an alteration of their present Charter. If country Fellows cannot sit on the Council, at least let them have a word in the election of Councillors.

In a case lately tried in the Divorce Court, the Judge Ordinary made the following pertinent remarks touching the pay and the labour of a medical practitioner.

"It seemed a small sum; but they did not know the amount of the petitioner's income. They did, however, know that he had six children, and that he was a medical man practising in a small country village; and perhaps there were few situations in which industry and intellect were so badly remunerated. Much was asked and expected of a man in that position, and much was freely given."

Dr. Semeleder has been appointed physician to the future Emperor of Mexico.

A commission at Versailles, appointed to investigate the statement made by Professor Nussbaum—viz., that the chloroform anæsthesia may be prolonged by subcutaneous injections of morphia-salts—have themselves experimented in the matter, and have arrived at the conclusion, that the statement may be accepted as a positive fact acquired to medicine.

The correspondent of the *Vienna Medical Journal*, writing from Schleswig, says that, at the commencement of the war, the sick and wounded of the Austrian army were most ill-cared for, but that things are now getting into better order. Wounds, for the most part, heal favourably; and few deaths, comparatively, even after severe wounds, have occurred. Pyæmia has not shown itself; but six cases of tetanus have proved fatal. We conclude from the letter, that the Austrian sick and wounded would be in an evil case, were it not for the attentions they receive from Schleswig-Holsteiners. The Prussian army is, we also read, in no better condition in its sanitary arrangements than the Austrian. Doctors are as scarce, and doctors are as powerless in the administration of their department, in the one as in the other army. Doctors, instead of receiving some attention during war-times, are as much snubbed as ever. They are scarcely recognised as belonging to the army, although they share on the battle-field the dangers and honours

of the combat. Another correspondent writes from Apenrade a sad account: The soldiers lying for two and three days in slushy snow, after long marches, were also half-starved. Even officers, with money in their hands, were scarcely better off. "Besides the horrors of a winter campaign, we have had the martyr-scenes of wounded lying two or three days in the open air, helpless, without food, without attention, and yet brought still living into hospital. I saw between Selk and Schleswig, in a field, two wounded Danes and two Austrians, who must have lain there two or three days. Their first word was 'hunger.'" The French campaign in Russia has been repeated here in a small way. The health of the troops is on the whole, nevertheless, satisfactory.

Mathieu de la Drôme, of weatherwise celebrity, is in high spirits at the occurrence of the late inclement weather. He has written to the Marseilles papers, to remind and prove to them how true a prophet he has been.

"In the autumn of 1835, I met in the street Nélaton, who said to me, 'If you will meet me in the Hôtel Dieu, M. Roux's ward, I will show you something pretty.' I asked him to tell me what it was; but he refused to do so if I did not come. I came, therefore; and he showed me 'the last load of the extraction operations of M. Roux' (*fournée*, a load, Roux used to call the operations which he performed on one occasion or on two successive days). The *quelque chose de joli* was eleven eyes, of which nine—that is, more than eighty per cent.—were in a most complete state of purulent destruction. Such was the result of the much vaunted compression bandage of M. Roux." (Siebel, in *Deutsche Klinik*, No. iv, 1864, p. 39.)

Scottish Weather Returns. The mean of observations at fifty-five stations of the Meteorological Society of Scotland shows that, in the year 1863, 42·11 inches of rain fell. There were in the year 1,711 hours of sunshine, which would have given an average of above four and a half hours a day. The mean temperature of the year was 46·8. These figures are all above the average of the last few years, more especially the rainfall. The range of temperature was from 85·2 to 12 degrees.

Army Sanitary Commission in India. The Viceroy of India has appointed a Sanitary Commission to consider all matters relating to the health of the army, and to supervise the gradual introduction of sanitary improvements in barracks, hospitals, and stations, etc., in Bengal. The president and secretary will be required to devote their whole attention to the work of the commission; but the other members will serve on it in addition to their other duties. The members are: *President*, J. Strachey, Esq., C.S.; *Members*, Dr. C. A. Gordon, C.B., Deputy Inspector-General of Hospitals; Major C. K. Crosse, 52nd Light Infantry; Dr. J. P. Walker, Bengal Army; and Captain E. C. S. Williams, Royal Engineers. *Secretary*, Dr. J. P. Walker. Similar sanitary commissions will be formed in the presidencies of Fort St. George and Bombay.

Special Correspondence.

EDINBURGH.

[from our own correspondent.]

Within the last few days a new hospital has been virtually opened in Edinburgh. Virtually, I say, and not formally opened; as the ceremony of inauguration has yet to take place. It is one of the characteristic traits of the English character to wish to be constantly founding new charities. We are undoubtedly the most charitable people in the world; yet we allow motives of charity to persuade us to commit acts which are charitable only in name, and which militate strongly against the public good. The foundation of new hospitals is one of the forms in which, in my opinion, charity has often been misdirected; and old and efficient institutions, which with difficulty struggle against constant monetary difficulties, are often weakened by the opposition of new hospitals, founded for the alleged purpose of treating some special complaint, or of benefiting some special class of the community, when they in reality have often been originated by the supporters of youthful aspirants in medicine and surgery, anxious to see their names enrolled on the list of hospital physicians and surgeons. In Edinburgh, we have been specially exempted from special hospitals. With the exception of the Dispensaries, the Maternity Hospital, the Eye Infirmary, and the Royal Hospital for Sick Children, no institution of any importance has vied with the old Royal Infirmary in the treatment of the poorer classes. The institutions above named, of obvious utility, have co-operated, not vied, with the Infirmary; and the good which they have conferred upon the public is undoubted.

The Royal Hospital for Sick Children, founded only four years ago, has, thanks to the admirable management of its board of directors, and the ability and attention of its medical officers, already attained a prominent position amongst our charitable institutions. Opened for the reception of patients in 1860, the original building soon became too small; and, a few months ago, the patients were removed to a new building situated between Lauriston and the Meadows, where, at the present time, forty-five little sufferers are receiving all the care which skill and kindness can bestow upon them. The good done by this institution may be judged of by the fact that, in 1863, the number of out-patients treated in it amounted to 4,075.

The hospital which has just been opened differs from the above mentioned institutions, as it is a general hospital. It is called Chalmers's Hospital for the Sick and Hurt, and is situated in Lauriston Place, nearly opposite the Cattle Market. No better site could, in my opinion, have been chosen. Situated in an elevated position, the hospital commands an extensive view of the Meadows and surrounding country. Before describing the arrangements of the new hospital, I may inform the reader how it came to

be founded. Many years ago, a person of the name of Chalmers, by trade a plumber, left a sum of money to the Faculty of Advocates, for the foundation of a hospital, to bear his name. The money has been long accumulating, and it is only a few years since the foundation-stone of the institution was laid. This is not a fit place to criticise the motives of testators who leave their money to found institutions for the perpetuation of names which would otherwise have found a place in no more permanent record than the *Street Directory*. Whatever may have been the motives of the testator, the learned body into whose charge the money was left appear to have acted with the greatest prudence and wisdom. The hospital is a very neat building, and stands in an inclosed space of ground. The entrance is in the centre, where are situated the offices and the staircases, which lead to the two lateral wings of the building, in which the wards are situated. The number of wards is four; of these, two are to be devoted to male, two to female cases. Each ward accommodates twelve patients, the space allowed to each being very large. Each ward is furnished with a bath-room and lavatory, water-closets, and a nurse's room. The arrangements of the kitchen, rooms for the resident medical officer, operating theatre, appear excellent. The whole building, indeed, appears admirably adapted for the purpose for which it was erected, and has an air of comfort, almost of elegance.

If the Faculty of Advocates have been judicious in selecting the site of the building for the new hospital, and in superintending its construction, their judgment in the choice of medical officers has been no less wise. Professor Miller has been appointed surgeon to the hospital, and Dr. Halliday Douglas physician. The position which the first of these gentlemen occupies in connexion with our University has made him so well known, that it would be superfluous to suggest any reasons for his appointment to Chalmers's Hospital. Dr. Halliday Douglas also is well known in Edinburgh as an accomplished physician. Formerly one of the physicians to the Infirmary, he discharged the duties of his office in a manner which secured for him the approbation and esteem of his colleagues, and of the students attending the Infirmary.

That there was any need for Chalmers's Hospital, I of course cannot admit. That it would have been a wiser and more useful act, had the founder Chalmers made over the money to the Royal Infirmary, I am sure. It is said that, in the course of time, the hospital will be reserved for the use of patients who are to pay a certain sum; and that the medical officers will receive a salary.

I cannot at present help fearing that the necessity under which the directors of the new hospital will feel themselves placed, of soliciting the aid of the public, may prove detrimental to the institution which has so long and so admirably ministered to the wants of the sick poor of Edinburgh: I allude to the Royal Infirmary.

A short notice of a famous Edinburgh trial appeared a short time since in these columns. The pursuer, Angus Mackintosh, Esq., sued Dr. Smith and Dr. Lowe, the proprietors of the lunatic asylum of Laughton Hall, for having wrongfully and illegally confined him in the said asylum, he being of sound mind. After a trial which lasted seven days, the jury returned a verdict for the defenders. It appears, however, from a letter written by Mr. Mackintosh to the *Scotsman*, that an attempt is to be made to obtain a fresh trial.

There have lately been no meetings of the Medico-Chirurgical Society. At the last meeting, Mr. Spence read a very interesting communication on Tracheotomy in Diphtheria and Croup. Mr. Spence is so well known as a good surgeon, and cautious and judicious reasoner, that an account of the results of his operations was listened to with great interest. Mr. Spence has arrived at the conclusion, that tracheotomy is a perfectly justifiable operation, not only in cases of advanced croup, but also in cases of diphtheria, where the life of the patient is threatened by asphyxia. Mr. Spence has operated on eighteen cases of diphtheritic croup, the disease being in every case very advanced, and the operation being only resorted to as a last chance. Seven of the patients recovered. I have myself been present at many of these operations; and can testify that, in every case of which I was a witness, the patient appeared in a hopeless state at the time of the operation.

On Wednesday last (March 2nd), Mr. Syme performed excision of the knee-joint, in a case of old-standing disease of that articulation. Although more than thirty years have passed since this distinguished surgeon last excised the knee-joint, he has for a long time expressed his willingness to have recourse to the procedure again, if a suitable case presented itself. The case operated upon appeared admirably adapted to it. The patient was a young woman, of apparently good constitution, who was the subject of ulceration of the cartilages of the joint, with disease of the bones. Mr. Syme performed the operation in the usual way, making a semilunar incision. Since the date of the operation, everything has proceeded admirably; and already (six days after the operation), I believe, the lips of the wound have united throughout the whole of its extent, except at the corners.

Since the date of Mr. Syme's operation, excision of the knee-joint has been performed in the Royal Infirmary, by Mr. Spence and Dr. P. H. Watson. The patients have, in both cases, been adult females; and the affection of the knee-joint has been of long standing. Dr. Watson's case was operated upon on Thursday, March 3rd; and Mr. Spence's on Tuesday, March 8th. I am informed that Dr. Watson's patient is progressing satisfactorily. In my next communication, I shall revert to the history and progress of these three cases.

University College, London. The Prince of Wales has intimated to the Council of this College his acceptance of the office of vice-patron of the hospital, vacant since the death of the Duke of Sussex.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Intermediate.]	Dr. Davies's House, Holywell.	Tuesday, March 22nd, 1 P.M.
Bath and Bristol. [Ordinary.]	York House, Bath,	Thurs., March 24, 8.15 P.M.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Saracen's Head, Ashford, on Thursday, March 24th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Thomas Boycott, M.D., *Hon. Sec.*

Canterbury, March 9th, 1864.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Old Falcon, at Gravesend, on Friday, April 1st, at 3 P.M.

Dinner will be provided at 5 o'clock.

Tickets, 5*s.*, exclusive of wine.

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, March 8th, 1864.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 23rd, 1864.

R. Partridge, Esq., F.R.S., President, in the Chair.

As soon as the Honorary Secretary had read the minutes of the preceding meeting of the Society,

Mr. Hulke said that he wished to enter his protest against a proceeding which had taken place at the last meeting. His paper had then been read out of the order which had been announced in the journals and elsewhere, and without any notification of the intention to do so having been made to him. He had no personal feeling in the matter; but as a principle it was bad to read a paper in the absence of the author when it could be avoided. Had he been informed that his paper would be read, he might have illustrated it by diagrams; and he thought some law should be in force on the point, and that it was the duty of the secretary to acquaint authors when their papers would be read.

Mr. Birkett explained that the paper was read to suit the time of the Society. He was not aware that there were any illustrations to it; and his notice to an author was not obligatory, but merely one of courtesy.

The President remarked that the custom of the Society was to read the papers in the order announced; but the secretary could not, of course, determine how long the paper might take to read, or how far the discussion upon it might extend. Under these circumstances, it might occasionally be necessary to substitute a short for a long paper.

After a few more observations, the subject dropped.

ALOPECIA. BY GEORGE NAYLER, ESQ.

Alopecia circumscripta, or areata, is a disease little noticed by any author except Cazenave, who confounded it with vitiligo of the scalp. It is far more frequent in the female than in the male, the relative proportion being that of seven to four between the two sexes; and it is chiefly observed about the period of puberty. It is a non-contagious disease, and may be represented by almost any number of circular bald patches on the scalp; very protracted in its progress, and tedious to heal. Alopecia is often associated with headache, especially in the female, or with some disorder of the catamenia; and in children, with ascarides or some gastric irritation. No pain or any previous symptom indicates the disease, which is generally unperceived for some time by the patient. The patch is of ivory smoothness, and ends in a circumference of sound unbroken hair.

When recovery takes place, the new hair is finer and softer than the old, and in some instances perfectly white. (The author had recently seen a patch in a lad of eighteen years where the new hair was quite white.) A microscopical examination shows the hair-bulb to be reduced to a fine point, or the bulb to be slender, and sometimes ending in brush-like filaments. In the stages of recovery, the bulb by degrees assumes its normal shape and size; but the hair itself for a long time retains its fineness and lighter colour.

Alopecia is regarded by most French writers as a parasitic disease, as by Bazin, Harding, and others; but no instance of a parasite has been found by Mr. Startin or the author. Mr. Hutchinson once detected it; but this may have been a case of tinea tonsurans or pityriasis versicolor of the scalp.

The prognosis is favourable, particularly when the disease is recent and the patient of early age or below puberty.

The treatment consists in attention to the general health, and in giving steel. The local treatment is of much importance. The surface affected should be painted from time to time with some blistering fluid, and in the intervals with some form of mercury or sulphur, either as an ointment or a lotion, or a lotion of the tincture of cantharides. In protracted cases, mercury and arsenic in *small* doses may be given internally.

In general alopecia the prognosis is less favourable, and when the disease is of long standing no good result can be expected. This form of alopecia differs from alopecia areata only in involving a greater extent of surface.

ON THE ABSORPTION OF DEAD BONE.

BY WILLIAM SCOVELL SAVORY, ESQ., F.R.S.

Can dead bone be absorbed? This question still awaits a satisfactory answer. For while careful and accurate experiments have furnished only negative results, there are unquestionable facts which compel us to admit the possibility of the occurrence. One all important consideration seems to have been hitherto neglected in the inquiry—the influence of pressure in determining the result. Thus, in the experiments which have been performed on the subject, and which have naturally led to the conclusion that dead bone may be kept amidst living tissues for weeks or months without losing the merest fraction of its weight—in these experiments the dead bone was kept in simple contact only with living parts. It appears that no considerable pressure was maintained; whereas, when ivory pegs are driven into bone, extreme pressure is of course produced. In order to test this view, some experiments were performed which were related in the paper. It appeared to the author that the only explanation which could be offered of the results of these several experiments was that the absorption of dead bone, when in contact with living bone, is determined by the *pressure* to which it is subjected.

Correspondence.

IRIDECTOMY.

LETTER FROM J. R. WOLFE, M.D.

SIR,—"Disease does not add any new element to the organism, but is merely a modification of the phenomena of life, produced by an exaggerated or perverted action of the nervous system." This doctrine of Claude Bernard is nowhere more applicable than to that department of ophthalmopathy, which forms the subject of the present controversy. Before entering, therefore, upon the consideration of iridectomy, I shall premise a few remarks on the physiological action of the organ of accommodation, in order to illustrate its perverted or pathological state in irido-choroiditis, and in the morbid phenomena called glaucoma.

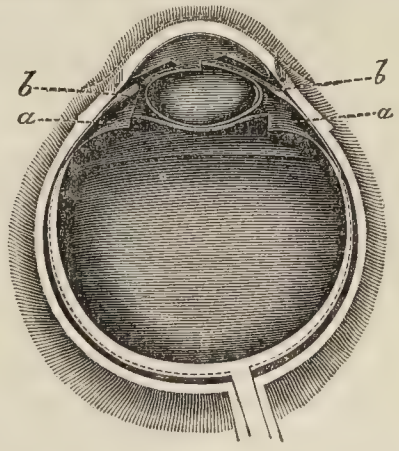
1. The iris consists of two sets of muscular fibres, sphincter and dilator iridis. They are animated by the following nerves; viz., *a*, motor oculi; *b*, trigeminus; *c*, pneumogastric and sympathetic. These anastomose and communicate with the Casserian and ophthalmic ganglia. The motor oculi furnishes the ophthalmic ganglion its short root, which goes to supply the sphincter iridis; whilst the cephalic filaments of the sympathetic and pneumogastric supply the dilator iridis. The trigeminus supplies the eyeball with general sensibility, and its ganglionic root imparts to it tactile sensibility.

This is established by the following experiments. When we expose the oculi motor, and irritate it mechanically, or by the application of the Calabar bean, the pupil contracts; when we cut it, the pupil dilates by the action of the antagonists (pneumogastric and sympathetic). On the other hand, when we irritate the pneumogastric and sympathetic mechanically, or by the application of atropine, the pupil dilates; cut it, and the pupil contracts by the action of the motor oculi. Hence contraction as well as dilatation of the pupil may be the result either of irritation or of paralysis of the corresponding nerves. So much, then, for the separate action of these nerves; but they anastomose, and the network which they form must necessarily give rise to complicated physiological action; *e. g.*, irritation of isolated branches of the trigemini may be reflected upon the ciliary nerves coming from the sympathetic, causing dilatation of the pupil, or upon the oculi motor branches, causing contraction. This complication will be rendered more complex, when some of the nerves are affected at the same time, as by intraocular pressure.

2. The iris regulates the quantity of light to be admitted to the retina. According to the susceptibility of the latter, the impression is conveyed to the sensorium by the optic nerve, and thence reflected, through the motor oculi and ophthalmic ganglion, to the iris. Accordingly, in paralysis of the retina, the pupil remains widely dilated. It may also be dilated by pressure upon the motor oculi, or by irritation of the sympathetic.

3. At its origin, the iris is intimately connected with the ciliary muscle, which is supplementary to it; and both together constitute the organ of accommodation—an apparatus which serves to adjust the optical mechanism of the eye for vision at different focal distances. This muscle, like the iris, consists of two sets of fibres (called two muscles), circular and radiating. The radiating are attached anteriorly to the pillars of the iris, and posteriorly to the choroid; whilst the circular (the punctum mobile) extends inwards towards the optic axis, as far as the tips of the ciliary processes.

The circular muscle (musculus compressor lentis accommodatorius of Langenbeck), or sphincter capsulæ (H. Müller), compresses the rim of the lens, thereby lengthening its antero-posterior diameter, accommodates the eye for near vision. The radiating withdraws the ciliary processes from the circumference of the lens, causing its flattening surface—accommodates the organ to distant vision. The nervous supply will be the same; viz., the circular is animated by the third nerve, and the radiating by the sympathetic. (See Henke's article in *Archiv für Ophthalmologie*, vol. vi, Part III.) The diagram will show the action of the iris and ciliary muscles. The right half of the figure shows the action of the iris, ciliary muscles, and state of the lens in viewing distant objects; the left, in viewing near objects.



a. Ciliary processes reflected downwards to bring into view
b. Ciliary muscles.

4. Seeing, therefore, what takes place in the adaptation of the eye to near vision, we may easily understand the state of those parts during an inflammatory process, and how iridectomy acts as a modificator. Suppose we have before us a case of chronic irido-choroiditis not amenable to medical treatment. The iris has become permanently contracted; the uvea thickened by exudations, which threaten to extend to the media; which at best will terminate in a false cataract. Ciliary muscles strongly contracted; lens bulging forward; sclerotica softened by pressure of the choroid (commencing staphyloma); or eyeball softened by pressure of the ciliary muscle from without inwards: can there be any doubt that iridectomy is the only rational treatment indicated? Its action is simple enough. It relieves stricture of the iris and compressor lentis, and the whole organ of accommodation is put into a state of quiescence. Is it surprising, then, that an eye in process of disorganisation by an inflammatory action should at once be relieved of its distressing symptoms and resume its natural elasticity after iridectomy?

5. I said before, that I consider the ciliary muscles as subservient to the iris, and supplementary to it; that the nerves which supply the one supply the other. The iris acts first; and, continuing to act, the ciliary muscles are stimulated to action, whether to contraction or dilatation. My reason is drawn from the pathological condition of these parts; and here my observations are fully borne out by no less an observer than Mr. Walton, who says: "Iridectomy destroys the integrity of the eye by interfering with refraction, adjustment, and the regulation of light to the eye. I never saw perfect vision after the operation; that is, no person so mutilated could see small things and different degrees of light equally well with one of the same age whose eye might be called normal and healthy," etc.

If the ciliary muscles were independent of the action of the iris, we might have accommodation per-

fect, or nearly so, after iridectomy, especially when it is done (as I am in the habit of doing) upwards, the coloboma iridis being hid under the upper eyelid. We know that accommodation is tolerably good in some cases after extraction of cataract. Whether, in young subjects, the external muscles may after a time supply in some degree the function of the ciliary muscles, is a question which I am unable to answer for the moment. Indeed, there is still diversity of opinion with regard to the office of the six muscles in the process of accommodation. In the meantime, I must put my humble veto on the side of Mr. Walton, in saying that (in old persons, at least) we sacrifice the organ of accommodation in iridectomy.

But I maintain further, as a corollary from these data, that it is just the sacrifice, called by that distinguished surgeon "mutilation", which is the saving of the precious organ, in arresting its disorganising process, or in warding off a condition less favourable than want of adjustment.

6. This is the starting-point of Von Gräfe, who, finding that iridectomy produced good results in chronic iritis, in irido-choroiditis (as long practised by my excellent teacher, M. Desmarres), and in certain forms of sclerotico-choroiditis, tried it also in glaucoma with the best results.

Glaucoma, according to that author, is "a kind of choroiditis or irido-choroiditis, with effusion, by endosmosis, into the vitreous and aqueous humours, the augmentation of which causes intraocular pressure, producing excavation of the optic nerve and iridoplagia. The latter is caused by pressure upon the ciliary nerves, in their passage to the iris; hence also anæsthesia of the cornea," etc.

It is not necessary to enter at any length into a consideration of this subject. I shall merely repeat the objections which I urged against this doctrine in my letter referred to (*Lancet*, 1859); viz., that there is no trace of iritis in typical glaucoma; the iris, on the contrary, is shrunk and reduced to its minimum. Nor is there choroiditis, strictly so called; for then we would have a contracted pupil. The reason assigned for the iridoplagia, as caused by pressure of the hypertrophied humours upon the cilairy nerves, might pass, in chronic glaucoma, but is inadmissible in the acute form of that affection. We can understand how chronic choroiditis may be confined to that membrane, and yield exudations to compress the ciliary nerves; but that acute inflammation of that membrane should run its rapid and destructive course (sometimes in twenty-four hours) without affecting the iris, is far from probable.

7. On the other hand, it appears to me that the whole range of glaucomatous symptoms, may be accounted for on the hypothesis, that it is the result of perturbation of the ciliary nerves.

Bearing in mind that a dilated pupil may be caused either by paralysis of the retina, or by pressure on the motor oculi, or by irritation of the sympathetic, now, by excluding the two former alternatives, we are shut up to the latter. Moreover, Claude Bernard has established by experiment, that the sympathetic is the only vaso-motor—*i. e.*, the only nerve which presides over the process of circulation; that it can produce changes in the local circulation of an organ, by which the blood, as well as the temperature, may either be increased or diminished. These experiments suggested to me the possibility that all the appearances of a glaucomatous eye may be the result of hyperæsthesia (rheumatic?) of that nerve within the orbit.

When we put the diseased state of the sympathetic as the centre, all other morbid phenomena of glaucoma will naturally radiate from it.

First and foremost, the dilated pupil caused by irritation of that nerve. Now, simple irritation would rather contract the muscular coats of the vessels, and produce atrophy of the organ, just as paralysis would, on the contrary, cause engorgement not only of the choroid, but also of the iris and the other tissues. But we have to do with hyperæsthesia, where the irritation is spasmodic, and its physiological action deranged or perverted. Hence we have engorgement of the choroid and humours, which give rise to pressure or dragging upon the filaments of the trigeminus, which in their turn produce anæsthesia of the cornea and the vitiated nutrition of the organ, tension, etc., rendering the phenomena more complex, and the *ensemble* tending to the inevitable termination so well described by Mr. Critchett.

8. The cure of glaucoma by iridectomy is somewhat analogous

a. To the section of the affected nerve in epileptiform neuralgia. My excellent teacher, M. Nélaton, obtained even more satisfactory results in tic douloureux, in removing a part of nerve thus diseased, than by mere division. Iridectomy, therefore, is strictly a *neurotomy par excellence.*

b. By removing a large portion of the iris, we relieve the constriction which it and the ciliary muscles cause round the zonula of Zinn upon the protruding lens, keeping up the disease.

c. The evacuation of the aqueous humour has undoubtedly its share in relieving the over-distension of the eyeball and allowing the parts to resume their healthy functions, although in itself it has proved ineffectual to arrest the progress of the disease.

9. Owing to the satisfactory results of iridectomy in a disease which had formerly been considered incurable, we have too long been satisfied with its efficiency, irrespective of the *modus operandi;* but the discussion in your columns will tend to direct more attention to the pathological anatomy of that affection. Already we see in the last number of the *Annales d'Oculistique* (page 343), reference made to the opinion of Professor Donders that "we must seek the proximate cause of glaucoma in hyperæsthesia of the fifth pair." This fragmentary reference to the more recent doctrine of that eminent physiologist shows that we are approaching nearer the truth. And I doubt not that Mr. Bowman, than whom none is better qualified for such investigations, has not said his concluding word on the subject. *It would be unreasonable, however, to demand a more minute analysis of that affection than the complexity of the organ admits of.*

But whatever be the *rationale* of iridectomy, one thing is evident, that its therapeutic merits can never be determined by surgeons who do not practice that operation.

In conclusion, I beg to thank you most sincerely for the manner in which this controversy has been carried on in your JOURNAL. The opinions of those distinguished men who have taken part in it, whether for or against the operation, cannot but be interesting to the profession at large in stimulating a spirit of inquiry into this and kindred subjects.

I am, etc., J. R. WOLFE.

Aberdeen, Feb. 17th, 1864.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—Dr. Browne says (*ante* p. 273) that I have omitted to notice some portions of his letter. I took what seemed to me the main points; but my patience will not tire so long as there are still any difficulties in the minds of able workers in this subject, which I am at all capable of removing. I will, therefore, now endeavour to meet his remaining objections, so far as

I can give them definite shape. I will summarily recite them, with my reply to each.

Dr. Browne. The use of iridectomy in glaucoma is not to be adopted, because "the so-called glaucoma has not yet been accurately defined, nor has the operation for its 'cure' been yet based on the recognised principles of scientific surgery."

Answer. It has been very precisely defined, both in its symptoms, diagnosis, *rationale* of treatment, and results. See Von Gräfe's memoirs, and Mr. Hulke's paper (British Medical Journal, last vol., p. 564.) The "recognised principles of scientific surgery" is here a sounding phrase, and nothing more. (See British Medical Journal, last vol., p. 535.) That is scientific in surgery which is based on exact observation of the manifestations of disease, and which contrives and applies to the relief of disease so discriminated an adequate method of treatment. The discovery or contrivance of such a remedy, in the case of a previously incurable malady and one destructive of sight, is a high evidence of science and one of its brightest results.

Dr. Browne. "There is not yet any settled understanding in the school of the iridectomists; no determinate principles upon which its disciples fully agree."

Answer. There is a *remarkable consistency* in their conclusions, as to *the main points both of doctrine and practice,* among those who advocate iridectomy. Seldom has it happened that the views of competent observers in different countries have come so soon or so completely into unison upon a subject embracing a complete revolution in opinion on a large and important branch of our art. And not only is the fact so (see Mr. Critchett's testimony, British Medical Journal, *ante* p. 20), but the reason for it is obvious. The revolution has occurred at an epoch when ophthalmic science, both physiological and pathological, has been making immense strides; when diagnosis has consequently been advancing with unprecedented rapidity and certainty, especially since the great invention of Helmholtz; and when not only has it become possible to propound new views on many old subjects, but to test them speedily by the searching scrutiny of a large number of able coadjutors in various countries. It is quite true that there has been much opposition to iridectomy. This was inevitable. But it is also true, that this opposition has proceeded much from men who have not moved forwards promptly on this subject with the age, and some of whom have also opposed other improvements when first propounded. Further, the opposition of these men is everywhere rapidly yielding under more exact, and in some cases more dispassionate, observation and inquiry.

But, surely, the differences on minor points which are to be found among the advocates of iridectomy, are but proofs of their independence of thought, of their not being mere blind followers of a master, and of the widening scope of their inquiries as the subject has expanded, as every advancing subject must do, with the increase of real knowledge. I regard the subordinate discussions between those who have adopted iridectomy, as the most healthy symptom of their competency as witnesses on those larger points whereupon they are agreed.

Dr. Browne says I have misinterpreted him as to the cases of glaucoma which he selected for operation and in which the operation failed.

Answer. If he will give the particulars of the cases in which he performed iridectomy, so as to let them tell their own story, he may help to elucidate what is now obscure in regard to his published results.

Dr. Browne. "Does Mr. Bowman consider himself, and those of his school, to be the only ophthalmic surgeons who are competent, careful, and truthful observers?"

Answer. I regard Dr. Browne as all these; and, therefore, expect that, ere long, *when he has carried his observations further,* he will reach the same conclusions as others not less competent, careful, and truthful.

Dr. Browne. Mr. Bowman has to reconcile the fact, that *acute glaucoma* has been frequently recommended as that in which the happiest results might be apprehended from iridectomy, with the statement, that the operation is especially valuable in the *premonitory period* before the severe inflammation sets in, which is attended by its own special hazards of spoiling the structures it involves.

Answer. When the operation *is done in time* in acute glaucoma, the happiest results may be anticipated, supposing the eye not to have suffered previously in structure during a premonitory stage; that is, supposing that, previously to the acute attack, the visual field have not been narrowed and the retina and optic nerve in any degree structurally deteriorated. Then the results are more satisfactory than those obtained in the slower long-standing forms, as the simple and subacute glaucoma of Donders, and the chronic glaucoma of Von Gräfe; because in these, structural damage has almost always occurred before relief is attempted. But if the premonitory stage has become well marked, the field of vision restricted, the iridisations and obscurations frequent, the remission of symptoms never complete, the congestion of the intra-ocular vessels constant, or an acute attack imminent, it is far better to anticipate this attack by an iridectomy at that stage, than to allow it to become developed, with all its attendant risks. For who shall tell how acute it may prove, or what help may be at hand, when a few hours may make an important difference in the result?

Dr. Browne. "The operation in the premonitory period would be the certain method of 'spoiling' the eye. The recommendation, in fact, amounts to this: *Mutilate* the eye that has only slight 'premonitory signs' of glaucoma, in anticipation of the hazard that might possibly spring from the 'spoiling' process of inflammation—inflammation that may never arise!"

Answer. The operation is *not* recommended when there are *only slight* premonitory signs of glaucoma; see my last answer. That an eye otherwise doomed to certain destruction by glaucomatous disease can be rightly said to be "spoiled" or "mutilated" by the iridectomy which saves its sight, I cannot admit, however often the objection may be repeated by those who oppose this sole remedy in such a case. (See my reply to Mr. Walton, *ante* p. 167.)

Dr. Browne. "How does Mr. Bowman discover (in a case of acute inflammation of the deep tissues of the eye, choroiditis, iritis, etc.) when 'glaucomatous complications' exist, and when they are not present?"

Answer. The augmented tension, as discoverable by touch, is the principal means, and a sufficient one. But in these cases, as well as in the typical forms of glaucoma, the surgeon of course employs all the diagnostic means at his disposal, and his sense of touch is but one of these. When the media are clear enough, the ophthalmoscope offers the most precise and conclusive evidence; the course of symptoms—the iridisations, the obscurations, the peculiar limitation of the field—may contribute further proof. When the hard glaucomatous state comes on in the course of those diseases specified by Dr. Browne, and which were not originally or essentially glaucomatous (*i. e.*, attended by hardness), we have often to rely chiefly on the touch for detecting it; also on the limitation of the field, as well as on the bulging

of the iris, when total posterior synechia exists. I propose to speak further next week on this most important subject of the eye-tension, in reply to Mr. Dixon; meanwhile, I am sorry that Dr. Browne should not only repeat the confession of his own inability to make the above discrimination by estimating the tension, but should also express his belief that *no other person* can do so. I can assure Dr. Browne, nevertheless, that there is hardly a young surgeon in attendance for a month at our hospital who has not made himself master of the very simple method of conducting the slight and rapid, though delicate, examination necessary for determining the tension of an eye.

Lastly, Dr. Browne still complains of my "tone" and "style." I am sorry they do not please him; particularly as I am sure his object has not been to misrepresent me. Yet as this is so, it would have been more satisfactory to have found in his second letter a candid admission that his first contained animadversions on my previous writings, which, as I showed, were quite unwarranted by anything they contained.

He asks for "a *plain, brief, unequivocal description* of the exact pathology of glaucoma." The *a b c* of the subject has been repeated often enough. The last excellent summary, with cases, was by Mr. Hulke in your own pages (British Medical Journal, last vol., p. 564, under date of Nov. 21st, 1863), and to that I can with great pleasure refer him. I must not weary your readers by tedious repetitions. I am, etc.,

Wm Bowman.

5, Clifford Street, March 7th, 1864.

THE PLEA OF INSANITY.

Letter from G. Bodington, L.R.C.P.Ed.

Sir,—In reference to your leading article in the Journal of the 20th instant, headed "Experts and Criminal Lunatics," I would offer a few observations, especially bearing upon the case of the convict Townley.

In the first place, allow me to relate a case or two of murder, or attempts to murder, by madmen, about whose mental condition there could be no question; and then, by a comparison of their conduct on such an occasion with that of Townley, we may draw conclusions which may possibly throw some light on the subject.

Many years since (more than twenty), in a large private asylum kept by a layman—that is, a non-professional proprietor, and situated within the precincts of the town of Birmingham, two maniacal patients were placed in confinement in one room, one of them being placed in a "restraint" chair, and duly fastened therein. In that position they were kept by the keeper. and the door of the apartment closed upon them. Well, there was the victim tied and bound; and there was a chair ready at hand; and then came the maniacal impulse at once upon the unrestrained patient, to take up the extra chair and break it into twenty pieces about the head and shoulders of his bound and unresisting companion.

Now, there was no explicable motive for this assault; no hatred or ill-will, no premeditation or malice aforethought, no preparation of means; but there was the chair, and there the victim ready bound; and mad impulse said "kill him", and of course the attempt was made.

I was called in to attend to the injured lunatic, whose skull and relative powers of endurance fortunately exceeded the destructive strength of the weapon with which he was struck, and which lay on the floor at his feet broken into many fragments. The numerous scalp-wounds were dressed; there was no fracture of the bones; and the patient ultimately recovered.

Another case occurred more than twenty years ago; and the crime was committed by a man who had been discharged from my own establishment, in which he had been treated for mania; and from which he had been, after some months, removed at the instance of his own friends, as I had declined that responsibility; for, although he had apparently perfectly recovered his reason, I could not but entertain an opinion that he was an unsafe man. Soon after his discharge, he married a young woman to whom he had been previously engaged; and who had herself visited him in the asylum, and knew all about his malady, and yet had the infatuation to accept him as her husband. They got on very well together for some months; until at length his malady returned very suddenly, inasmuch as, in the night, he jumped up, seized the razor which he ordinarily used for shaving, and therewith attacked his wife, inflicting upon her many wounds. Her screams, however, brought aid, and his hand was arrested before he had quite completed his purpose. He was tried, convicted, and detained as a madman during the pleasure of the Crown. Here, as in the other case, a momentary impulse impelled to the deed. There was no apparent anticipation of it; no preparation with regard to the weapon or the time of doing it. But there was the mad impulse; and there was the weapon at hand, as if by accident—an old razor.

What a contrast do these cases present, to the deliberate murderer, who, having his senses about him, prepares his weapon, forecasts the time, fixes the meeting, and, to sum up, prepares himself for the final blow, by swallowing several glasses of brandy and soda-water? This last circumstance constitutes a marked distinction from the madman-type of murderers, who never dream of the necessity of such a stimulus in aid of such a crime. "The fever of the brain, doth from the senses take all feeling else, save what beats there."

But it was said of Townley, that he was of sound mind when he committed his crime; but that he became unsound at the time of his trial, or after conviction and condemnation. That is a very convenient plea, indeed, for a criminal to set up, if he can succeed in it as Townley has done. It may be affirmed that no man, after such a crime, can be said to be of sound mind subsequently to its perpetration, and especially after conviction and condemnation; for all such, almost without exception, are sufferers under that form of mental depression or malady, which we distinguish by the term *melancholia*. Their condition partakes of all the characteristics of that form of mental derangement, and to an intense degree. But can this be put in as a plea for arrest of judgment? To allow this, is to make a loop-hole for the escape of great criminals; to strike a blow at the root of justice and law; and to expose society to great dangers. There is such a broad distinction between the types of madmen-murderers and those who commit the crime impelled by the prevalence or predominance of their passions, as to make it plain that, as regards the latter, after detection and conviction, the question as to the soundness or otherwise of the mind is admissible, and never ought to be entertained at all; or, if exceptions be possible, they would be very rare indeed.

But the law has been flustered and frustrated, as regards the Townley case, by a theory put forward by an eminent physician (I do not like the term "mad doctor"), respecting the existence of certain obscure diseases of the brain of a nature to render the subjects of them irresponsible for their actions. Well,

this is an obscure theory; so much so, indeed, that it is, in fact, unintelligible, baseless, and dangerous to the best interests of society.

We may, for practical purposes, divide society into three classes, all alike endowed with passions and intellect or intelligence. The first class are they whose passions do not carry them to the length of committing heinous crimes, because restrained by conscience. These are they who may be entrusted with any amount of "untold gold," or with the lives or persons of the most helpless; and, irrespectively of the law, they would be safe, because conscience rules. Some might call it honour, or morality, or religion; but I think the word "conscience" the more suitable. We hope, and presume, that society, for the most part, is constituted of this class. The next class are they who are restrained from crime by the fear of the law and its penalties, but are not held back by "conscience"; and some of these, thinking to escape the fangs of the law by cunning, venture to commit crime under that delusion or presumption. Such was Palmer; and there have been many more of the same stamp, some of whose effigies are to be seen at Madame Tussaud's exhibition. Lastly, there is a third class, who having fairly weighed in their own minds all the consequences and legal penalties, are neither restrained by conscience nor by fear of the law; but who boldly elect to commit the worst of crimes, and declare at once their readiness to pay their quittance by suffering the punishment allotted for it. Such was Townley; and there have been many such.

In the first class, the will is exercised to control passion or appetite, from conscientious motives. In the second class, the will is exerted to commit crime, and the intelligence exercised to evade the penalty. In the third class, the will determines to indulge the passions in the commission of crime, and also to endure unflinchingly the legal penalty. A man's mind may be said to be unhappily constituted which does not belong to the first class here enumerated; but then this has nothing whatever to do with the question of mental derangement; for, if this plea were allowed, a fatal blow would be struck against all law, and order, and safety, in society.

Even whenever the plea of insanity may be allowed to be set up on behalf of great criminals, the inquiry into the question ought rather to have reference to the antecedents and previous history and conduct of the accused himself, and that without reference to an assumed theory respecting the blood of his great-grandmother or other remote ancestry, which can have but little to do with the matter; and with but little regard to the state or conduct of the criminal subsequently to detection, conviction, and condemnation, when his mind can scarcely be expected to be otherwise than in a morbid condition after undergoing so terrible an ordeal as that implied in the commission of the crime and its consequences.

I am, etc., G. Bodington.

Driffield Asylum, Sutton Coldfield, Feb. 22nd, 1864.

MERCURY IN SYPHILIS.

Letter from George Gaskoin, Esq.

Sir,—Owing to various engagements, your number of February 6th, has but now attracted my attention. It contains a review of Dr. Drysdale's work on the *Treatment of Syphilis and other Diseases without Mercury*. In this review a reference is made to Sir Benjamin Brodie's teaching on the use of mercury in syphilis. As none of Sir B. Brodie's pupils attended to his remarks with greater assiduity than myself, perhaps I may be permitted to state what we derived from him in the way of instruction on this subject towards the close of his career.

In one of the last of his lectures, delivered less than twenty years since (the only lecture, by the way, which I ever heard him give on the subject of syphilis), he prefaced his discourse by saying, with great impressiveness of manner, that natural science and the arts had in our epoch generally been progressive in improvement, but that this fact was not without occasional exceptions; and that the treatment of syphilis was, in the science of medicine, an instance of such exception; for, of late, this treatment had been simply retrograde. So far from advancing we had gone backwards; the disease being far more mismanaged than in years long gone by. This reflection was aimed at the non-mercurial treatment. He then went on to recommend the work of Pearson to our perusal, as calculated to bias us in a right direction. This was the only book I personally ever heard him recommend students to read; for Brodie's was entirely bed-side teaching.

Is it not, sir, beyond a doubt that a non-mercurial or nitric acid treatment received a full trial both on its first introduction and subsequently during the present century? and that it brought discredit not only on the practice of Rose, but on the first surgical names in England and Ireland?

It will ever exceed the power of argument to displace a conviction formed upon a close observation of facts. I am unable to dismiss from my mind cases which, I believe, have been victims to the non-mercurial system of treatment, and those which, after long torture and disfigurement, have recovered health under the employment of mercury. Is such subserviency required of us, that we must altogether disallow the experience of Mr. Lawrence, when he says there is a phagedæna which is benefited by mercury, if we have witnessed accordant facts in hospital wards? In practice, instances will occasionally occur of patients with remote symptoms of syphilis getting steadily and permanently well after using mercury, who had for months previously suffered from periosteal agony and other complications, unalleviated by any possible remedy. Such have been excellently described by Mr. Collis, in a recent number of the *Dublin Quarterly Journal*.

It was the frequent practice of Sir Benjamin Brodie, I believe I may say, to employ in extreme broken-down cases of secondary and tertiary syphilis, small doses of hydrargyrum cum cretâ, and with a remarkable degree of success.

In concluding these remarks, I may observe, that no one is more convinced than myself of the high merit of modern investigators, and of the important additions that have been recently made to the pathology of this disorder, and particularly in the diagnosis of its forms; but much remains requiring further elucidation. I would merely express a conviction, that the usefulness of mercury in some of these forms of syphilis rests on too strong a foundation of experience for it ever to fall into disuse; it will always vindicate itself.

I am, etc.,
George Gaskoin.

3, Westbourne Park, February 1864.

Munificent Gift. Mr. S. Howard, of Stanley, near Perth, late of Burnley, has placed in the hands of trustees, for the use of the town of Burnley, sixteen acres of land whereon to erect an infirmary, to be called "The Howard Institution". The land is valued at £16,000. The land not necessarily required for the institution is to be let for building sites, the proceeds of which are to go towards its endowment.

Medical News.

APOTHECARIES' HALL. On March 3rd, the following Licentiate was admitted :—

Lloyd, Edward Sydney, Pill, near Bristol
Powdrell, John, Farndon, near Chester

APPOINTMENTS.

SQUIRE, Balmanno, M.B., F.L.S., has been appointed one of the Lecturers in St. Mary's Hospital Medical School.

POOR-LAW MEDICAL SERVICE.

MORRIS, Wm. Whytehead, Esq., to the Clun District of the Clun Union, Shropshire.
RICHARDS, D., Esq., has been appointed Medical Officer of Workhouse and Industrial Schools, Brighton.

ARMY.

CROCKER, Surgeon A., 3rd Foot, to be Surgeon-Major, having completed twenty years' full-pay service.
LEWIS, Staff-Assistant-Surgeon J. H., to be Staff-Surgeon, *vice* H. Huish, M.D.
WATERS, Staff-Assistant-Surgeon J. M., to be Assistant-Surgeon 62nd Foot, *vice* J. Niven.

ROYAL NAVY.

BREAKEY, John, M.D., Surgeon, to the *Bulldog*.
COURTNEY, Joshua P., Esq., Assistant-Surgeon (additional), to the *Cumberland*.
JOHNSTON, Duncan M'N., Esq., Assistant-Surgeon, to the *Hogue*.
LAMBERT, John, Esq., Assistant-Surgeon, to the *Implacable*.
LAWRENSON, Richard C. P., Esq., Assistant-Surgeon (additional), to the *Wellesley*.
MITCHELL, Alexander, M.D., Acting Assistant-Surgeon, to the *Excellent*.
MOCKERIDGE, John, Esq., Assistant-Surgeon, to the *Boscawen*.
MOSS, E. L., M.D., Acting Assistant-Surgeon, to the *Bulldog*.
PARKER, James, Esq., Assistant-Surgeon, to the *Cambridge*.
PICKTHORNE, Geary B., Esq., Acting Assistant-Surgeon, to the *St. Vincent*.
POWER, W. M., Esq., Acting Assistant-Surgeon, to the *Euryalus*.
PURCELL, Thos., Esq., Acting Assistant-Surgeon, to the *Euryalus*.
REDFERN, Thos., Esq., Acting Assistant-Surgeon, to the *Euryalus*.

MILITIA.

BULLEY, F. A., Esq., to be Assistant-Surgeon Royal Berkshire Militia.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

ANDERSON, J., M.D., to be Assistant-Surgeon 5th West Riding R.V.
DENTON, E. R., Esq., to be Assistant-Surg. 4th Leicestershire R.V.
DOWN, H. W., Esq., to be Honorary Assistant-Surgeon 19th Somersetshire R.V.
ELY, J. J., Esq., to be Assistant-Surgeon 9th Kent R.V.
FURSE, E., Esq., to be Honorary Assistant-Surgeon 6th Devonshire Mounted R.V.
MACQUIBBAN, C. M., Esq., to be Assistant-Surgeon Royal Aberdeen Highlanders.
MALTON, F. L., Esq., Honorary Assistant-Surgeon, to be Lieutenant 19th Somersetshire R.V.
PHILLOTT, J. S., Esq., to be Assistant-Surgeon 9th Surrey R.V.

DEATHS.

CARLYON, Clement, M.D., at Truro, aged 86, on March 5.
COTTON, Thomas A., M.D., aged 71, on February 29.
MASON, George, Esq., at Deal, aged 50, on March 2.
MORRISON, James G., Esq., Surgeon, at 121, Edgeware Road, aged 59, on February 19.

THE CRAWLEY TRIAL will cost the country upwards of £18,000.

GALEN was born at Pergamos 131 years after the birth of Christ.

DEATH OF A MEDICAL PRACTITIONER IN THE SNOW. Dr. Gallice, a French doctor, lately perished in the snow, whilst engaged in his country practice.

THE METRICAL SYSTEM. Mr. Ewart's Bill for making use of the metrical system of weights and measures has been read a second time in the House of Commons.

THE CATTLE DISEASES PREVENTION BILL has also been read a second time, and referred to a Select Committee.

NEW HOSPITAL AT SHOREDITCH. A number of gentlemen have met and appointed a committee for the purpose of establishing a hospital in the neighbourhood of Shoreditch.

PROFESSOR CASPAR of Berlin died on February 24th. The third volume of the translation of his work on *Forensic Medicine* has just been issued by the New Sydenham Society.

STATUE OF SIR JAMES MACGRIGOR. A deputation has waited on the Commissioner of Public Works respecting the fixing of a site for the statue of the late Sir James Macgrigor, Bart.

A GOOD EXAMPLE. The funds of the Cork Fever Hospital being exhausted, an anonymous "Friend" dropped a letter into the box of the *Constitution*, containing a £100 note for that institution.

UNIVERSITY OF LONDON. The Senate of this University have intimated their intention of proceeding to the election of examiners on April 27th. There are amongst others vacancies in the examinerships for chemistry, botany, and vegetable physiology, and surgery.

BEQUEST. Mr. J. M. Oppenheim has bequeathed legacies of £100 to each of the five following institutions: the London Ophthalmic Institution, St. Thomas's Hospital, Royal Free Hospital, Society for the Relief of Foreigners in Distress, and to any hospital in Hamburg the executors may select.

ROYAL COLLEGE OF SURGEONS. At a special meeting of the Court of Examiners on the 3rd inst., Mr. James Alexander Grant, of Ottawa, Canada West, having undergone the necessary examination, was admitted a member of the College. This gentleman had previously been admitted a Doctor in Medicine of McGill College, Montreal, his diploma bearing date May 4th, 1854.

THE LINGEN TESTIMONIAL. From the circular forwarded to each subscriber to the Lingen testimonial we copy the following :—*Receipts :* Subscriptions, £439 : 4. *Payments :* To Messrs. Bodenham and James, legal charges £286; postage, printing, advertising, etc., £50 : 4; plate and book for Mr. Lingen £103; total £439 : 4.

ROYAL COLLEGE OF SURGEONS. The next primary or anatomical examinations will commence respectively on the 9th, 16th, and 30th of April; and the surgical or pass examination on the 23rd of April and 7th of May. The preliminary examination for the fellowship will commence on the 26th of April, and the professional examination on the 31st of May.

PASSING THE LINES. There is a novelty in "underground travelling" from Richmond. Dr. Maclure has for some time been engaged in the business of disinterring and embalming the dead, preparatory to transportation to the homes of their families. He has just been arrested while driving a waggon in which were two coffins, supposed to contain the remains of dead Federal soldiers, but found upon examination to be occupied by two live Jews, who, it is believed, paid high fares for their conveyance.

TESTIMONIAL. Dr. Hawkins of Hitchin has been presented with a splendid silver salver and a thousand guineas by his friends, in token of their appreciation of his long and great services to the poor. Dr. Hawkins, in 1820, established a dispensary at Hitchin; and, through his efforts and energy, this dispensary was in 1842 expanded into an infirmary. Dr. Hawkins continued physician to the institution up to the autumn of last year, when he was struck down with paralysis. Deeply gratifying to him, under such circumstances, must be this token of his friends' appreciation of his services.

Sarracenia Purpurea in Small-Pox. The sarracenia has finally been submitted to a trial, which would seem to prove conclusively that it has no specific virtue in small-pox. It is time the profession put an end to the pretensions of those persons who are endeavouring to palm upon the community a remedy of no value. (*American Medical Times.*)

Danish Sick and Wounded. It would be impossible to deny the Danish sanitary department of the army the praise of great skill and care in the treatment of the sick and wounded. Almost all the poor sufferers have seen give proofs of that calm and silent endurance which is characteristic of all Northern races. The wounded, especially, are invariably cheerful and sanguine. (*Times.*)

Sanitary Condition of Liverpool. Notwithstanding the great improvements which have taken place in Liverpool of late years in the way of widening lines of thoroughfare and constructing larger and finer buildings, it is estimated that about one-fifth of the population are still housed in wretched and ill-ventilated courts and alleys. The Corporation are about to apply to Parliament for powers to open up or abolish these courts, for it appears that the rate of mortality is greatly increasing in the town.

Consumption of Spirits, etc. The quantity of home-made spirits retained for consumption in the United Kingdom as beverage only, in the year 1863, amounted to 19,118,092 gallons; in 1862 the quantity was 18,836,187 gallons. The quantity of brandy imported and entered for home consumption in 1863 was 1,916,434 proof gallons; in 1862, 1,700,156. Of rum the quantity was 3,419,756 proof gallons; in 1862, 3,320,356. Of foreign and colonial wine 10,478,401 gallons in 1863; 9,803,028 in 1862.

Health of the Metropolis. In the week that ended March 5th, there was an increase of nearly a hundred on the number returned for the week immediately preceding. The successive numbers for the last three weeks are 1,586, 1,677, and in last week 1,766. The 1,766 deaths now returned constitute a very heavy mortality for the beginning of March, for they exceed the estimated amount by 346. Last week, the births of 2,139 children were registered in London. In the ten corresponding weeks of the years 1854-63, the average number (corrected) was 2,071.

The late Surgeon of St. Mary's Hospital. Mr. William Coulson was entertained at a dinner at Penzance, on Friday week, as a mark of public satisfaction at the manner in which he had discharged the duties of High Sheriff of Cornwall during the year. The mayor, who presided, in proposing the health of Mr. Coulson, entered into an account of that gentleman's eventful and prosperous career, eulogised his professional abilities and private character, and dwelt on the services he had rendered to the people of the county of Cornwall, rich as well as poor. Mr. Coulson replied in a speech of considerable length, in the course of which he took a review of the progress, in point of population and general prosperity, of his native county since 1821, the date of his departure from it.

Alleged Poisoning by a French Medical Practitioner. The evidence against Dr. Couty de la Pommerais, accused of having poisoned more than one woman, in order to obtain from an insurance company large sums for which their lives were insured, is complete, and the trial may take place next month. The magistrate having carefully examined the bedchamber in which the last of the doctor's alleged victims expired, remarked several stains on the floor near the bed. Having been informed that these stains were caused by natural causes, he had the floor scraped. The scrapings having been collected, a pigeon which ate a portion died very quickly. Experiments were likewise made upon frogs. The heart of a frog was exposed to view, and, the operation having been carefully performed, the frog lived for a long time without the appearance of any disturbance of its vital functions. A second frog was operated on in a similar manner, and a drop of digitaline was let fall on its heart, that substance having been found in the stomach of the last person supposed to have been poisoned. The movement of the frog's heart diminished gradually, its pulsation became slower, and it very soon died. A very small portion of the scrapings on the floor were placed on the heart of a third frog, and the result was the same. Death ensued almost immediately. The two last frogs died while the first was living, nor did there appear to be any derangement in the pulsation of its heart. It is said that these experiments are to be repeated in presence of the jury summoned to try this mysterious affair.

The Herbalists Again. Joseph Levy Markuss was indicted for the manslaughter of Jane Sumby, at Sunderland, on September 9th last. The prisoner kept a shop in Sunderland, where he passed as a herb doctor, or "herbalist." The deceased complained to him of pains in her back, and appeared to have been ailing for some days. The prisoner volunteered to prescribe for her, and sent her daughter for sixpenny worth of pale brandy in a six ounce bottle. Into this he put about an ounce of colchicum seeds, first bruising them, giving directions to place the bottle before the fire for two hours, and then shake it up and give the patient a tablespoonful. The daughter gave her mother a tablespoonful about two o'clock on Monday, the 7th. The deceased became ill and sick shortly after, and, after taking some tea at four o'clock, vomited violently, and continued at short intervals vomiting and retching till she died exhausted at ten o'clock on Wednesday morning. Dr. Nattrass was called in on Monday night, and prescribed opium, prussic acid, and soda to allay irritation, but her stomach was so irritable it would retain nothing. While attended by her daughter and neighbours it appeared that she had several times taken small quantities of brandy neat to try and stop her sickness, and had also taken some "nerve powder," which a neighbour recommended. This powder, when analysed, was found to consist of valerian, skunk-cabbage, gentian, ginger, and some other ingredients, harmless in themselves, and which would act as a stomachic in ordinary cases. On *post mortem* examination the organs were found healthy, but the internal coat of the stomach was of a violet colour. She died from gastritis, which the medical men who attended her attributed to the overdose of colchicum. A teaspoonful of the mixture would contain eighteen grains, and was a fatal dose, and a tablespoonful contained eighty grains. This was a highly poisonous and fatal dose, the drug being a narcotic irritant poison. In the judgement of the medical men this was the cause of death. The learned counsel for the prosecution, in his opening, drew attention to the law, which made no distinction between regular practitioners and quacks, both being responsible for culpable and gross negligence. The defence urged was that when analysed the infusion of colchicum had become stronger than when administered, and that it was the continued doses of brandy, and the nerve powder, acting on a stomach attacked by gastritis from cold, which had increased the disease, and had thus caused death. The jury returned a verdict of *Not Guilty.*

Examination at the Army Medical School. The following were the questions put at the recent examination of candidates for the Army Medical Service, held from February 1st to February 6th, 1864. A. *Written Questions.* I. *Hygiene.* 1. What are the special circumstances in the life of the soldier at home which are unfavourable to health? Enumerate the chief diseases causing admission into hospital and mortality. How would you prevent the development of these diseases? 2. What are the effects of the inhalation of sewer-air? State the various means of removing sewage from dwellings. What are the principal disinfectants of air and sewage? 3. What are the general principles of clothing? Describe the accoutrements of the infantry soldier of the line, and discuss their effects on health. II. *Military Medicine.* 1. Phthisis pulmonalis being a fatal disease in the army, you are required to give (*a*) its place in the official classification of diseases; (*b*) the causes which appear to operate in its production and propagation in the army; (*c*) the most judicious means of counteracting them; (*d*) the symptoms, constitutional and physical, of the first stage, assigning to each its diagnostic value. 2. Define leukæmia, and give (*a*) the causes which appear to induce this condition; (*b*) its diagnosis; and (*c*) the most rational treatment. 3. Give an accurate definition of dysentery. Describe the symptoms and treatment (*a*) of the sthenic and (*b*) of the scorbutic types of this disease. III. *Military Surgery.* 1. Enumerate the several varieties of wounds of the head which may be caused by musket-bullets, specifying the chief features which distinguish them from each other, and the influence of these features on your prognosis. Sketch, generally, the treatment to be adopted in each variety, and particularly mention what circumstances in any case would induce you to resort to the operation of trephining. 2. Give a description of the nature and consequences of endostitic inflammation, or osteo-myelitis, as observed after gun-shot injuries of bones of the extremities, or after amputations consequent upon them; the treatment you would adopt; and the reasons for your practice. 3. A soldier is reported by the instructor of musketry to be incompetent for rifle-practice on account of defective vision, the nature of the defect being unknown. You are required to state whether the man's vision is defective or not; and, if it be so, to name what defect it is. On examination, the man is proved to be neither myopic, hypermetropic, nor presbyopic; but is found to be amblyopic. Describe the course of optical examination by which the diagnosis in this case is arrived at, explaining what sources of fallacy may be met with in the successive steps of the examination, and by what means you guard against them. IV. *Pathology.* 1. Name and define, as concisely as possible, each of the several forms of continued fever which can be clinically recognised; and describe the anatomical signs which are peculiar and characteristic of typhoid and typhus fever, on examination of the body after death from these diseases. 2. Mention the usual temperature of the body at completely sheltered parts of the surface (say axilla); and give a concise account of the value or significance attached to continuous thermometric observations in cases of acute diseases. 3. Mention the circumstances under which you would expect cases of (so-called) pyæmia or phlebitis to occur; explain the nature of such cases, and their *post mortem* appearances. B. *Practical Examination.* I. *Hygiene. First Day.* 1. Examination of water; its physical character; determination of amount of chloride of sodium and organic matter contained in it. 2. Examination of water; temporary and permanent hardness; amount of lime. 3. Microscopic examination of adulterated flour. *Second Day.* 1. Examination of adulterated beer. 2. Examination of adulterated milk. 3. Microscopic examination of adulterated coffee. II. *Pathology.* 1. Examination of fluid containing parasitic remains. 2. Examination of morbid tissues. 3. Description of morbid specimens from the Pathological Museum. 4. Give the names of the parasites on the table. 5. Determination of the powers of lenses.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.

Friday. ..... Westminster Ophthalmic, 1·30 P.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M.

Tuesday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Statistical (Anniversary).—Pathological.

Wednesday. Meteorological.

Thursday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Harveian Society of London, 8 P.M. Dr. Camps, "On Some Points in the Pathology of Convulsive Diseases."—Zoological.—Royal.—Linnæan.—Chemical.

Friday. Royal Institution.

Saturday. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Partridge Fund.—A correspondent complains that he has received no acknowledgment, public or private, of a subscription which he forwarded for the benefit of the family of Mr. Partridge, whose case was alluded to in the Journal of the 20th ult. We are sure that the Treasurer of the Fund will at once remedy this mistake.

Poor-Law Medical Reform Association.—Mr. Griffin begs us to announce that within the last few days he has received the following subscriptions, in aid of the funds of the Association.

Horton, H., West Bromwich, 5s.; Reid, R. B., West Derby, £1; Jardine, J. L., Dorking, 10s.; Gaye, W. T., Williton, 10s.; Brett, A. T., Watford, 10s.; Hubert, W. A., Hemel Hempstead, 10s.; Perry, C. H., Aylsham, 10s.; Black, W. S., Freebridge, Lynn, 10s.; Brewer, J., Newport, £1; Phillips, G. M., Hitchin, 7s. 6d.; Hair, J., Sudbury, 2s. 6d.; Brine, J. E., Shaftesbury, £1:1; Bennett, W. H. R., Shaftesbury, £1:1; Miles, E. J., Shaftesbury, £1:1; Griffin, R., Weymouth, £1:1; Blenkinsop, W. H., Easthampstead, 10s.; Smith, H. B., Ticehurst, 7s. 6d.; Clouting, J., Milford and Launditch, 10s.

Assurance Companies and Fees to Medical Men.—Mr. Sladden has forwarded us a copy of a string of seventeen questions, sent to him by the Indisputable Assurance Company of Scotland, touching the health of a person proposed for assurance. Mr. Sladden very properly refused to answer any such questions without receiving his fee. We can hardly believe that any Assurance Company at this time of day would ask such questions of a medical man without paying him his fee.

F. T.—Medical men are exempted from serving on juries by reason of the nature of their occupation, and on the theory that the public health would suffer if the doctor were thereby prevented from attending to his patients. Butchers are not *exempted*, but are *forbidden*, to serve on juries; and we believe on the theory, that the nature of their business is such as to render them callous to the call of mercy! No doubt such an outrageous pretence, if it were discussed at the present day, could not stand good for a moment. Butchers are, we suppose, willing to put up with the imputation, on account of the relief which they thereby gain from the performance of an onerous duty.

FREEMAN'S CHLORODYNE.—SIR: Having not only written to Mr. Freeman and to the various medical journals in which his advertisement has appeared, to the effect that "*Freeman's* Chlorodyne" is not used at this hospital, but also having had a interview with Mr. Freeman, in the presence of Messrs. Foster and Marriott, the house-surgeons of this hospital, on which occasion I told him that his (Freeman's Chlorodyne) was never used here by any member of the medical staff, I take the present opportunity of asking your kind insertion of this letter. I may further add, Dr. Irwin is not resident medical officer at this hospital. I am, etc.,

JOHN D. HILL, Resident Medical Officer.

Royal Free Hospital, Gray's Inn Road, W.C., Feb. 26, 1864.

ADVICE GRATIS.—SIR: I was very much pleased with the very able article on advice gratis, in the JOURNAL of February 13th. In a neighbouring town to where I am practising, the principle is carried on by a general practitioner (who is in aristocratic practice) on market days. The gentleman to whom I allude is M.D., and occupies a good social as well as professional position.

Some years since, a gentleman who practised purely as a physician in the same town, carried on the same style of practice, on market days at first, and at last things got so far, that he was often called out of bed to attend people even in comfortable circumstances; and, having no horse, was compelled to hire a horse and gig, if the patient lived in the country. This gentleman, who was much respected, lived to a good old age, and was at the latter part of his time living upon a fund raised by public subscription for his support. He was, poor man, a friend to the public, but an enemy to his professional brethren and himself.

I wish you could, by your powerful pen, abolish all advice gratis, public and private; it would be better for the patients, as they would have their cases more fully investigated; and it would raise our noble profession in the estimation of the public.

February 1864. I am, etc., ANTI ADVICE GRATIS.

MEDICAL EDUCATION.—SIR: Pray spare me a corner in the JOURNAL to protest against the untrue and illiberal sentiment which a F.R.S. concludes his letter last week. It is downright ingratitude to write in that way, when so much has been done in late years to raise the preliminary education of the medical practitioner, and to lift him from the mechanical level of a drug-vendor and a pulse-feeler. F.R.S. ought to have discovered, long before he won the honoured title which he wears, that there is no antagonism between science and letters; and that the lettered man even makes the best man of science. Both help to elevate and refine the mind, and to discipline the intellectual faculties; each without the other is to that extent maimed and useless.

So far from medicine having nothing to do with Greek and Latin, there are few practical arts in which a knowledge of at least Latin is so essential; and, like most other sciences, the terminology of medicine and surgery is built up largely with words having a classical origin. But the bare utility of a classical education is a poor ground to argue upon; I would rather fall back upon the old-fashioned but true dogma, that a fair knowledge of Greek and Latin is an element of a refined and liberal education; and that it is disgraceful for a member of a learned profession to be ignorant of languages which have been such noble instruments in the mental culture of the human race. If the advice of F.R.S. were followed, medical men would soon be unfit for the society of gentlemen; but, fortunately, there is no fear of our Medical Boards pursuing such a narrow and retrograde course.

Bath, February 29th, 1864. I am, etc., J. K. S.

COMMUNICATIONS have been received from:—Dr. WILLIAM ADDISON; Mr. R. S. FOWLER; Dr. ROUTH; Mr. CHRISTOPHER HEATH; THE HONORARY SECRETARY OF THE HARVEIAN SOCIETY OF LONDON; Dr. O. VON FRANQUE; Dr. G. M. HUMPHRY; Mr. T. CHURTON; Dr. T. M. ROOKE; Dr. SAMUEL MARTYN; Mr. WILLIAM BOWMAN; Dr. RICHARDSON; Dr. WADE; Dr. KIDD; Mr. R. B. REID; Dr. FLAXMAN SPURRELL; Dr. GIBB; Dr. W. TILBURY FOX; Mr. W. C. BURDER; Dr. WOLFE; Mr. STONE; Dr. THOMAS LAYCOCK; Dr. F. J. BROWN: Dr. G. BODINGTON; Mr. RICHARD GRIFFIN; Dr. J. W. OGLE; Dr. THOMAS BOYCOTT; Dr. WILLIAM OGLE; Mr. LAWSON; META; SENEX; and Dr. J. D. RENDLE.

BOOKS RECEIVED.

1. A Vindication of the Present State of Aural Surgery. By A Member of the New Sydenham Society. London: 1864.
2. Biographical Sketch of Sir Benjamin Brodie. By Henry W. Acland. London: 1864.

ADVERTISEMENTS.

Prize Designs.—"As affording the most striking contrast, Mr. Benson shows with these a fresh exhibition of modern watches, with cases made from Prize designs at the South Kensington Museum, some of which are fine specimens of engraving."—*Times*, Sept. 15, 1862. Chronometer, duplex, lever, horizontal, repeaters, centre seconds, keyless, split seconds, and every description of watch, adapted to all climates. Benson's Illustrated Pamphlet on Watches (free by post for two stamps) contains a short history of watchmaking, with prices, from 3 to 200 guineas each. It serves as a guide in the purchase of a watch, and enables those who live in any part of the world, to select a watch, and have it sent safe bypost. Prize Medal and Honourable Mention, Classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

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The Principles of Agriculture.

By WILLIAM BLAND, M.R.A.S., Author of "Principles of Construction in Arches, Piers, Buttresses, etc."

London: LONGMAN, GREEN, and Co., Paternoster Row.

Reigate Union.—To the Medical PROFESSION.—Notice is hereby given, That the Guardians of the Reigate Union in the County of Surrey, are prepared to receive Proposals in writing from persons willing and properly qualified (according to the qualifications specified in article 168 of the Consolidated Order of the Poor Law Board) to undertake the Office of Medical Officer of the SOUTHERN DISTRICT, comprising the Parishes of Charlwood, Horley, and Leigh, containing an area of 17,640 acres and a population of 3634, at the Salary of £100 per annum, and the usual Extras for Midwifery Cases, Operations, and Vaccination, etc.

The person appointed will be required to reside in the Parish of Horley, and the duties to be performed will be those defined in Articles 205 and 206 of the said order, and such other duties as are or may be directed by the Poor Law Commissioners or Guardians.

Applications, accompanied by Testimonials as to character and ability, to be forwarded to me at my office (postage free, on or before Tuesday, the 15th of March instant, and the Candidates are required, at their own expense, to attend the Meeting of the Board, at the Workhouse, Redhill, on Wednesday, the 16th March, at 12 o'clock at noon. By order of the Board,

G. CARTER MORRISON, Clerk.

Reigate, 3rd March, 1864.

TO PHYSICIANS, SURGEONS, AND DRUGGISTS.

Brown's Cantharidine Blistering TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lyttæ P. L., easily applied and removed, and will not produce strangury or troublesome after-sores. It has received the sanction and commendation of many of the most eminent practitioners in the kingdom.—In tin cases, containing ten feet, 6s. 6d.; and small cases of five square feet, 3s. 6d. each.

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TO ADVERTISERS.

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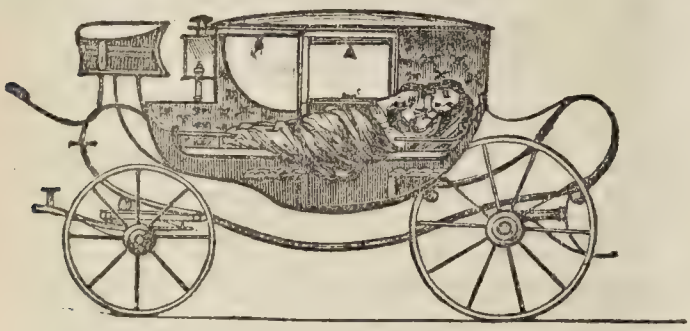
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To the Surgical and Medical Professions.—W. F. Durroch, Manu-

FACTURER of SURGICAL INSTRUMENTS to the Royal Navy. Greenwich Hospital, Guy's Hospital, &c. &c., begs to inform the Profession that he continues to manufacture SURGICAL INSTRUMENTS of every description, and that he has attained the highest reputation by the approval and patronage of the most eminent Practitioners and Lecturers for the improvements made in various articles. Gentlemen favouring him with their orders may rely on having their Instruments finished in the best and most modern style. Surgical Instruments made to Drawings and kept in repair. Established 1798.

NOTICE OF REMOVAL.—W. F. Durroch has removed from No. 28, St. Thomas's Street East, to No. 3, St. Thomas's Street, near the Hospitals in Southwark. Late Manufacturer to the leading Houses in the Trade.

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OF KNOWN COMPOSITION. **TOWLE'S CHLORODYNE.** **For Formula, &c., see back Numbers.**

Extract of Letter from Dr. C. KIDD (Author of standard works on Chloroform): "Sir: Of the value of Chloroform given internally I have no doubt, it appears to me in that form an anodyne *sui generis* that no other anodyne can approach. I have resolutely opposed the use of *secret* compounds of Chloroform, and, in every way I can, encourage the 'Chlorodyne' (if we must have it at all) that is made by you, as you state that its composition is known. Many medical men think with me and recommend your componnd, but will never prescribe a *secret* remedy. (Signed)

"Sackville Street, Piccadilly, London. April 1862." "Chas. Kidd, M.D. and Surgeon."

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

In bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; 4 oz. and 8 oz., 8s.

LIQ. CHLOROFORMI CO. (TOWLE'S).

This preparation is identical with "Towle's Chlorodyne," *sine* Ol. Menth. Pip. (dose, 5 to 20 minims. as in Chlorodyne).

The Proprietor having for some time past, at the request of several members of the Medical Profession, made a preparation of Chlorodyne without peppermint, has lately, on account of the frequency of these demands, prepared the same for more general use, under the designation of Liquor Chloroformi Co., which, possessing the Medical properties of Chlorodyne, may be prescribed in all cases where the Ol. Menth. Pip. is disapproved, and overcome the objection so generally felt to the use of the term "Chlorodyne."

May be obtained, as an introduction, from the following Wholesale Houses, in 2 and 4 oz. bottles, at 2s. 6d. and 4s. each:—London:—Barclay and Sons, 95, Farringdon Street. Birmingham: Southall, Son, and Dymond. Liverpool: Clay, Dod, and Case. Edinburgh: Duncan, Flockhart, and Co. Glasgow; The Apothecaries' Company. Dublin: Bewley, Hamilton, and Co. Manchester: Jas. Woolley; and the

Manufacturer and Proprietor of these Preparations, A. P. TOWLE, 99, STOCKPORT ROAD, MANCHESTER.

Price's Glycerine, its Uses and

Purity. See "De la Glycerine, de ses Applications à la Chirurgie et à la Médecine," by the eminent French Surgeon, M. Demarquay. pp. 240. Paris: P. Asselin. 1863. Or, "On Glycerine. and its Uses in Medicine Surgery, and Pharmacy." By Dr. W. Abbotts Smith. London: H. K. Lewis.

Surgical Instruments.—Arnold

& SONS continue to supply Instruments of the best workmanship at moderate prices, manufactured on the premises under their own superintendence.

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Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture X.
ON TORTICOLLIS, OR WRY-NECK.

Wry-neck is occasioned by structural shortening of some of the cervical muscles; but especially of the sterno-cleido-mastoid muscle, through which the head is twisted to one side; the ear being approximated to the shoulder, and the chin being projected in the opposite direction. Other muscles, as the trapezius, the platysma myoides, and the scaleni, may subsequently become affected. Not only is the head drawn down to the shoulder, but the shoulder is raised; and through the traction which is made upon it by the sterno-mastoid muscle, the clavicle may even become deformed. The face on the side of the contracted muscle appears to be smaller and less developed than on the opposite side; the eye is lower; and the mouth is depressed. This tension which is kept up on the face causes the muscles on the affected side to be nearly or entirely inactive; and an inexpressive and almost idiotic appearance is thus given to the countenance.

Through this muscular contraction, the head is almost immovably fixed; and it consequently becomes necessary to turn the whole body when the patient desires to look at an object which is not immediately in front of him.

This subject naturally follows that of lateral curvature of the spine, since wry-neck is one of the many causes of spinal curvature.

One of the worst forms of lateral curvature of the spine that I have seen lately, was induced by wry-neck of a singularly severe character. I saw it together with my friend Mr. Mould. In this instance, the entire sterno-mastoid muscle of the left side was contracted; the convexity of the cervical curve was on the same side, and the dorsal curve was on the right side, while the lumbar curve was formed on the left side. It was necessary, in this instance, to divide both the sternal and the clavicular portions of the muscle, as well as some tense bands of fascia.

The effect of section of the muscle in lowering the left shoulder, and in tending to reduce the dorsal curve, was extraordinary; so that, although the distortion was of some years' standing, it was removed without much difficulty, and in a short time, after the tense muscle had been divided.

This affection occurs more frequently in the female than in the male. It occurs both as a congenital and as a non-congenital affection. The former is not common. But as a non-congenital affection, it may be seen at any period until middle age; especially it is found to occur in children between the ages of 2 and 12.

Figure 28 represents the congenital form of the distortion in a boy, 12 years of age, who was sent to me by my friend Mr. Hodgkinson.



Fig. 28.

The *Causes* of congenital distortions which depend on muscular retraction are veiled more or less in obscurity. Many theories have been advanced, which need not here be mentioned. One, however, is especially worthy of notice; namely, irritation of the nervous centres; and it is probable that, in a large number of instances of congenital distortion, this is the cause of muscular retraction.

It is unnecessary to say, that this is not the only cause of congenital distortion. Some distortions arise from injuries to, or malformations of, the bony skeleton; others from imperfect development of the muscular system; while others, again, are occasioned by affections of fascia or of skin. These last mentioned causes of distortion, however, are comparatively rare. The usual cause of congenital muscular retraction giving rise to distortion is, as Rudolphi stated, "morbid nervous influence acting on the muscles." This fact was, at a later period, developed into a system by Guérin. He, however, having adopted the teaching of Rudolphi, generalised too freely, and was at length led beyond the truth.

It is known that, where some destruction of the nervous centres has occurred, or where marked change of structure from the normal condition of brain or spinal cord has been induced, every variety of muscular distortion may be found. But, it is said, when the brain and spinal cord are wanting, similar muscular retractions are found to exist. And, again, without appreciable nervous lesion, muscular retraction is found equally. Is it possible to reconcile these several cases?

Perhaps, this question is less difficult to solve than would at first appear. Notwithstanding that the

brain and spinal cord are absent, nervous irritation may yet remain, portions of nervous matter being still undestroyed; irritated meninges and hypertrophied nerves, also, being present to produce perhaps not less distortion than would be induced by the irritation of larger masses of nervous matter. Again, our means of examining nervous structure are yet very imperfect; so that it is impossible to say where healthy structure terminates and where disease commences. We are compelled, therefore, to admit, that every form of muscular retraction may be induced by nervous irritation. And by exclusion it may be proved, that congenital distortion is due either to malformation, occurring, as it then does, in the germ; or to inflammation and destruction of tissue; or to nervous irritation.

Wry-neck, then, being a congenital affection, and being occasioned by muscular retraction, owns nervous irritation as a cause.

The *Causes of Non-congenital Wry-neck* are injury at birth, inflammation, paralysis, and spasm.

When the sterno-mastoid muscle and the parts around are bruised at birth, or when the muscle is lacerated, either by the application of the forceps or other cause, an effusion of blood takes place, which may be followed by inflammatory retraction. And when inflammation of the muscle occurs, from whatever cause, the fibres of the muscle become shortened and unyielding.

But the most frequent cause of wry-neck is paralysis, occurring perhaps after fever, or from cold, or from disease of the nervous centres. The muscle of one side being paralysed, that of the other side contracts upon itself, and becomes rigid and cord-like.

Again, spasm in the muscle exists together with disease of the nervous centres. Brodie relates a case where spasm of the sterno-mastoid muscle alternated



Fig. 29.

with insanity. Two very extraordinary examples of this affection have come under my own care; in both of which death has been occasioned by disease of the brain. Figure 29 was taken from one of these cases. In severe cases of spasmodic wry-neck, disease of the cerebro-spinal axis is perhaps always present.

Treatment of Wry-neck. In the earliest infancy, mechanical means will sometimes be sufficient to overcome retraction when it is not severe. When, however, the distortion is not removed during the earliest years, section of the retracted muscle becomes necessary. This muscular retraction occasionally arises from temporary irritation, as in a case which I lately saw; where the irritation caused by cutting a molar tooth seemed to be the cause of retraction. In such a case, when the offending cause is removed, the distortion also quickly disappears.

After structural shortening of the muscle has taken place, subcutaneous section of the entire muscle, or perhaps of its sternal attachment only, will be necessary.

The patient should be seated, his head being supported by an assistant and slightly inclined forward, while a tenotome is carried behind the muscle from within outwards. The muscle should be divided in withdrawing the knife. The section of the muscle should be made there where the tendon stands out most prominently—from one to two inches above its insertion. By some, this operation is looked upon as dangerous; and instructions are given how to avoid the carotid artery and the jugular vein. This notion, however, is simply absurd. In the division of this muscle, as with every other retracted structure, there is no danger of wounding vessels, if the knife be used with moderate ability, and the blade is kept close to, and is not allowed to pass beyond the retracted tendon.

Some, as Stromeyer, seem to prefer to perform this operation from before backwards. The risk of wounding vessels is greatly increased by dividing the tendon in this manner. Not only this, but every other tendon, when section is required, should be divided by first passing the knife beneath the tendon. The section is thus more easily performed; and it is done much more satisfactorily. Instead of the operation being bloodless, as these subcutaneous operations should be, there is great danger of wounding veins if the edge of the knife be not turned upwards towards the tendon and the skin. Re-union is impeded by the effusion of blood, and abscess may very likely follow.

It is seldom necessary to divide more than the sterno-mastoid muscle. Other contracted structures will probably relax before a well-adjusted instrument. Yet it may be necessary to touch bands of fascia with the knife, or even to divide other muscular fibres.

The patient should be kept quiet in bed, with the head supported, until the wound has healed. An apparatus may then be applied for gradual extension. When the position of the head has been restored, the opposed or paralysed muscle may be stimulated with liniments, galvanism, and the like. And until the two muscles are again of equal power, or nearly equal power, the head will require to be supported, that retraction may not again take place.

Trichina Spiralis Poisoning. During the past week, an instance of the poisoning of a whole family, and the death of one member, caused by eating a ham, was reported in the city papers. The case was investigated by Dr. Schnetter, who found the ham full of the trichina spiralis, and did not hesitate to attribute the poisoning to this parasite. (*American Medical Times.*)

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WESTMINSTER HOSPITAL.

CALCULUS IMPACTED IN THE URETHRA OF A CHILD: ENORMOUS DISTENSION OF BLADDER: REMOVAL: RECOVERY.

Under the care of CHRISTOPHER HEATH, Esq.

[*Reported by* Mr. WATTS, *House-Surgeon.*]

FEBRUARY 5th, 1864. Richard P., aged 3¼ years, was sent to Mr. Heath by a practitioner a few miles from town, suffering from retention of urine. For three weeks his mother had noticed that he had complained of pain about the bladder and penis, particularly when passing urine. On the 2nd (three days ago), she found that he could not pass his urine at all; and since that time he had been unable to do so, but a small quantity had constantly dribbled from him. He had been constantly crying and pulling his penis; and on the day before admission, she took him to a practitioner, who only ordered a powder; and afterwards, to the medical man who sent her to Mr. Heath.

On admission, the lower part of the abdomen was distended by the full bladder, which formed a distinct prominence as high as the umbilicus. There was some œdema of the scrotum, but no appearance of extravasation of urine. Mr. Heath, who was in the hospital when the child arrived, had him put under chloroform, and then examined the urethra externally to see if there was an impacted calculus, but failed to find one. He then proceeded to pass a catheter, which struck against a calculus immediately within the meatus, which was concealed by a congenital phimosis. Mr. Heath therefore at once performed circumcision; and on exposing the glans penis, the calculus was seen slightly projecting from the meatus, from which it was easily extracted. It proved to be an oval calculus, broken at one end, and weighing four grains. The outer coat was uric acid; but at the broken end could be seen an inner layer of phosphates; and probably there was an inner nucleus of oxalate of lime, as is frequently the case in these small calculi of renal origin. A catheter was passed, and a very large quantity of urine evacuated.

February 7th. The boy was quite comfortable; but appeared unable to hold his urine, large quantities of which had been passed under him.

February 9th. The thread was removed from the foreskin, which was healing. The incontinence of urine continued.

February 11th. The boy was up to-day, and able to hold his urine. Nitrate of silver lotion was applied to the foreskin.

February 23rd. He was discharged. The boy has quite recovered the control of his bladder, and the foreskin is all but healed.

In some clinical remarks upon this case, Mr. Heath explained to the pupils that retention of urine in children was almost always associated with calculus, and that the early recognition and treatment of the case was most essential. In this boy, the calculus had passed through the whole length of the urethra, and was only obstructed by the narrow meatus, from which it was readily extracted; but calculi not unfrequently became impacted in other parts of the urethra, and if permitted to remain there, gave rise to fatal extravasation of urine. Fortunately, this boy was seen in time to prevent such an accident; but the bladder was in a dangerous state of over-distension.

The treatment of this case was simple enough; but had the stone become fixed further back, it would have been necessary to open the urethra at that point. Mr. Heath said that he agreed with Mr. Cooper Forster, in believing that there was no more danger in opening the urethra in front of the scrotum than behind it, if the calculus were impacted in the anterior part.

Original Communications.

THE NATURE OF SO-CALLED "PARASITES" OF THE SKIN.

By W. TILBURY FOX, M.D.Lond.; University Medical Scholar; Physician to the Farringdon General Dispensary.

IN the *British and Foreign Medico-Chirurgical Review* for January 1864, is an elaborate article by Mr. Erasmus Wilson, *On the Phytopathology of the Skin and Nosophytodermata, the so-called Parasitic Affections of the Skin*, in which an attempt is made to overthrow the almost universally accepted view of modern authorities, in regard to the nature of "parasitic" bodies. The vast influence which the name of Mr. Wilson exercises in dermatological matters, must alone guarantee an acceptance of the doctrines put forth in the essay referred to, by those not well versed in the special literature of skin-diseases. Now, of late years, several questions relating to parasitic diseases have been centres of the most opposite opinions. Are the "parasites" the result of spontaneous generation? Are they produced by a transformation of the molecules of a higher into a lower state of life? Are they vegetable in any degree in their nature? Are they the *vera causa* of disease, or only secondary products? In my work on *Parasitic Diseases*, an attempt has been made to satisfactorily determine most of these queries, but no discussion is contained therein touching the exact nature of so-called parasites, because almost every authority admits absolutely their *vegetable* nature. The essay of Mr. Wilson necessitates a detailed examination of the question; for, indeed, if the more prevalent view be erroneous, and that of Mr. Wilson correct, the whole of our pathology and treatment is bad in the extreme.

Speeking generally, the article is a representation of the views of MM. Robin, Bazin, and Hardy. The original matter relates more particularly to the origin and nature of the parasitic germs; there is scarcely more than a passing notice of the question pressing now-a-days most strongly for solution: viz., the *identity* or *relation* of parasites, a part of the subject which contains the most telling arguments *against* the doctrine advanced by Mr. Wilson.

The present remarks will be directed especially to the examination of the opinion advanced by Mr. Wilson, touching the nature of the so-called parasites. I may first call attention to the very elaborate and complicated nomenclature introduced into the article, forming a total sufficient to bewilder and reduce to despair not only the student but the more learned practitioner. The following may be quoted:—Phytopathology; Nosophytodermata; Phytiform; Porrigophyton; Aphthophyton; Mentagrophyton; Porrigo tonsurans; Porrigo decalvans; Alopecia areata; Phytodermic; Chromatogene-

sis; Epidermophyton; Mucedinales; Dermophyton; Mycodermis; Trichosis furfuracea tonsurans; Tinea pelada; Tinea mentagrophytes; Furfuræ dermophyticæ; Lichen annulatus serpiginosus; Herpes circinatus pustulosus; Herpes esthiomenos; Pelada decalvans; Tinea achromatosa; Tinea pelada simplex; Area alopeciata; Trichosis area ophiasis; Dyschromatogenous; Furfuræ parasiticæ; Dermopathology; Trichosis maxillaris; Trichosis corporis seu lichen annulatus; Phyticides.

It is a matter of no denial, that these "hard names" are very obstructive to the advance of knowledge. Take one general term: be it porrigo or tinea, and then particularise each variety by appropriate additions: Tinea favosa; Tinea tonsurans; Tinea decalvans; Tinea circinata; Tinea sycosis; Tinea versicolor; and the result will be materially the better, in that we may reject, *in toto*, all sources of confusion in nomenclature. Why cannot we use the term Parasitic Diseases instead of Nosophytodermata? Indeed, if the latter be not produced by "vegetable growths" then is the term Nosophytodermata in every way incorrect. It is much more desirable to employ names which are "easy to read and write," and which "convey quite as correct a notion of the characters of the disease," even "in preference to the more lofty-sounding" ones.

It is a fair criticism, to say that the article "Phytopathology" in the *British and Foreign Medico-Chirurgical Review*, does not deal with the subject in a liberal manner. The arguments contained in it, cannot be fairly said to be a "total" of *pros* and *cons*; indeed, the data which form the basis upon which the vegetable nature of parasites rests, are not refuted—not examined. True, the history of their discovery, their outward resemblances, and their microscopic appearances are discussed; but the arguments derivable from analogy, the vital and chemical behaviour of the "parasites," the effect of treatment and the like, are not noticed. Mr. Wilson details very clearly and forcibly the mode in which he conceives the parasitic bodies to be produced by a "granular degeneration" of normal tissues, and refers for corroboration to the instances of the development of "mucus and pus" to be noticed presently; but it seems to me that the whole point has been examined by an anatomical eye and anatomical ideas, without any reference to the *botanical* view of the case. "More than twenty years since," says Mr. Wilson, "after a careful microscopic investigation of the pathological elements of which they are composed, we came to the conclusion, that they resulted from an aberration of cell-formation; that this aberration consisted in the growth and proliferation of the primary granules of which epidermic cells and hair-cells are normally constituted; that this growth and proliferation had the effect of arresting the granules at their embryonic stage, and in the performance of their embryonic functions, and, as a consequence, that the cell-tissue (epidermis and hair) composed of these embryonic granules and imperfectly elaborated cells, was, upon desiccation by the air, dry, spongy, friable and brittle; that, in trichosis, this change alone existed in the hair and epidermis; whereas, in favus, the granules composing the yellow disk around the mouth of the follicles passed through a pustular stage, the consequence of a higher degree of inflammation, and, in their pustular condition, obtained their peculiar yellow colour. We called this morbid alteration of the primary granules of the epidermis and hair-tissue 'granular degeneration', and subsequent experience has not altered our opinion."

As regards the mode of increase and production: "the granules are nucleated separate or in groups, or adherent in moniliform strings of two to four, or five in length. The greater number of the granules are uninuclear; some, however, are binuclear or trinuclear. The binuclear granule is in process of proliferation; the original nucleus has split into two, each moiety has become a separate nucleus, the space between them has increased, a septum has arisen in the interval, and the cell has become oblong—an oblong cell with two nuclei, or rather two independent but adherent cells; cells that may subsequently divide and become separate unities. This is the mode of cell-proliferation." At an early stage, and in near contact with the vital tissues, the tendency is to the formation of granules; but, "removed from the source of nutrition proliferation weakens, the divided cells remain adherent, and either retain their globular and embryonic shape, and give rise to moniliform filaments, or they grow in length at the expense of their contents, and form cylindrical and transparent filaments divided by septa, each intermodial segment representing a single original globular granule or cell." They lapse, in the latter case, "into an irregular and filamentary proliferation, giving rise to an inferior form of organisation neither so complete nor so permanent, and which converts the higher animal organisation into a lower and phytiform organisation—an animal tissue into one which might be likened to a vegetable tissue." These quotations give us as the source of the so-called fungus-elements, the normal tissues (epidermic granules); the nature of the disease pathologically as a "granular degeneration;" the mode of increase by the division of the nuclei of the cells, and the secondary division of the cell itself; the formation of so-called mycelium by the division of the nuclei, but the non-separation of the binucleated cell into separate unities. These stages are best seen in favus. The granules are globular, uninucleated, bi- and trinucleated; the mycelial forms are moniliform and opaque, cylindrical and transparent, with a branched and ramified filament. "In the case of the trinuclear cell a bifurcation is effected, and the proliferation of each part of the tissue-cell lays the foundation of a branched and phytiform growth." The peculiarity of favus "is due to a pustular complication;" the layer of the favous mass next the basement membrane of the derma is made up of pus-globules; "these pus-globules contain from four to seven or eight well-formed nuclei; and these nuclei, on their escape from the cell-membrane of the pus-globule, become the nucleated granules which are the chief constituent of the pathological product." The moniliform thread is produced by the coalescence of these escaped nuclei. We have, then, a further proposition to notice; that in favus the "phytiform" elements are derived from the nuclei of pus-cells. Mr. Wilson interprets the term "granular degeneration," by "the idea of an arrest of development of the cell-tissue of the epidermis at its embryonic stage, and the production of a tissue constructed of crude and imperfect materials, which represent an earlier period of cell-generation than that which Nature intended, and which, in consequence, is truly in a state of degeneration from the perfect type."

Now, it is impossible to overrate the immense importance of the opinions contained in the quotations given; for, seeing that they differ in *almost every particular* from the opinions of our great dermatologists and botanists, a considerable check must be given to the advancement of the study of Parasitic Diseases, until the conflicting opinions of high authorities are harmonised, or the one or the other is shewn to be untenable. The whole matter rests upon the solution of two questions. The one is, Are the so-called parasites vegetable in their nature? The other is, Can an animal by a retrograde metamorphosis ever become

converted into vegetable tissue? Then comes the subsidiary question: What are the effects of the growth of parasites?

First, then: What are the grounds upon which the opinion of the vegetable nature of parasites rests? Speaking generally, we find that the existence of vegetable growths is very general in the hard external covering of living beings; and not only this, but there is a complete similarity between the unicellular plants found upon man, and those found on animals. They have been observed, especially by Kölliker, in sponges, foraminifera, corals, bivalves, brachiopods, gasteropods, annelids, cirrhipeds, fish, etc. A very familiar instance is that of the silkworm and caterpillar disease of parasitic nature.

We should be led, then, to expect the occurrence of vegetable parasites upon the outer covering of man; and the attributes possessed by so-called parasites are sufficiently distinctive of vegetable bodies: they are, briefly, *structural, chemical,* and *vital.*

a. Structural. We are able to distinguish the presence of cellulose externally, and internally the primordial utricle coloured by iodine; also the *tubed* mycelial form and fructification; the latter being unrepresented in animal structures.

b. Chemical. Ether, chloroform, and spirit of wine render epithelial tissues transparent, and dissolve all fatty substances; whilst vegetable parasites remain unchanged. Ammonia dissolves animal products, *ex. gr.*, pus, puriform secretion, "crusts, etc., converting them into a gelatinous mass"; and caustic potash behaves in like manner.

c. Vital. These are by far the most important to notice here. Something may be learnt from a consideration of the localities in which parasites grow, as follows; on the skin generally; in depressions of the derma (follicles); on the epithelial tissues, in the case of the Madura foot or podelkoma; a wound is often followed by the development in it of fungus elements; in the stomach, intestines (hence in the stools); in the œsophagus, vagina, uterus, pleura, cavities in the lungs, urine, the wax of the ear, etc. Now, in the vast majority of cases, it is clear that the external air has free access to those situations in which fungi are wont to occur. The exceptional cases admit of very considerable doubt. For example, in the interior of the egg a fungus has been found, but has been supposed to obtain an entrance before the formation of the shell, when there can be no difficulty in accounting for its presence through the medium of the external air. The fluid of the ventricles of the brain, the kidney, and the bladder, have been stated as places where the elements of a fungus may spring up without communication with the exterior. The evidence, however, is open to grave negation. It is quite possible that the development, rapid as it has been, has taken place after the removal from the body or the exposure to the air of the fluids in which it is found. The most notable case of the kind is recorded by Dr. Begbie in the *Edinburgh Medical Journal* for April 1856, in which sarcinæ were found in fresh urine, immediately after micturition, upon two occasions. Can air enter the bladder from without? Another explanation has been offered, by supposing the "germs" of the entophyte to be taken up by the blood, and deposited in the kidney or bladder, as the case may be; reasoning from analogy, it appears most likely that the "germs" are derived *ab externo* in some way as yet unexplained. At any rate, we may reasonably conclude that, in the great majority of cases, there is the greatest facility for the introduction of parasitic elements from without; and that the occurrence of parasites in certain internal parts of the body directly militates against the theory of Mr. Wilson, inasmuch as their presence is unaccompanied by any change of tissue, especially such as would lead us to imagine anything like "granular degeneration" of the epithelial linings. To argue in this case from a narrow limit of observation, *ex. gr.*, the parasitic tineæ, must inevitably lead to error and misinterpretation.

The argument which determines the whole question at once is the fact that parasites (or Mr. Wilson's "granular degeneration") will grow when removed from the influence of living tissues, and away from the influence of the blood—a property which no one will accord to animal tissue. The most casual experiment will convince any one of the truth of this assertion. If a piece of favous matter, a hair from tonsurans or "herpes circinatus", be "put up" and kept in a warm place, in a short time the *growth* of the fungus will be noticed; not so that of the animal tissues present. The stromal (nuclear) will develope into the sporular form; the sporules will increase in size, join together, bud, or produce mycelium. I have seen in the trichophyton a most luxuriant crop of mycelial threads sprout away from a diseased hair, while the sporules in the interior became chained and moniliform, while not a particle of fungus could be found in any other part of the field, to suggest an origin from any other source. These artificial germinations are not always successful, and require care in their manipulation; in them we see another very important argument militating against the "granular" theory, and confirming in strong terms the vegetable nature of parasites—viz., the pathological tendencies. After a time, these artificial preparations exhibit a great contrast. The spores become chained, double-contoured, large, forming a mass of slightly squared cells, chained and linked in all directions, mostly in the axis of the least pressure—viz., longitudinally, or rather parallel to the long axis of the hair; mycelial threads sprout away from the side of the latter, and now and again attempts at fructification are observed; but, inasmuch as the influence of the external air is withdrawn, it cannot be perfected. In contrast to this state of growth is the fatty degeneration of the animal structures—hair, epithelial cells, and the like. I remember to have shown some of my friends a most charming specimen of the kind in perfect preservation (a hair loaded with the trichophyton tonsurans), in which these changes were as marked as possible; the fibres of the hair had degenerated, and their place was supplied by beautiful tufts of crystallised fatty matter; while the fungus itself was freely growing and encroaching upon the space occupied by the hair-fibres. Originally, the shaft of the hair was perfect in its structure, only freely infiltrated with sporules. A prettier object for the polariscope could not be imagined.

Now, if the parasite were a lower form of animal life, a degeneration of the normal structures, surely it should first of all undergo that kind of degeneration so characteristic and cardinal in, as they may be called, dead or dying tissues of the animal body; whereas, in the case in point, we find a positive divergence, a development of the vegetable and dissolution of the animal tissue. It avails nothing to argue here, that there is a conversion of the one into the other; because, leaving out of view the different kind of metamorphosis going on, there are no transitional stages; and the perfectly formed structure of the hair disintegrates by a chemical process, its vital life being wholly null and void; and, according to Mr. Wilson's theory, the "granular degeneration" is a vital process, of course. The only vital process present is the growth of the parasitic vegetation. Hence there is a further point to notice. The change in the animal structures is a chemical, that in the parasitic a vital one in addition—a distinctive difference, which needs

no further consideration. The chemical destruction of the animal, no doubt, helps the development of the vegetable; but the one is not produced by a transformation or modification of the molecules of the other. The same kind of independent existence of parasites is seen in those cases in which the shaft of the hair is retained in the follicle, while its root is totally disconnected with the formative process. The hair is in this case, to all intents and purposes, a dead structure, yet the parasitic vegetation luxuriates; and other cases might be quoted. The existence of budding is another feature of distinctive significance as to the vegetable nature of the parasites. This will be referred to again.

The occurrence of an union of cells as an active process may be mentioned. This is a fact which every one will admit. Hebra, Mr. Wilson, and others seem to recognise, as the universal mode of the production of sporules, the constriction of filaments, and separation of the constricted portions, as well as the bidivision of free cells. This is surely an error of observation. The sporules are primary in point of existence, therefore cannot be formed by division of the mycelial cells. Besides, the larger are seen to be produced by the enlargement of the smaller cells. In the case of the torula, this is seen to an extreme degree in its endogenous growth. Saving in the fructification, which is rare in human epiphytes, the most usual process is an increase by endogenous formation, and also the formation of the mycelium by a union of cells (with superadded budding); and in the mycelium the same endogenous growth obtains. Now, nothing of this complete kind exists in the epithelial tissues: endogenous growth, yes, but not a true junction and union of cells. I refer now to the epithelial tissues only, which are those concerned in the discussion.

Parasitic disease can undoubtedly be produced by the introduction of the germs from without, provided there exist a suitable soil. The experiments of various observers will occur to the memory of most readers. In accordance with all that is known of fungi generally, it must be accepted as certain that vegetable growths arise in the case of "porrigo", of favus, and such like, "as they do if a piece of melon or a bit of cheese, not over dry, be placed in a cupboard"; that is to say, in accordance with the same general laws; or, in other words, they never flourish upon "*healthy*" surfaces, though it is difficult to define clearly the exact state of pabulum by external manifestations; but that some favourable condition of soil, some deviation of the nutritive process, exists, must be admitted. Well, then, introduce the sporules of a fungus to a person so nutritioned, and parasitic disease will result. Does not the contagious character of tinea make a dead stand against the acceptance by us of the theory of "granular degeneration"? Mr. Wilson states that, in a certain sense, "mucus may be viewed as a *parasite* receiving nutriment from the body, but not shape, nor claim to vitality"; and adds, in a foot-note: "In this sense, we are willing to accord to the nosophytodermata the title which has been assumed for them of parasitic diseases, but not as organisms originating from without, and intruding upon the tissues of man, as the phytopathologists claim." Yet he does not notice the bearings, upon this question, of artificial inoculation and contagion. It has been pretty surely shown that, in the instance of Madura foot, which presents a larger amount of fungus than any other disease, the germs are derived through wounds in the feet; and it may not be uninteresting to observe here, that Mr. Wilson's theory could not explain the development of the chionyphe Carteri in the carious bones of the foot. Looking for a moment to the applicability of the word parasite to the case of mucus (pus), these latter have most special and useful functions to perform, without which nature would suffer very materially. The term parasite, as given to them, leads one to form by far too low an estimate of their nature and worth, and detracts from the beauty and perfectness of conservative nutrition.

[*To be continued.*]

RECENT INTUSSUSCEPTION.

By E. Cousins, Esq., F.R.C.S.

On December 13, 1862, a male child, aged 21 months (the same patient whose case in a former illness is reported in the British Medical Journal for June 21, 1862), came again under my care. The child was said to have had diarrhœa for the last day or two, supposed to be connected with teething. At 1½ A.M., the nurse gave it two teaspoonfuls of castor oil, which acted before 3; giving a not unhealthy-looking liquid evacuation, on which oil floated. The child, however, strained much in passing it, and seemed faint. He then had frequent paroxysms of pain and slight tenesmus, during which he writhed much, and then fainted, remaining pale and more or less unconscious till fresh torminia appeared to rouse him. He occasionally vomited a few teaspoonfuls of serous fluid with greenish flakes. At 3½ A.M., he passed about half an ounce of bright blood *per anum*, with tenesmus, and then fainted (as usual after each fit of pain). At 4 o'clock, I found him in a state of syncope, with the pulse barely perceptible, even during the fits of restlessness. These occurred every ten minutes; in the intervals between them, the abdomen was soft and flaccid, and free from tenderness or from any discoverable tumour; and the right iliac region and hypochondrium were sensibly full; the epigastric, umbilical, and left iliac regions, were depressed; the space from the umbilicus to the pubes was moderately full. Whilst palpating, the transverse colon was felt to harden under the hand, and formed a well-defined hard tumour, which could be traced, though less hard, through the region of the ascending colon to the cæcum. Evident distress began after this; the rectus muscle hardened so as to obscure the tumour; and the child writhed severely. Laudanum was given, with a little sal volatile. The fit of pain passed off; and during the subsequent syncope the tumour again became perceptible, and then gradually became less and less defined, and nearly ceased at last to be distinguishable, until the approach of the next paroxysm.

The diagnosis was, intussusception of the ileum through the ilio-cæcal valve, reaching half-way along the tract of the colon. Some brandy being given, inflation *per anum* was performed with the stomach-pump at seven o'clock. The abdomen was rendered very tense with air, which in about three minutes was heard suddenly to escape with a gurgle into the small intestine; and on examination, the tumour was found to have disappeared, while the small bowels were discoverable as an elastic mass surrounded by the easily traced colon. It was interesting to note the remarkable change in the feel of this organ, during an ordinary peristaltic contraction of it which followed in a few minutes after the operation. The pulse recovered its tone and fulness instantly afterwards, and the cheeks regained some colour. The child seemed to rest for about a quarter of an hour, and then showed indications of returning playfulness and interest in those around him. He was ordered rice or barley-water with cream as an exclusive diet.

1 P.M. He had had a quiet sleep; after which he craved for food; then had a bloody stool.

8 P.M. He had had two evacuations; the last was

said to contain a small particle of fæcal matter. There was no pain nor tenesmus, nor tenderness of the abdomen. The child was playful all the afternoon, and now fast asleep; having had a powder of hydrargyrum cum cretâ and Dover's powder, of each a grain, and a linseed-meal poultice.

Dec. 14th. He had had a good night, and had passed two evacuations; the first fæcal, but loose, with a patch of mucus tinged with blood; the second devoid of blood, and with abundant bile, but still relaxed. He was ordered to have a grain of extract of logwood, and five minims of ipecacuanha wine, with some syrup, in half an ounce of aniseed water, every four hours, and to repeat the powder.

8½ P.M. He was comfortably asleep; he had been full of play all day, and hungry. He had had one semisolid evacuation.

LARGE CALCULUS IMPACTED IN URETHRA: REMOVAL.

By T. Morley Rooke, M.D., Cheltenham.

The following case presents some features of interest. I was called one evening, two or three weeks since, by a gentleman, to see his stable lad, who, I was informed, was suffering from retention of urine. I found the patient, a small sized but healthy youth of 18 years of age, in considerable suffering, with his bladder distended up to the umbilicus; he had passed very little urine for thirty-six hours. The retention had been at first partly overcome by strong expulsive efforts and the aid of a warm bath, but more lately it had been complete; there was no history of gonorrhœa recent or old, nor of anything likely to cause stricture. On proceeding to explore the urethra with a catheter, the instrument immediately struck upon something hard and perfectly resisting; and on opening out the lips of the meatus, I could plainly see, about half an inch within the canal, what looked like an urinary calculus. I could also feel a hard rounded body, on pressing the glans, conveying the impression of something of the size of a small marble. I at first endeavoured by external manipulation to press the substance forward; but, this totally failing, I passed the blades of an ear-forceps with broad concave-flattened points on each side of the stone, and was enabled firmly to grasp it; but, although I used for more than half an hour every effort of force and cunning to extract it, so firmly was it wedged, that it would not move a hair's-breadth; indeed, the stone at length broke under my forceps. I finally saw no other plan than to slit up half an inch of the mouth of the urethra; this I accordingly did, and then, though still not without some difficulty, extracted the calculus. Of course, the bladder was immediately relieved. The wound of the urethra was nearly healed in five or six days, its urethral edge having adhered by the morning after the operation.

The stone was of an ovoid form; but, it having broken, I cannot give its exact dimensions; the main fragment, probably a little more than half, measures exactly half an inch in its transverse diameter, but the bossed character of its surface no doubt much aided its impaction. The weight of the same fragment is thirteen grains; I should estimate the whole as having been about twenty-two grains. According to my analysis, the composition is oxalate of lime with a little carbonate.

Looking to the age and the small make of the patient, I should think a similar case of a calculus of such dimensions being forced so far along the urethra must be extremely rare. I cannot myself find one on record.

Reviews and Notices.

Excision of the Scapula. By James Syme, F.R.S.E., Surgeon in Ordinary to the Queen in Scotland, etc. Pp. 35. Edinburgh: 1864.

Every one has had personal experience of the truth of the old adage, "A great book is a great nuisance." We are glad, therefore, to be able to tell our readers that Mr. Syme's volume is small, and its value great. It contains the history of three cases of excision of the scapula; and the value of the history is shown in the fact that it establishes a new operation in surgery. These cases prove that the entire scapula, either with or without the arm, may be removed without much difficulty, and without dangerous loss of blood; that the wound will heal quickly and well; and that the arm, if preserved, may be strong and useful.

Mr. Syme first performed this formidable operation in 1856, the patient being an old woman seventy years old. The tumour appears to have been of a cerebriform kind. In this case, the wound healed; and the patient died, not from any of the ordinary results of operations, but apparently from natural decay. She survived the operation two months and a half, and lived long enough to establish, in Mr. Syme's mind, the propriety and feasibility of the operation.

In the next case, in 1861, Mr. Syme removed the scapula in a man forty-three years of age. He had previously removed, in 1860, the diseased head of the humerus in this man; and, a year aftewards, observed a tumour over the shoulder, which gradually enlarged, and became eventually the subject of his second excision of the scapula. The tumour weighed between four and five pounds, and was of a suspicious nature. The man completely recovered, and was able to lift heavy weights with his arm; and, fifteen months after the operation, was in perfect health, and engaged as a letter-carrier.

In the third case, Mr. Syme in 1862 removed a fibro-cartilaginous growth of the head of the humerus, which did not affect the joint; and the patient rapidly recovered. Some months later, a fibro-cartilaginous cyst, of the size of a walnut, was removed from under the cicatrix. Shortly after this, a swelling commenced in the scapular region, which was rapidly developed, extended into the axilla, and overlapped the humerus. In this case, the arm could not be preserved. The tumour, which was removed with the scapula in May last, was of exactly the same character as the morbid growths previously excised. No fewer than nineteen ligatures were required to secure the blood-vessels in this case. The patient recovered completely; and, the last time Mr. Syme heard of him, he was out with the hounds.

An operation of this kind may be truly called a triumph in surgery. It manifestly is a means of prolonging existence, and of snatching man from the immediate prospect of a certain and very painful death. The profession has to thank Mr. Syme for having once again widened the domain of surgery. The details of his cases will, no doubt, be carefully studied by all surgeons.

AN ESSAY, HISTORICAL AND CRITICAL, ON THE MECHANISM OF PARTURITION. By WILLIAM LEISHMAN, M.D., Fellow of the Faculty of Physicians and Surgeons of Glasgow, etc. Pp. 129. London: 1864.

THE mechanism of parturition—of childbirth in its ordinary and normal forms—is a subject that is not yet thoroughly understood, if one may judge from the occasional appearance of essays and treatises on the subject, containing views more or less diverging from each other. Dr. LEISHMAN, an obstetrician of some eminence in Glasgow, has now added his contribution to our literature of parturition, in the form of an historical and critical essay.

The book consists of five chapters. In the first chapter, the author makes some remarks as to the practical importance of a knowledge of the subject on which he writes; arguing "that a man can no more be a thorough accoucheur without this knowledge as his guide, than he can treat disease without recognising a standard of health." He then goes on to state, that the object of his essay is "far more a plea for the study of nature than to introduce any new theories, still less to induce others to view the art in a light too exclusively mechanical." He then gives a historical survey of the doctrines held by the principal writers on midwifery, from Hippocrates (or whoever it was that wrote the works on parturition which are attributed to the Father of Medicine) down to Sir Fielding Ould and Smellie.

In the second chapter, Dr. Leishman first notices the views of Rœderer, Puzos, and Levret. The last named obstetrician founded what Dr. Leishman is inclined to term the "obstetrico-mathematical" school. "L'accouchement," he wrote, "est une opération naturelle, véritablement méchanique et susceptible de démonstration géométrique." On Levret, and the mathematical theories of parturition prevalent in his time, Dr. Leishman observes.

"Among the errors into which, as the result of this tendency, this really able man" (Levret) "fell, I will instance only the geometrical fallacies into which he is led in his demonstration of the mechanism of the dilatation of the uterus, and the no less inaccurate manner in which he arrives at the *quod erat demonstrandum*, in shewing how, according to all known laws of geometry and mechanics, the uterus must empty itself of its contents.

"Nothing is clearer than that the writers of that day had taken up a false idea, which had a most pernicious effect on the progress of the art. They were in the habit of considering the act of labour as a mere form of ordinary mechanism, and they sought to assimilate to this position all that nature and the operator did. This false view led to another. They concluded that the operator must do more than nature. They indicated to nature the way in which the child should move, like the globe, in curves, which might be calculated with mathematical precision, according to the laws of gravitation; and, as they very soon concluded that nature could not confine herself to the prescribed path, they saw in each variation nothing but a fault which the operator in every case must remedy. The result was they infinitely multiplied these, and, according to endless genera and species, drew out rules for assistance. If they had in the infancy of the art trusted too much to the aid of nature, they now trusted to it too little." (Pp. 28-29.)

The appearance of Smellie's work, and its translation on the continent, led to the adoption of a course in which nature was studied in preference to mere theories, and ultimately to an attempt to determine the actual mechanism of parturition by observation, in which the continental authorities for some time took the lead, notwithstanding the prestige which the labours of Ould and Smellie had given to British obstetric science. It is the elder Naegele, whom we are accustomed to regard as the great continental authority on the positions of the child during delivery; but, according to Dr. Leishman, sufficient account has not been taken of the merit due to two obstetric writers, whose works have never been translated, and who are little known—Matthias Saxtorph of Copenhagen, and Solayrés de Renhac; and also Saxtorph's preceptor, Berger.

"The question with which the names of Saxtorph and Solayrés are more especially connected, is the discovery and announcement of the fact, that the head passes down into the pelvic cavity in a position which corresponds neither to the transverse nor conjugate diameters, but it is intermediate between the two, or oblique. But, while it is to the labours of these men that the general diffusion of this new doctrine was undoubtedly due, and while I am inclined to believe that the conclusions of Solayrés were the result of independent observation, yet there can be no doubt that this position of the head had been recognised and imparted to his pupils by Berger, whose pupil Saxtorph was at a period not later than 1759. Of this fact there is internal evidence in Saxtorph's works, and especially in a note to one of his papers, where he says—'In a similar manner Berger saw the true position of the head, and imparted it in his lectures.' But, while this makes it certain that the position alluded to was recognised by Berger, there can be little doubt that it would, but for Solayrés and Saxtorph, have remained unknown." (P. 31.)

Dr. Leishman then gives some copious extracts from the writings of Saxtorph and Solayrés. The latter described six positions of the head; which, briefly expressed in modern obstetric language, are the following:

1. Head in antero-posterior diameter; face backwards.
2. Head in antero-posterior diameter; face forwards.
3. Head in right oblique diameter; face backwards.
4. Head in right oblique diameter; face forwards.
5. Head in left oblique diameter; face backwards.
6. Head in left oblique diameter; face forwards.

The celebrated Baudelocque was a pupil of Solayrés, whose doctrines he promulgated and improved; acknowledging, indeed, his obligations to his master in such a way as, according to Dr. Leishman, detracted too much from his own merit.

In England, some attention was given to the mechanism of labour by Johnson and White; but, until the appearance of Dr. Rigby's translation of Naegele, little investigation was made in this subject. This was principally due to the influence of Dr. Denman, who, in his zeal against the tendency to regard parturition as a purely mechanical process, went altogether to an opposite extreme, and wrote:

"It does not appear that any ill consequences would follow an erroneous opinion of the manner in which the head of the child is protruded through the cavity of the pelvis, in a natural labour; for, no assistance being wanted, no principle was required for the regulation of our conduct."

While, however, obstetricians in England were

taking little notice of the mechanism of parturition during the early part of the latter and the beginning of the present century, on the continent the question attracted the attention of many, among whom Dr. Leishman specially mentions Bang and Professor Boer of Vienna, Stein and Schmitt, and especially Naegele of Heidelberg, whose essay appeared in 1819 in Meckel's *Deutsche Archiv*. The author gives an outline of Naegele's views, and notices also the criticisms passed on his doctrines by more recent writers, especially Dr. Halahan of Dublin and Dr. West of Alford, who are selected as "representing the most diverse and extreme views of the case."

In the third chapter, Dr. Leishman leaves the historical and enters on the practical part of his subject. His subject here is, the Head in the First Position. Before proceeding, however, to offer the remarks which he has to make, he calls attention to the "want of proper definition, and the lack of scientific accuracy in the use of certain terms." The terms to which he specially alludes are "vertex", "presentation", and "at the brim". He then proceeds to comment on the first position—that in which the forehead is turned to the right sacro-iliac synchondrosis, and notices at length the three kinds of obliquity which are described as occurring here.

"The first is that described by Saxtorph and Solayrés, according to which the long diameter of the head occupies the oblique diameter of the brim; the second is the obliquity described by Naegele and most of his followers, by means of which the right parietal eminence enters the brim before the left; and the third is that by means of which the great occipito-frontal diameter accommodates itself in almost all cases to the brim, by the occiput preceding the frontal bone in its descent." (P. 60.)

The chapter is concluded with some remarks on the manner on which rotation of the child's head is effected after its escape from the brim of the pelvis.

In the fourth chapter, the Head at the Outlet is the subject discussed; and here we have a notice of the debated question of "supporting the perinæum". Dr. Leishman recapitulates, from a paper published by him in the *Glasgow Medical Journal* for January 1860, the principal historical points in relation to this practice, which, he believes, was first taught as a part of the duty of obstetricians in all cases, by Professor Hamilton of Edinburgh. He considers fully the views of Drs. Tyler Smith, Graily Hewitt, etc., on the subject, and gives the following as the result of his own observations.

"Having been long convinced of the utter uselessness of a systematic support of the perinæum, I am, however, strongly impressed with the idea, that the practice actually in some cases brings about the very evil which it is intended to prevent. No one, I presume, attempts to deny that there are certain cases where rupture will take place, do what we may to prevent it. . . . . If there is any truth in the statement that support prevents laceration, it follows that I, who *never* support the perinæum, must meet with laceration more frequently than those who do. So far, however, from this being the case, I am pretty well convinced that, the more assiduously the perinæum is supported in natural labour, the greater is its danger of rupture; and I am perfectly certain, that in my practice a severe laceration is quite as rare as it is in the hands of those of much greater experience and ability who support the perinæum. I am glad, however, that the truth of my assertion does not rest on my own limited experience, but is amply confirmed by men of such undoubted talent and vast practical experience as Tyler Smith, Swayne of Bristol, and West of Alford." (Pp. 91-2.)

He then notices the causes which are assumed to produce laceration of the perinæum; viz., deformities of the pelvis; deformity or malpresentation of the fœtus; rigidity of the perinæum and *ostium vaginæ;* too rapid labour; injudicious or unskilful use of instruments; persistence of the hymen; and mechanical support of the perinæum—which Dr. Leishman regards as "a possible cause, if mechanical support is carried to an extreme." As a summary of his views on supporting the perinæum, he gives the following as the terminating words of the chapter.

"While I am quite aware that 'support', as usually practised, is harmless, I am most firmly convinced that it is useless. I am scarcely less firmly persuaded, moreover, that in many cases the result is the reverse of beneficial, and I can bring myself to look upon it in no other light than as a barbarous relic of 'meddlesome midwifery'." (P. 100.)

In the fifth and last chapter, the author comments on the other Cranial Positions, noticing the well known discrepancies as to their relative frequency found in the writings of Naegele, West, etc.

Dr. Leishman's *Essay on the Mechanism of Parturition* is a book that will doubtless be read with pleasure and instruction by many obstetric practitioners.

Progress of Medical Science.

SURGERY.

Foreign Bodies in the Ear. Dr. Voltolini observes that the first thing we have to do is to assure ourselves that a foreign body really is within the ear, for it by no means rarely happens that persons apply under the belief that an insect or other body is within the ear, which the most exact inspection fails to discover. In some cases, inflammation of the membrana tympani is the cause of the deceptive sensation, and this becomes aggravated by the unsuccessful searching for the foreign body. On the other hand, persons sometimes have foreign bodies in the ear without being the least aware of it. The author removed a rolled-up, hairy leaf from the bottom of the meatus, in the case of a lady, who had not the slightest idea how it came there, and who consulted him for deafness of the other ear. In another case, a hexangular glass bead was removed, the patient being entirely ignorant that she had any foreign body in the ear. We should always make a very careful examination, and, when possible, by aid of the direct rays of the sun. No artificial or reflected light is a substitute for this; but where it is not attainable, Dr. Voltolini employs an apparatus of his own invention, which is also serviceable in laryngoscopy. The simplest means of all, however, is to fasten a wax-taper to the handle of a bright spoon in such a manner that the flame exactly reaches to the bowl of the spoon. Taking the spoon by its handle, and holding the light against the ear, by looking over it we are not dazzled, and can explore at our leisure. While in some cases the symptoms caused by foreign bodies in the ear are of a frightful intensity, in others they are wholly insignificant, and do not attract attention to the seat of mischief. For want of due examination of the ear, many patients complaining of giddiness, stupor, singing in the ears, etc., are sent to Carlsbad, Kissingen,

or the sea-side, when all the mischief is due to a foreign body in the ear. Distant organs of the body may exhibit more or less considerable symptoms without, in some instances, the foreign body in the ear giving rise to any peculiar sensation, so that its presence remains unsuspected. For the removal of foreign bodies we should first employ only the gentlest means, such as syringing the ear with warm water; and by this substances of the most different form and composition—even lead-pencil—may be removed. Beyond a bent forceps, an ear-scoop with a long handle, and a small corkscrew, almost all the instruments recommended for this purpose are more or less toys, or dangerous. By means of the corkscrew, wadding and similar soft substances may be easily drawn out; and in many cases we can remove bodies by passing the ear-scoop behind them. We should never employ force, and never should pass any instrument a line farther into the meatus than we can follow it with the eye. For want of such precaution, many a patient has lost his life or his hearing. The first effect of rough procedures is to make matters more obscure, the bleeding and swelling which ensue rendering complete inspection impossible. If the gentlest endeavours (or syringing), during which the eye guides the hand, do not succeed, the body should be left at rest in the ear—aye, even were it a dagger's point; and strong as the expression seems, the author justifies it by reference to cases on record in which pointed bodies have remained for years in the ear with impunity. It is not meant to be said that bodies should in general be left in the ear, but that matters should not be made worse than they are by violent manipulations. Leaving the body in the ear, then, warm water syringing and soft poultices, are to be daily resorted to, until the ensuing suppuration loosens it and gives it a new direction. *(Brit. and For. Med.-Chir. Review.)*

Penetrating Wounds of the Chest and Abdomen. Dr. Howard, of the United States Army, states, that the right way of treating gunshot and penetrating wounds of the chest and abdomen is by "hermetically sealing" the opening. The custom of leaving the wound open is objectionable because it affords an outflow, and thus favours the continuance of hæmorrhage. It allows the force of atmospheric pressure upon the lungs, and necessitates dyspnœa. It admits continually air, ensuring decomposition of the clot in the pleural cavity and suppuration. By closing the wound, hæmorrhage is controlled. The blood lost after the operation cannot be more than would suffice te fill up the unoccupied space in the pleural cavity; the elastic clot furnishing a styptic for the vessels. Dyspnœa is immediately relieved upon removal of the atmospheric pressure. The inclosed volume of air being absorbed, the lung can expand, limited only in proportion to the size of the clot in the pleural cavity. Suppuration, if not prevented, is diminished by shutting out air.

The operation is as follows. All accessible foreign bodies having been removed, introduce the point of a sharp-pointed bistoury perpendicularly to the surface just beyond the contused portion, and with a sawing motion pare the entire circumference of the wound, converting it into a simple incised wound of an elliptical form; dissect away all the injured parts down to the ribs, then bring the edges of the wound together with silver sutures deeply inserted, at no more than a quarter of an inch apart; secure them by twisting the ends, which are then cut off short and turned down out of the way. Carefully dry the surface, and with a camel's hair pencil apply a free coating of collodion over the wound; let it dry, and repeat it at discretion. For greater security shreds of charpie may now be arrayed crosswise over the wound after the manner of warp and woof—saturate it with collodion, and when dry repeat the process until the wound is securely cemented over; as a still greater protection a dossil of lint may then be placed over the part and retained with adhesive straps. The sutures must not be removed until healing by *first intention* is complete. Should suppuration occur so as to occasion distressing dyspnœa, proceed to treat it in all respects as a case of empyema, introducing the trocar at the most dependent point, and taking special care to avoid the admission of air.

ANATOMY, PHYSIOLOGY, & PATHOLOGY.

Physiological Effects of Exercise upon the Human Body. The conclusions of Speck upon the influence of exercise on the human body are as follows. Corporeal exercise diminishes the weight of the body. The use of water during corporeal exercise appears to act differently than during inaction. During rest the use of water diminishes the weight of the body; on the contrary, during action the drinking of water is accompanied by an augmentation of the body's weight, the water being probably retained to compensate for the loss of fluids, which otherwise ensues. Muscular exertion constantly diminishes the quantity of urine; during action the quantity may be reduced to two-thirds, or even one-half of the normal amount. The cause of the diminution of the quantity of the urine during action is, that there is, during exercise, an increased cutaneous transpiration; hence, during exercise, the urinary excretion contains more solid materials than usual, so that in this respect muscular activity becomes an important agent in promoting renal elimination. During labour the skin and the lungs become the main excretory outlets; the excretory processes are more active at the close of the afternoon than during the forenoon. During active exercise the perspiration may be increased to threefold its usual amount; after the exercise has ceased, the perspiration is rapidly reduced or may wholly cease.

The fæcal evacuations are, as a rule, less during exercise than during repose. Food of the same kind appears to be alike digested during repose or muscular activity; it is probable that the less weight of the excrements during exercise is dependent upon the want of the aqueous element. Intestinal peristalsis occurs more slowly during violent exercise. There has been observed no perceptible alteration in regard to the quantity of urea which is eliminated during active bodily exercise. Physical exercise increases to a great extent the amount of uric acid that is discharged. As the use of water diminishes the relative amount of the uric acid in urine, so free perspiration increases it. Since the perspired matter contains a considerable quantity of chloride of sodium, when the transpiration is profuse, the chloride of sodium in the urine is lessened.

All researches indicate a considerable increase of sulphuric acid in the urine during exercise. The perspiration seems to remove little or no sulphuric acid. Phosphoric acid is also considerably augmented in the urine, both during and after exercise; the quantity of this acid which is excreted during free perspiration appears less than that during diminished perspiration, hence the inference that there is a portion of phosphoric acid excreted also through the skin. . . . . The quantity of the air which tranverses the lungs is gradually increased from morning until evening, so that in the evening, from eight to nine o'clock, the maximum is attained. Exercise very notably augments this amount; the augmentation is

manifest even when the number of respirations remains the same. The quantity of carbonic acid which is eliminated is more increased than the amount of air: for example, during gentle exercise the elimination of this gas becomes double the normal standard, and during violent exercise the quantity of carbonic acid excreted is augmented to threefold the usual amount. The heat of the organism is somewhat increased by exercise, though soon after the exercise has ceased the temperature rapidly sinks, even to a point below the normal degree. The production of the perspiration appears to be accompanied with an increase of bodily heat. The lowest temperature of the body is in the morning, the highest at midday, and in the evening there occurs a diminution again. (*San Francisco Medical Press.*)

British Medical Journal.

SATURDAY, MARCH 19TH, 1864.

MEDICAL EDUCATION IN GERMANY.

NO. III.

THE organisation of medical instruction is, as we have seen, tolerably uniform in the German universities; but considerable difference exists in the different faculties respecting the examination for the doctorate. In Austria, the students undergo no examination during their studies. When the ten required semesters of study are finished, the student is admitted to examination, called *examen rigorosum*, which is strictly oral. This examination is divided into two parts, several days intervening. Since 1849, the thesis has been abolished.

M. Jaccoud enumerates the subjects which compose the examination. Having passed this examination, the student becomes Doctor of Medicine; but this does not give him the right to practise surgery. To obtain this privilege, he must go through another *examen rigorosum* on matters special to surgery. Doctors of Medicine in general, and especially those living in Vienna, undergo both examinations; so that, in truth, the separation of the two studies is rather nominal than real.

M. Jaccoud takes a serious objection to these examinations. It is this: that, notwithstanding all the excellent organised systems of clinical and practical instruction, the candidate is not put through any practical clinical or anatomical test of his knowledge. Rokitansky, the present Dean of the Faculty, he says, agreed with him that, in this respect, the French system is superior.

In the Prussian faculties, one diploma only is granted; viz., that of Doctor of Medicine. The examination, properly so called, is preceded by two preliminary examinations, one of which may be passed at the end of the first or second year of study, and the other not before the end of the fourth year. The first is called the *tentamen philosophicum;* and the second, the *tentamen medicinale.* The last consists of a written and a *vivâ voce* trial, both in Latin, the Dean alone being the examiner.

The *examen rigorosum*, which leads to the doctorate, is preceded by certain singular preliminaries. The candidate gives an abridged history of his life, written in Latin, and setting forth his religion. The examination is composed of an oral questioning on the different branches of medical instruction; and of a Latin thesis, to be defended in public, under the presidency of the Dean, against, in the first place, three opponents named by the faculty, and, secondly, against any one present who is a member of the university, and ready to do battle.

M. Jaccoud severely reprobates the tests of knowledge required in Prussia, and declares that they are even worse than those in Austria.

In Saxony, things are managed differently. The Leipzig student, for example, must undergo fourteen examinations, three during his scholastic life, and eleven in obtaining the title of Doctor, the last of the eleven being the disputation of a thesis.

Other degrees besides that of Doctor of Medicine are conferred by the German universities. We have already spoken of the doctorate of surgery; and we have to mention three other degrees: *Magister Obstetricæ, Magister Oculisticæ, Magister Dentiastiæ.* These special degrees, however, can only be taken by those who are already Doctors of Medicine.

Other inferior titles, such as the *Wundarzt*, have been abolished in many states of Germany, and in all the states are being gradually done away with.

M. Jaccoud, in conclusion, considers that the medical instruction in France has need to borrow from Germany only two things; viz., its organisation of clinical instruction, and the institutes of pathological anatomy and legal medicine.

GRATUITOUS SERVICES: THEIR REWARD.

LAST week, a woman died at Birkenhead from hæmorrhage after delivery. An inquest was held upon the body, and coroner and jury took the occasion of displaying their humanity and cheap virtuous indignation at the expense of the medical profession of that district—accusing them, in fact, of neglecting their duties and the interests of humanity. The woman, it appeared, had engaged no doctor to attend her; and when, therefore, the moment of delivery was come, several doctors, who were applied to, very naturally refused to have anything to do with the case. One gentleman, himself ill in bed at the time, did, however, obey the urgent call, and is therefore made a butt of by the coroner and his jury. The coroner, in fact, brought a wholesale charge against the doctors of Birkenhead, stating that it was a constant subject of complaint that they did not attend when

called upon to do so. Now, we sincerely trust that what the coroner says is strictly true; for, if it be so, we have hopes that the principles so often laid down in this JOURNAL touching gratuitous medical services are at last beginning to be actually brought into play in the profession. To suppose that doctors will not attend upon patients, if they are paid for their services, is, we beg to tell Coroner Churton, mere nonsense; and, as we read the case between him and the profession at Birkenhead, it simply amounts to this, that the doctors there are resolved no longer to do the work of the public for nothing. One of the sapient jurymen actually cried out: "There ought to be a law to make the doctors go when they are sent for." Now, if this highly indignant baker, or cordwainer, or brandy merchant, or whatever he is, wish to display his virtue in something beyond mere words, we will tell him how to do it. Let him get up a fund to insure the payment of the doctor in such a case as this; and we will venture to say that never again will he have need, on this score, to let his virtuous indignation rise. We would also ask him, as a man of business, this question: Suppose the deceased woman's husband had called upon him, the brandy merchant, for brandy to sustain the sinking wife, would he have descended into his cellars at the middle of the night, and given out his precious stores? Would he have given this sort of attendance on the woman, if the husband came with no money in his hand? But why, then, in the name of common honesty, is he to expect the doctor to give his *eau-de-vie*, his services, and time, and all for nothing? Why, it is only a few weeks since that we were recording the case of a medical union officer who was actually refused payment by the parish for attending a woman in childbirth, after he had received the order so to do from the parish officer. The county court judge told him he had no business to attend such cases; for if he did, and the parish paid him, all the vagabond women in England would be coming to lie-in in that parish!

We must say that we rejoice to see the profession at Birkenhead in so healthy a state. It is clear that our brethren there know the value of their services; and that they are going the right way to work to make the public learn their value too, by refusing to work without being paid. In the name of the profession, we indignantly reject the accusation of inhumanity of this coroner and his jury, and tell him and them that if, in this case, there were neglect at all, the neglect lies at the door of *society*, and not at the door of the *doctor*. High time, indeed, is it that the profession should cease this senseless and thankless task of doing society's work gratis. This, indeed, is a specimen of the thanks our profession get for their gratuitous medical labours!

Let the medical men of Birkenhead seize upon this case, and argue it out with the coroner and the jury and society. Let them say to society: We are perfectly ready to make our share of sacrifice to humanity in cases of this kind, but we are determined no longer to be made the scapegoat, and to bear the whole of the burthen upon our shoulders—the burthen which manifestly belongs to society at large. Instead of letting forth this cheap sort of wordy sympathy with the poor, come forward like honest men, and share in the labour which you are endeavouring yourselves to shirk, and are so desirous of throwing upon the generosity—the weak, the foolish noble-heartedness—of the medical profession.

A CORONER AND A JURY.

THE conduct of Mr. E. Hooper, coroner, at West Bromwich, towards Mr. Manley, seems to us to be wanting in common sense and common courtesy. A woman is suddenly taken ill. Mr. Kite was sent for by the friends, but could not attend. The messenger then calls upon Mr. Manley, who is also out; but his pupil immediately obeys the summons. On his way to the sick house, however, he meets Mr. Kite, who has been there in the meantime, and who tells him that the woman is dead. The pupil, therefore, as every one else of sense would have done, turned back and went home. An inquest is held on the woman; and the jury, in the absence of all inquiry, ignorantly or unjustly express "strong reprehension at the conduct of Mr. Manley's assistant," who had, as they supposed, never attended the call to the dying woman. The coroner, who is supposed to have more brains than the ordinary run of jurymen over whom he presides, would, one might have thought, have inquired into the truth of the allegation before he accepted it as true. But nothing of the sort. He at once indites an indignant epistle to Mr. Manley, in the name of the jury. Mr. Manley, under such circumstances, very properly ignores the existence of both coroner and jury, but satisfies the public by sending the following note to the newspaper.

"*To the Editor of the Daily Gazette.*

"SIR,—In your report, on Thursday last, of an inquest held at West Bromwich on a Mrs. Collins, an attempt is made to blame my assistant. The information, which I decline to give to coroner or to jury, you will oblige me by giving to the public.

"My assistant did go 'within ten minutes'; and, within a few yards of the house of the deceased, met a returning medical man—Mr. Kite—who told him the woman was dead. "Your obedient servant,

"JOHN MANLEY.

"February 8th, 1864."

At the adjourned inquest, when the fact is told as above related, the coroner and the jury doubtlessly looked and felt very silly; but, instead of apologising to Mr. Manley, these egregious individuals make themselves still more unjust and ridiculous by endeavouring, through petty quib-

bling, to escape from the false position in which they had placed themselves. This coroner and this jury, therefore, stand in this position. They accept a false charge against Mr. Manley's pupil; without inquiry, they endorse it; they then pour forth their wrath through a coroner's epistle to Mr. Manley; they at length discover that Mr. Manley is as innocent as themselves of all blame; and then, instead of acting the part which is customary on such occasions amongst gentlemen who have a respect for themselves, they attempt to cover their retreat by a series of miserable petty quibblings. We rejoice to find that his profession, at all events, has done ample justice to Mr. Manley. He may well bear the petty doings of this Bromwich coroner and his jury.

MEDICAL EDUCATION.

Dr. Laycock, in accusing us of wanting to dispense with a classical education for the medical man, is drawing (as the old saying goes) upon his fancy for his facts. No one who has experienced the advantage of a classical education, would attempt to deprive others of enjoying a like benefit. Dr. Laycock's logic must be sleeping when he accuses us of wanting to dispense with a classical education, because our reviewer states that "Dr. Laycock is fond of introducing new names into medicine, such as trophesiæ, kinesiæ, parakinesiæ, etc."; and because he intimates a "fear that, though they may be very expressive, they will share the same fate that has befallen Piorry's and Dr. Mason Good's nomenclature." It beats our medical logic to understand how the expression of this opinion proves that we object to the advantages of a classical education. Perhaps, however, Dr. Laycock may be satisfied to hear that the reviewer of his work is an accomplished classical scholar.

As to our own views about medical education proper, they of course must pass for what they are worth. They, at all events, meet the views of highly educated teachers of medicine in London—Oxford and Cambridge men; and we shall be glad if Dr. Laycock, instead of simply denouncing them, will try to show our facts to be wrong, and our arguments founded in error. This Journal, we need hardly say, has given rise to many most highly important discussions; and, amongst other subjects, it has especially opened up that of medical education. Our pages are open to the freest discussion of the question; and, as Dr. Laycock may observe, all sides have a fair hearing. Surely he does not think that the present system of medical education in this country is perfect, or incapable of improvement. The Medical Council's chiefest function would be at an end, if medical education were perfect. What Dr. Laycock calls "the gross exaggeration of the difficulties of medical studies, lately current in the British Medical Journal", is (if he would take a broader view of the matter) simply the public expression of professional feeling on the subject. Both the parents and the teachers of students of medicine have long had a strong impression that our system of medical education is in some point or other very defective; and they are now beginning to give utterance to the feeling, and, with the aid of the Medical Council, to endeavour to discover and remedy the defect, if so it may be. It is useless to ignore the existence of this reforming spirit. Wise men will try and guide the movement in a sound direction by their advice and influence. No conservative opposition will be able to stop the current.

The main position in the matter which has been assumed by this Journal is, that a great many more lectures are forced upon the intellectual stomach of the student than are good for the healthy nutrition of his mind; that, instead of healthily disposing of the rich materials supplied for his repast, he is often troubled with severe indigestion—the food turning rather into ill vapours, and producing general confusion of intelligence, instead of mental vigour and a sound appetite. We believe that there are not, in London at all events, half a dozen medical lecturers who would refuse to endorse this position; and therefore we must suggest to Dr. Laycock, that his words "gross exaggerations" are somewhat stronger than the occasion requires, and do not fit the facts of the case. We would also suggest, that he perhaps hardly knows what are really the opinions on medical education of the gentlemen to whom he refers. He certainly can know little of our opinions (although he condemns them so strongly) on the subject, or he would have scarcely ventured to accuse us of objecting to what we consider essentially necessary to all properly educated students of medicine—viz., a sound preliminary classical education.

"Macte virtute, puer," etc., is excellent general advice to the rising generation; but we would suggest to Dr. Laycock, that it hardly fits the point in question. We think friend Horace gives a better hint for the occasion when he tells people not to swallow more intellectual food than they can digest, and to fit their efforts to their actual powers.

> "Sumite materiam vestris . . . . æquam
> Viribus, et versate diu quid ferre recusent,
> Quid valeant humeri."

"Give," he seems to say, "O ye professors, to the student matter suitable to his powers. Try hard to find out what his stomach can bear, and don't lay weights on his shoulders which will sink him."

L'Union Médicale speaks of *Lord* Grey, in referring to Townley's affair; and a second time informs us of the difficulty in which *Sir* W. Hammond, late Surgeon-in-chief of the Yankee Army, is placed just now!

Professor Casper had professed legal medicine for thirty-five years. Last year, his thousandth autopsy was *fêted* at Berlin. He was the organiser of the system of public medico-legal autopsies for students. His chief works were: *Medical Statistics and Public Medicine; Practical Treatise of Legal Medicine;* his *New Considerations on Legal Medicine*, which appeared six months ago; and a work recently finished and which is not yet published, on *Poisoning by Strychnine.* Casper was also a distinguished *litterateur.* He has published accounts of some of his numerous journeys. He spoke French, English, and Italian as perfectly as his mother tongue. His drawing-room was celebrated at Berlin; it was the resort of magistrates, artists, diplomatists, and statesmen. He adds another to the list of high men of science who have lately passed away—Mitscherlich, Schönlein, Rose, Schroeder Van der Kolk, Casper.

M. Guersant has lately given a statistical account of tracheotomy in croup, performed at the Hôpital des Enfants. During eleven years, 783 operations have been recorded; and of these, 191 were successful. In all these cases, the double cannula has been employed, and the cravate placed over the cannula. In all the cases, the children had been ill several days, and had arrived at the stage of continued forced inspiration. In private practice since 1834, M. Guersant has performed tracheotomy 156 times, and has saved 28 children. His first 32 operations were unsuccessful, 2 only having survived; but at that time he used the single cannula, and no cravate. Of the 124 operated on afterwards, 26 recovered. During the past year, he has operated on 11 children, of whom 5 recovered.

One Lacroux, convicted of employing animal magnetism in the illegal practice of medicine, has been mulcted in three fines of fifteen *francs* each and the expenses at Evreux.

A Society of Climatology has been established at Algiers. Its object is "the study of geography, of topography, of meteorology, of statistics, and of the moral, natural, and physical sciences, from an Algerian climatology point of view."

L'Imparziale speaks in glowing terms of the festival held in Pisa for the first time to celebrate the third centenary of the birth of Galileo. "The feast was splendid and touching. Now, for the first time under the sceptre of *Re Galantuomo*, was celebrated with impunity a name glorious to Italy and to the whole world." The Minister of Public Instruction attended; and the French Institute was represented in the person of Count Lasterie.

The discussion on Vaccine, which has for some time past occupied so large a portion of the attention of the Academy of Medicine, has, we venture to think, added nothing to our knowledge on the subject. M. Dépaul started the discussion by pretending to show, that there is no such thing as vaccine-matter. His idea is, that man, cows, horses, sheep, pigs, etc., are all subject to an eruptive disease, which is variola. He has not, however, proved his idea to be a true one. Next he stated, that the variola could be communicated from animals to man; but all he showed was, that the inoculation of the eruption found on the horse and the cow produced vaccinia in man. Thirdly, he insisted that variola could be communicated from man to animals. But here, again, experiments were against him; and the few brought forward by him were unsatisfactory to everybody but himself. M. Dépaul winds up with the general conclusion, that facts, experience, and reason, prove that vaccine-virus does not exist as a species distinct from variolous matter. We are happy to believe, that every other Academician has come to the very opposite conclusion; viz., that facts, experiment, and reason, have up to this time proved exactly the contrary. Happily, however, whichever view men of science may take of the matter, their practice need not be altered. M. Dépaul had been accused of wishing to introduce inoculation; but against this insinuation, as the corollary of his doctrine, he energetically protested. Variola, he said, is the powerful variolous-virus; vaccine is the attenuated variolous-virus; and senseless, indeed, must he be who would prefer the powerful to the attenuated form of it. The question, therefore, which has been so eloquently and elaborately handled in the Academy, is really little more than a matter of curiosity—an interesting study in natural history. The sources of vaccine are now well known, says *L'Union Médicale*, and M. Dépaul may claim a large share in the discovery; but do not let us forget that the discovery was foreseen and pointed out by Jenner; and full of gratitude and admiration, let us place another crown upon the brows of this immortal benefactor of mankind.

A physician of Paris was accused on the 11th inst., before the French Police Court, of having revealed the "secret disease" of one of his patients, and to the patient's damage. He was found guilty, and condemned by the court to a year's imprisonment and to pay a fine of 500 *francs.* Moreover, at the expiration of his imprisonment, he was to remain for five years under the surveillance of the police, and to pay all the expenses of the trial. Besides this, having injured his patient's reputation, he was ordered to pay the patient 1000 *francs* as damages.

M. Tavignot tells the Academy of Sciences that he has been led, by observation of the success of punctures of the iris in ordinary iritis, and by the numerous happy results attending excision of the iris in glaucoma, to treat sympathetic iris by iridectomy.

Professor Chierici has established a Temperance Society in Italy, the first ever heard of in that land.

Association Intelligence.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held at Birmingham on March 10th, 1864.

PRESENT—Sir Charles Hastings, M.D., etc., (in the Chair); Mr. Bartleet; Mr. Clayton; Mr. Husband; Dr. Richardson; Dr. Roberts; Dr. Waters; Dr. Vestall; Dr. Wilkinson; and Mr. Watkin Williams (Secretary).

The following resolutions were adopted.

1. That the Treasurer's Report be received, adopted, entered on the minutes, and published in the JOURNAL.

2. That this Committee desires to record its sincere sympathy with the widow and family of the late Mr. Peter Martin of Reigate; and the deep regret which the members feel individually for the loss of their able, indefatigable, and highly esteemed colleague.

3. That the essay for this year be on Physiology.

4. That the Annual Meeting be held on the 3rd, 4th, and 5th days of August.

T. WATKIN WILLIAMS, *Gen. Sec.*

13, Newhall Street, Birmingham, March 14th, 1864.

FINANCIAL STATEMENT FOR 1863.

Your Committee regret that the financial statement on the present occasion is not so satisfactory as that which was made last year to the Association.

Instead of a balance of £221 : 1 : 10½ being due from the Treasurer to the Association, the balance-sheet now submitted, and found correct by the Auditors, shews a balance of £8 : 3 : 0½ due to the Treasurer.

This excess of expenditure over income is mainly due to the issue of an extra number of the JOURNAL, involving a cost of £134 : 10. The salaries, also, for the last year amount to a higher sum than for the previous year.

As these causes of increased expenditure are not likely to operate in the current year, your Committee have reason to believe that at the end of 1864 the income will be found equal to the expenditure.

1863.—RECEIPTS.

	£	s.	d.
Balance from 1862	221	1	10½
Subscriptions	2118	9	0
Donation by Dr. Evans (Gloucester)	10	10	0
Advertisements	626	16	4
	2976	17	2½
Balance	8	3	0½
	£2985	0	3

1863.—PAYMENTS.

	£	s.	d.
JOURNAL EXPENSES:			
Mr. Richards (Printing)	1784	9	0
Ditto (for Extra Number)	134	10	0
Mr. Richards (for Directing, etc.)	66	16	0
Mr. Honeyman (Sundries)	92	18	0
Mr. Davidson (Commission)	77	19	0
Mr. Orrin Smith (Engraver)	5	3	6
Editor of Journal	200	0	0
Dr. Henry	50	0	0
Contributions	301	8	0
Interest and Commission	3	16	4
EXECUTIVE EXPENSES:			
Dr. Williams and Clerk	117	0	0
Mr. Williams	52	10	0
Dr. Williams (Petty Cash)	49	9	8
Mr. Williams (ditto)	8	5	11
Bristol Reporter	11	14	6
Birmingham Stationer	10	9	6
Sundries:—District Expenses; Post-Office Orders; and Collecting	18	10	10
	2985	0	3

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
NORTH WALES. [Intermediate.]	Dr. Davies's House, Holywell.	Tuesday, March 22nd, 1 P.M.
BATH AND BRISTOL. [Ordinary.]	York House, Bath,	Thurs., March 24, 8.15 P.M.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Saracen's Head, Ashford, on Thursday, March 24th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

THOMAS BOYCOTT, M.D., *Hon. Sec.*

Canterbury, March 9th, 1864.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE next meeting will be held at the Old Falcon, at Gravesend, on Friday, April 1st, at 3 P.M.

Dinner will be provided at 5 o'clock.

Tickets, 5*s.*, exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, March 8th, 1864.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: SPECIAL MEETING.

A GENERAL meeting of the above Branch was held in the Medical Department of the Birmingham Library on Thursday, March 10th, 1864; ALFRED BAKER, Esq., President, in the chair. There were also present seventy-five members. Mr. Manley, surgeon, of West Bromwich, attended as a visitor.

Charge of Neglect against Mr. Manley. Mr. DUNCALFE of West Bromwich having brought before the meeting a recent case in which a charge of neglect of professional duty was preferred by the coroner for the District of West Bromwich, in the Southern Division of the county of Stafford, against Mr. John Manley, surgeon, the following resolutions having been put from the chair were unanimously adopted.

"The subject of the treatment of Mr. Manley, by the coroner for the District of West Bromwich, in reference to an inquest held on February 2nd on Mrs. Collins, having been brought before a numerous meeting of the Birmingham Branch of the British Medical Association;

"It is resolved unanimously—

"1. That on the occasion in question, when the coroner observed to the jury, 'that he should like to know whether the medical men had paid due attention to the deceased', it is the opinion of this meeting that the coroner was bound in common justice and fairness to have summoned the medical men called to the case, before implying a suspicion on their conduct.

"2. That the hour of attendance, as stated by Mr. Bindley, is conclusively borne out by the evidence of Mary Collins, the youngest daughter of the deceased.

"3. That Mr. Bindley, in accordance with the rules of medical etiquette, very properly retired from the case, on learning that the medical gentleman who had been first summoned had been in attendance.

"4. That Mr. Manley has been in no way guilty of contempt or want of courtesy, either to the coroner or the jury, but that he replied as soon as he was served with the coroner's summons; and that, if Mr. Manley had attended the inquest, subject to the coroner's letter, he would have lowered the dignity and sacrificed the interests of the profession."

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

ANNUAL MEETING, TUESDAY, MARCH 1ST, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

AT the commencement of the meeting, the President declared the ballot open for the election of the Officers and Council for the ensuing year, and nominated Dr. Kirkes and Mr. C. H. Moore as scrutineers.

Report of the Treasurers. From this report, it appeared that the total ordinary income of the year had been £1352 : 12 : 9, which, with the amount of composition fees, £43 : 1, and a balance from the previous year's account of £357 : 19 : 9, gave a total of £1753 : 13 : 6; and against this sum the ordinary expenditure, inclusive of £181 : 14 : 6 on the library, and £202 : 16 : 3 on the *Transactions*, etc., was £985 : 5; the extraordinary expenditure (for alteration in the meeting-room etc.) £34 : 7 : 7, and the sum of £500 13 : 9 purchased into the funds; leaving a balance of £233 : 7 : 2 in the treasurer's hands. The total receipts of the Society for the last two years had exceeded its expenditure by about £700.

Mr. ARNOTT moved, and Dr. WEBSTER seconded, the adoption of the report. Dr. Webster said that from the statement just exhibited, it appeared that the Society's rent amounted to £1 : 2 : 10 only.

Report of the President and Council. The total number of Fellows was 634—a slightly smaller number than in the previous report; but this was accounted for principally by the large number of deaths (16) which had occurred. The report referred in detail to the steps which had been taken by the Council since the last general meeting relative to the ventilation of the meeting-room, its appointment of a committee on the subject, and their recommendations. A portion of these only, owing to insufficiency of time during the ordinary closure of the library in the autumn, had been carried out, consisting of a window over the entrance-door of the room, and an apparatus for opening a portion of the skylight, by which it was believed a great improvement in the ventilation of the room had been effected at a small cost. The report also stated that 323 new works, exclusive of periodical publications, had been added to the library; and referred to the munificent donation of Mr. Soden, of Bath, of the collection of medical portraits formed by his late father, Mr. John Smith Soden. Other portraits had since been presented by Fellows of the Society; and in consequance of a letter from Mr. Propert, as executor of the late Mr. Squibb, and on the recommendation of the Library Committee, the Council had resolved to offer £70 for Mr. Squibb's well known collection—subject to the confirmation of the annual meeting. If purchased, the Society would possess a collection of considerably above 2000 engraved medical portraits, some of which were of great rarity and value. The report also referred to the photographic collection of portraits of Fellows of the Society in continuation of the above, and the collection of pathological photographs, further contributions to which were much desired by the Council. The committee appointed by the Council "On the Uses and Effects of Chloroform," were unable to conclude their labours last year; but their report would now shortly be presented to the Society, and would be published in the next volume of the *Transactions*.

PRESIDENT'S ADDRESS.

The PRESIDENT commenced his address by advocating the expediency, for communities as well as for individuals, of an occasional retrospect of the past with a view to the guidance of the future; to ascertain whether progress had been commensurate with opportunities, or whether there had not been seasons of indolence and inaction, the causes of which might be avoided in future. He reminded the meeting that the Medical and Chirurgical Society, like the "Royal," had its origin in a private meeting of a few scientific persons anxious for the promotion of knowledge, who held a preliminary meeting at the Freemasons' Tavern in May 1805, and (after the organisation of the Society) a first ordinary meeting in the December of the same year. The Society's first place of meeting was in Verulam's Buildings, Gray's Inn, then successively at two houses in Lincoln's Inn Fields, where it continued until its removal to Berners Street in 1835, in consequence (amongst other reasons) of its having been ascertained that a very large proportion of its resident Fellows lived west of the former locality. The first President, in 1805, was Dr. William Sanders, and the first volume of the *Transactions* was published in 1809, under the presidency of Dr. Matthew Baillie. In 1812 an ineffectual application was made for a charter of incorporation. Its importance, however, was felt to be so essential to the status an stability of the Society, that the application was renewed, and a royal charer obtained in 1834. On this occasion the bye-laws and other regulations of the Society were revised and adjusted. During the period of removal, the Society, through the kind liberality of the then President (Dr. Elliotson), held its meetings at his house. The first meeting in Berners Street was on February 10th, 1835. Since that time the Society had steadily advanced in reputation and usefulness, revising its laws from time to time, so as to adapt them to circumstances as occasion made it expedient becoming more just and liberal in some of its regulations, adding largely to its magnificeut library, and of late increasing its utility by the frequent publication of abstracts of its *Proceedings*; and finally, by instituting, from among its Fellows, committees for the investigation of certain subjects of great general importance to the profession, such as the "Committee on Suspended Animation," and that on "The Uses and Effects of Chloroform," the report of which is nearly completed. The success of the labours of the Society is attested by the publication of forty-six volumes of its *Transactions*, forming a standard work of reference on the most important topics which have engaged the attention of the profession during the last half century, and by the formation of one of the largest and best-managed circulating libraries of medical books in the kingdom. Still (added the President) there remain great objects to accomplish, and foremost amongst them, the acquisition of a permanent residence, either in the shape of a freehold house, with some architectural pretensions as a public building, or of apartments in Burlington House, in association with other scientific bodies. The President then called the attention of the meeting to the very fine collection of medical portraits and autographs now in possession of the Society, comprised—1, in the Soden collection, recently presented by Mr J. Soden, of Bath; and 2, by the purchase of Mr Squibb's collection, just sanctioned by the present general meeting; both together forming a collection unrivalled by any in the kingdom. Notice was also taken of the rapidly forming series of photographs commenced by Dr. H. G. Wright, of pathological specimens, and the Fellows were urged to contribute to these collections as opportunities offered. The Society during the past year had lost by death sixtee

its Fellows. This number, though double the erage of the last ten years, was yet nearly equalled two former years, and exceeded in two others of e same period (ten years). The President gave a ort memorial of each of these sixteen Fellows. mongst provincial Fellows, Mr. J. S. Soden, of ath, Mr. W. J. Wickam, of Winchester, as hospital rgeons; Dr. E. Stephens, of Manchester, as an anomist and teacher; and Dr. Carter, of Deal, as a ysician in extensive practice, were the most conicuous. Amongst resident Fellows was Mr. Henry ncell, a gentleman largely engaged in general prace, and a man of much ability as well as of laborious search and learning, as is shown by his works on *uberculosis*, on the *Physiology and Pathology of the ood*, and by his unpublished treatise on *Poisons of e Blood*. On Mr. J. H. Green he passed a high logium, commenting on the great position which held in the profession and in the governing bodies d professional societies of the country; upon his gh, chivalric, and truly Christian character, his quence, and his extensive and varied learning. e alluded to the long and laborious years of study nich Mr. Green had given to the completion of a *stem of Spiritual Philosophy*, originated by Colelge. There is a prospect of the speedy publication this posthumous work. Amongst the younger llows, the President especially noticed Dr. E. R. rvey, Registrar of St. George's Hospital, as one o, already distinguished by his researches in phylogical chemistry, promised, had he lived, to have t a mark on his generation. Mr. T. Davis and Mr. C. Johnson were gentlemen who, each in his time, d enjoyed large practices, and who, without having ntributed to the literature of their profession, were, vertheless, remarkable as skilful surgeons, possess; in a wonderful degree the confidence of their tients. Finally, he deplored, as a loss to the scienc world, a foreign honorary Fellow, in the person Professor Vrolik of Amsterdam, whose works on Chimpanzee, on Embryology, Teratology, etc., so universally known and esteemed, and whose putation seemed hereditary. His noble museum, lected by his father and himself, was always open the scientific foreigner, and his genial manner and owledge of our language were particularly agreee to our own travelling countrymen.

At the conclusion of the address, the best thanks the meeting to the President were moved by Mr. RGUSSON, seconded by Dr. WEGG, and carried with lamation.

t was also moved by Dr. C. J. B. WILLIAMS, seded by Mr. DIXON, and carried unanimously:—hat the cordial thanks of the Society be given to retiring Secretary, Dr. Sieveking, for his valuable l zealous services during the time he had been in ce; and also to the retiring Members of Council—. Hodgkin (Vice-President, Dr. West (Vice-Presit), Dr. Cotton, Dr. Gream, Dr. George Johnson, . Holt, and Mr. Holthouse."

SUPERANNUATION OF POOR-LAW MEDICAL OFFIS. We refer with pleasure to the resolutions pted at a meeting of the medical practitioners of Edenderry Union, with respect to the claims of dical officers to a superannuation allowance from Government after they have become incapacitated age or infirmity from efficiently performing their ies. Whilst the duties imposed on them are ere, their requital is measured too often in a dging and parsimonious spirit. The wretched aries usually granted to workhouse and dispensary dical officers are totally inadequate to enable them nake provision themselves. (*Irish Times.*)

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—The question as to eye-tension is one of far too great moment, in a practical point of view, to be allowed to rest in the unsatisfactory form it assumes in Mr. Dixon's letter of January 11th (*ante*, p. 80). I have already, at p. 107-8, in replying to Mr. Walton, adverted to this subject; but Mr. Dixon's strong reassertion of the correctness of his own views obliges me to meet his statements separately. If he be right in his observation, that the eye is hard in "very numerous cases of iritis, keratitis, etc.," "which can be perfectly and readily cured by judicious medical means," *undue hardness* ceases to be *a sign distinctive of the glaucomatous state*; the all-important indication it affords for other than medical treatment is delusive; the modern doctrine regarding glaucoma (resting, as it does, on this very basis) is shaken in a vital part; and we are thrown back towards the confusion in which the whole subject lay previous to 1856. Hence my strong desire that all practitioners, who have the responsibility of advising in cases which may prove to be glaucomatous, should look with interest on this cardinal and in general easily recognisable sign, *too great hardness of the globe, as estimable by the touch*; and that its extreme diagnostic value, as distinguishing between glaucomatous and non-glaucomatous diseases, should come to be understood and acknowledged. It is because the view of Mr. Dixon and others appears to me not only erroneous as a matter of science, but of perilous tendency in practice, that I am so anxious to have the facts clearly defined, and not obscured by any ambiguity of expression, This must be my excuse, if I occupy any time on verbal criticism.

Mr. Dixon says (BRITISH MEDICAL JOURNAL, last vol., p. 698): "We can only judge of *tension* by its phenomenon, *hardness*; and to say that all inflamed eyes which are harder than natural are to be subjected to iridectomy, will be to inflict that operation upon numberless cases of iritis, keratitis, etc., which can be perfectly and readily cured by judicious medical means." He now explains (*ante*, p. 80), that by "numberless" he means "very many" or "very numerous", which is quite the sense in which I understood his expression when I said, in opposition to his view (*ante*, p. 55), that "all *the ordinary inflammations of the internal tunics* are *not characterised, as a rule, by undue tension*; and that if, in their course, the eye becomes tense, a new element of danger is introduced, depending on a new order of conditions, to be met by treatment conducted on a new principle, *though not always necessarily by iridectomy*."

If such cases as Mr. Dixon alludes to are really "very numerous", surely they must be "ordinary", unless we are to employ common words in unusual senses, and thus needlessly confuse the discussion.

I have stated (*ante*, p. 55) that I am directly at issue with some esteemed colleagues on a plain and simple point of fact. Were it not a most fundamental one, it would not be requisite thus to revert to it. The real question of moment is this: Is hardness of the eye, when any of its structures are inflamed, a sign of value as regards treatment? Does it mark a typical distinction between two classes of inflammation, which in their general appearances, and under certain circumstances, may much resemble each other? Does not the question, whether a particular case of inflammation "can be perfectly and readily cured by judicious medical means," often turn on this other;

viz., whether the eye, as a matter of fact, has become too hard? and, if so, are the medical means used any longer judicious, after hardness has been once ascertained to exist?

Having already adverted to what seem to me the general facts on this subject (*ante*, pp. 106, 7, 8), I perhaps need not enter upon them at much length on the present occasion. I am persuaded that any practitioner who accustoms himself to estimate the eye-tension in all cases of impairment of sight, with or without serious inflammation, will soon arrive at the conclusion that it is a sign of indispensable value in diagnosis, and as an indication for treatment; and that, in the main, the facts as to tension in other diseases, as distinguished from the glaucomatous class, are as I have stated them. Stony hardness, T 3, *may* be present, and may last for weeks, as I have seen it do, without any redness, any pain, any discoverable opacity of the humours, and even with perfect power of sight; but a patient in this condition stands, as it were, on the brink of a precipice; he cannot continue long without the development of the secondary results of pressure. These will show themselves, at all events, by the impairment or loss of retinal function and structure; and, if inflammatory complication be superadded, perhaps by a frightfully rapid destruction of tissues, together with hæmorrhage from obstructed return of blood.

On the other hand, non-glaucomatous inflammation the most extensive, the most painful, the most intractable by all treatment, the most destructive to vision, may run through its whole course without our being able at any period to detect any undue hardness of the eyeball. *Amount of inflammation* and *degree of hardness*, therefore, are so far from being convertible terms, that they appear to have no more than an occasional, and as it were an accidental, sometimes a very transient, relation to each other. Common inflammation, even of the *internal* tunics, occurs without hardness; and hardness from disturbed balance of secretion, from derangement of that which normally controls the tension of the eyeball, may occur without any discoverable evidence of inflammation, unless we so refine our definition of inflammation as to reduce it to disordered secretory function. The presence of this hardness, however, by the secondary influence it exerts on the blood-vessels subject to the compression, not only seems to predispose them to congestive and inflammatory accessions, but tends enormously to aggravate the consequences of these when they arise. Hence the peculiar liability of glaucomatous states to become complicated with inflammation; and the exceeding gravity of congestive or inflammatory excitement, according to its intensity, when once roused in an eye already tense from the glaucomatous condition. Hence the anxiety that waits on the treatment of glaucoma, and the extreme importance of remedying the undue tension of an eye whenever it is ascertained to be permanently present. If tension come on intermittingly, as often happens, with complete remissions, during which the eye is perfectly normal to the touch, it is a threatening of danger. If, between the attacks of tension (marked, as they are, by their other proper symptoms, besides hardness), the remission be imperfect, and some residual excess of tension be distinguishable, the danger is more imminent. But if the hardness once become constant, and especially if it be also considerable, the greatest anxiety must be felt, since those ulterior consequences (as diminished sensibility of the retina, limitation of the visual field, vascular excitement) may be expected soon to manifest themselves, for which operative relief will become essential.

I pass to Mr. Dixon's views. He reaffirms in his second letter (*ante*, p. 80), not only that the facts *a* as he has stated them to be, but that they *must be* s Not only, he says, are at least "very numerou cases of iritis, keratitis, etc., attended by hardnes of the eyeball; but inasmuch as in the severer form of what we, for want of a better word, term iritis, an in those inflammations of the cornea where the scle rotic and other tissues are implicated, *a considerabl amount of hyperæmia of the globe is* induced, *it is im possible but that the hardness of the organ should b increased* beyond its normal standard. Is not thi the case," he asks, "with every congested organ— with a swollen testis or a lymphatic gland?"

We have here, therefore, Mr. Dixon's meanin clearly expressed; viz., where there is "a consider able amount of hyperæmia of the globe"—where th blood-vessels of the globe contain considerably mor blood than in health—"it is impossible but that th eye should be harder than natural," and, of course, i *is* harder than natural.

It is well that a disputed question of fact so impor tant as this one in its practical bearings, and o which such diametrically opposite opinions preva among men having, all of them, very large opportu nities of observation, admits of such very easy settle ment. It is important for the interest of the patients that all practitioners should entertain correc notions regarding it; and all that any one need d who desires to satisfy his own mind upon the poin is to to take the pains to examine for himself *whethe the eyeball is hard* in the next few cases of "iriti keratitis, etc.," which he may happen to have unde his care. If he be unused to this little investigatio let him practise himself in estimating the norma eye-tension in healthy eyes, or in the eyes of perso suffering from other affections than those now spoke of; and he will find some simple directions in aid his inexperience in the JOURNAL for October 11, 186

I shall perhaps be asked to explain, if I can, how comes to pass, if what I say be true, that men lik Mr. Dixon, Mr. White Cooper, Mr. Walton, an others, are so at issue with me upon this easily settle question. It will be conjectured that there may b after all, two sides to *this* shield, as to so many othe which have formed the subject of disputes. M opinion, if I must state it candidly, is that its tw sides are alike, and that the other side has bee deemed to be different from mine only because it ha not been accurately looked upon. In a word, so im possible do I regard it for competent observers t maintain two opposite opinions on this question plain fact, that I am driven perforce to believe tha the eye-tension has not yet been made the subject exact and customary examination by these (I glad admit) most able and competent and conscientiou observers, in those ordinary cases of inflammation i which they *suppose it to be heightened.* If this h so, it is to be regretted that they should so inca tiously have committed themselves to an erroneo opinion.

As regards Mr. Dixon, his remark as to what th tension *must be,* when hyperæmia is present, falls with the above explanation, the correctness of whi I think the issue of this little controversy will d monstrate. I expect that ere long these colleagu will candidly acknowledge that "in ordinary keratit iritis, choroiditis, retinitis, as well as in many oth cases in which the *eye-vessels are manifestly ove charged with blood,* the eye, as a rule, *is not hard.*" must not be deemed arrogant in thus speaking con dently. I am only saying now what I said in t most express terms in 1862 (see BRITISH MEDIC JOURNAL, Oct. 11th, 1862, p. 378, and last vol., 106); what I am continually pointing out, with t illustrative cases before me, to our students; a

nat every person affirms whom I happen to know to ve paid close attention to this subject, both among y immediate colleagues at Moorfields and the young en who attend at that school.

But I have no wish to dogmatise. I will endeaur to contest the reasonableness of Mr. Dixon's ew. I will at once admit it to be so far plausible, at it would probably be held, rather than its oppoe, by many men who had not taken the pains to amine the actual state patiently and candidly for emselves, unbiassed by their own preconceptions. ney might be ready to exclaim with him, "Of course, the vessels are overfull, the eye must be hard. Is t this the case with every congested organ, with a ollen testis or a lymphatic gland?"

It can hardly be necessary for me to explain in del, by a reference to the anatomical facts, how ferent is the structural condition, and how disnilar would probably be the behaviour of the eye, compared with the organs instanced by Mr. Dixon, der a like amount of inflammatory engorgement. en in the case of a solid glandular organ, no doubt, e phenomenon of congestion or of inflammation, d the altered bulk or tension thereto pertaining, is t limited to the mere expansion, more or less, of the od-vessels concerned. With every moment of ered circulation come corresponding changes in the rts to which the vessels minister—morbid secrens, absorptions, alterations of tissues, etc. hether such a solid organ is to become hard or not, ll depend partly on the balance of bulk at any one ne existing between the several elements which ke up its entire mass; and partly on the extensity of its investing capsule or its interior framerk; for there may be much swelling of the subnce of an organ (often much of the surrounding rts) without its becoming hard; or, on the other nd, much hardness with little augmentation of size. ery one acquainted with the anatomy of solid organs n readily apply this to special examples.

But the eye is not a solid organ, like the testis or ymphatic gland; it is peculiarly constituted in ny respects. The parts comprised within its conning capsule are highly complex. Doubtless, it uld become harder under increased afflux of blood, he augmented volume of its blood-vessels were sole change occurring in the volume of the whole . But much more than this takes place; the phenena of inflammation in it are not so simple. In rticular, the aqueous humour, an important porn of the whole eye-contents, is peculiarly capable augmentation or of diminution in quantity under normal conditions of the circulation, or otherwise. is humour admits of being rapidly secreted and l rapidly absorbed. Its speedy reproduction we erve when it has been evacuated by accident or ign; and its lessened volume becomes immediately parent when a swollen lens bulges with the iris ards the cornea without any increase of the eyesion; or when, by undue repletion of a considere portion of the intraocular blood-channels in the dinary" inflammations, the equilibrium of pressure till found to be maintained within normal limits. e aqueous humour, by this remarkable facility of nation and absorption, serves, I have long thought, purpose which the cerebro-spinal fluid appears to wer in the maintenance of the pressure-equilium within the head; in this way, at least, a reable explanation is afforded of the certain fact t, notwithstanding the impossibility imagined by Dixon, a *considerable, and even a sudden, hyperia* does, in "numberless" instances, occur within eyeball, without (in Mr. Dixon's words) "*the lness of the eyeball being increased beyond its nal standard.*"

Indeed if, in an "ordinary" case of severe iritis—syphilitic, rheumatic, or idiopathic—with much redness, pain, lacrymation, and dulness of sight from effusion, the tension be critically examined, with the precautions lately described by me (at p. 107 of the present volume), the eye will be found impressible by the fingers; and, if not even slightly too soft, at least normally elastic, though perhaps very tender to the touch. The same will be found to obtain in "ordinary" corneitis, corneo-iritis, choroiditis, and retinitis; in which latter, with or without external redness, the deeper tissues may exhibit "considerable hyperæmia."

As regards frequency of occurrence, a normal tension in such inflammations is *the rule;* instances in which undue hardness is present are not "very numerous," but, on the contrary, comparatively rare and exceptional. If, in any such case, the eye inclines to be harder than natural, the hardness is to be carefully heeded, according to its degree and persistence. If slight and transient, it may be disregarded. If considerable, it assumes great importance, according to its intensity; since, if no special operative relief be afforded, it will scarcely subside under any mere medical treatment; but will continue and produce its proper ulterior or secondary consequences—the compression of the retina, and the deranged circulation through that structure consequent on the compression. If, therefore, undue tension exist, the disturbance of sight will probably be greater than the visible condition of the media would account for; and the relief of the tension by operation will probably improve sight in a double manner; viz., 1, by clearing the media through lessening inflammation; and 2, by moderating pressure on the retina. And conversely if, in a given case, the imperfection of vision be manifestly more than the opacity of the humours would explain (and especially if there co-exist other now well understood symptoms of typical glaucoma), this may often lead us to suspect, and on exact examination to discover, that the eye-tension is permanently more or less above the normal standard, and that a part of the imperfection is due, not to opacity, but to compression. The necessity then arises, perhaps has long existed, for surgical relief; possibly by puncture, much more probably by iridectomy. At all events, the conditions are present which render a reliance on medical means no longer judicious or admissible; because they cause the loss of precious time, foster delusive hopes, and, by taking the place of the indispensable operative relief, lead to the destruction of sight.

I think it unnecessary here to recall what I have so lately stated, as to the eye-tension being found within natural limits, or perhaps even too slack, in various other most serious and even destructive forms of internal inflammation, traumatic or otherwise; or to explain again the exceptions that occur in a certain stage of iritis, when glaucomatous hardness supervenes, and has to be met by appropriate operative treatment; or when glaucomatous complications arise in the course of affections not originally nor essentially glaucomatous, and where it is most important, in a practical point of view, to discriminate between the first affection and the second, so as to keep the indications for treatment distinct. It is an inestimable comfort in practice to have a clear conception of this distinction in the mind; since it serves to guide our treatment under mixed conditions of disease, often sufficiently perplexing, by giving us the positive testimony of a physical condition, estimated by our own touch, in place of a doubtful deduction from an assemblage of ambiguous and perhaps contradictory symptoms. It is because I am fully aware how difficult it often is, when we see for the first

time a case of severe intraocular inflammation, to unravel its exact history, and to form a true conclusion as to the actual state of the affected tissues, that I am desirous of pressing this cardinal point on the attention of practitioners. I am sure it is worthy of being studied with the moderate care required to ensure confidence in the indications it will yield.

I would, however, by no means be understood to imply that, when we may have ascertained the non-existence, or the existence, of hardness in a badly inflamed eye, we may be at once at our ease as to the treatment, or may have no other difficulties or anxieties to encounter. Unhappily, there are many cases of internal inflammation, *unattended by any undue tension*, which are by no means to be "perfectly and readily cured by judicious medical means"; but which ultimately baffle the most approved remedies.

There are also unhappily other hæmorrhagic cases, *attended by hardness*, as I have myself pointed out (British Medical Journal, October 11th, 1862, p. 380), in which neither medical nor surgical aid can be always relied on. But this does not render it less our duty to ascertain the presence or absence of tension, since, *if the eyeball be found hard, as well as inflamed*, it must at all events be most satisfactory to know it, in order that the local surgical relief, apparently needed, may be applied if deemed fitting. That this relief may occasionally come too late—that the disease by its duration, its intensity, or its hæmorrhagic type, may still sometimes end unfortunately is no argument against a remedy which in general succeeds when used in time, for employing which there is a clear and rational indication discoverable by the surgeon's touch, and without which it is demonstrable that the eye must perish.

I return, therefore, always to the absolute necessity for ascertaining in every instance what is the state of tension in an eye internally inflamed, of always regarding the presence of undue tension as a character removing the particular case from the class of "ordinary" inflammations, and marking it as of the glaucomatous type. And I cannot too strongly insist on the doctrine (in direct opposition to Mr. Dixon's position) that when an inflamed eyeball is hard it can no longer "be perfectly and readily cured by judicious medical means," and therefore that no medical means can be judicious in such a case, which, by buoying up patient and practitioner with fallacious hopes, lead to the exclusion or postponement of the needful operative relief, until the time be past when it can benefit.

In what I have now said, I have purposely spoken of hardness of the eyeball apart from the several other proofs or indications of exalted tension, which in various degrees attend upon this one, and which are more or less useful to the surgeon in aid of his diagnosis. When the ophthalmoscope, owing to the dulness of the media, affords no view of the fundus oculi, and when, as very frequently happens, the history of the case is obscure, the actual state of the eye-tension at the moment of examination becomes all the more important, since it may chance, especially in hospital practice, that on it, almost alone, we may be compelled to rely for our diagnosis and the consequent treatment.

So much at present, upon the important subject of the eye-tension in disease. The remaining more distasteful topic introduced by Mr. Dixon into this discussion, that, namely, of the serious and reiterated moral charges brought by him against the conduct and motives of some of his brethren, I propose, with your permission, to review in a separate letter.

I am, etc., Wm. Bowman.

5, Clifford Street, March 11th, 1864.

MEDICAL EDUCATION.

Letter from Joshua Parsons, Esq.

Sir,—The object of medical education is to mal medical practitioners. Now the business of a med cal practitioner is, as we full well know, of a high multifarious kind. To-day he has a problem to sol of the highest importance to his patient, his countr or his race, the solution of which requires extensi knowledge and a highly cultivated intellect; b every other day of this week he is occupied wi cases and details, not one of which is of sufficient i portance ever to have been mentioned in a lecture, noticed by a hospital teacher. Yet these very detai trumpery as they may appear, and rightly too to t purely scientific eye, go very far to conduce to t success of the practitioner and the comfort of his e ployers. Woe betides both doctor and patient, if t former, with his high testimonials and college educ tion, recognise in the latter only a diseased hum body, without considering whether that body belo to a duchess or her washerwoman. These things a necessary, though in varying degrees, to be kno by every man who would practise our art with co fort; yet, in the present fashionable mode of medi teaching, where or when is he to learn them? C tainly not in the lecture room, the hospital ward, the dispensary; nor if he could, would it be rig to distract his mind with these stray rudimenta gleanings while reaping his full crop of professio lore. This desideratum was supplied by the fashioned system of apprenticeship; and, though would by no means advocate all the details of th system, yet I say that in the main no better has e been devised for introducing a man to the *work* of profession. As a *paterfamilias*, I should feel that t medical supervision of my family was far more lik to be comfortably conducted by a young man w had been for two or three years engaged in the dut of actual practice, than by one who had spent t time in "walking hospitals" only.

Again, as to the student himself, he is a man like passions with ourselves; and do we not kn for how much of that remembrance of cases wh goes to make up our valuable possession of medi experience are indebted to the circumstances, lo domestic, pecuniary it may be, with which th cases were accompanied? How often do we find o selves saying, "I never forget that case because horse fell and broke my leg as I was going there"; "because the patient was a good kind friend of min or "because I never got a farthing for all my time a trouble"? Just so, I believe, will the student's a path be all the clearer, and more impressive for th way-marks of personal experience which tend to in vidualise his studies and shew him their pract bearings upon human happiness and his own w doing. I readily concede that the old term of five ye or perhaps, even of three was too long to be expen on this initiatory experience; and that too often t time was spent in studies which could have b better pursued elsewhere; but there were exceptic In climbing the difficult ladder of knowledge, i surely well to get the foot firmly planted on lower step before attempting to reach the high and I hold that no man is or can be so well fitte wield the weapons of his art as he who has b familiarised with such by handling them in early I agree with Dr. Martyn that it is highly neces there should be direct personal relation between teacher and the taught; and I know men who, hav since passed zealously and honourably through t academical course, still gratefully refer some of t most vivid and useful impressions to the colloq

structions of their "master." But I quite differ m the supposition that a practitioner is fitted to ve the elementary instruction I am advocating, be- use he is the physician or surgeon to an hospital. ese great institutions tend to place the disease in far eater prominence than the man who suffers from it; d the error of our times in medical education seems me to have been just this: cramming the student th abstract knowledge, and leaving him to pick up actical information as he best can.

I will not, sir, trespass further on your space; but lo hope that good will arise from the present dis- ssion, and that in future curricula, such provision ll be made for personal and practical acquaintance th the minor details of professional duty, that we all no more see a man crowned with scholastic les and honours, who cannot pick out a six-ounce ial or a half-ounce pill-box, or take his lancet pro- rly in hand to open a common abscess.

I am, etc., JOSHUA PARSONS.

Frome, March 1st, 1864.

LETTER FROM PERCY LESLIE, M.D.

SIR,—As you have been floating in the regions of opia, in the matter of medical education, at pre- nt so much mooted in the schools, perhaps, in order at all sides of the question may be heard, I may be rmitted, as neither teacher nor tyro, to express a w remarks, though from a lower round of your ty pedestal.

It appears to me that the great object of reform in dical education should be to simplify the teaching thout curtailing the material of the science itself this end, many practical suggestions have appeared your JOURNAL; whereas the tendency to view me- ine too much in the utilitarian light, as expressed Dr. Latham, would lead to the encouragement of at false and pernicious system of education, the (I ast) fast expiring plan of apprenticeship, which, for derogatory effect upon our profession, I would ss with gratuitous service and pill-making, medi- ne-selling practice.

I would now suggest my Utopian curriculum. There ould be a thorough preliminary examination in tin, mathematics, arithmetic, and physical dyna- cs. Of the present professional chairs, let patho- gy and materia medica be excluded; impressing, at e same time, the importance of the former subject on the professors of principles of surgery and medi- ne, and the latter upon the chairs of chemistry and tany, who should ever seek to dwell on those points ost necessary for the medical student. The course study should be the following.

First Year. Winter Session. Chemistry; Anatomy; ssections; Clinical Surgery. *Summer Session.* Prac- al Chemistry; Dissections; Geology; Clinical Sur- ry.

Second Year. Winter Session. Dissections; Prin- les of Surgery; Physiology; Clinical Medicine. *mmer Session.* Dissections; Botany; Medical Juris- dence; Clinical Medicine.

Third Year. Winter Session. Dissections; Princi- s of Medicine; Clinical Medicine; Midwifery. *mmer Session.* Zoology; Clinical Medicine; Oph- almic Surgery; Surgical Operations on the Dead dy; Practical Dispensing; and attendance at a rtain number of Midwifery Cases.

For some such course of study, provided uniformity system be generally adopted, let the title of M.D. given by all the licensing bodies in the kingdom, th a right to practise throughout the British em- re. Should the graduate wish to attain honours, another year be passed in his college, with an amination at its close in Greek, histology, and psychology; the same being signified by some appro- priate title.

I quite second the suggestion of having all the examinations in and during the respective classes, and the clinical teaching tested by well examined and recorded cases. At the same time, the curricu- lum should be closed by a practical examination in medicine and surgery, conducted at the bedside, as well as oral and written. Not beginning medical studies proper until eighteen years of age, the student would in this way acquire a complete theoretical and practical knowledge of his profession.

I am, etc, PERCY LESLIE.

March 1864.

PROFESSOR LAYCOCK ON MEDICAL EDUCATION: REPLY TO A CRITICISM.

LETTER FROM THOS. LAYCOCK, M.D., F.R.S.E.

SIR,—I am always glad to be instructed by critics, whether they be competent or not; and am quite ready to submit in silence to reproof, whether just or unjust. There are, however, some opinions set forth in your criticism of my lately published work on *The Principles and Methods of Medical Observation and Research* (JOURNAL, Feb. 13, 1864, p. 117), which appear to me to have a general application to medical education, and to be of mischievous tendency. Setting personal considerations aside, I, therefore, beg leave to express my dissent from them.

1. You give a decided opinion as to the at least doubtful advantage of classifications in medicine. "Can any one tell us" (you ask) "whether, at any time, and to what extent if any, medicine in its true sense—the science of healing—has been advanced one step by the elaborate systems of classification which nosologists have devised, and in the details of which no two of them thoroughly agree?" Now, I take exception to your definition of medicine as a science. It aims admittedly in modern times far more eminently at the prevention than the healing of disease; although the mere healing, because of the popular ignorance of medicine in the "true sense", is believed too generally to be the sole business of the physician. In my humble judgment, a teacher does only half his duty, and that half most imperfectly, if he only teaches how to heal. For, very often, the cure of disease needs the means necessary to prevention or removal of the causes alone; nature heals. Hence, a knowledge of causes of diseases is of primary importance to practical medicine. If this be true, I will beg of you to state by what other means better than a careful classification of diseases, according to their causes or principal con-causes, you can so arrange the accumulated knowledge of the profession, so as to be available for teaching and practice? In the work you have done me the honour to criticise, I say, "Classification concentrates and indexes our knowledge. In every science, therefore, the classification of the facts of the science is of primary importance. In medicine, perhaps more than any other, a classification is needed; because of the vast number of facts and of their multifarious relations to each other. Without such an indexing and concentration of our knowledge (termed a nosology, or nosological arrangement), the study of medicine would be almost a chaos." (P. 231.) It is not easy to say to what extent the elaborate nosologies of Linnæus, Sauvages, Cullen, Mason Good, and others, have thus advanced medicine; but I will venture to affirm that the "statistical nosology" of Dr. Farr, although limited in its application to the causes of death as distinguished from those of dis-

case, has been of signal and unquestioned advantage to medicine.

2. I conclude, however, that you probably mean to object, not to limited classifications like that of Dr. Farr, but to "elaborate" classifications. You object that no two framers of these "thoroughly agree" as to details, and that the nosologies they invent pass away into oblivion. Now, elaborateness means completeness or perfection of detail; but how can you reasonably expect permanence or thorough agreement as to the detailed facts of a science and art which are continually changing and are proverbially uncertain? Classifications must of necessity be remodelled when new facts have to be classed and errors eliminated. Further, why expect more in the classifications of medicine, than in those of botany, zoology, geology, and chemistry? When practitioners "thoroughly agree" upon such points as the uses of alcohol or mercury, or the treatment of pneumonia or syphilis, the most elaborate nosologies will be found also to agree in their details.

I must humbly submit, however, that your idea of elaborateness is limited. You give as an example of the "extreme of elaboration", my classification of remittent fevers. Now, I should be really indebted to you for a less minute, and, at the same time, sufficiently complete arrangement. I should feel thankful if you could save a single head—nay, a single line—and leave out nothing important. Would you omit or alter the first line, for example, which defines remittent fevers as "malarious fevers" (that is, fevers due to marshy emanations) "complicated with inflammations?" If you omitted you would suppress a generalisation which distinguishes remittents from agues, and is practically applicable to a class of diseases that prevail endemically from Indus to the pole; if you would alter, pray express the generalisation in fewer words. Inflammations being admitted, doctrinally, would you omit the class of "cerebro-spinal remittents—endemic meningitis"? If so, you would neglect to notice the endemic kinds of meningitis (chiefly spinal) which have been observed in Ireland, France, and the United States; and leave no place even for those "pernicious fevers" described lately, in which there is a production of black pigment in the blood (*melanæmia*) and a plugging of the encephalic and other capillaries with it, and which, I am well aware, ought to have had a place in my nosology, with other fevers omitted in like manner. Perhaps, you would omit the "pulmonary remittents" as too minute; for probably the English practitioner rarely suspects he may have to deal with a remittent pneumonia; and it is, doubtless, much more simple and easy to have no nosology of pneumonia whatever. But without an "elaborate" that is as clear and detailed an exposition of the causes of pneumonia and of the functional and anatomical changes in the lungs which they induce as is possible, no sufficient therapeutical teaching is practicable. Hence, the failure of the Association in its late attempt at a combined therapeutical inquiry into "acute pneumonia"; for of more than 2000 schedules issued to members, only fifteen were returned! Now, this one generalisation, too minute for mention to the student as you probably think, would help him to understand why acute pneumonia may sometimes be most successfully treated with quinine.

And this generalisation as to the class of remedies suited to all these remittents applies equally to the next group of "bilious and gastric remittents." Would you omit these? If so, then you blot out from teaching and practice both the grave endemic fevers which infest the shores of the Baltic and Mediterranean Seas and the endemic yellow fever of the tropics. And yet to distinguish this non-infectious endemic kind from the epidemic and infectious yello fever is of the utmost practical importance to th profession in the United States, in India, in ou colonies, in Southern Europe, and in garrisons lik Gibraltar. Or, to look at home, if you left out th next class of "remittents complicated with the actio of sewer and dung-hill emanations", you would giv the student no warning that there are endemic, ma larious, and continued fevers, which simulate and ar confounded with the epidemic and infectious "enteri fever." These distinctions serve to clear up muc that is confused and discrepant in the histories an treatment of these wide-spread fevers. You do m the honour to say, indeed, that the arrangement "i clear and interesting." How then can it be deprive of any of its divisions, so as to retain these charac teristics and yet make it less amenable to the charg of that "minuteness of classification carried to th extreme of elaboration" which you bring against it and which you assert has the effect of "further over whelming and confusing the already overburdene mind of the student"? A nosology of a class of fever which prevail with more or less intensity over th whole world is obviously of the greatest practical im portance; and I repeat that I shall be most thankfu to you, or to any one, for a practical demonstratio of what such a nosology should be. I must warn you however, that, in a copy of Cullen's nosology no before me (and Cullen's is still in use), the fever which I have arranged nosologically within the com pass of one page of a crown octavo occupy more tha ten pages of a large quarto.

3. You object, that I introduce into my nosologies "not new names, but names which are scarcely eve heard of in medicine, such as trophesiæ, æsthesia kinesiæ," etc. These examples are selected from th nosology of diseases of the nervous system, in whic the names are of necessity more numerous and technica than those of other systems or organs, and therefor more confusing. Now, clearness and precision i naming not only indicate clearness and precision i thought, but communicate them; and if you can b one Greek word thus communicate ideas which woul otherwise require a sentence, why not adopt it? I is not in accordance with my reading, that the word I use are (as you affirm) "scarcely heard of i medicine". That assertion may be in some degre correct as to British medical literature, but it as suredly is not as to the most classical French an German writers. And, in truth, the first word yo quote is new, as the text shows and explains. In m nosology, I have endeavoured to make the one wor "*trophesiæ*" do the duty of whole phrases, just a chemists and algebraists use letters and symbols. D you deny the principle? or do you deny the validit of its particular application? I wish to teach tha according to my experience, certain changes in certai nerves and nerve-centres are followed by such diso ders in the health as morbid heat, redness, pallo coldness, sweats, œdema, fluxes, hæmorrhages, va cular neuralgias, effusive inflammations like herpe zoster, and wasting of muscles like the "wastin palsy". These have never been classed together be fore as having ought in common. Are they, bein such, to have a common name, or not? If not, the every time they are referred to, the preceding ser tence must be used to mention them. A name, there fore, being necessary, what principle of naming woul you adopt, so as to secure clearness and precision?

4. Doubtless, you can fairly object to the use Greek words as puzzling to the student who is ign rant of Greek; but the objection equally applies t the terms of all the sciences. Our elementary gram mars, arithmetics, and catechisms abound with term of Greek origin, just as difficult as other scientif

ns until explained. Take one of the opening sen-ces of Lindley Murray. "English grammar is di-ed into four parts; viz., orthography, etymology, tax, and prosody." Are my names for the four isions of diseases of the nervous system really more icult than those of the four parts of Lindley Murray's ammar, which is put into the hands of children? e—vesaniæ—is Latin, and presumably easier. If, eed, you adapt medical teaching to such ignorance s implied in your objection, where would you stop your abandonment of learning and discipline? e of your correspondents of February 27th (F.R.S.) wers the question—I suppose in jest. He would pense with all lectures, and with any knowledge atever of Latin and Greek, as "dead and utterly less languages". Let us consider what would be practical result of this. The British medical y would be forthwith removed from the list of the arned" professions. It could have no communion h the medical profession on the continent, which ld still remain learned, with a professional litera-e abounding in "hard" words, and terribly "puz-g" to the untaught medical Briton. That indivi-l would have only an imperfect comprehension of multitudinous technical terms in use in the ethical pure sciences; while all works on the natural sci-es, with their large infusion of Greek and Latin nes, would require to be popularised for him, just or the unlearned multitude. Further, how could associate with members of the other "learned" fessions, or combine with scholars and gentlemen the cultivation of studies like those of history, nology, archæology, and the like? At this mo-nt there are youths entering upon commercial suits who have had a classical education at Eton, row, and the English universities; and yet you ld dispense with it in medicine.

advocate no deep classical training, however, for medical student. If he is able to read the Greek tament or Xenophon's *Anabasis*, he knows enough comprehend readily the multitudinous scientific ns of Greek derivation. Such knowledge, by facil-ting the study of the medical sciences, may be sidered equal to the saving of at least one year of lical studies. I say nothing of its subsequent ad-tages in the reading and comprehension of the stores of experience contained in medical litera-. This knowledge of Greek is so small in amount, the youth of fifteen or sixteen who, *having had opportunity*, has proved himself mentally unable cquire it, has proved himself, *ipso facto*, mentally t for the life-long study of medicine; for none will y that good mental capacity is needed for medical tice, or that the practitioner who would fitly do duty must make up his mind to be a life-long lent of all that concerns human nature. Om-ience he can make no pretence to; but between and a minimum of knowledge and abilities the ance is infinite.

Lastly, I submit that all the gross exaggerations ne difficulties of medical studies, lately current in British Medical Journal, can only serve to ourage the timid student, to excuse the indolent pleasure-seeking, and to lower the profession in lic opinion. None of the real difficulties are so t that ordinary abilities, aided by industry and hod, may not surmount. Rather, then, let us to the student, "Macte virtute, puer; sic itur ad a"; and discipline him for his struggle with them. ou will easily understand how much I differ from sentiments and the tone of your own editorial les on this important subject. I cannot think they express the views held generally, or by the ing members of the Association, more especially he President, Dr. Symonds, the President-elect, Dr. Paget of Cambridge, the Treasurer, Sir Charles Hastings, and the ex-President, Dr. Burrows, whose opinions, as recorded in the Journal, seem to be wholly different from those of which it is exclusively the advocate amongst medical periodicals.

I am, etc., T. Laycock.

4, Rutland Street, Edinburgh, March 2nd, 1864.

GRATUITOUS MEDICAL SERVICES.

Sir,—I read with much pleasure the letters of your correspondents Drs. Mushet and Gibbon, and "Rusticus Expectans". In due deference, I beg to suggest a remedy, and ask the opinion of your numerous readers on the subject.

There are, no doubt, a great number of people who are able to pay for medical services, and would willingly do so to the extent of a few shillings, but are unwilling to call in a doctor, in fear of "running up a bill"; and it is that class who chiefly resort to the prescribing druggist, to the "advice gratis" physician, or to the out-patient department of our hospitals and dispensaries. Now it appears to me that, if many of our young surgeons and physicians, who are "waiting for practice" in many of our large towns, would combine to form a dispensary on the principle of a comparatively small payment on admission, many lives would be saved that are now lost by the ignorance of prescribing druggists. It might at first be thought that this plan would be lowering the dignity of the profession; but, on consideration, the contrary will be found to be the case. What is the system that is pursued now by young men striving to get into general practice in our large towns? Either they canvass artisans and workmen *to do them the honour* to appoint them as medical officers to their Odd Fellows and other clubs, at half a crown per man *per annum;* or they start an open shop, selling soap, perfumery, etc., which they ignore after "getting a more respectable practice". Self-supporting dispensaries appear to be only another name for the club system. I believe England is the only country in which gratuitous medical services are given. A few months ago, when in Paris, I mentioned this fact to a young physician just beginning practice in that city. He was amazed, and shrugged his shoulders, as much as to say that "we know better here than to do that". Now I would suggest that, in all our large towns, a dispensary should be formed, under the auspices of several of the senior members of the profession, to see that it was properly conducted, and that none above the class I mentioned should be admitted as patients. Six or twelve young practitioners should do the work, giving so much of their time per day as might be arranged. A dispenser and treasurer should be appointed; and, after the expenses were paid, the surplus to be equally divided among the working members of the institution. It ought to be a rule, that none of the physicians or surgeons should hold office longer than a short term of years, to give place to other young men.

I am inclined to think that some such plan as this would tend to mitigate the evil of gratuitous medical advice; it would give practice and experience and a more united feeling to the rising members of the profession, and some slight remuneration for their labours.

I am, etc., Meta.

March 1st, 1864.

The late Sir William Brown has left legacies to the following local charities (among others in Liverpool): Northern Hospital £1000; Southern Hospital £500; Royal Infirmary £509; Infirmary for Children £100; Eye and Ear Infirmary £100.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on March 11th.

Bell, William, Rochester; diploma of membership dated April 26, 1826
Smith, Charles Manners, H.M.'s Indian Army; April 28, 1843
Tothill, Frederick Disting, Charles Street, St. James's Square; June 7, 1833
Vines, Charles, Reading; July 25, 1836

The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board, on March 16th.

Blanchet, Jean Baptiste, M.D., Quebec; diploma of membership dated January 26, 1864
Covey, Charles Edward, Basingstoke; May 6, 1863
Freeman, Richard Thomas, Hatcham; January 27, 1864
Harris, James Smith, St. John's Wood; July 31, 1863
Langhorn, Joseph, Savile Row; January 28, 1864
Monckton, Alfred, L.S.A., Brenchley, Kent; July 31, 1860
Thomas, George Frederic, L.R.C.P., Canterbury, New Zealand; February 11, 1859
Watermeyer, William Godfrey, Cape of Good Hope; November 20, 1863
Wilson, William Samuel, Bayswater; April 22, 1862

APOTHECARIES' HALL. On March 10th, the following Licentiates were admitted:—

Brotherton, William Henry, Bethnal Green Road
Grigg, William Chapman, Bristol
Harris, Walter, Waterford
Walker, George Charles, Bootle, Liverpool

At the same Court, the following passed the first examination:—

Brewster, Edward, Sheffield School of Medicine
Haxworth, Walter, Leeds School of Medicine

APPOINTMENTS.

*HILLIER, Thomas, M.D., appointed Physician to the Skin Department of University College Hospital.

ROYAL NAVY.

BURGESS, Peter, Esq., Acting Assistant-Surgeon, to the *Gladiator*.
COGHLAN, Thomas, Esq., Surgeon, to the *Research*.
EVANS, William J., Esq., Surgeon, to the *Gladiator*.
M'DONALD, Alexander, Esq., Acting Assistant-Surgeon, to the *Research*.
RAE, Peter M., Esq., Assistant-Surgeon, to the *Black Prince*.
TELFER, William, Esq., Surgeon, to the *Black Prince*.
WRIGHT, George V., Esq., Acting Assistant-Surgeon, to the *Edgar*.

MILITIA.

LOUTTIT, J.. M.D., to be Surgeon Durham Artillery Regiment of Militia.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

LONG, R. G., Esq., to be Hon. Assistant-Surgeon 12th Dorset R.V.
OLDHAM, R., Esq., to be Assistant-Surgeon 4th Durham A.V.
TERRY, J. N., Esq., to be Surgeon 1st Administrative Brigade West Riding A.V.

DEATHS.

BARKER. On March 7, at Kornthal, near Stuttgart, aged 15, Eaglesfield J. G., eldest son of E. J. Barker, Esq., retired surgeon H.M.'s Madras Establishment.
BURNARD, Charles F., Esq., Surgeon at the London Fever Hospital, aged 21, on March 10.
FROGLEY, Ralph A., Esq., Surgeon, of Hounslow, at Brighton, aged 70, on March 15.
GOOD. On March 15, at 46, Burton Crescent, Margaretta Elizabeth, daughter of the late J. Mason Good, M.D.
PECK, Ffloyd M., Esq., Surgeon, at Sale, Gipps Land, Australia, aged 43, on January 7.
POWELL, Robert H., M.D., at Chester, aged 46, on March 10th.
SMITH. On March 4, at Morningside, Edinburgh, aged 11, Lucy F. M., eldest daughter of G. Smith, M.D., Principal of the Medical College at Madras.

MEDICAL MISSION AT CANTON. Efforts are being made to enlarge the hospital of the Medical Mission at Canton.

MEDICAL REGISTER. Of this yearly publicat the Government takes two thousand copies for t benefit of public functionaries, etc. The income the Medical Council during the past year was £72 and the expenditure was £4800, leaving a hap balance of £2,442.

MIDWIVES IN PHILADELPHIA. We learn from t *Reporter* that of the twelve persons who attended t largest number of obstetric cases in 1861, seven w midwives. The largest number of cases attended one person (a midwife) was 247, and the lowest 1 The average number of cases attended by the sev midwives was 174. The average number attend by the five physicians named was 164. (*Ameri Medical Times.*)

MEDICAL CHARITIES. Under the will of the l most benevolent Bishop of Ely, which has just be proved under £40,000, it is stated that nearly whole of that large sum will be equally distributed charitable institutions, including the following me cal charities in this metropolis: King's College Hos tal; the Westminster Hospital; the Western Disp sary; the Bedford Infirmary; the Huntingdon Cou Hospital; and the Suffolk General Hospital.

VACCINATION REGISTRATION. In the House Commons, on Monday last, Sir M. Peto asked wheth as the registration of cases of vaccination was a to failure, it was the intention of the Government amend the Act this session. Mr. Lowe said it w quite true that the system of registration under Vaccination Act was very bad, but it would cos great deal of money to improve it. Moreover, ev when improved, it would not make these compuls measures effectual to any extent. The great di culty in working them was the reluctance of pers to prosecute poor people for disobedience to a law, neglect of which was countenanced by too many w ought to know better. He was sorry that he co not hold out hopes of an improvement in the syste

DIETARY IN WAKEFIELD PRISON. On Tuesday l Lord Fermoy asked the Secretary of State for Home Department what was the effect of the l change of dietary in Wakefield prison on the hea of the prisoners; and whether he would lay a copy the correspondence on the subject, together with report of the medical officer, upon the table of House. Sir G. Grey said the change was introdu some time ago as an experiment; and, at the end six months, the visiting justices informed him tha had not been in operation long enough to ena them to form any conclusive opinion as to its eff on the prisoners. At present, a thorough inquiry going on into the whole question of the dietary in prisons.

MEDICAL SOCIETY OF LONDON. The ninety-f anniversary meeting of this Society was held Willis's Rooms, on the 8th instant; Edwin Cant Esq., President, in the chair. The annual orat was delivered by Dr. Thudichum. The following g tlemen were elected officers and members of Cou for the ensuing year:—*President*, R. Greenhal M.D. *Vice-Presidents*, T. Davidson, M.D.; W. Ha ing, Esq.; C. J. Hare, M.D.; G. Lawson, Esq. *Tr surer*, C. H. Rogers-Harrison, Esq. *Secretaries Ordinary*, G. D. Gibb, M.D.; E. S. Thompson, M *Secretary for Foreign Correspondence*, V. de Mé Esq. *Other Members of Council*, J. Althaus, M.D.; E. Anstie, M.D.; R. Barwell, Esq.; J. Bird, M.D. H. Browne, M.D.; T. Bryant, Esq.; W. Camps, M. E. Canton, Esq.; W. Cholmeley, M.D.; A. Clar M.D.; T. W. Cooke, Esq.; J. Jephson, M.D.; Leared, M.D.; A. Poland, Esq.; H. P. Robarts, Es W. R. Rogers, M.D.; H. Smith, Esq.; W. A. Sm

.D.; J. S. Stocker, M.D.; H. Thompson, Esq. *ator for* 1865, W. Smiles, M.D.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN. The ual monthly meeting of this Society was held on onday the 7th inst., at the Dental Hospital, Soho quare. The chair was taken by the President, Edward unders, Esq. Models of irregularities in the teeth d the plan of treatment adopted were exhibited d explained by Mr. Saunders, Mr. Harrison, and r. Parkes. A discussion took place on Mr. Spence ate's paper on the "Pathology of Dental Caries," ad at previous meetings. Mr. Bate maintained at all enamel had a tendency to be less perfectly veloped in its external surface; that in cases where ere was a deterioration in the development of teeth, at external surface would be less perfectly deloped than in other teeth; that it was common to d in teeth predisposed to decay, that the external face had a more than usually large amount of ani- l tissue existing in it. Passing to the dentine, he aintained that in every tooth where there was a disposition to decay, certain marks, called areolar aces, were found, and came to the conclusion that ose parts were of a less perfectly developed struce, containing a larger amount of animal tissue an the other parts. The green marks deposited on e teeth were nothing more than the decay of the ernal membrane; and decay was really an absorpn of oxygen by the animal matter in and about e teeth which formed carbonic acid, which decomsed the phosphate of lime and left the animal contuents of the teeth exposed, which formed a further antity of carbonic acid.

OPERATION DAYS AT THE HOSPITALS.

NDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

SDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

DNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

RSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

DAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 P.M.

URDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

EETINGS OF SOCIETIES DURING THE NEXT WEEK.

DAY. Medical Society of London, 8.30 P.M. Mr. Jabez Hogg, "Eye Diseases as determined by the Ophthalmoscope; more especially in relation to the Diagnosis and Surgical Treatment of Glaucoma."

SDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Moore, "On a Method of Consolidating Fibrine in Incurable Aneurisms, with a Case by Dr. Murchison"; Mr. Bryant, "On Removal of Stone in the Female Bladder by Urethral Dilatation"; Dr. M. Mackenzie, "On the Invention of the Laryngoscope by Dr. Benjamin Babington."—Zoological.—Ethnological.

NESDAY. Geological.

SDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."—Royal.

RDAY. Royal College of Surgeons of England, 4 P.M. Professor Huxley, "On the Structure and Classification of the Mammalia."

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

ERRATUM.—SIR: In my letter in the JOURNAL of the 12th instant, there occurs this passage. "There is such a broad distinction between the types of madmen, murderers, and those who commit the crime impelled by the prevalence or predominance of their passions, as to make it plain that, as regards the latter, after detection and conviction, the question as to the soundness or otherwise of the mind is *admissible*, and never ought to be entertained at all; or, if exceptions be possible, they would be very rare indeed." Obviously, the word *inadmissible* was intended.

March 13th, 1864. I am, etc., G. BODINGTON.

FREEMAN'S CHLORODYNE.—SIR: My attention has been directed to a letter from Mr. J. D. Hill, of the Royal Free Hospital, in your last number. If any one will refer to the name of Dr. G. R. Irvine in the *Medical Directory*, they will find that that gentleman was resident medical officer at the Royal Free Hospital (being Mr. Hill's predecessor); and he then bore testimony to the properties of my chlorodyne. I am, etc., R. FREEMAN.

5, Clayton Place, Kennington Road, S., March 15th, 1864.

MEDICAL CHARGES.—SIR: Will you kindly inform me whether a person holding the diplomas M.R.C.S.Eng. and L.F.P.S.Glasgow, is legally entitled to practise both *medicine* and *surgery*, and recover for medicine and attendance in both cases?

I enclose my card, and remain, etc., DELTA.

[Any man, medical or other, in the country, may practise both medicine and surgery. But only he whose name stands on the *Medical Register* can make a legal demand for medical or surgical services rendered. EDITOR.]

THE SANITARY STATE OF LIVERPOOL.—SIR: I send you a report of the proceedings of the Liverpool Town Council, which show the horrible results of dirt, destitution, and ignorance. The increase of 2,700 deaths, above the corrected annual average, is to be attributed to the ignorance and selfishness of the better classes far more than to the destitute and dirty. Liverpool is proud of many facts in her history, and has for many years spent very large sums to improve the sanitary state; and your readers might suppose that either this money was thrown away or that Liverpool was formerly in a horrible state.

Now, the money was not lost; there has been a great deal of improvement; but Liverpool is, nevertheless, still in such a diseased condition, that a great deal more improvements are essential to make it what it ought to be. Liverpool, with its corrected average, has a mortality over similar towns; but this 2,700 deaths is such an extra excess, that the result is just the same as if the town were blockaded and bombarded (annually), with 2,700 killed and about 12,000 wounded; and, I have no doubt, that many of the better classes come in for their fair share (and properly, too) of disease and death. You will see that the health officer is bringing his profession into its proper position; that his directions are followed; and that his voice is considered a revelation of the natural laws, teaching the people how to improve the sanitary state of their dwellings, so that their health and happiness be increased, and the common weal promoted.

The poorer classes become so enervated by improper dwellings and overcrowding, that bodily and mental prostration arises. How welcome any filthy alcoholic drink to make them feel as if they lived in pure and sunny air. This increase of 2,700 extra deaths, with the thousands of diseases, and corresponding increase of poverty and sorrow—these are some of the works of Mammon. Vested rights must give way when they are opposed to the common safety, common sense, and common weal. The health officer has heavy work before him when he is obliged to contend with Messrs. Mammon, Ignorance, and Co.; that old-established firm, with numerous agencies, and that firm, studying to look on all things with gain in their eye, will most energetically oppose the health officer and his common weal notions, if such notions diminish their percentage of profit.

It is a noble appointment that of health officer. The duty is so acceptable to a large heart and head, and it is so benevolent and beneficent to superintend the preservation of the prosperity of the poor, that it becomes a work acceptable to our God, and makes the health officer even as one of the ministers of the Creator. As I am now an old member of the medical profession, and have always been a student of the natural laws and of the constitution of man, I consider those laws as the only sources of our commonweal, prosperity, and civilisation, and that the health officer, in the midst of so much respectable ignorance and deplorable dirt, is the most important of all men; for he endeavours to clean, not only the mind and body of those very much in want of it now, but does he not by such efforts in cleanliness also promote the progress of godliness and good-will to all men?

February 28th, 1864. I am, etc., DICKY SAM.

THE PARTRIDGE FUND.—The Treasurer of this Fund requests us to say that he has acknowledged receipt of all subscriptions received by him in the following Birmingham papers:—The *Gazette*, the *Journal*, and the *Midland Counties Herald;* and that when the subscription-list is closed, it is his intention to send a copy of the list to each subscriber. He will feel much obliged to any gentleman who has forwarded a subscription, and who may not have received an acknowledgment, to communicate with him; and regrets that there should have been any error on this point. Dr. Bell Fletcher is the Treasurer of this Fund.

THE LINGEN TESTIMONIAL FUND.—SIR: It appears to me that the comparison instituted in last week's JOURNAL between this and the Fraser case, and your remarks on the decision of the Committee to purchase, for Dr. Lingen's acceptance, a piece of plate with the balance left after defraying the legal expenses of his suit, appear to have been made in forgetfulness of the fact, that the bulk of the money was contributed by his private and non-professional friends; now, though I concur in the sentiment that it is not desirable that any part of money subscribed *by the profession* to aid one of its members to meet the costs of an iniquitous action, should be expended in a testimonial; yet it is clear that Dr. Lingen's case was quite an exceptional one.

The incident that led to this action was, in its nature, more a social than a professional one: and though the movement for a Testimonial Fund originated with his medical friends, it professed to be, and was from the first, of a mixed character. The Committee was formed before the legal proceedings terminated, and when Dr. Lingen was threatened with a fresh trial; and, to quote the words of the earliest resolution of that Committee, it was intended to "give expression to the sympathy and unabated respect entertained for him by his medical and private friends." The contributions, too, came in far greater abundance from his private friends than they did from professional sources, as is attested by the long list just issued to the subscribers, with the chairman's statement of accounts, which shows that out of nearly four hundred contributors, eighty-two only were medical men; and of these, I am assured, the greater number were his old and intimate friends. It would seem, therefore, that the profession contributed very little above a fourth of the sum paid by the Committee for the legal expenses, and less than a fifth of the amount subscribed. Under these circumstances, I submit that it would not have been competent to the Committee to alienate for professional purposes any part of the money entrusted to their keeping.

March 7th, 1864. I am, etc., A CONTRIBUTOR.

[The original Committee who started this Fund were all medical men; and, we believe, we are correct in saying, that the working Committee has throughout been virtually, if not nominally, a Medical Committee. The Fund having been got up by a Medical Committee, became naturally a matter of professional interest. No doubt in the case of the Fraser Fund, also, a portion of the subscription was from non-professional friends. Our opinion, therefore, remains unchanged. EDITOR.]

NIGHT AIR.—SIR: The following is a brief description of my mode of obtaining pure air in a bed-room at night. A tin tube, one inch in diameter, and open at both ends, has one end inserted in a hole in the window-frame at the top, communicating directly with the external air, and the other end bent at right angles so that the internal opening is at a distance of about two feet from the head of a person lying in bed. The tube is suspended near the ceiling, and carried right across the room, the bed being against a wall at the opposite side of the room to that in which the window is. The tube is nearly horizontal, but slightly inclined towards the bed. A paper wheel anemometer is attached to the internal opening of the tube, which wheel turns with a very slight current of air. The length of tube allows the air, however cold outside, to attain the same temperature as that of the room, before it reaches the bed. In this way a gentle current of pure air is kept up all night, only where it is wanted; namely, close to the mouth. By this method, the difficulties attending the general ventilation of a room are avoided; and by it, as far as experiment yet goes, the sleeper derives the full benefit of a constant supply of fresh air, in perhaps the simplest manner possible. At all events, almost no expense is required; and any one can get a similar contrivance made in an hour or two. I have never been able to detect the slightest draught while lying in bed, no doubt owing to the fact that the air is warmed, though fresh; and the constancy of the in-coming current is shown by the perpetual rotation of the anemometer, usually performing about a hundred turns per minute. I am, etc.,

Clifton, March 6th, 1864. WILLIAM C. BURDER, F.R.A.S.

COMMUNICATIONS have been received from:—Mr. WILLIAM BOWMAN; Mr. BRODHURST; Dr. T. M. ROOKE; Mr. CHRISTOPHER HEATH; Dr. HILLIER; Mr. THOMAS NUNNELEY; Mr. JONATHAN HUTCHINSON; DELTA; Mr. H. TERRY, JUN.; Mr. JOHN MANLEY; Mr. E. COUSINS; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. LOWNDES; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. T. M. STONE; Dr. THOMAS SAVAGE; Dr. O'BRYEN; Dr. WOLLASTON; Mr. OLIVER PEMBERTON; Dr. B. FLETCHER; Dr. LUND; Dr. WOLFE; and Dr. C. BARHAM.

ADVERTISEMENTS.

Wanted, for the Liverpool Royal INFIRMARY, a JUNIOR HOUSE SURGEON. The Salary is £80 per Annum, with Board, Washing, and Lodging. He must be unmarried, and a Member of the College of Surgeons of London, Dublin, or Edinburgh, and also a Licentiate of the Apothecaries' Hall of London.

Candidates are requested to send in their Testimonials, addressed to the Chairman of the Committee, on or before Tuesday, the 22nd March next. Selected Candidates will be required to attend at the Infirmary on receiving notice to that effect.

EDWARD GIBBON, Chairman,
Royal Infirmary, Liverpool, 3rd March, 1864.

Royal College of Physicians of LONDON.—TWO LECTURES on the LARYNGOSCOPE will be delivered at the College, Pall Mall East, by Dr. GEORGE JOHNSON, on Wednesday, April 6th, and Friday, April 8th, at Five o'Clock p.m.

LECTURE I.—The Method of Using the Instrument, and the History of its Invention.

LECTURE II.—Illustrations of its Value in the Diagnosis and Treatment of Disease.

1864. By Order of the President, W. COPNEY.

Royal College of Physicians OF LONDON.—FIRST PART OF THE PROFESSIONAL EXAMINATION FOR THE LICENCE. The next Examination of Students who have completed their Second Winter Session of Study at a recognised Medical School will commence on Tuesday April 5th.

SECOND PART OF THE PROFESSIONAL EXAMINATION.—An Examination of Gentlemen who are eligible for admission to the Second Examination for the Licence will commence on Tuesday April 12th.

Graduates in Medicine of a University recognised by the College, Licentiates of the Royal College of Physicians of Edinburgh, or of the King and Queen's College of Physicians in Ireland, and Registered Medical Practitioners qualified before January 1861 are admitted to Examination under special Bye-Laws.

Candidates are required to give fourteen days notice in writing to the Registrar of the College, with whom all Certificates and Testimonials required by the Bye-Laws are to be left at the same time.

Pall Mall East, 1864. H. A. PITMAN, M.D., Registrar.

University of St. Andrew's.—The Examination of Candidates for DEGREES in MEDICINE will take place at St. Andrew's, on Thursday, 28th April next, at 10 o'clock a.m., and following day. Applications must be lodged on or before the 25th of March.

By order of the Senatus Academicus,
14th March, 1864. ALEXANDER MUIR, Secretary.

Testimonial to Dr. Day —Subscribers to the Testimonial to Dr. DAY (late of St Andrews), whose Subscriptions have not yet been sent, will greatly oblige by forwarding them to the undersigned. Particulars respecting the Testimonial have been posted to those Subscribers who have paid, up to the present date.

B. W. RICHARDSON, M.D., Hon. Treasurer.
London, 12, Hinde Street, W., March 12th, 1864.

Classical and Mathematical.—Dr. STEGGALL prepares Gentlemen for their Examinations in Classics and Mathematics at all the Medical Boards, viz., the Preliminary Examination at Apothecaries' Hall; the Matriculation Examination of the London University; Preliminary and Fellowship Examination at the Royal College of Surgeons, etc.

Dr. STEGGALL continues his Instruction for all Medical and Surgical Examinations during the summer months.—Address Dr. STEGGALL, 2, Southampton Street, Bloomsbury Square, London.

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Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture I. (*Concluded.*)

On Some Points connected with the Pathology and Etiology of Fibrous Tumours of the Uterus.

Causes of Uterine Tumours.

From what we have already seen, it can scarcely be doubted that in pregnant women the fibrous tumour, which grows with the uterine organ itself, essentially partakes of its muscular elements; also, that in an unimpregnated but hypertrophied uterus, the same structures may be found. The point is interesting, as bearing on the origin of fibrous tumours. Every practitioner has met with cases of large, heavy, condensed uterus, and yet where no distinct localisation of condensation existed to constitute a tumour properly so called; but a sort of general congestive hypertrophy of this organ has taken place. Sometimes, however, this is more limited, and then we have what years ago Lisfranc stated he had found; *i.e.*, uterine indurations rounded and circumscribed, offering at their surface lumps and irregularities like fibrous tumours. (S. Lee on *Uterine Tumours.*)

This view does not explain the formation of cysts, although it will fully interpret the development of those fibrous tumours without envelopes, where the tumour and the uterus are so interlaced as to render enucleation impossible. This opinion appears to be that also of some of the most distinguished anatomists of the present day. MM. Verneuil and Lebert believe that fibrous tumours of the uterus are only partial hypertrophies of uterine tissue. (*Bull. Soc. Anat.*, xxvii, 324.)

Upon this supposition, it is easy to understand how any circumstance which may bring about irritation and congestion of the uterine organ will be a cause of the growth of a fibrous tumour. The opinions enunciated on the origin of these by authors have more or less this direction. Excessive venereal excitement has been mentioned by Puchelt. Blandin believed the causes were analogous to those which produced hæmorrhoids; and certainly menorrhagia in females is often produced by the same causes which produce piles in men—*i. e.*, hepatic and portal congestion. According to Lisfranc, a localisation of congestion will develope a fibroid. I have often heard patients refer to a sudden crick felt in the uterus on lifting up a heavy weight, or after a sudden fall, as the cause of a fibrous tumour. Here we have a reason why a determination of blood should be localised. Mr. Brown believes they are often developed, in single women especially, from habits of delection, and has even foretold their occurrence in this way. Dupuytren and Krüll alone assign extraneous causes; Krüll, advanced age; Dupuytren, hereditary predisposition. The facts I have collected, however, do not justify these last opinions. Statistics, I think, throw some light upon this question.

Frequency of Fibrous Tumours.

1.—*Fibrous Tumours.*

Age.	Married or Widows.	Single.	Condition not stated.	Total Number.	Age not stated. Mar.	Sing.
16—20	—	—	—	—		
21—25	3	2	—	5		
26—30	17	5	—	22		
31—35	18	13	5	36		
36—40	22	5	6	33	6	7
41—45	21	10	3	34		
46—50	12	6	6	24		
Above.	7	2	7	16		
Total.	100	43	27	170		

2.—*Polypi.*

Age.	Married or Widows.	Single.	Condition not stated.	Total Number.	Age not stated. Mar.	Sing.
16—20	—	—	—	—		
21—25	3	2	—	5		
26—30	17	3	1	21		
31—35	13	6	—	19		
36—40	25	4	1	30	19	3
41—45	20	—	4	24		
46—50	23	2	7	32		
Above.	15	—	4	19		
Total.	116	17	17	150		

3.—*Fibrous Tumours and Polypi conjoined.*

Age.	Married or Widows.	Single.	Condition not stated.	Total Number.	Age not stated. Mar.	Sing.
16—20	—	—	—	—		
21—25	6	4	—	10		
26—30	34	8	1	43		
31—35	31	19	5	55		
36—40	47	9	7	63	25	10
41—45	41	10	7	58		
46—50	35	8	13	56		
Above.	22	2	11	35		
Total.	216	60	44	320		

The preceding tables prove that the disease is more common among the married than the unmarried women.

Out of 156 cases of fibrous tumours of the uterus, 106, or 68.5 per cent., occurred in married women.

Out of 152 cases of polypi of the uterus, 135, or 82.2 per cent., occurred in married females; or, taking polypi and fibroids of the uterus together, out of 301 cases, 241, or 80.2 per cent., were married women.

This result, favourable as it is for spinsters, is still more so when we remember that, as a rule, there are generally about twice as many spinsters as married women. This is the proportion which Quetelet obtained for Belgium. Out of 1,000 women, 628 were single, 295 married, and 77 widows. The same general law would apply to England. If we take the census of 1851, the married females amounted to 3,461,524; the widows, to 795,590; and the unmarried, to 6,478,805, the preponderance being greatly in excess in favour of the unmarried.

But it is clear that, to judge of the potency of sexual excitement as a cause of fibrous tumours, it is imperative to take only the ages during which sexual power is active; and here the rule laid down admits of much modification.

The average age of a wife in Great Britain is 40.65 years. It is at very nearly this average age that the number of fibrous tumours and polypi is in excess.

But, if we take the proportion of unmarried, married, and widowed women, to 100 females living in Great Britain at these ages, their number will be as follows.

Ages.	Spinsters.		Wives.		Widows.	
15 to	97.5	83.5	2.4	16.1	.03	.26
20—	69.6	55.1	29.8	43.5	.49	1.2
25—	40.7	33.2	57.3	63.6	1.9	3.0
30—	25.8	22.3	70.0	72.3	4.1	5.3
35—	18.8	17.3	74.6	74.3	6.5	8.4
40—	15.6	14.6	74.0	73.1	10.3	12.1
45—	13.7	13.4	72.2	69.5	13.9	16.9
50—	13.2	12.9	66.8	52.1	19.9	34.9
Above.	12.6		37.4		49.9	
All ages.	60.3		32.2		7.4	

At the ages between 35 and 40, we find 22 cases of fibrous tumours among the married and widowed, against five among the single—*i. e.*, 4.4 as many; whereas the married women exceed the unmarried by only 3.7, giving clearly the advantage to the unmarried. The same is true for polypi. We must, therefore, admit that, as the disease occurs more frequently among married women than among single women than their numbers justify, married life favours their production.

2. Before wives, however, reach their average age *i.e.*, 40—or, in other words, before a woman reaches that age at which most fibrous tumours occur—there is a period of probation to go through—*i.e.*, a certain amount of sexual excitement for their development, assuming that sexual excitement is a cause.

If it be so, it may in a certain degree be measured by the ages at which most marriages, the strongest sexual passion, and the greatest fecundity occur. Now, the marriage table for Ireland is as follows to a maximum 100 population.

Age.		Females.		Maximum age.
Under 17	.....	13.3		
17—25	.....	79.26		
26—35	.....	79.32	.....	26.34
36—45	.....	11.1		
46—55	.....	1.5		
Above 55	.....	.16		

In England, most women are found to marry a little earlier—22.80.

Again: the sexual offences may be fairly taken, I think, as an index of the sexual passion. From this we have the following results for males. I select those of Ireland and Scotland, where only the sexes are distinguished. The periods are, for Ireland 1845-7, and Scotland 1842-6; and the proportion given to 100,000 population.

Age.		Females.		Maximum age.
16—20	.....	8.43		
21—30	.....	14.96		
31—40	.....	7.96	.....	26.66
41—50	.....	.57		
51—60	.....	.78		
Above.	.....	—		

Lastly: the fecundity tables give pretty near the same age. These are taken for Ireland for the two years 1839-40.

The table for Sweden and Finland, also annexed, makes the maximum age a little higher than the Irish tables.

Irish Fecundity Table.

Age.	Annual number of deliveries to a maximum 100.
Under 17	44.96
17—25	96.94
26—35	90.28
36—45	50.95
46—55	23.51
Above 55	7.06

Sweden and Finland Fecundity Table.

Age.	Annual number of deliveries to a proportion of 100 fem. living.
15—20	2.48
20—25	12.56
25—30	21.64
30—35	22.82
35—40	18.32
40—45	9.54
45—50	2.28
50—55	0.05

Thus, therefore, it would appear that the age of greatest fecundity is somewhere about 26, at which age we must presume that sexual irritation is strongest, and the uterus most likely to develope the beginning of those local affections which terminate in the development of a tumour, which is the usual case.

Nor is it the case that fibrous tumours, as a rule, take, on an average, so many years before their discovery. I have no facts to prove or disprove this inference. Those that we have merely justify us in asserting broadly that the age of sexual excitement manifestly precedes that of the formation of the greatest number of fibrous tumours.

And this conclusion is strengthened by another kind of evidence, to which I have only time to allude—the well known fact that, with the diminution of sexual excitement, these tumours diminish in size, sometimes disappear altogether. They are also much rarer after the ages when the catamenial function ceases. I cannot now recall to my recollection a case of fibrous tumour enlarging after this cessation, although many are the instances where, having been produced anteriorly, they remain dormant subsequently.

The researches which I have made lead me also to make another statement not generally admitted. Women affected with fibrours tumours are not necessarily barren. Out of 22 married women affected with fibrous tumours, only 5 were barren. Out of 24 affected with polypi, only 3 were barren. Consequently, out of 46 women married, 36, or 82.9 per cent., had children; only 8 were barren; 12 had 1 child, 6 had 6 children, 3 had 3 children, 2 had 5 children, 3 had 7, 1 had 9, and 3 had above 10.

Original Communications.

SUCCESSFUL CASE OF OVARIOTOMY: WITH OBSERVATIONS ON THE OPERATION.

By Thomas Nunneley, Esq., F.R.C.S.E.

HOUGH so many cases of ovariotomy have now been erformed and recorded by many different surgeons, to materially lessen the interest and importance hich attach to an individual case, still, judging om the statements and opinions which emanate om time to time from men whose opinions are of lue, there appears yet to remain considerable doubt the minds of some as to the propriety of the proeding, and the probability of its taking permanent nk amongst the great standard operations of surry. It would hence seem that the publication of l cases in which the operation has been performed desirable, so that the question may be settled in cordance with the results of large experience. More pecially at present are details of operative proceedgs of importance; because, according as these are ccessful or not, we may learn to avoid all those ntingent, but not necessary, dangerous accompanients, which may add materially to the difficulty d hazard of what must, under every circumstance, one of the most serious operations which can be dertaken; and to adopt all those methods which ay reduce the danger to the minimum, so that the tient may only have to struggle against what ust inevitably be attached to such an injury incted upon the human system. It admits of a doubt hether some of the proceedings which have been lopted in certain cases may not have been the cause an unsuccessful result, rather than the mere reoval of the ovarian tumour itself; and whether the sire to avoid or lessen certain dangers has not led the adoption of plans, which have of themselves en productive of more danger than that which has en sought to be avoided. A more unpromising se than the following it would be difficult to select; more satisfactory result could not be desired. hough it obviously would be absurd to attempt to gmatise from a single case, whether favourable or favourable, I feel convinced that the result was t uninfluenced by the proceeding employed; thereon I shall presume to remark.

Case. I first saw the patient, Maria B., on December th, 1862. I learned from herself, from the woman th whom she had lived for several years, and from r. Mann, an intelligent young surgeon who had tended her, and who had already diagnosed ovarian opsy, the history of the case up to that date. She s 26 years old, unmarried, but had had a child ven years previously, which was the cause of her ving her home—a small farm-house in the East ding of Yorkshire. Since that time she had supported herself as a char- and washer-woman amongst e poorer class in Leeds, and consequently had had life of very hard work. Six weeks previously, she s delivered of a six months fœtus. Between the o pregnancies, she had been regular; and since the t confinement, the catamenia had appeared once. til the last year, her general health had been od; but for some time past the great size of her dy had been a subject of constant remark. The rease lately had been very rapid, and was not mially diminished by her confinement; indeed, it was greater now than before this took place. Owing to her great size, and feeling unwell, she for some time past had not been able to work; and, consequently, she had not been able to obtain anything like a sufficiency of food. She was a very tall, gaunt skeleton of a woman, with the abdomen measuring, over the bare skin, forty-six inches. It was as tense as a drum, and very tender, particularly over the right side, where there was the greatest hardness, and where she had for several weeks felt considerable pain. On this side, and all below the umbilicus, the perception of fluctuation was most obscure. Above, it was much more evident. There was not the least indication of any rolling over as the body was inclined from side to side; indeed, had there been no other cause, the tenseness of the abdomen was too great to allow any motion of its contents. The pulse was very quick, feeble, and small. She was so weak as not to be able to walk, and hardly to sit up. The face was haggard and hectic; the respiration imperfect and hurried; the tongue red, dry, cracked, and glazed. There was constant thirst, and no appetite. The urine was dark and scanty. She had diarrhœa. The legs were œdematous. The uterus was normal in size and position, and readily admitted the uterine sound.

I sent her to a small ward, in which she alone was placed; and gave her good broths, milk, and farinaceous diet, with alkalies, bitters, and hydrocyanic acid in the daytime; and two grains of pilula hydrargyri and four of compound ipecacuanha powder at bedtime. The improvement was at once most marked. The countenance lost its anxiety; the tongue became moist; the pulse slower and stronger; the bowels regular; the urine more copious; the legs less swollen. She slept well; and the pain and tenderness of the abdomen considerably lessened, but never passed quite away. The former remedies were changed for iron and quinine, and a good portion of meat was added to the diet, with which the improvement continued; when, having waited until the catamenia had again passed away, and had the bowels well opened by an aperient given the previous day, on January 19th, 1863, I operated upon her, with the assistance of Mr. Smith and other friends.

The room was heated to 65° Fahr., and the air made thoroughly moist by the evaporation of boiling water for some time before the operation. Chloroform was administered, but only to a moderate extent, as it had a tendency to cause retching; and, after the incision through the skin is made, no very considerable amount of pain is inflicted. I had intended to have made only a short incision; but, owing to the size, thickness, and adhesion of the first cyst, I had to enlarge the wound until it was eight inches long. From the tenseness of the abdomen and the long continued pain, I was prepared for some adhesion, but not for the extent I found. So completely were the parietal peritoneal surface and the cyst confounded, that, when the cyst was reached, some of those present could not believe that this had been reached; but, after a little manipulation, the escape of some clear ascitic fluid proved that the peritoneum had been opened. The cyst was now punctured with a large trocar furnished with an elastic pipe, by which many pints of thick dark fluid were drawn off. Still no part of the cyst escaped; and it was only after some time, considerable care, and some amount of force by the fingers and handle of the scalpel, had been employed, that the cyst was separated from the peritoneum before, and a considerable extent of omentum behind. It also adhered in a less degree to the transverse and descending colon. I thought it better to tear, and avoid hæmorrhage, than use the knife or scissors and incur the risk of bleeding. A second cyst, nearly as

large as the first, was punctured. It, however, was not nearly so thick, firm, nor vascular, as the anterior cyst, and was but little adherent. It, however, contained some solid matter, as did smaller cysts. The pedicle, consisting of the right Fallopian tube and broad ligament, was moderately long and narrow. It was tied with a single thread of "China twist". The left ovary and uterus were quite healthy. There was hardly any hæmorrhage; and, owing to the admirable assistance Mr. Smith rendered, scarcely any escape of fluid into the peritoneal cavity. The tumour weighed upwards of forty pounds.

The wound was closed by three strong white metal pins, with flexible iron wire twisted round them, instead of thread. A good hold of the peritoneum was taken with these three pins. Between the three larger sutures, several of fine iron wire were carried through the skin, so as to bring every part of the two sides of the skin-wound into apposition. The pedicle, which was left so long that there should not be any dragging, was secured to the wound by the central pin being carried through it; and its ligature was brought out at the umbilicus. Broad strips of plaster were carried all across the body, a thin soft compress placed over the wound, and a flannel bandage lightly adjusted. Forty minims of tincture of opium, in a little weak brandy and water, were given. The operation was well borne.

After the immediate effects of the operation subsided, she had very little pain or tenderness in the body. For two days there was, at intervals, considerable vomiting of green slimy matter, during which time only a little brandy and water was allowed by the mouth. Enemata of broth and gruel were given, and well retained. A grain of calomel and half a grain of powdered opium were given, night and morning, until the third day, when they were omitted, and a mixture with aromatic spirit of ammonia and tincture of opium substituted, with the effect of checking the vomiting. On the third day, broth, and on the fourth, milk with a little bread, were allowed. She slept well; and the only unfavourable symptom was, that the pulse for several days, particularly on the third, was very rapid and small; but, as more food by the mouth was allowed, and the ammonia and opium given, the quality of the pulse considerably improved.

The wound was not touched for five days, when the pins were removed, but not the wire which had been twisted over them, as it adhered closely to the skin, and could not occasion any irritation. From only one of the punctures did the least matter ooze. The plaster was not removed, but only slit up, so that the pins could be taken out. Other long strips were put on; but the bandage was not replaced; indeed, it had soon slipped, and was useless.

Seventh Day. She was well in every respect, except that the pulse was still up at 100, and weak. She had so much distress from a large mass of hæmorrhoids as to interfere with the use of the injections, which were directed to be discontinued, and a diet of good beef-tea and rice-pudding taken. As the bowels had not been opened, two pills, of six grains of compound extract of colocynth and four grains of extract of poppy, were ordered.

Eighth Day. The wound was dressed. There was no discharge; and the wound was perfectly united through its whole extent. The bowels were not opened. The pills were ordered to be repeated.

Ninth Day. She was greatly distressed by the enormous mass of irritable hæmorrhoids, and from a copious discharge of acrid pus from the vagina, which had excoriated the external genitals. Though the pills had been twice repeated, the bowels had not been opened. She was ordered to have half an ounce of castor oil; and, after it had acted, to eat an egg which she had asked for. One grain of quinine three times a day was ordered. The pulse was now coming down.

Tenth Day. The bowels had been well opened. She was better in every respect.

Fifteenth Day. She had considerably improved in strength, and said she felt quite well. She ate very heartily, so much so that she had to be restrained. For the last three days there had been a discharge of pus from the larger pin-punctures, and a very free one from that where the pedicle was. The ligature from this came away to-day. The whole line of the incision itself was perfectly united, and the union appeared firm and strong.

From this time the improvement was steady and rapid. She quickly recovered strength and flesh, and, from a thin, haggard, sickly person, became a healthy looking woman. She was soon able to get up and walk out; but, from the situation of the pedicle, there continued for some days a very free discharge of thick matter. By repeated applications of the nitrate of silver, the wound closed; and on the 3rd of March, six weeks after the operation, she went to her home in the East Riding quite well in every respect, except that the catamenia had not appeared.

I lost sight of this woman until September 5th, 1863, when she called upon me. She had grown so stout and healthy looking, that at first sight I did not recognise her. Though directed, when she left in March, to wear a bandage round the body, and to be very careful not to lift heavy weights, she neglected both precautions. The bandage she did not employ; and, on getting home, at once did all the work in the farmhouse, where no servant was kept. She milked the cows, made the butter, and did the washing, etc. On one occasion, about a month after her return home, and less than three months after the operation, while standing upon some steps and reaching over her head to hang some very heavy hams (the pig had weighed forty stones) to hooks in the ceiling, she suddenly felt something to give way in the body, and a considerable swelling to come on. This increased for a few days, and then continued stationary. As it was not painful, she paid no further attention to it; but, fearing a return of the disease, she on this date called upon me. I found a protrusion of the entire line of incision; and, below the umbilicus, a circular aperture, nearly two inches in diameter, in the linea alba, through which nearly the entire mass of floating abdominal viscera protruded, only covered and supported by the integument, which was so thin that the peristaltic motion of the intestines could be easily seen. As her stays did not reach to the aperture, this large mass had literally had no support whatever.

On her return home, she at once menstruated, and had done so with regularity ever since. Three weeks before I saw her, she was married, and assured me that she felt herself as apt and as efficient for the duties of the state as she had ever done.

[March 14th, 1864. I have lately seen this woman who is quite well, and seven months gone with child. By means of a large soft pad and an elastic belt the protrusion was restrained so as to occasion very little inconvenience.

Remarks. Among the prominent points in this case upon which I may remark is, first, the fact of the woman becoming pregnant while labouring under ovarian dropsy. Though, so long as the uterus is healthy and one of the ovaries normal, there is nothing to obstruct conception, the occurrence is not very common; and the conjunction of the two would not tend to render clearer a diagnosis which, at the best, may be difficult and obscure. The abortion at six month

as probably simply occasioned by the pressure of ne ovarian tumour upon the expanding uterus, renering a farther development of the child impossible. he great pressure thus occasioned had not improably first originated the widely-spread subacute inammation of the peritoneum; and the very extenive adhesion of one of the larger sacs is a state hich would be assisted by the exertion the woman ad been compelled to make, and the low state of ealth which her condition and the want of proper nuriment had induced.

The wretched condition of the woman when I first aw her, the benefit which resulted from rest, tonics, nd good diet previously to the operation, and the uick and complete restoration to health after its erformance, show how purely local the affection was n its nature; and that, though the constitution was uffering considerably, it was so solely from the local ischief. This, I cannot but think, constitutes an mportant argument in favour of operation even in ome cases which do not appear promising, provided nly that the viscera are healthy.

The necessity for some abdominal support, and for aution against undue exertion, by which great pres- ure may be put upon the cicatrix, long after the erformance of the operation, is shown by the enor- nous protrusion which took place suddenly in this voman ten weeks after the performance of it. Though t probably would be impossible to put the firm- ess of a cicatrix to a more severe test than was so mprudently done in this instance, and to the like of hich few will be exposed, it is a lesson which should ot be forgotten. Had the peritoneum not been in- luded in the sutures, it might have been argued, hat the want of this had occasioned the weakness; but, nasmuch as particular care was taken that a good old should be had of this membrane by all three ins, the union of all the structures was made as firm s it could be. I observe that some operators are fraid of including the peritoneum in the sutures, on he ground, I presume, of avoiding all possible cause f exciting inflammation in this membrane; but, in- smuch as it has already been extensively divided nd handled, I cannot think that the small addi- ional mischief of being punctured by the pins is kely to add materially to the tendency to unfavour- ble results; while the fact of the peritoneum being hat tissue which above all others is disposed to take n adhesive inflammation is so important, and the ontinuity of the lining abdominal serous surface so ssential, that I think the bringing together the edges f the incision in it is most desirable, and likely to ssist in the primary closure of the wound by dhesion, and to lead to the subsequent formation f a firm cicatrix by the whole tissues being con- olidated together; while, on the other hand, if here should be a disposition towards diffuse on-adhesive inflammation, I do not think the on-inclusion of the serous membrane would be suffi- ient to prevent its development. This most fatal omplication is more likely to ensue from the patient ot being in a good constitutional condition at the time f the operation, than from an additional puncture of ne peritoneum.

I believe that the good diet and tonics to which nis woman was subjected previously to the opera- on, enabled her to surmount difficulties to which she ould otherwise have succumbed. A woman in igorous condition is far less likely to sink under the nmediate shock of such an operation, or to die from iffuse inflammation, than one who is in a debilitated ate. In the former, we might have too much ac- on, but we should have corresponding power; in the tter, whatever the action might be, we certainly ould not have the essential power—a condition which it is always difficult and often impossible to deal with satisfactorily. In the former, we may not improbably control and limit the action within not very injurious bounds; in the latter, we have often but little time for treatment; and when we have, it is too often altogether inoperative. As I believe there is no operation which is calculated to inflict a greater shock upon the system than ovariotomy, so I believe there is none in which it is more important to have the patient so prepared that, while there is no plethora (of which, indeed, in the majority of these cases, there is no great danger), there should be as much power and strength in the system as possible.

As regards the steps of the operation itself, I am disposed to think that, while it is desirable to have the temperature of the room sufficiently elevated to prevent the exposed peritoneum and viscera from sudden cooling, in the desire to avoid this risk, in many late instances, the patient has been subjected to too high a temperature, in which the air has also been too dry. A temperature of 80° Fahr., or above, is not likely to assist a patient in supporting such an operation well; and a dry atmosphere of so great elevation carries off moisture from the exposed membrane so quickly, that it is far more likely to be injurious than a moderate exposure to a somewhat lower temperature in which the air is so moist that it has little disposition to take up more from the membranes. The time occupied by the operation is not, or ought not to be, so prolonged as to cause an injurious depression of temperature in the exposed viscera, so as to bring on reaction; whereas considerable desiccation is likely to do so. In this case, I had the temperature of the room not above 65°, and the air made moist by the evaporation of boiling water.

The administration or not of chloroform is an important consideration. In the majority of cases, it should, I apprehend, be given very sparingly, and more especially so if it occasion any retching, which in these cases it not unfrequently does, if not at the time of the operation, subsequently to it. Indeed, there rather appears to be a liability in these cases for vomiting to come on, than which nothing can be more distressing; for the straining acts directly upon the wound, stretching and disturbing every part which should be maintained in as quiescent a condition as possible. Besides, after the incision into the cavity has been made, the operation is not a very painful one; and, therefore, there is less necessity for complete anæsthesia throughout the whole period of it than in many others. I would therefore suggest that, if chloroform be employed, its use should be limited in a great degree to the earlier stage of the operation, while the painful incision is being made.

The handling the viscera as little as possible, and the prevention of the flowing of the fluid from the cysts into the peritoneal cavity, I regard as of primary importance, and as not unlikely to make all the difference between a successful and a fatal issue. A rough handling of the viscera, and the repeated mopping and wiping of these parts by sponges, however soft, cannot be too carefully avoided. Who amongst us, on his oath, would hesitate, in a medico-legal inquiry, to declare that such a proceeding was sufficient to account for death, supposing the incision and effusion alone, with the mopping and handling of the parts, had been the mischief inflicted upon a healthy person? And surely the evil is not likely to be less when it is inflicted upon the commonly impaired constitutional powers of an ovarian case, and the removal of the diseased mass as well is undergone. Delicacy and quickness of manipulation are essential for the prevention of the first mischief; and a careful, watchful assistant, who will so support and guard the abdominal walls as to main-

tain the tumour protuberant and keep the intestines behind the parietes, while a large trocar and tube attached carry the fluid well away from the body, is of the utmost importance for the second. But, if fluid escape into the intestines and into the pelvic cavity, should it be allowed to remain, or ought it to be removed? If the fluid be small in quantity, clear, and little more than serum, I should be disposed to allow it to remain, as it is impossible to entirely take it out, and the absorption of a little more or less would not be material; while, if the fluid be mere serum, it will probably have little tendency to excite depressed diffused action. On the contrary, if the quantity of fluid be considerable, and especially if the quality be bad, thick, dark, offensive, or containing portions more or less solid, I think that it should be removed as quickly and effectually as possible by the insertion of very soft moist warm sponges, gently pressed upon the parts to absorb it.

The complication of adhesion is one of the most unfavourable possible; yet, as this case proves, it is not necessarily a fatal one; though there can be no doubt, that it must always be regarded as most materially adding to the danger of the operation. It is a circumstance which, if it were possible to be correctly ascertained, might make the difference between our deciding in favour of the operation or against it. In this case, I must confess, though I was prepared to meet with some adhesions, had I anticipated that they would have been found nearly co-extensive with the parietal peritoneum before, and to a great extent of the omentum behind, and below to the colon, I should have been afraid of risking the operation. Though we may, in some degree, form an opinion as to the presence or absence of adhesion, as there may have been pain and tenderness of the body, or parts thereof, or the mobility of the tumour in varied positions of the body, these indications can never be very reliable means of diagnosis, or accurately reveal the extent of the adhesions, supposing these actually to exist. Adhesions will often occur without there having been much pain or tenderness, and may not necessarily be present when these have been suffered; and the mere distension and tenseness of the abdomen, as in this case, may be so great, as by the pressure alone to quite prevent any rolling over of the cysts in the moving of the body.

When adhesions are found to have occurred, what is the best method of separating them? If recent, and not requiring any very great effort to accomplish, I should, as practised in this case, try, with care and without hurry, to separate them with the fingers or the handle of the scalpel. This may often be done without hæmorrhage, which it is most important to avoid; for though the vessels may not be sufficiently large to require ligatures, it will be almost impossible, if the vessels have been cut, to avoid the escape of some blood amongst the viscera, which, even if it can all be removed, will necessitate the handling and rubbing of the parts—a proceeding so much to be avoided; and will, under any circumstances, delay the operation by our having to wait until all risk of bleeding has ceased. If, on the other hand, the adhesions be found dense and firm, more particularly if they be in bands, then, I think, it would be better that they should be divided *seriatim* with the knife or scissors, taking care, if there be any vessels likely to bleed, to first tie the portion with two fine threads of flexible iron wire, cutting the knots close off, and making the division between the threads. (This wire I have now got as thin and flexible as silk.) Its presence will, in all likelihood, be far less injurious than a clot of blood, which is liable not only to act as a foreign body, but to decompose, and thus excite diffusive inflammation.

The length of the pedicle is of no slight importance. If possible, it should be left sufficiently long that, when brought to the peritoneal wound, there should not be any dragging upon it. If it be found impossible to leave it long enough to avoid dragging—if it be brought to the abdominal surface—I should think it the less evil of the two not to attempt so to secure it. I am convinced that the dragging would far more than counterbalance any advantage which may arise from having the cut stump near to the surface.

In this case, I did not use the clamp or any similar contrivance; nor would I do so in any other. I have always been at a loss to conceive what advantage such means could possess over the ligature; while it is certain that its use does not in any degree simplify the operation. If the pedicle cannot be secured by threads, I feel certain that it will not be by the clamp. There must be very few pedicles so thick and unyielding as to be incapable of being compressed by a piece of well-twisted cord; or, if the fibrous material be objected to, the "China twist" (which I believe to be of animal origin) which, if pulled tight enough, will cut through any pedicle in the world, may be employed. If the pedicle be very massive, it will be easy to draw a double thread through the middle of it, and then tie the two threads separately. If the threads be drawn tight enough to be proof against hæmorrhage for the first twenty-four hours, there will be no danger from the subsequent shrinking of the ligatured pedicle; for, long ere this shrinking occurs, the vessels will have been closed, if they ever will be so.

In bringing the wound together, I have already stated why I think the peritoneum should be included in the sutures. I should not again employ the white compound metal pins; as I do not think that they are in any respect better than the ordinary long steel pins. In the first place, they are longer and so require more force, and cause larger holes in penetrating than the steel pins do; and in the next, when the flexible iron wire is used to form the twisted sutures with them, I fancy a galvanic action is set up, which has a tendency to induce suppuration. At any rate, in this case, at each of the pin-apertures, there was a black deposit; and a copious and somewhat obstinate discharge of pus took place and continued long after the whole line of incision was otherwise sound. Of course, if thread were employed with them instead of the wire, there would not be any galvanic action; but I much prefer the flexible wire to the thread; for though I do not go to the extent that Dr. Simpson does in his notions as to the great influence fibrous material has in inducing pyelitis, the flexible wire is certainly a cleaner material than is either flax or silk thread; and as it does not absorb any of the discharge, when it is wished to withdraw the pins, a simple rotatory motion is sufficient for the purpose; which is not the case with the fibrous material imbued with the tenacious gluey discharge; it has either to be cut or to be soaked in water to be loosened from the pins, and so the adhesive process is liable to be interfered with; while, with the wire, the pin has simply to be withdrawn without any force, and the wire may be left undisturbed *in situ*, still supporting the feebly united integuments by its adhesion to them.

I need hardly observe that the wound should be disturbed as little as possible, and that the abdominal parietes should be as relaxed as may be, by the patient being placed upon the back, with the shoulders and knees comfortably raised and supported; while, from the removal of the great internal pressure to which she has been so long subjected, it is well that some moderate, equable, external support should be supplied by the adjustment of a flannel bandage.

As the patient's bowels have been efficiently opened ne day before the operation, and for some days after the diet will be very light, they should not be disurbed by aperients for some days after its performnce.

A dose of opium should be at once administered, nd repeated if there be much pain or restlessness; there be depression, wine or brandy may be added o it. In this case, for the first two days, half a rain of opium and one grain of calomel were given ight and morning, and I am not sure that the pracice is not a good one; but if there be no tendency hown to active inflammation, the mercury should not e continued.

Upon the question of allowing food to be taken by he mouth for the first few days after the operation, here is a difference of opinion. Some who have had xperience, hold that it is better not to allow food to e swallowed, but that enemata should be given. For he first two days, this plan was adopted with this atient; but I confess to not feeling satisfied with he correctness of the reasoning upon which the pracice is founded. I am not certain that less disturbnce of the parts concerned in the operation is caused y the injections *per anum*, than by the ingestion of luids by the mouth. The administration of these inolves considerably more disturbance to the patient han does the act of swallowing. The parts to which hey are at once carried are in more immediate conguity with the seat of the operation than is the tomach. They are quite as likely to excite peristalic motion in the lower bowel as when in the stomach. njections are not so pleasant nor so grateful to the eeling as is drink; and though, doubtless, fluids are bsorbed when thrown into the rectum, they do not fford that support to the system which they do hen taken into the stomach in the natural way. At ny rate, this patient at once materially improved in very respect when she was allowed to swallow simple ood; to which, in proper limited quantity and quality with portions of ice if there be heat or thirst, I should rom the first incline to allow, rather than to rely pon enemata alone.

There is only one other point to which I will allude efore bringing my remarks to a close; that is, the ropriety or not of tapping a case of ovarian dropsy efore the section is made. The advantages to be btained are important, and not to be overlooked. By o doing, we may possibly satisfy our minds in some mportant particulars. We may not improbably ender what is perhaps the most obscure and difficult roblem connected with ovarian operations—the diagnosis of the disease—clear and certain. Some surgeons would perhaps say, undoubtedly we may do this. In some cases, we may certainly do so; but with the following case impressed upon my mind, I cannot go so this full extent. Many years ago, long before ovariotomy came into vogue, a woman was admitted nto one of the large London hospitals, and fell nder my immediate care as a subordinate officer. She was the patient of one of the best surgeons it has ever been my good fortune to be intimate with, or, I believe, England has produced. The woman's body was of large size, very hard, with obscure sense of fluctuation. Ovarian dropsy was diagnosed, and tapping ordered. As a mark of confidence, I was allowed to use the trocar; it penetrated well, but only a few drachms of fluid could be obtained. My principal, who was present, then tried; but with no better success. A director was introduced through the cannula and moved about; but still no fluid escaped. The woman was put to bed; and quite unexpectedly, the next day, rapidly sank and died, to the amazement of the few who were cognisant of the case; for, as the operation had been done on casually going round the ward, not many knew of it. Another excellent surgeon, who was then attached to the hospital—both have been dead many years—and who was not particularly noted for his enforcement of *post mortem* examinations, heard of the case, and was so struck with the interest and obscurity attaching to it, as he declared, that he took a great deal of trouble to obtain an examination of the body, which the other surgeon, although, as a rule, most punctual in his personal attendance at *post mortem* examinations, was, in this instance, quite willing the friends should remove from the hospital unopened. Unfortunately, on the morning of the following day, when the examination was to take place, my first friend sent for me to his house, as he was suddenly taken ill, and was too unwell to attend; but emphatically desired that I should make the section, or at any rate be present—which I did, in the presence of my other friend and many others. Prior to the opening of the body, many were the surmises as to what the tumour would prove to be. No error whatever had been committed in the diagnosis. Ovarian dropsy existed sure enough; but the cysts were many; and, curiously enough, it had happened that in both punctures the trocar had penetrated a very small cyst, the walls of which were too thick to be ruptured by such force as it was thought proper to employ with the director; and so hardly an ounce of fluid escaped, though gallons were contained in the abdomen. There were neither adhesions nor inflammation; the woman had simply sunk from the shock of so simple an operation. My report made immediately to my first friend was very effectual in relieving his indisposition at once; but, I am sorry to add, the revelation was not consolatory to the gentleman who had been present at the examination; for I believe he would have been better satisfied had the diagnosis been erroneous, than that practical surgery should have failed in so unimportant an operation.

Many surgeons will be able to call to mind cases which, if not identical with this, are at least so similar as to prove that, though in many cases, by preliminary tapping, we may be assisted in our diagnosis, in others we may by it be possibly led astray; and it is precisely in those cases where the difficulty of diagnosis is least, that the tapping is the most applicable, as in a single cyst; and in those cases where the difficulty of diagnosis is the greatest—the multilocular — tapping is the least applicable. Moreover, the operation is not altogether devoid of danger, as statistics show; though it may be argued with some force, in answer to this, that if the patient should die from the minor operation of tapping, the probability of death following the far more serious operation of ovariotomy would be very great, though this does not necessarily follow, for paracentesis has some dangers of its own. But the greatest objection I feel to preliminary tapping is the likelihood of adhesions, if they do not already exist, being established between the cyst and the peritoneum, to what extent it may be impossible to determine, and thus materially add to the danger of the subsequent ovariotomy; and as some considerable period must elapse between the two operations, the patient is during this time kept in a state of suspense.

I had almost forgotten to remark that, in operations of this nature, (indeed, I doubt if the same would not apply to almost all the more serious operations), it appears to be most advantageous to the patients that they should be secluded as much as possible from other diseased conditions, and that, therefore, isolation in a separate ward should be adopted. There is much to be said in favour of, and, so far as I know, nothing against the suggestion.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page* 176.]

The following case is one of *Mania.*

Case xi. B. C., married, aged 32, an accomplished person, in good position, of superior address and handsome exterior, was admitted in June. The attack was said to be the second. The former attack occurred about three months after the birth of one of her children; and the present attack about four months after the birth of another. In the former attack, she was melancholy. There was predisposition to insanity in the family. Her own mother, her mother's brother, and the latter's son, had been insane; the patient's brother was said to be flighty, and certainly appeared to be of deficient intellect.

The family history of the patient was also one favourable to the development of insanity. The patient was the only one of the family the least gifted either in bodily or mental endowments. The rest were dwarfed, unhealthy, and deficient in intelligence. She had, therefore, from her earliest youth, been the oracle of her circle, and had had everything her own way. She made an imprudent marriage. What property she possessed was speedily dissipated. She became greatly reduced, and was obliged to return to her family. When attacked with her present illness, she was living by sufferance with them. The husband, an officer in her Majesty's service, had lost his commission, and was in the greatest poverty, and forbidden the house. Such was her position; and she had a baby four months old at the breast. The attack was said to have commenced a few days prior to admission; and the immediate exciting or determining cause was said to be something arising out of a call of the family solicitor. The patient was much interested in the business to be transacted; and she was greatly disappointed in the result. "She did not get her own way", as she expected; she became greatly excited and angry, took to drinking large quantities of ale, and left the house.

She was admitted a few days only after this. On admission, she was dressed in the extreme of fashion, though her clothes were in great disorder. She was in good bodily condition; she was much excited; she raved and shouted incoherently, and was very violent in her conduct. It appeared that she was taken to the station-house for knocking a policeman's hat off in the street, in the broad day-light.

The following is the description received at the time; and it forms a part of the medical certificate which accompanied the order of admission.

"She is exceedingly violent, and obliged to be placed under restraint; is very indelicate in her actions, rending her clothes, and exposing her person. She is at times very incoherent and very vulgar in her conversation.

"The porter (of the Workhouse) states she has been twice brought to the infirmary by the police, having on both occasions collected a mob of persons by her strange and violent behaviour."

No note was made by me of this case during the first six weeks; but the usual report-books of the Asylum indicate that she continued very excited throughout. She was placed several times in seclusion; and had aperients and counterirritation to the nape. She passed sleepless nights; and was an occupant of the refractory ward from the first day.

A note in August is to the following effect. She continued very excited, raved incoherently, laughed, shouted, and rushed about wildly. She exposed her legs or her bosom without regard to decency. She slept better at night; but was wet and dirty daily—both night and day. The tongue was clean. She took food well. The bowels acted regularly. She was thinner than at period of admission; but had gained flesh again of late. Pulse 84, regular. She had several boils about the scalp and neck. She menstruated regularly, somewhat profusely. There was no difficulty nor impaired condition of the motor functions.

October (fourth month). She continued very violent and excited; was noisy, talked and shouted incoherently; and was never rational. She was wet and dirty, and begrimed her bed-room and person with excrement. She was still thin. Menstruation was regular.

November (fifth month). She was sitting and talking aloud to herself in an incoherent strain. Her dress was disordered and slovenly; her stockings were hanging about her heels, and her legs exposed. When addressed, she made no rational reply. She was wet and dirty as before. She ate well, and had gained flesh. Boils continued to break out about the neck.

December (sixth month). Slight improvement had taken place in her general health. The boils continued to break out. She menstruated somewhat profusely.

January (seventh month). Her bodily health was improved. She was both stronger and stouter. The mental state was less changed. She was rather less indecent in her actions; but was still wet and dirty. She took food well; slept well at night. There were no signs of paralysis; the pupils were equal, and acted well. Articulation was clear and normal.

February and March (eighth and ninth months). There was very gradual improvement. Her hair had fallen off. Boils still continued to appear.

April (tenth month). Improvement continued. She had been gradually becoming more quiet and correct in conduct. She was now somewhat dull, with slight indication, apparently, of shame in her expression. She had become cleanly in her habits.

May (eleventh month). She had continued to conduct herself with propriety; and had been removed to a convalescent ward. She was now industrious, and was sociable with the other patients, and more cheerful. She conversed rationally. She had continued to menstruate regularly; and had gained flesh.

July (twelfth month). There was at times a slight depression of spirits apparent; in other respects, she appeared convalescent. She had had several interviews with her relatives, who annoyed her with family matters. She gained strength.

August (thirteenth month). She was discharged cured.

There are several points worthy of notice in the above case. In the first place, it has been selected out of many others, as the most free from melancholia that has occurred in my practice; and it presents all the most salient points of an acute maniacal case, as very early disturbance of the intellect, restlessness, violence of movements, and perversion of habits, especially with respect to personal cleanliness.

Among the bodily symptoms, it also illustrates what is frequent in cases of mania: the falling off of the hair; the eruption of boils; and the regularity of the menstrual function.

The absence of a premonitory melancholic stage in

econd attacks of insanity must be admitted as not nusual. And such certainly occurs in the secondary ttacks of recurrent mania to be described hereafter. he line between a recurrence of an attack of in-anity—that is, a new attack, after an absolute re-overy from a first attack, and a paroxysm in the orm called recurrent mania, in which an absolute re-overy is at least doubtful—is certainly one very dif-icult to trace out satisfactorily. It must remain for ome time doubtful, when a patient is attacked a econd time, whether the new symptoms are due to a evival of the primary morbid actions; or whether here is an entirely fresh morbid action. The evidence f the perfect cessation of the primary disease is fre-uently difficult to procure.

In the above case, it is in the highest degree pro-able, that the attack was a true second attack; be-ause the history afforded evidence of a period of erfect sanity intervening between the attacks; and he phenomena of the second attack possessed cha-acters unlike the usual forms of recurrent mania. he absence of a melancholic stage, if really absent, s important; and it is to be regretted that the evi-lence is not more reliable; for it depends on the ac-ount gathered from friends not very intelligent, and ertainly not very compassionate; and, if the patient's revious troubles caused any depression, highly alculated as they were to do so, it is quite possible he low spirits would not have been heeded by hem.

The next example is that of a primary attack. It s selected as a typical case, and one in which the nelancholic stage existed, but was scarcely noticed; nd might, indeed, as the examination of the friends hows, have been altogether overlooked.

Case xii. B. D., was admitted in November. She vas single, 27 years of age, of somewhat proud and overbearing disposition towards her inferiors, ex-ernally very correct in her own conduct. By busi-ness she was a dressmaker, working away from home. Her health was delicate. She had had rheumatic fever hree years previously. There was no predisposition o insanity. Her mother was affected with paralysis agitans.

The parents observed that B. D. for several months had been somewhat dull and out of spirits; but, as she went to work, they took no notice of it. About even weeks prior to her admission, she was taken in abour, and gave birth to an illegitimate child. This vas totally unexpected by her parents, who, there-ore, evinced great surprise and anger at the circum-tance. The patient felt her disgrace keenly; having, ier mother says, been very severe on others for simi-ar failings. The labour was easy.

On the tenth day after her confinement, she awoke uddenly in the night, and said some one had stolen he baby. She continued very delirious, frantic, and noisy. She was taken to King's College Hospital, rom which she was discharged in a fortnight as an mproper case. On her return home, she was very iolent towards her parents, and threatened her sister vith the poker.

On admission (forty-second day), she complained f headache, and wished to lie in bed. Her manner vas strange. She had an expression of abstraction nd wonder; and stared about without apparent ob-ect. She complained of the light. The pupils were oth dilated. The tongue was clean. The bowels vere freely open by an aperient taken in the Work-ouse. Her appetite was indifferent. Pulse 60. Breathing quiet; skin cool.

46*th Day*. She had been occasionally violent. She ad a wild, somewhat anxious expression. She was ude in her answers, which were occasionally inco-erent. She was strange in behaviour; turned her back when spoken to; was disposed to throw off her dress. She refused her food. The tongue was moist. Pulse 80,

50*th Day*. She appeared to be very wandering in her mind. She had a wild and wandering expression; was irritable and easily incensed; and was disposed to strike. She conducted herself in a strange manner; danced about, and placed herself in grotesque atti-tudes. She was very incoherent in her answers. She complained of the light to her eyes. Breathing 16; pulse 120, feeble. The tongue was coated; the bowels were open. She ate sparingly; but filched the food from the others. She was becoming thinner; and was very sallow.

80*th Day*. She continued very violent. She had taken for the last month cod-liver oil. She was thinner, but took food well. She was much excited, and frequently violent; raved and shouted; and passed restless nights, shouting all night. She was wet and dirty. The oil was continued.

121*st Day*. She had gained flesh; and her appetite was improved. The violence and noise were the same. She was rude and bantering in her answers; was very restless and noisy at night; and wet and dirty in habits. She was ordered to be employed in the laundry.

150*th Day*. She worked; but was occasionally ex-cited and violent.

184*th Day*. She was quieter; worked industriously and well. She had not menstruated since admission; but was troubled with leucorrhœa. She had had one or two boils, which were still troublesome and pain-ful. She appeared debilitated by them. She had been perfectly tranquil and quiet, respectful, and well behaved. She was ordered to take compound iron mixture twice a day; and to have porter daily.

She was discharged on trial on the 210th day, or about three weeks after the above report; and was finally discharged as recovered one month subse-quently.

In the above case, the stage of depression clearly existed; but the case is selected as one of the most free from decided melancholy as a premonitory stage.

Mania, otherwise acute maniacal insanity, is not a common form of the disease. About 11 per cent. of the cases admitted are of this form. In 198 admis-sions during 1863, there were 22 cases of acute mania; but in 13 only was the history obtained. Premonitory melancholic stage existed in all. There were, besides the cases of acute mania, 5 cases attended with maniacal symptoms, in which, according to the ac-count, no melancholic stage existed. They were all second or third attacks, and were of the form of dis-ease called recurrent mania.

The existence of a melancholic stage at the onset of all cases of primary attacks of insanity is impor-tant; but it is very easily overlooked, and especially in maniacal cases. The outbreak of the excitement, raving, and violence, draws the attention of the friends from the transient depression. Nor does the depression at first, either in cases of melancholic or maniacal insanity, differ from an ordinary depression as it occurs in the sane.

[*To be continued.*]

The Morality of the Bar. In the trial of Mack-intosh *v.* Drs. Smith and Lowe, the Lord Advocate did not hesitate resorting to quotations from the works of the famed sensation novelist on lunatic asy-lums in order to get a verdict for his client. He ought in fairness to have told the jury that the novelist's paymaster, Dickens, had disavowed his sub-ordinate's calumnies.

Progress of Medical Science.

MIDWIFERY AND DISEASES OF WOMEN.

Sudden Death after Labour. In an article on this subject, M. Hervieux, after referring to some of the recorded instances, observes that the anatomical lesions found have been very diverse, and sometimes insufficient to account for death; while even in some cases no pathological change has been detected. He suggests that, as the assigned causes are so various, there is probably some general influence independent of and above all these; and that this cause lies in the special physiological conditions of the puerperal state. The precise nature of this cause he does not pretend to determine; but, in connexion with it, he calls attention to the extraordinary facility with which puerperal women are affected under the influence of moral emotions.

Returning to the alleged causes of sudden death after labour, M. Hervieux specially notices the cases which have lately fallen under his own observation.

Syncope has perhaps been most frequently assigned as the cause of death; sometimes because no *post mortem* examination has been made, sometimes because no pathological lesions have been found. There is no doubt that there has been syncope in some cases, where the patients have died suddenly after profuse *post partum* hæmorrhage. There is also reason for supposing that syncope has been the cause of death in more or less convalescent women, who have died suddenly in performing acts in which the horizontal position, hitherto rigorously maintained, has been for the first time abandoned for that of sitting or standing. In such cases, M. Hervieux admits the existence of syncope, although it has not always been proved; but he thinks that death has been too liberally attributed to this cause in many cases in which the patients have been found dead in their beds, and no *post mortem* examination has been made. In the following case, however, death appears to M. Hervieux to have been incontestably due to syncope.

M. M., aged 26, was delivered at the Maternité Hospital on December 19th, 1863. For some days she had merely slight fever and some pain in the abdomen. Labour had lasted thirty-six hours; about twenty ounces of blood were lost altogether. The face was pale and slightly puffed; there was no œdema in the urine. On the 23rd, she fainted several times; and at night she was found dead. On *post mortem* examination, the uterus was found reduced to the size of a fist, and presented at the left upper angle a superficial spherical swelling, of a violet colour, and as large as a walnut. It was filled with thick, yellowish, well-concocted pus. At the right upper angle of the uterus, there was also an abscess of about the same size as the other, but lying deeply in the walls of the organ, instead of projecting. On cutting into the uterine tissue at various points, some drops of pus escaped by the openings in the veins. The uterus was otherwise healthy, with the exception of being somewhat softened and of a violet colour in the neighbourhood of the purulent deposits. No morbid appearances were observed in the broad ligaments, the ovaries, Fallopian tubes, or peritoneum. All the other viscera were perfectly healthy; there was no air in the veins nor in the cardiac cavities; nor was there any thrombosis in the pulmonary artery.

In this case, M. Hervieux attributes the fatal result to syncope, in spite of the symptoms presented during life and the *post mortem* appearances. It is not the ordinary nature of uterine phlebitis and suppuration to cause death so suddenly. Without doubt, these were present in sufficient amount to produce the phenomena of purulent infection; but such did not occur. The fever and abdominal pain had been slight, and the patient appeared to be progressing satisfactorily, when attacks of fainting set in; and it is from the occurrence of these that M. Hervieux concludes that syncope was the cause of death. He does not, however, deny that the uterine suppuration was altogether unconnected with the patient's death. He believes that the intrauterine purulent deposits either acted like certain chemical agents, favouring the fatal action of syncope by their mere presence; or that the elements of pus, being absorbed into the circulation, interfered with the heart's action and produced its sudden suspension.

Another cause of sudden death in the puerperal state, less commonly recognised than syncope, is *thrombosis or fibrinous deposit in the pulmonary artery.* M. Hervieux refers to two cases related in the English journals, and to one which occurred in the practice of M. Gosselin, and relates the following instance as having come under his own observation.

On August 19th, 1863, a young woman was confined at the Maternité. The labour was at full term, and normal. The patient's recovery was uncomplicated. On September 8th, twenty days after delivery, she sat up for the first time; she felt well, and said she would go out the next day. She had been in the erect position about five minutes, when she grew pale, and her strength failed. When spoken to, she did not answer; on being seated on a chair, she slid to the ground. She had some convulsive movements of the face, and in a few seconds ceased to live. On *post mortem* examination, twenty-four hours after death, no lesion was found in the peritoneum; the uterus was healthy, and of normal size. The pleuræ were sound; the lungs were slightly congested posteriorly. The right heart was distended with black fluid blood. The left heart was small and contracted; its walls were thick. The pulmonary artery contained clots of dark blood and of fibrine in dense resistant masses. One of these was of large size, had a slightly pink grey colour, and was very resistant to traction. The fibrinous clots obstructed the trunk and two main branches of the pulmonary artery, but did not extend into the divisions beyond these. The upper and lower venæ cavæ, and the veins of the neck and of the thigh, did not contain any clots. The brain was healthy.

In this case, death was not preceded by hæmorrhage nor phlebitis. If, as is often the case, an examination of the pulmonary artery and its divisions had been neglected, death would have been attributed purely and simply to syncope. Indeed, it was when the patient rose for the first time that death occurred; and the erect position is a recognised cause of syncope in persons who have long lain horizontally. He does not, therefore, deny that in this case, as in many others, syncope was concerned in the production of death; but he asserts that this syncope and the consequent death was produced by the thrombosis of the pulmonary artery.

Another cause of death after labour is *air in the vascular system.* Of this, M. Hervieux relates the following case.

On July 10th, 1863, M. F., pregnant for the second time, was delivered in the Maternité of a male child, after a natural labour. Her progress was favourable up to July 20th; and, being of good general health and strong constitution, she had been selected, at her desire, as a wet-nurse. On July 20th, the lochia were very fœtid; and an injection of infusion of camo-

mile was ordered. Care was taken that the syringe did not contain air. The injection produced no pain; the fluid which returned was very fœtid. On the 21st, the injection was repeated at 7 P.M., with the same care as before. The patient was now seized with rigor and grinding of the teeth, and lost about 750 *grammes* (nearly 22 ounces) of fluid blood. The hæmorrhage was arrested by ergot. In the course of the evening, the patient became violently excited by a quarrel with one of her neighbours, and screamed frightfully. Opium was given in pills, without result; and the patient died suddenly at half-past 12 in the night, in a paroxysm of furious delirium. On *post mortem* examination, at the end of twenty-three hours, the heart was found to be large, round, as if distended, and yielding readily to the pressure of the finger. The vessels proceeding from the heart were each tied in two places, and cut through between the ligatures. The heart, being thus removed, was placed in water under an inverted jar. On making an incision into the right ventricle, large bubbles of gas escaped into the upper part of the jar. The left ventricle also yielded some gas, but much less than the cavities of the right side. On analysis, this gas was found to consist of oxygen, 7; carbonic acid, 11; and nitrogen, 82 parts in 100. The volume of the quantity examined was almost that of forty or fifty *grammes* of water. The lungs were perfectly healthy; there was no trace of emphysema or of congestion. The inferior vena cava was much distended with gas, which escaped with a slight hissing noise on making a puncture with a scalpel: it was quite inodorous. On making a larger opening, a blackish frothy liquid escaped, evidently a mixture of blood and gas. The vena cava was distended through its entire extent; but no gas was contained in the common iliac veins, nor in the veins of the uterus and ovaries, nor in the superior vena cava and its branches. The pulmonary veins contained a little gaseous fluid. There was no trace of inflammation or suppuration in the uterus: the cervix was rather soft, friable, and ecchymosed. On the inner surface of the womb, at a point corresponding with the fundus, were two small erosions, each as large as a pin's head. Small red clots were still adherent to them, and from them must have proceeded the hæmorrhage which took place on the evening of July 21st. The Fallopian tubes and ovaries were healthy. From want of time, the head was not examined.

M. Hervieux observes that this is the first occasion on which the gas found in the veins in sudden death after labour has been collected and analysed. As to its source in the present case, it could not, he says, be referred to cadaveric decomposition; for the body of the patient had not undergone any remarkable change; and, on the other hand, he has never found the heart and vessels distended with gas in women who have died of metro-peritonitis, although putrefaction rapidly takes place in such cases. The gas could not, for several reasons, have been introduced by the syringe in injection; and if it had been, how did it contain 11 per cent. of carbonic acid and only 7 per cent. of oxygen? M. Hervieux is disposed to attribute the presence of the air to the uterine hæmorrhage which took place. He suggests that the mass of blood, diminished in quantity and impaired in quality, may have readily become the seat of some grave perturbation, of hysterical character, leading to the development of gas. (*Gaz. des Hôpitaux*, Janvier 21, 1864.)

MISSED LABOUR. Dr. M'Clintock has placed on record an instance of that rare occurrence, missed labour; in which, from some unknown cause, the fœtus is retained, dead, for an indefinite period beyond the normal time of delivery. Not more than fifteen or twenty undoubted cases of missed labour have been recorded; and the late Dr. Montgomery is, as far as Dr. M'Clintock is aware, the only Dublin obstetrician who has published any case of the kind.

A large flabby woman, aged 45, consulted Dr. M'Clintock in the early part of last summer, on account of a vaginal discharge, very profuse, and most horribly offensive. She had had many children; her last labour had occurred fourteen months previously. The discharge had lasted several months; there was no hæmorrhage; her rest at night was impaired and her strength greatly reduced. On examining the abdomen, Dr. M'Clintock found a globular tumour in the hypogastric region, resembling the uterus at the fourth month of gestation. On touching the os uteri, a gush of abominably fœtid sanious matter took place, leading him to imagine at first that the case was one of uterine cancer, especially as the os uteri was indurated and thickened. A sound introduced into the uterus came soon into contact with some bony or calcareous substance; and on introducing, with some difficulty, the point of the index finger, several bony projections and surfaces were fell. On further inquiry, it was found that the patient had given birth to twelve living children; then to a dead child; after which she had become pregnant for the fourteenth time. In the seventh month, symptoms occurred which probably denoted the death of the fœtus. At the end of the ninth month, pains as of labour set in, and there was discharge of blood and water. The pains, however, passed off; and, five weeks afterwards, she was again seized with what she described as labour-pains, which continued two days without cessation. A practitioner at this time found her suffering from hæmorrhage, and removed from the vagina a bone which proved to be a fœtal rib. Several other bones, which she described as being denuded of flesh, also came away at this time. From this date, to the time when Dr. M'Clintock saw her, sixty-two weeks had elapsed. During the greater part of this interval, the fœtid discharge had been going on, and a few fragments of bone had come away. It was determined to remove the fœtal *débris* from the uterus. For this purpose, the os uteri was dilated by a conical sponge-tent introduced at night. The next day, the patient having been placed on the operating table, the tent was withdrawn; and tepid water, with a small quantity of solution of chlorinated soda, was injected into the uterus. While this was being done, the patient was placed under the influence of chloroform, and some bones were removed by means of long curved forceps. Between May 1st and June 9th, she underwent seven operations, at each of which two or more bony fragments were removed. The last operation was followed by a slight inflammatory attack; so that no further attempt was made until June 18th. On June 25th, Dr. M'Clintock removed a part of the lower jaw, with some tabular pieces of bone. On July 2nd, Dr. Hardy removed with some trouble two pieces of bone like a femur and humerus, which had apparently been imbedded in the uterine tissue. After the operation, which caused much suffering, she was for some time weak and prostrated; pains, rigors, and vomiting, with copious dark expectoration and profuse sweats, then set in; and she died on July 7th —the symptoms resembling those of acute pyæmia more than anything else. No *post mortem* examination was permitted. The number of recognisable pieces of bone that were removed exceeded sixty; including portions of each of the bones of the head and face, of the ribs, spine, pelvis, and fingers; a femur, humerus, ulna, and tibia; and a number of small fragments.

In concluding some remarks, in which he makes

reference to the other recorded instances of missed labour, Dr. M'Clintock mentions the following as the circumstances under which he would abstain from attempting to remove the fœtal remains; viz., the presence of acute hysteritis or peritonitis; the probable existence of ulceration in the walls of the uterus; and the probability, from the absence of symptoms, that the uterus has become reconciled to the presence of the mass. (*Dublin Quart. Journ. of Med. Science*, Feb. 1864.)

Cæsarean Section. A case of Cæsarean section, the result of which was successful to both mother and child, is related by Dr. Frickhœffer. The patient, a woman aged 31, had been married six years, and had been confined three times. The presentations had been natural, but the labours had been very difficult; and the child's skull had been each time much compressed. On one occasion, the infant was apparently dead for nearly an hour after birth. Her last confinement had occurred a year and a half before she came under Dr. Frickhœffer's care; and in the interval she had an abortion at the second month. During childhood and puberty, she had enjoyed good health. During her pregnancies, however, her walking had become unsteady and difficult; and in the latter two pregnancies, especially the last, she had complained of pain in the back and pelvis; for which she had taken during the last year an abundance of cod-liver oil. She was taken in labour on January 8, 1863, in the eighth month of pregnancy; on which day there was a considerable discharge of liquor amnii. On examination, the distance between the ischiatic tuberosities was found to be not more than an inch or an inch and a half; the pelvis was also much narrowed in the antero-posterior direction. The diagnosis was that the case was one of mollities ossium; and, as the fœtus had not arrived at the full term, it was determined to try whether the pelvis might not be dilated and delivery be effected by the natural process. No progress, however, being made, in spite of the continuance of labour-pains, and the beatings of the fœtal heart becoming weak, the Cæsarean section was performed fifty-two hours after the discharge of the liquor amnii. During the operation, the patient (who had been placed under the influence of chloroform) was suddenly seized, after the removal of the fœtus and placenta, with vomiting; so that it was difficult to keep the intestines from protruding through the wound. The subsequent progress of the case was satisfactory; there was no appearance of any inflammatory symptoms; the patient left her bed on February 5th (the twenty-fourth day after the operation); and was discharged cured in the beginning of March. The child, a female, presented all the signs of maturity; and at the time of the report, although not remarkably strong, was in good health. (*Würzburg. Medicin. Zeitschrift*, Band iv, Heft 3, 1863.)

Rupture of the Uterus. Mr. J. H. H. Llewellin relates two cases of this accident.

In the first case, he was sent for to attend Mrs. P., a very short, stout woman, in her third confinement. On arrival, he learned from the midwife in attendance, that the child had been nearly born, but that the pains had entirely ceased two hours previously. On examination, he could reach neither child nor os uteri with the finger; the patient complained only of a weight at the pit of the stomach. Two hours and a half afterwards, her countenance had become pale and anxious; and the pulse had risen from 70 to 100. Mr. Llewellin now introduced his hand, and felt a quantity of intestines, and the head of the child lying in the left iliac fossa. Chloroform was given; and the child, the feet of which lay just under the middle lobe of the liver, was easily turned and removed; it was quite dead. The removal of the placenta, which was readily effected, was followed by the extrusion of a portion of small intestines, which presented no lesion, although the blood-vessels seemed highly injected. They were returned, and the right hand was retained in the uterus; which was grasped by the left hand through the abdominal walls. The rent in the uterus was found to be in the posterior wall, to the left of the mesial line, and to extend from the fundus to the cervix. The uterus gradually contracted; there was no hæmorrhage throughout the operation. The subsequent progress of the patient presented nothing remarkable, beyond a slight and transient attack of tympanitis; at the end of three weeks from the date of her confinement she was quite well.

In the second case, the patient was in her fourth labour; her previous confinements had been easy. She had on the present occasion employed a midwife, who, at the commencement of labour, gave her a dose of castor oil. Seven hours afterwards, the oil operated; and the patient felt intense pain. The child came down at the time of defecation in the position in which it was found six hours afterwards by Mr. Llewellin; viz., with the right hand outside, and the left just inside the os externum, and both scapulæ at the upper part of the pelvis. The child was easily turned, and born; it was asphyxiated, but in an hour and a half was restored to life. There was no after-pain. On proceeding to remove the placenta, Mr. Llewellin found that the uterus was ruptured. He could find the funis, or a part of it; but no placenta, neither in the uterus nor among the intestines. The search was repeated by another practitioner (Dr. Gordon); and again on the following morning by Mr. Llewellin, but without success. The patient died thirty-one hours after she was first seen by Mr. Llewellin, and forty-four hours from the commencement of labour. Opium and brandy were copiously administered, and kept her tolerably free from pain; but the case was altogether hopeless. On *post mortem* examination, eleven hours after death, the intestines were found to be much distended with flatus. The placenta, having about an inch of funis attached to it, lay flat against the middle lobe of the liver. The rupture in the uterus was in the middle line posteriorly, and extended through the cervix, vagina, and rectum, to within half an inch of the anus. (*Australian Medical Journal*, January 1864.)

Labour Obstructed by Unruptured Hymen. An unmarried woman, aged 20, was admitted into the Melbourne Lying-in Hospital, under Dr. Turnbull's care, having been in labour several hours. On examination, Dr. Fetherston, the resident physician, found the head distending the perinæum; he could find no opening into the vagina, but readily passed his finger into the urethra. On careful examination, he discovered that the hymen formed a thin but dense membrane, apparently completely occluding the vaginal orifice; it had a small opening, of about two lines in diameter, about the centre, from which fluid escaped during the pains. The hymen and perinæum were much distended by the labour-pains; and rupture of the perinæum was threatened. Mr. Fetherston, therefore, divided the hymen by a crucial incision extending about half an inch each way. Very little hæmorrhage occurred, and the child was soon born. The fourchette was torn slightly; not more than is usual in first labours. The child was of full size and healthy. The patient made a good recovery. (*Australian Medical Journal*, January 1864.)

British Medical Journal.

SATURDAY, MARCH 26TH, 1864.

THE INDIAN MEDICAL SERVICE.

[*By a Retired Indian Surgeon.*]

THIRTY years since, a young surgeon who had obtained a nomination to an assistant-surgeoncy in the East India Company's medical service might well be congratulated by his friends on having made a good start in life. Men then entering the Bengal medical service (a favourable sample of the three services) had the prospect, if they lived long enough—and the prospect was in very many instances realised—of retiring, after seventeen years' full service, upon a pension for life little short of five hundred pounds a year. But those who have entered the service within the last twenty-five or twenty-six years have not been so fortunate. Many surgeons of this standing have retired upon the portion of the retiring allowances granted by Government, but are still compelled to wait for the other portion, to which they become entitled according to their seniority, from the Bengal Medical Retiring Fund. Still we may say that all those who passed into the service from about thirty years ago up to the time of the assumption of the imperial authority over India by the Queen, had a reasonable expectation, amounting almost to a certainty, of being able to retire, after a not immoderate length of service, upon a pension of five hundred pounds a year. During their residence in India, they might also expect to receive pay adequate to their comfortable support, and had many chances of making money through the obtaining of staff-appointments, lucrative private practice, etc. In addition, the rank was found adequate to enable them to maintain a comfortable position relatively to the royal medical and other branches of the military, as well as to the civil officers of Government. Of still more importance were the liberal annuities for their widows and allowances for their children, in the event of death; to which they were entitled by periodical payments (which did not, in the main, cripple their resources for the time being).

An unmarried surgeon had, therefore, a reasonable prospect of securing an ample independence, in case he weathered the climate; and to a young married surgeon, without any special provision or expectations at home, there were no prospects so good before him in any other department. Now, however, matters are altered; and it becomes every one of our readers who thinks of entering the new Indian service, or who is interested with reference to a son or relative in this matter, to inform himself of the exact state of the case at the present moment. Men entering the service now have the prospect of retiring upon a very reduced scale of pension, from the circumstance of the Medical Retiring Fund annuity, amounting in Bengal to £300 a year, being entirely closed to them; so that, after their first term of service has expired, they would only have about £200 a year; after twenty-one years' service, £250; after twenty-five years, £300; instead of, as formerly, £500, £550, and £600 a year. This is the most important change for bachelors. For the married men, it is still more seriously for the worse; for the Widows' and Orphans' Funds are closed to them, so that there is no provision for their families, other than is derived from their savings—if, indeed, it be possible for men to save who can scarcely do more than live with decency upon their now scanty pay and allowances. No medical officer can reasonably depend upon obtaining private practice or valuable staff-appointments. We may be sure that the scale of pay, whatever changes may be made, will not be much larger, if at all, than at present; probably smaller. The number of staff-appointments to be distributed among members of the service will be gradually becoming smaller, as the surgeons of the British medical service gain, by qualifying themselves, or by the favour of the Indian Office or the Horse Guards, an increasingly larger proportion of them. At the same time, the cost of living will be greater from various reasons. The increased amount of railway construction and traffic tends to increased competition for labour; to remove servants, so indispensable in a hot climate (not for luxury, but for ordinary health and comfort) from the field. The increasing number of Europeans settling in the country will tend to raise the price of provisions, the rent of houses, the cost of building them, etc.

Moreover, Indian medical officers will, we fear, now be looked upon as inferior to the British, and will be in danger of supercession by them in matters relating to comparative rank, lucrative posts, the most healthy and otherwise desirable stations, etc. This is evidently the case now; for we find that deputy inspectors-general (British), of probably less than twenty years' service in any part of the world, are allowed, from the date of their arrival in India, the rank of colonel, and consequently supersede all the Indian officers of like title (but only ranking as lieutenant-colonel) of probably thirty-two years' service in India—the old superintending surgeons, as they were called. Thus the rank of surgeon averages ten years for the British, sixteen years for the Indian service; and all the superior grades will be attained by the British, who may have served principally in the healthiest parts of the world, in far smaller periods of time than by the Indian surgeons.

Thus we may say that the whole Indian medical service is superseded by the British in point of rank; while, in point of pay and allowances, the Indian sur-

geons are in many particulars worse off. The number of superior offices also is so small that a man can hardly count upon becoming a deputy inspector of hospitals before he attains the age of fifty-five; in which case, if still a regimental surgeon, he is doomed to extinction. In respect of retiring pension, the following table will show the disadvantages under which the Indian army surgeon suffers, in relation to the British medical officer. When either is compelled to retire, from ill health or other causes, he is entitled to retiring allowances, respectively, as under.

Indian Medical Officer.	*British.*
Under 3 years' service, about £45	about £109
10 years' service ,, 73	,, 200
15 ,, ,, ,, 73	,, 246
17 ,, ,, ,, 191	at least 246
21 ,, ,, ,, 250	383
25 ,, ,, ,, 300	410 to 611
32 ,, ,, ,, 500	465 to 684

If the Indian surgeon finds his health after a few years affected by tropical climate, he has no other resource but his very small pension. The British surgeon can make out his time in a healthy climate, until he becomes entitled to a higher rate of pension. With respect to furlough pay, the discrepancy in favour of the British medical officer is still more glaring, as is instanced by the fact that, while he would receive, after twenty-five years' service, most probably at least £547 a-year, the Indian medical officer would only be entitled to £191; and at other periods, in proportion. With regard to pay in India, the Indian medical officer of about fifteen years' service cannot calculate upon receiving more than about £660 a-year; while the British medical officer, if holding regimental charge, may receive £1150, or if, as is probable, he be Deputy Inspector-General, £2160 a-year.

As a partial set-off against these disadvantages, the Indian medical officer will probably have the larger number of staff appointments, and some few lucrative non-professional posts; but now he can advance no claim to them, more than the British medical officer can; except it may be the poorly paid Presidency surgeoncies and the professorships in the Presidency Medical Colleges. It is true that, in the British service, the surgeon cannot, as a rule, retire before the expiration of his twenty-five years' service. The Indian surgeon would be able to retire upon his very small pension after seventeen years spent in India; but it is presumed that he will not often find inducements to do so. Very few would desire to accept so small a provision, until at least twenty-five years had been served.

Thus we see that, in almost all respects—army rank, retiring pensions, pay in India, etc.—the Indian surgeon, although necessarily passing the whole of his time on full-pay in an unhealthy climate, is placed in a position very inferior to that of the British medical officer.

In short, unless the authorities connected with the Government of our Eastern dominions establish a better system of pay, pension, and other advantages for their medical servants, which we have almost ceased to expect or even to hope for, we really cannot see what should induce well qualified young men to undertake an arduous career in so unhealthy a climate. The best prospect that could open for them would be to resign the service, in case their expectations did not seem likely to be realised, and to betake themselves to the hilly regions, to take the chances of private practice, or to speculate in tea, coffee, or cinchona. But then there are much finer fields for speculation and employ in the more healthy climates of Australasia or other parts of our wonderful colonial empire; where also highly qualified medical practitioners must be in request for many years to come. Moreover, the experience of the last few years, with respect to the army, navy, and Indian Medical Warrants, shows us that even the Secretaries of State do not hesitate to play fast and loose with the engagements entered into with those under their authority, even although those engagements may have received the solemn sanction of majesty.

Upon a survey of these considerations, we feel inclined to recommend the young medical graduate to think seriously and often before he sacrifices any position to which he might naturally aspire, at home or in our colonies, for the chances of liberal or even just treatment under the Queen's Indian Administration.

CRETINISM.

Professor Kœberle of Strasburg has written an interesting treatise on *Cretinism*. The investigation of the endemic character of cretinism in certain of the Swiss cantons has led, as all the world knows, to most diverse conclusions concerning the origin of the affection. In the first place, it has been found, contrary to the usually received accounts, that this degenerated state is not absolutely confined within deep and narrow valleys, more or less deprived of sun, and where great variations in temperature prevail, as in the Alps, Pyrenees, and Cordilleras. Cretinism, with all its well-marked characters, is met with, though much more rarely, in many different countries, and in plains exposed to the wind and sun, as in the valley of the Rhine at Strasbourg Hence altitude alone does not suffice to produce cretinism. Neither can it be traced to bad hygienic conditions, to poverty, etc. The statistics of the Sardinian Commission show that, of 3,955 cretins, 1,381 only belong to poor families. Doubtless bad air, excessive humidity, filthy dwellings, etc., may favour its production; but we cannot seek in such things for the true cause of the affection, as they exist in other countries where the affection is not noted.

Cretinism, again, has been attributed to the state of the drinking water—to the sulphates and carbonates of lime contained in it; but without any good or sufficient reason. Arguing in this way, *par voie d'exclusion*, M. Kœberle has been led to attribute cretinism to a miasmatic poisoning, developed under the influence of certain conditions of temperature and humidity. Hence there are the localities which produce cretinism, just as there are marshy lands which produce fever. Numerous authors have, in fact, connected together the affection and the influence of the surrounding marshy country. The products of decomposition of different marshy lands are very great. At the mouth of the Ganges, cholera may be produced; the plague in the Delta of the Nile; yellow fever at the mouths of intertropical rivers, etc.; and, in like manner, cretinism, under certain conditions, hitherto undefined, of temperature, humidity, and locality, may arise in marshy districts.

Cretinism and goître M. Kœberle considers as essentially different diseases, produced by distinct causes; and the proof of this is given in the fact that, in many places where goître has been for a long time past very frequent, cretinism is not met with, even when the thyroid swelling is excessively large.

THE COLLEGE OF PHYSICIANS.

At a meeting of this College on the 21st instant, Drs. Bagshawe, Witherby, and Grant, were admitted members. It was also reported, that two candidates for the membership had been examined clinically in the wards of Guy's Hospital. This inauguration of a new method of examination by the College will, doubtless, meet with the approbation of the profession.

It was announced that, amongst the books presented to the College, a large collection—forty-six volumes—of selected American works, as well as his own well-known *Lectures*, had been given by the President.

We are glad to note, that the Curators of the College Museum have recommended the completion of the Museum during the ensuing summer.

The College once again rejoices in the election to its Presidency of Dr. Watson. We believe we are only stating the unanimous opinion of the College when we say, that the duties of the office have never been more carefully, honestly, and worthily fulfilled, than they have been by Dr. Watson. We need hardly say, that the re-election of such a President was unanimous. The President, in acknowledging the compliment, briefly adverted to the principal events interesting to the College which had occurred during the past year. He spoke of the promised grant from the Government of a renewed lease of the premises of the College; and also referred to the adjudication of the Swiney prize. He also, with his usual strong good sense, gave the sanction of his high authority to a practice which is at present not uncommonly adopted, but yet adopted with some degree of hesitation. He recommended that, for the present, and until men have had sufficient time to master the details of the *British Pharmacopœia*, they should, in prescribing, continue the use of the old—the *London Pharmacopœia*—only taking due care to head their prescriptions with the words *Lond. Pharm.* The profession will thank the President for thus sanctioning a proceeding which will certainly tend to facilitate the operations of the druggists, and to the security of the public at large. The practice which Dr. Watson has thus sanctioned, we have, from the first, recommended in this Journal.

Two Fellows of the College have died during the past year, Dr. H. W. Carter and Dr. R. Fowler; the latter gentleman at the age of 98. Also, during the past year, twelve Fellows and nineteen Members have been admitted. The number of Members admitted shows clearly enough that the new class of Licentiates has in no way lowered the value of the Membership in the eyes of the profession at large.

We omitted the following paragraph in Professor Laycock's letter published in last week's Journal, because we considered that Professor Laycock was taking a very exaggerated and serious view of a remark which we had considered was meant by its author as little more than a mere pleasantry. The remark is to be found at page 84 of the Journal of January 16th, 1864; and the words omitted in Professor Laycock's letter, and of which omission he complains, speak of it as follows.

"—One statement as to my teaching of fevers quoted in it" ("Modern Medical Knowledge", Jan. 16th, 1864, p. 84, British Medical Journal) "is indeed a gigantic lie," etc.

In the passage quoted by us from a pamphlet, and thus stigmatised by Professor Laycock, the author was speaking of the multiplicity of facts which were now taught the medical student under the heads of the different sciences, of botany, of chemistry, of physiology, and of medicine; and we are satisfied that the profession will agree with us, that the last thing which he wished to state was anything to which could rightly be applied such terms as those used by Professor Laycock. It is only fair to Professor Laycock to state, that misapprehension has evidently prevailed relative to his etiological nosology. Under the head of *Fevers* he classes all febrile diseases; his term fevers, in fact, corresponding very much with the *Pyrexiæ* of Cullen. So that, in reality, his nosology is very much the ordinary nosology of writers, only classified in his own peculiar way. Hence, then, the whole of the number of *Fevers*, or rather, as we should say, of *Febrile Diseases*, mentioned by him, is

very much the same as is usually given by nosological writers; only, in addition, Professor Laycock introduces under the head of Fevers such diseases as hydrophobia, carbuncle, leprosy, yaws, syphilis, which writers do not ordinarily bring under that head. The profession will decide whether or not we acted wisely in originally excluding the above paragraph from Professor Laycock's letter.

Dr. Garstang of Blackburn has been called on by the Relief Committee in that town to give certificates gratuitously in cases of sickness. This he very properly objects to do; and has addressed the following sensible remarks to the Rev. Mr. Meany, a member of the Committee.

"2, France Street, March 17.

"Rev. Sir,—I have pleasure in stating that the fee of *one shilling* in each instance, I have fixed as a reasonable one for appending my name to the tickets issued for that purpose by the Relief Committee. . . . . Should the very practical suggestion of systematic certifying now under contemplation, meet with the approval of yourself and colleagues, it would remove a source of unpleasantness, said to be generally experienced in committee, through my non-acceptance of their tickets for gratuitous signature. Obviously, my time and faculty are exclusively my own, and not summarily available at the pleasure of the Relief Committee, except, of course, conditionally. I must declare to you, that the imposition on me by the committee of additional labour, in the task of gratuitously certifying of sickness or otherwise, and of affixing my name to multitudinous tickets, whereby a direct benefit is gained by the committee, has always appeared to me to be devoid of adequate reason. . . . . In the face, sir, of the strong precedent of paid service in the case of the working troop of persons, through whose combined labour the administrative *ménage* of public relief is carried on, I hate, as you must, the motive that would affect to call upon my profession for an involuntary performance of unpaid services. No person, or body of persons, has assuredly the least sentimental pretext to expect, *still less to impose*, the execution of any kind of professional labour, as such, without frankly attaching to it an honourable pecuniary remuneration. Charity wears many false airs; one of the most repulsive among them is found in the matter of gratuitous medical service done in behalf of the public.

"Yours truly, "Walter Garstang, M.D.,
"L.R.C.P. Lond. & Edin."

M. Serre, a vivacious surgeon of the South of France, lately informed the French Surgical Society, that he has performed Mr. Hancock's section of the "tensor muscle of the choroid"—*a muscle whose existence, however, he will not guarantee*—at least 2500 times! He prefers this operation to Gräfe's iridectomy in *staphyloma*, because it is exempt from all danger, and because any one can practise it. M. Follin remarked, that he believed Mr. Hancock's operation was at present abandoned in England. It was an operation not to be compared with iridectomy. He was perfectly convinced that, thanks to iridectomy, glaucoma, acute or subacute, could be entirely cured—*enraye*—and that even when the glaucoma was in a chronic state, iridectomy could ameliorate, if not cure the disease. The operation of Mr. Hancock is either useless or absurd. It would be most unfortunate, he thought, for surgeons to give up iridectomy which cures glaucoma, for an operation whose harmlessness is no compensation for its inutility. M. Giraldes said that, in his opinion, the division of the tensor—a muscle of whose existence there was no earthly doubt—was introduced to combat iridectomy; to set up a school against a school. He could not imagine what use it could serve in staphyloma; he could well understand that pain produced by inflammation would yield to puncture of the sclerotic; and, in fact, by removing pressure on the nerves of the sclerotic, it must necessarily relieve pain.

One of our learned societies—the Medico-Psychological—says the *Gazette des Hôpitaux*, is honoured at the present moment by the foreigner with flattering marks of recognition. Professor Monti of Bologna, for example, physician to a lunatic asylum, finding his dignity touched by the improper interference of the administrators of the establishment, desirous of imposing on him their views as to the treatment of the insane, solicits and obtains the moral support of the Society. Then, again, a gentleman named Townley, having assassinated his *fiancée*, is condemned to death. Dr. F. Winslow, convinced of the insanity of the man, appeals to the intelligence of the Society, and immediately the Society responds by appointing a commission to report on the affair, which has inflamed the English press. Townley is provisionally installed in a lunatic asylum. Once more: several Spanish doctors were implicated in the illegal confinement of Dame Sagrera, and consequently condemned to twenty years of prison. The Society is consulted, and proclaims the innocence of these doctors. The Queen of Spain signs their pardon; raises Dr. Antonio Pujadas, one of its foreign associates, to the rank of Commander of the Order of Charles III, and nominates him an Inspector of Lunatic Asylums in Spain. These three affairs demonstrate, we are told, the importance of this Society.

A fact worthy of remark has lately occurred at Hôpital Beaujon, says *L'Union Médicale*. A young woman, suffering from croup in an advanced stage, was tracheotomised by Dr. Morel-Lavallée; but when the cannula was introduced into the opening, respiration was arrested. Dr. Lavallée suggested that insufflation through the cannula must be tried, whereupon M. Magnié put his mouth to the cannula, blew into the lungs, and had his mouth filled with blood and mucus. MM. Bessey and Delfau, *externes*, and M. Blumenthal, an *interne*, as well as Dr. Raynaud, also all performed the same office again and again. "It was a strange but consoling spectacle to see these young people, their faces and mouths all bloody, facing formidable dangers with an impulse which

knew no calculation." Informed of these facts, the Director of the Administration of Public Assistance visited the hospital, in order to thank the students for their devotion to the cause of humanity, as well as to the cause of science.

The French Government has had, as we continually have had occasion to show, the good sense, whenever it wants advice in matters of a special scientific character, to apply to those scientific men who are best able to give the advice. As a rule, we manage these things differently, and not better, in England. Science with us is rather treated with suspicion than with confidence. We read lately, that the French Minister of Public Instruction has appointed a Commission of Hygiene, to give advice on all questions touching the food, clothing, hygiene, exercise, etc., of the pupils in the different public schools of the empire. The Commissioners appointed are, MM. Dumas, Rayer, Brogniart, Denonvilliers, Faye, Vernois, Caffe, Mourier, and Duroy.

The Belgian Royal Academy of Medicine has proposed the following questions as subjects of prizes. The Demonstration, by Critical Examination of Existing Works and by New Researches, of the Formation of the Blood-Globules, a medal of 1500 *francs*. The History of Glycosuria, especially in Reference to its Causes, Nature, and Treatment, 800 *francs*. An Exposition of the Scientific Medical Progress which has taken place in Belgium since 1835, medal of 1000 *francs*. The Effects of the Uses and Abuses of Tobacco on Man in Health, 300 *francs*. The Characters of the Disease, the Causes and Treatment of the Disease met with in Animals under the name of Malignant Pustule, medal of 500 *francs*. The Chemical History of Digitaline, medal of 500 *francs*. The essays may be written in Latin, French, or Flemish.

M. Milne-Edwards has exhibited to the Academy a series of fossils found by MM. Lartet and Christy in the caverns of Laugerie (Dordogne.) These fossils, it is said, demonstrate the contemporary existence of man and of the raindeer in the South of France during the rocky age. Moreover, they prove that even in those pre-historic times man cultivated the arts. Many of the raindeer bones are carved, and very well carved. The figures of animals may be distinctly traced on them. One of the long bones of the raindeer, cut in the form of a poignard, has on the handle a round figure very elegantly carved. One of the vertebræ of a raindeer has been pierced by a flint lance, which has been broken in the wound and fixed there. It now remains for the geologists to tell us the age of the formation in which they were found. Let us hope that they will be more successful and explicit than they were in the case of the famous Abbeville jaw-bone.

M. Flourens, at the request of MM. Pouchet, Jolly, and Musset, has adjourned the meeting of the commission which is to settle for once and all the question of spontaneous generation, until the weather has become more favourable for the experiments required.

INDIAN MEDICAL SERVICE.

The following are extracts from the letter of a gentleman who has been nearly twenty years in the Indian medical service. They were not written for publication. His letter is dated from India, January 1864:—

"I have lately had extra work to do on account of the paucity of medical officers. I am still in uncertainty as to the time of my return to England. Of course, I am waiting for the amalgamation. I see by the British Medical Journal of last Nov. 21, that it is supposed the rules for the new Indian Medical Staff Corps have been published in India. This is a mistake. From all I can learn, there was a draft of the new rules sent out in September last; but the order has either been quietly burked, or else been returned to the Secretary for India for reconsideration. Report says that the scheme was considered too liberal by some of the big-wigs out here. I suppose we may wait another five years before it sees the light. I repeat again, anything would be better than keeping us in this state of uncertainty. My own opinion would be in favour of complete amalgamation of Royal and Indian services. Without it, the Indian, being the weaker in every way, must languish, and it would be looked down upon, unless it possessed higher rates of pay and pension. The best men would not be foolish enough to enter a service which too often consists of banishment for life, and in which even leave on medical certificate (beyond a certain amount; viz., two years in twenty) is deducted from your service towards promotion or pension. Moreover, the pay whilst on leave, either at home or in India, is too small to support a man in the position of a gentleman. At the present moment, a surgeon-major on leave to recover health in the hills, after twenty years' service in India and with the rank of lieutenant-colonel, after payment of his compulsory subscriptions to funds and income-tax, receives as the balance of his pay 329 rupees; while the pay of a cornet on his arrival in India is 310 rupees, of which he loses only 15 on going to the hills for his amusement. Moreover, the surgeon and the cornet may both belong to the same regiment; for the surgeon of a cavalry regiment only draws infantry pay when on leave.

"It is nonsense to say that, because such a state of things has hitherto existed, so they must remain. Governors-General have always altered the rules whenever it suited their purposes, and can therefore do so again. For instance, when I entered the service, the highest rate of pension was £700 after thirty-five years' service; but it has recently been ruled, that no surgeon shall remain in the service after the age of 55. Now, as a medical officer could not enter the service till he was 21, he would, if untunate in his promotion, never be able to reach the highest rate of pension. All this shows clearly that a revision is required in the present rates of pay and pension of the Indian medical service; and that, until such revision takes place, no wise man would enter the service. I have said nothing about the royal service; but I believe they have as many causes of complaint as we have; for her Majesty's warrant has never altered their position in this country, except in nominally giving them the rank without the pay."

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Old Falcon, at Gravesend, on Friday, April 1st, at 3 P.M.

Dinner will be provided at 5 o'clock.

Tickets, 5*s.*, exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, March 8th, 1864.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

FEBRUARY 4TH, 1864.

R. GREENHALGH, M.D., Vice-President, in the Chair.

ON FIBROUS TUMOURS OF THE UTERUS TREATED BY SURGICAL MEANS. BY I. BAKER BROWN, F.R.C.S.

On December 7th, 1859, the author had read a short paper, containing a case of fibrous tumour of the uterus treated successfully by surgical means. On March 6th, 1861, he had read a second paper, giving six cases, four of which were cured, one was relieved, and one died. The object of the present paper was to confirm the practice previously advocated, by fourteen more cases, and at the same time to show that in most cases a very modified surgical treatment was sufficient; for, whereas Mr. BROWN had hitherto divided his operation into two parts—preliminary incision of the os and cervix, and gouging or breaking up the tumour,—he now found that the first step would always arrest the hæmorrhage and the development of the tumour. In some cases the tumour decreased, and when small it would entirely disappear, more especially if of recent origin; and even when gouging was required, a much slighter operation is sufficient. Mr. Brown now used only a pair of long-handled, blunt-pointed, curved scissors. The author entered minutely into the mode of operating, and laid great stress on carefully and thoroughly plugging the incisions and whole vagina with oiled lint after the operation. Of the fourteen cases related, ten were cured of the hæmorrhage by the incision of the os and cervix uteri alone, and one was relieved; in two only was it necessary to perform the second operation, both resulting in cure of the tumour; in six cases the tumour had either entirely disappeared or materially decreased after incision alone. Of the three deaths, one had occurred from peritonitis, resulting from exposure to cold and the restlessness of the patient; one from organic disease independent of the operation; and one from pyæmia. Out of between twenty and thirty cases occurring in his private practice, the author stated that he had had one death, in a patient whose case was complicated with hæmatocele; and that in his public practice he had had as many more as were now given, with no more deaths.

The following practical conclusions were drawn. 1. The fact of the curability of these tumours is materially confirmed by these cases. 2. It is not necessary in many cases to do more than incise the os and cervix, thereby much lessening the danger of the operation. 3. The hæmorrhage is almost invariably arrested by the incision of the os and cervix. 4. The cure of these fibrous or fibroid tumours by surgical means, without the danger of enucleation, is now firmly established, as proved by Dr. M'Clintock, Dr. Routh, Dr. Dawson of Newcastle-upon-Tyne, as well as by Mr. Brown.

Dr. GERVIS asked whether the incisions he made in the sides of the cervix uteri were ever apt to reunite; whether, if they did, the hæmorrhage recurred; and whether, if they did not, the incised condition of the cervix, in a patient who subsequently became pregnant, in any way interfered with normal parturition.

Dr. ROUTH considered the paper as evidence of the advance of medical science with respect to a disease many cases of which had been deemed incurable. He alluded to the process of enucleation recommended by Dr. Atlee, which he (Dr. Routh) regarded as too hazardous. Dr. Routh considered that fibroid tumours required different treatment according to whether they were in or out of the cavity of the pelvis, whether the heart and lungs were pressed upon, or micturition impeded, or whether in either case excessive floodings occurred. In any case, the tumour should not be meddled with unless vital functions were interfered with. Mr. Brown's operation could not be used in suprapelvic cases, because of the uncertainty of position and risk of wounding the peritoneum. In such cases he considered gastrotomy the best treatment, removing both ovaries also. In the pelvic fibroids, he agreed with the author that the tumours after bisection diminished, and he considered this an established point in practice. The opening of the cervix he believed not only checked the hæmorrhage, but enabled the tumour to be more easily got at; it was, under the restrictions laid down by Mr. Brown, quite safe.

Dr. GREENHALGH considered the question of fibroid or fibrous tumours one of great importance, especially where the hæmorrhage endangered the life of the patient. In the great majority of cases he had found the best results from the use of bichloride of mercury or bromide of potassium. Still there was a certain limited class of classes in which medicines were of little avail, and it was in such that the division of the cervix uteri was attended with benefit. He had seen a few cases; and in these, although the hæmorrhage was considerably lessened, yet the size of the uterus was not much reduced. In those cases where pressure on surrounding structures had produced injurious effects, he had seen good results from pushing up the tumour above the brim.

Mr. BROWN stated that care was taken to prevent the incisions in the os and cervix from uniting. The oiled lint, in the first instance, and the injections afterwards, generally prevented union; but if any bands of lymph were thrown out, he always broke them down with the finger. He had never seen a case in which the patient had been confined after the operation, but it was only reasonable to infer that parturition would be accelerated after these incisions; for in the case of a primiparous woman, where the os is torn, the subsequent labours are always exceedingly quick. As to the *rationale* of the operation, Mr. Brown thought the action was twofold. The tumours were of very low vitality, and the slightest interference with them stopped their growth. Thus, in the first place, the initiatory blood-vessels were cut through by incising the os and cervix; and, secondly, the tumour was grasped more firmly by the contraction of the uterus, which always takes place after the os is incised; and thus the tumour was confined, could not grow, and often died.

CASES OF OVARIOTOMY, WITH REMARKS. BY THOMAS BRYANT, F.R.C.S.

After a few preliminary remarks, the author gave the details of ten cases of ovariotomy, six of which were successful. The following are the brief notes.

Case I. *Multilocular Ovarian Tumour; Ovariotomy; Death on Fourth Day.* M. C., aged 30, married. Tumour discovered two years; never been tapped. Ovariotomy on December 5th, 1860; small incision; pedicle, which was broad, fastened by double ligature; wound brought together with pins. Opium freely given. Third day, vomiting, with tympanitis; and death seventy-eight hours after the operation. *Post mortem* examination; peritonitis.

Case II. *Unilocular Ovarian Tumour; Ovariotomy; Recovery.* E. D., aged 32, married. Disease existed two years and a half; had been tapped once. Ovariotomy on October 15th, 1862; small incision; adhesions in front; pedicle secured with clamp; wound brought together with silver sutures. Uninterrupted recovery in one month. This patient has since been confined of a living female child.

Case III. *Unilocular Ovarian Tumour; Ovariotomy; Recovery.* A. S., aged 25, single. Disease four years; tapped twice. Ovariotomy on March 20th, 1863; no adhesions; small incision; pedicle secured with clamp. Acute bronchitis. Perfect convalescence from the operation in one month. The patient subsequently died from pneumonia two months after the operation.

Case IV. *Double Ovarian Disease; Ovariotomy; Death.* E. C., aged 32, married. Disease two years; tapped once. Ovariotomy on April 15th, 1863; extensive adhesions; broad pedicle secured with three whipcord ligatures on left side, on right side with two. Collapse and death in twenty-two hours. *Post mortem* examination; peritonitis.

Case V. *Semi-solid Ovarian Tumour; Ovariotomy; Death.* J. P., aged 44, married. Disease many years; tapped once. Ovariotomy on July 25th, 1863; small incision; broad pedicle secured with three whipcord ligatures. Death in thirty-seven hours from peritonitis.

Case VI. *Multilocular Ovarian Tumour; Ovariotomy; Recovery.* L. W,, aged 17, single. Disease existed one year; never been tapped. Ovariotomy on September 8th, 1863; small incision; no adhesions; broad pedicle secured by three whipcord ligatures; silver sutures to wound. Rapid convalescence.

Case VII. *Multilocular Ovarian Tumour; Ovariotomy; Death.* H. D., aged 24, married. Disease three years; tapped three times. Ovariotomy on October 8th, 1863; small incision; extensive adhesions; broad pedicle requiring seven whipcord ligatures. Collapse and death in twenty-three hours. *Post mortem* examination; slight hæmorrhage into abdominal cavity.

Case VIII. *Multilocular Ovarian Tumour; Ovariotomy; Recovery.* H. B., aged 34, married. Disease one year; tapped once. Ovariotomy on October 8th, 1863; large incision; no adhesions; pedicle secured with three ligatures; silver sutures to wound. Uninterrupted convalescence.

Case IX. *Multilocular Ovarian Tumour; Ovariotomy; Recovery.* A. J., aged 37, single. Disease one year; never been tapped. Ovariotomy on October 16th, 1863; large incision; no adhesions; clamp to pedicle; silver sutures. Rapid recovery.

Case X. *Multilocular Ovarian Disease; Ovariotomy: Recovery.* S. C., aged 50, married. Disease eighteen months; tapped twice. Ovariotomy on December 2nd, 1863; large incision; no adhesions; clamp to pedicle; silver sutures to wound. Rapid convalescence.

The author confessed that in three of the cases which had been noticed the chances of securing a successful result from the operation were looked upon as being very slight, and that he should now in similar cases refuse to operate. He dwelt upon the propriety of being very careful in selecting cases, and expressed his belief that the surgeon had better err on the side of caution than on that of rashness. He considered that the best patient for the operation was the one who was in the best health, and that there was no special general preliminary treatment demanded which was not applicable to other operations. He enforced the necessity of isolating the patient, and of guarding her well from the contact of all who were not specially required for the treatment of her case. It was to the careful observance of this rule that he attributed his success. During the operation he preferred to place his patient in the half-sitting posture. He was indifferent to the length of the incision which he made, but had commenced always with the small incision, and increased it when any difficulty in the extraction of the tumour was experienced. He condemned the practice of exploring the abdominal cavity with the hand, in the search for adhesions, and advocated the practice of breaking them down as they manifested their presence during the operation. As to the treatment of the pedicle, he used the clamp or ligature according to circumstances. When it was long and narrow he had employed the clamp, as convalescence appeared more rapid after its application than when the ligature was used; when it was broad and short he had used the ligature, as he regarded traction upon the pelvic viscera as most injurious. He spoke in favourable terms of the practice which Dr. Tyler Smith had introduced of dropping the pedicle with its shortened ligature into the pelvis; and expressed his belief that such a practice might be more general. The practice of sponging out the pelvis he regarded as dangerous, and recommended its adoption only when an excess of blood or of semi-solid ovarian material had taken place. In the treatment of the wound he had always employed silver sutures. He had also included the peritoneum and abdominal muscles in his sutures. In his after-treatment he had been guided by the ordinary surgical principles. He had kept his patient's room warm but airy. He had given but little opium, and strongly advocated its employment as a suppository. For the first two or three days he had given only liquid nourishment, such as good beef-tea and arrowroot; but after that he had given meat and wine with average caution. He had no special treatment to recommend.

Mr. Spencer Wells argued that all serious operations succeeded better in private houses and in small hospitals than in the larger institutions; and that Mr. Bryant's success was due in a great measure to his patients being kept alone in a private room, and placed otherwise in similar conditions to those in small hospitals. In some desperate cases, even where there was little hope, it might be the surgeon's duty to risk his reputation in the hope of saving life. When blood or ovarian fluid escaped into the peritoneal cavity, it should be removed with scrupulous care.

Mr. Baker Brown agreed with the last speaker that the arrangements had been precisely the same as those practised in a small special hospital, but he would strongly urge Mr. Bryant not to exclude the pupils. In the London Surgical Home, visitors, sometimes to the number of fifty or sixty, witnessed his operations, and he had seen no ill effect follow, his statistics of ovariotomy in that institution being thirty-six operations and thirteen deaths. But after the operation the patient must be separated from the others to give her a fair chance of recovery. With reference to sponging out the peritoneum, Mr. Brown laid down this rule; if there were blood or fluid of a colloid nature in the cavity, it must be removed either by sponges or flannels, or sometimes by placing the patient on one side; if, however, the fluid was ascitic or simple mucoid fluid, as often found in

ovarian cysts, and not in large quantities, he left it alone. Of course, one would not interfere with the peritoneum if there were no occasion.

Mr. Bryant was quite ready to give all credit to the surgeons of the smaller hospitals for having stimulated others to practise the operation. He was ready to admit that great precautions were needed in the larger institutions to isolate the patients, and thus rescue them from all risks of contagious influences. The success which his cases had demonstrated was undoubtedly to be attributed to this caution; but it also proved that such was to be obtained in a large hospital by attention to these points. He acknowledged that a surgeon was placed in a difficult position when asked to operate in a case in which the prospect of success was very small; but he believed that almost desperate cases should be avoided. He would advise the sponging out of the pelvis when much blood or colloid fluid had escaped into it; in other cases it was not required. He agreed with Mr. Brown that it was a desirable thing that the pupils should witness the operation; but as this advantage was only to be obtained by incurring some unnecessary risk to the patient, he had thought it better that, to a certain extent, they should be excluded. The few who had been admitted were senior men, who had been placed under a kind of quarantine for some days previously.

LIVERPOOL MEDICAL INSTITUTION.

February 18th, 1864.

R. Gee, M.D., Vice-President, in the Chair.

Fractured Scapula. A specimen was shewn taken from a patient that had been under Mr. Lowndes' care at the Northern Hospital. She was an old woman, aged 78, and was admitted on December 4th, 1863. She had fallen into a cellar and struck her shoulder; there was some ecchymosis, and a very distinct crepitus to be felt all over the scapula. There were no other injuries. She went on well until December 19th, when, as she was standing up by the fire and trying to get a light, some lighted paper fell upon her dress, and she was burnt so severely that she died next day. The scapula presented several distinct fractures, both through the spine and the body. There was a good deal of firm fibrinous deposit along the line of the fractures, on both aspects of the bone.

Villous Tumours of the Bladder, and Suppurative Nephritis. Mr. Nash shewed a specimen. A man aged 40, an ironfounder, was admitted into the Royal Infirmary on February 4th, 1864, with the following history. About three weeks before, he first noticed that his urine at times dribbled from him; he then had some slight pain in the back, which was not sufficiently severe either to deter him from work or to induce the belief that there was much amiss. The amount of urine dribbled and the degree of pain in the loins varied throughout. Three days before admission, in addition to the previous symptoms he felt "bodily ill," and lost his appetite; nevertheless he worked on, and even was at the foundry the morning he was admitted; the day previous, he had passed a few clots of blood *per urethram*. On admission, he was passing urine involuntarily *guttatim*. He had a tottering gait, and pain in the loins; his tongue was dry; his pulse was quick, with general feverishness; percussion over the pubis did not shew over distension, and yet the bladder did not seem empty. A No. 9 silver catheter failed to draw off anything, but upon passing a large prostatic instrument, two or three ounces of bloody fœtid urine escaped. The next morning, the large catheter was again used; but to no purpose, a little blood and some shreds only coming away. The patient remained in this condition for a few days, and at the end of a week succumbed with a fluttering pulse, parched tongue, and muttering delirium. The mode of death strongly resembled that in continued fever. The breath was not urinous; there were not convulsions nor coma.

Autopsy. The body was not emaciated, but, on the contrary, there was a striking muscular development. There was nothing in the general appearance to suggest the probability of malignant disease. The left kidney was found to be very much enlarged, with a thickened capsule and a healthy suprarenal body. The ureters were dilated, hypertrophied, and tortuous. There was no peritonitis, nor enlargement of the abdominal glands, nor of the cervical; no tubercle in the lungs, which were unusually healthy. The other viscera were normal. The walls of the bladder were thickened; it contained five or six ounces of urine, and two distinct tumours, one as large as a small orange, the other of the size of a pigeon's egg. The larger mass was attached to the bladder in a position corresponding with the orifice of the right ureter; the smaller was not far from the entrance of the left ureter. Both growths felt something like a piece of omentum; they were intersected by deep sulci, were fimbriated at the surface, and resembled the cauliflower excrescence of the os uteri. The coverings of the tumours were directly continuous with the lining membrane of the bladder; hence they had apparently a deeper origin. Upon some of the villi there were interspersed small clots of blood. A probe passed into the bladder from the right ureter traversed a sulcus, and appeared in the centre of the growth. There was no cystitis. The capsule being removed from the left kidney, it was found to be of an unnaturally dark colour, and irregularly covered with spotted elevations of the size of small peas, which in places were confluent. The interior of the kidney was found to be much disorganised; the cortical portion was much softened, of a yellow colour, and frequently spotted with something which looked like either softened tubercle or thick pus; in the medullary portion were layers of the same yellow material interposed between, and running parallel with, the pyramidal tubuli. The mucous lining of the renal pelvis was enlarged. The left kidney was similarly diseased, to a minor extent.

Mr. Nash said this case was a good example of the occasional insidious origin and progress of renal disease; for, until three weeks before death, the disease was unsuspected, while the appearance of the diseased parts shews us it must have existed a much longer time. The tumours in the bladder, for instance, cannot have shot up and become so developed in three weeks' time, and in the same way a vesical calculus, or other tumour, may attain a large size without giving the slightest indication of its existence, especially when, through impaction or an enlarged prostate, it is prevented coming into contact with the neck of the bladder; and in the present case, the size of the growth may only lately have allowed it to reach the vesical neck. It was stated that even a prostatic catheter failed to draw off any urine; no doubt its end became imbedded in the tumours. These growths are generally called villous cancer; but Dr. Wilks says, "The ordinary villous growths from mucous membranes are not malignant, and therefore the old term villous cancer is an erroneous one; but this does not preclude a cancerous growth putting on this appearance." Again, rarely or never do two primary malignant growths exist in one subject at the same time. With regard to the kidneys, there can be no doubt that they became secondarily affected, from irritation having been conducted upwards by

the ureters which induced chronic nephritis. Mr. Nash thought the condition of the kidney was the immediate cause of death, through imperfect depuration of the blood, although the described symptoms of uræmic poisoning were by no means well marked.

Extensive Tubercular Disease. Dr. GRAHAM shewed specimens of tubercle from a boy aged 12, at the Bluecoat School, who died after symptoms of acute hydrocephalus, pain in the head, squinting, loss of vision, etc. A large quantity of fluid was found in the ventricles of the brain, and there was tubercular matter in the cerebellum: the lungs were full of tubercle and a section gave the appearance of granite; the peritoneal cover of the liver was studded over with tubercle, the right kidney was healthy, the left infiltrated with tubercle and pus, the ureter large and dilated, and a deposit in it; there was also tubercle deposited in the walls of the bladder. There was general enlargement of the glands.

Diseases of the Liver. Dr. GEE shewed three specimens.

Hydrophobia. Dr. E. WHITTLE related a case which occurred in August 1864. Thomas Jones, aged 35, sent for him at 5 A.M. The messenger reported that the patient was suffering from retention of urine; and he accordingly took a case of catheters with him. On the way the messenger asked him whether he had ever seen a case of hydrophobia. He replied in the negative; but asked what that had to do with the man's not being able to pass urine. The messenger then explained that the patient had a dread of drinking. On arrival at the house, Dr. Whittle found him sitting quietly on a chair, and complaining of a constant and distressing inclination to pass urine, while scarcely any passed; he examined the abdomen and found that the bladder was not distended, but that he was suffering from dysuria, just in the same way as patients often do after the application of a blister. His pulse was not accelerated; his tongue was clean; and there was no febrile excitement. Every five minutes he was seized with a convulsive shuddering that seemed to pervade his whole frame; some of the attacks were more severe than others, when he extended his arms and legs rigidly, leaped up in his chair, and called out to be held, that he might not do harm to anybody. He was in no respect unconscious; and during the intervals he talked about his condition, and said he felt something flash through him as if he were electrified, beginning about the penis. Dr. Whittle had a looking-glass held to him, and it immediately brought on a paroxysm. He offered him drink, which had the same effect; he induced him to try to drink, and by making a resolute effort the man did drink; but so violent and prolonged a paroxysm was occasionad by the attempt, that it seemed as if he would have been suffocated. He had no recollection of ever having been bitten by a dog or cat, or any other animal. The paroxysms lasted nearly half a minute, and recurred about every five minutes, but they gradually increased in violence and frequency, and became more prolonged. About eight o'clock, he seemed to remember suddenly a circumstance that had occurred about ten months before, and which up to this moment entirely escaped his recollection. When working at a gentleman's house, doing repairs, he had occasion to go into a water-closet. While he was making use of the closet, a little lap-dog was lying on some shavings in a corner; while he was adjusting his dress to leave, he disturbed the dog, which flew at him, scratching with his tooth the end of the penis, but so slighty that no mark remained; there was scarcely a drop of blood, and he thought no more about it. One of the workmen took the dog and drowned it. The remembrance of this circumstance had a bad effect upon him; he felt himself a doomed man; he immediately undressed and went to bed; called for his children, and took leave of them, and desired them to be taken away. He attempted to read a psalm to them with the intention of praying with them; but the paroxysms recurred now so violently that he was obliged to desist. He was soon rapidly worse, there being scarcely any intermission between the paroxysms; he rolled his head violently about as if struggling for breath; he continually expectorated a glairy ropy mucus that seemed to come from the pharynx; this he spattered all about the bed, and it also hung in strings from his lips and about his chin; he expelled it from his mouth with great difficulty. He expressed a fear that he might bite, but did not make any attempt; he frequently, however, begged everybody to keep out of his reach, and his hands had to be secured on account of his violence. He continued in this state all day, getting gradually worse, and about 5 P.M. died in a paroxysm, apparently exhausted. Towards the end he was flushed, with pulse much accelerated, and copious perspiration; these symptoms being apparently brought on by his violent struggles.

The place in which he was bitten accounted curiously for the apparent anomaly of a case of hydrophobia beginning with symptoms of urinary irritation. It appeared that he had felt this irritation for two days before Dr. Whittle saw him; but it was only on the previous evening that he had felt any dread of drinking; up to that time he supposed that he was merely labouring under an attack of gravel.

Dr. HIBBERT TAYLOR related a case which occurred twenty years ago at the Northern Hospital, under the care of the late Dr. James Carson.

Mr. HIGGINSON observed nothing had been said about the parts injured having been cut into after death, to shew whether there was any inflammation, which is said to come on when the symptoms of hydrophobia appear; and stated he should be inclined either to incise or cauterise the parts, or inject them subcutaneously.

Mr. HAMILTON mentioned two cases he had read of in which pain was manifested in the parts bitten before the symptoms shewed themselves. He had removed the three bitten parts by deep incisions, three months after the bite, in the case of a young gentleman who had been bitten by a favourite dog. The dog shewed symptoms of madness the night after biting him, and was shot.

Dr. BRABAZON had seen two cases; and in neither of them were there any marks of recent inflammation. In the first case, the patient, aged 12, had complained of pain in the side of the face, like neuralgia; then difficulty of swallowing came on three days later; he could answer questions rationally, but had a jerking motion when standing up; he complained of a feeling of choking; saliva was constantly flowing from his mouth, and he was gnawing his clothes; his pupils were widely dilated. In the second case, a child, aged 6, was bitten three weeks before in the leg by a dog, which had bitten several other people. He had pain in the part bitten, and opisthotonos; his pupils were dilated; his pulse quiet; he was anxious to drink, but could not; he could swallow solids. Death took place from exhaustion.

Dr. WHITTLE said there were two forms of rabies; in the one, the dog will not bite unless it is provoked; in the other, it will bite anyone. The dog has no fear of drinking, and will swallow. The horse will bite and tear his knees, and trot round and round until he dies.

Mr. DENTON asked whether there were any pathognomonic symptoms or rabies.

Mr. HODGSON said the dogs affected will always pick up bits of rubbish, and will vomit their food and

drink, but not these extraneous matters which are found in their stomachs after death; the tongue is hanging out; and there is an appearance as if there were something in the throat.

Mr. HIGGINSON had found in a dog's stomach a ball of its own hair.

Correspondence.

IRIDECTOMY.

LETTER FROM S. BROWNE, L.K. & Q.C.P.

SIR,—I regret that Mr. Bowman, in his reply to my letter of the 27th ult., has not answered on his *own* authority, derived from his investigations of glaucoma and the results of iridectomy in his own practice, the following very precise and clear queries. "Let him" (Mr. Bowman) "give us a *plain, brief, unequivocal* description of the exact pathology of the disease now called glaucoma; and, above all, let us hear how it is that iridectomy—an operation that must more or less mutilate the eye—effects a 'cure' of glaucoma in its several stages, from the premonitory period to the stage of the disease when the eye has become considerably altered in structure. All surgery, worthy the name of scientific surgery, is based upon definite principles; let us know what are the definite principles of iridectomy" (*in glaucoma*), "and then we are likely to listen to its advocates," etc. I asked him for a plain, brief, and unequivocal statement of his own views; but he has evaded the subject by referring me, in the closing sentence of his letter, to the summary of cases published by Mr. Hulke! In a preceding paragraph, however, of his communication, he says: "The 'recognised principles of scientific surgery' is here *a sounding phrase, and nothing more!* That is scientific in surgery which is based on exact observation of the manifestations of disease, and which contrives and applies to the relief of disease so discriminated an adequate method of treatment. The discovery or contrivance of such a remedy, in the case of a previously incurable malady, and one destructive of sight, is a high evidence of science, and one of its brightest results." Just so. But does *this* "sounding phrase" explain "how it is that iridectomy—an operation that must more or less mutilate the eye—effects a 'cure' of glaucoma in its several stages," etc.? No, nothing of the sort; it is a simple evasion of the question, and must be thus regarded until some one will undertake to explain "what are the *definite principles* of iridectomy".

I have just read Dr. Wolfe's lucid communication which appears in your last number (March 12th), and which deals both with the pathology of glaucoma, and gives a *rationale* for the operation of iridectomy also. Now, as this gentleman dissents from the pathology of glaucoma as advanced by Von Gräfe, and is clearly not "a blind follower of a master", and as he has also stated the principles of iridectomy according to his view, it would have been instructive, had we seen, side by side, the independent opinions of these two able advocates of iridectomy. Whether Mr. Bowman will accept these views of Dr. Wolfe, or whether they will carry conviction to the profession, I cannot determine; but they have certainly this to recommend them: they are clearly and plainly set forth. The pathology of glaucoma, right or wrong, as laid down, is exact. There are definite principles given for the employment of iridectomy in the treatment of the pathological condition which is supposed to exist; and I shall certainly watch with considerable interest the issue of the question, as it *now* stands before the medical public. Meanwhile, I may state that the views and opinions I have already submitted are unaltered.

It has been my wish to elicit truth. I am not one of those "men" referred to by Mr. Bowman, who "have not moved forward promptly on this subject" (iridectomy) "with the age"; nor have I "opposed other improvements when first propounded"; but I have lived long enough to have seen many specious theories in medicine ably propounded, warmly supported, and then sink into nothingness; and I have arrived at the age when men usually seek for something beyond mere assertion to sustain any position, and when they are not likely to be carried away by the most brilliant theories which are not upheld by intelligible arguments and unquestionable proofs. Now as, in these respects, the theories relative to glaucoma and its "cure" seem to my mind more than defective, I have not been able conscientiously to receive them. But Mr. Bowman, it appears, has hope of me yet; he "expects that ere long" I will "reach the same conclusions as others"—viz., the iridectomists. Well, it may be so. I am, I trust, open to conviction; but I cannot hope to raise my fancy to the pitch of the "young surgeon" who, after a month's attendance at Mr. Bowman's ophthalmic hospital, "can make himself master of the very simple method of conducting the slight and rapid, though delicate examination necessary for determining the tension of an eye"! Now, be it understood, it is not to determine whether tension of the eyeball exists in any case—that I know my own sense of touch could reveal; but it is to determine by "*touch alone*"—for so I shaped my query—whether, in certain inflammations of the deep tissues of the eye, "glaucomatous complications" exist also!

I must conclude by expressing my conviction, that the correspondence which you invited upon the question of iridectomy in glaucoma, will be followed by beneficial results both to the profession and to the public. As the question at present stands, it is clear that there is yet much to be definitely settled; but, in the hands of those who are investigating the matter, and who, I am satisfied, are actuated by an anxious desire to arrive at the truth, it will receive all the consideration which its importance demands.

I am, etc., S. BROWNE.

Belfast, March 15th, 1864.

MEDICAL PRIZES FOR STUDENTS AT OXFORD AND CAMBRIDGE.

LETTER FROM WILLIAM OGLE, M.D.

SIR,—Dr. Humphry has done well in calling attention to the prizes within reach of medical students at Cambridge. It is but justice to my *Alma Mater* to endorse, however imperfectly, what he has mentioned as to the advantages of a university course.

First, there are fellowships, of which a greater number now than formerly are open to laymen. Next come scholarships, which, to the value of £20 to £40 *per annum*, may be easily obtained by any one who has stood fairly in a public school, and by very many who have not had that advantage. But this is not all; nor, in fact, anything, in comparison with that which is within the reach of every one. The chief prize is "the mental training"—"the best foundation"—which is necessarily laid in reading for the B.A. degree. Many a man goes up to the University with a most limited knowledge of Greek and Latin, and with a still more slender stock of mathematics, who nevertheless takes a very respectable position at the time of his degree; and ever afterwards he is a marked man. It is enough that he is of Oxford or

Cambridge. Long may the distinction maintain its present value! The *reason* of this is, that the Universities give a training which makes itself manifest, whatever be the future calling of the student. The three years, though spent in the study of classics and mathematics, are not lost. It would be nearer the truth to say they are clear gain. At the end of a second or a third three years, the result is manifest. He who begins his professional study without this preliminary course is, by comparison, a man in fetters. That the members of our English Universities, though so few, should have left their mark so distinctly upon our profession, is proof that, as a general rule, these men acquired a mental power incomparably superior to that which they would have had if those same three years had been devoted to the study of subjects connected more immediately with their profession. I am somewhat jealous of the recent changes in favour of the "natural sciences", and which make it to a certain extent optional whether or not a man shall graduate in Arts. Unless closely watched, under the specious pretext of adapting them to the requirements of the age, the Universities will lose their character of soundness and solidity. *Verbum sat sapienti.*

Moreover (and this is no slight gain, though only an incidental one), by contact with his fellows and with his superiors, the university man learns something which is hard to describe, but which is easily recognised—a self-knowledge—"a peculiar temperateness and steadiness of thought, a habit of respect for others' feelings and convictions, and a reasonable and considerate tone of mind." (See *Times* article on the University system, in reference to candidates for the ministry, Jan. 2nd, 1864.) These qualifications are as necessary in medicine as in divinity. The mixing with others who are destined for the sister professions, and with those who will one day occupy the chief places in the state, tends in like manner to curb man's inherent self-assertion: it enlarges his ideas; it makes him, almost in spite of himself, a gentleman. On these grounds, I presume, Dr. Humphry concludes that, "for the intelligent and industrious student, the Universities are the very best entrance to the profession," and expresses his "surprise and regret that so few comparatively avail themselves of the advantages offered. Yet, in expressing surprise, one thing must be borne in mind: the choice does not rest with the student, but with his father. I do not think it is the expense of the course, nor so much from want of appreciation of its advantages, but rather, and chiefly, from the difficulty which in an especial manner besets the English graduate in first commencing practice. The main avenues into the profession are closed against him. Poor-law practice and club practice are bye-words. Who would be a club-doctor, if he could help it? or a parish-doctor? "General practice" also is almost wholly denied to the university man. He may "give advice gratis"; but even that is hardly reputable now, through the abuse of it. Nothing seems left for him but to support the dignity of his neighbours—a very pleasant duty, even when you get no thanks for it; but it involves that, for ten or twelve years, such a one must live upon his private means. It is idle to expect that fathers will send their sons to the University, except in rare instances, so long as this is the case. Happily, there are signs of change; and straws show the direction of the current. Mere titles are becoming waste paper. Medicine and surgery are more and more recognised as one science. Humbug (though perhaps never more rampant) is being exposed. And though there is a danger lest, in making everybody a physician, the physician be lowered, and not the everybody raised; and lest, in our outcry, for instance, against "advice gratis", we be carried into the opposite extreme,—there are indications of better things. The apothecary system of payment "per bottle" is on the wane. Will not "per visit" follow? The *form* is gone. "Particulars", even of the visits, are only "given if required". People are beginning to see that "per visit" takes no account of that which "is better than cure"; and that prevention, the *highest* function of a medical man, is practically ignored. An annual sum, with a margin for exceptional fees, seems to me to meet the requirements of the case.* At any rate, whether this be the solution of the difficulty or no, the difficulty should not be ignored in the discussion of the important question which has been brought forward so opportunely by Dr. Humphry of Cambridge.

I am, etc., WILLIAM OGLE.

Derby, March 8th, 1864.

ARMY HOSPITALS AND CIVIL SURGEONS.

LETTER FROM HENRY TERRY, JUN., ESQ.

SIR,—I have recently observed, in some of the medical journals, articles reflecting much on the Army Medical Department; which, in my opinion, are strongly exaggerated. I trust you will allow me to reply shortly to them, having been for some time past in medical charge of troops in this town.

I may state, *in limine*, that a private practitioner in charge of troops has to conform to the greater part of the "Regulations" as laid down for regimental assistant-surgeons.

The main grievance, so far as my memory serves me, was the question of *diets*, and the great amount of writing and trouble required of the surgeon in ordering and changing them; and I think that in this matter a great improvement has taken place. Not long ago, most detachment hospitals in provincial towns—to which I chiefly allude—were in charge of non-commissioned officers of the regiment, who might or might not understand the hospital accounts. Hence, on every change of troops in any given hospital, some trouble and confusion arose in having to select such a person and teach him his duties. At the present time, one of the "Army Hospital Corps," having no connection with the regiment, is permanently attached to the hospital; he is, of course, thoroughly *au fait* with the various forms required. This is a vast improvement.

In the next place, the surgeon used to be responsible that the proper quantity of provision was daily ordered; and, indeed, it was his duty to sign the various "requisitions" for them; and in any case of mistake in this respect, much correspondence became a necessary consequence. The whole of this duty now devolves on the Army Hospital Corps man steward, as he is called. He gives the required orders to the tradesman after the surgeon has paid his visits and entered the diets. This is a great boon.

The large number of diets, to which you are restricted, amounting to about ten, is also an improvement, instead of the contrary. And here I must add, that great liberality is shown in ordering extra medi-

* A similar suggestion was favourably noticed in the *Lancet*, November 14th, 1863: though, I regret to say, the writer did not perceive the professional, but only the commercial bearing of the plan; and so recommended it only to be adopted *sub rosâ*. The *American Medical Times*, however, in noticing my paper (Social Science Congress, Edinburgh Meeting), says boldly (December 19th, 1863):—"The physician assumes under it (the new system) the *highest* and *most dignified* functions of his profession. His aim now is to prevent disease.... If universally adopted, it may prove to be a most beneficial medical reform." The motto of the College of Physicians in Philadelphia is, *Non sibi sed toti*. I commend it to the consideration of any who think that a plan can be commercially right which is professionally wrong. (W. O.)

cal comforts; and there is no trouble in procuring them—in fact, they are kept in the hospital, ready for immediate use.

As regards the recruiting, I cannot speak from experience, as private practitioners do not in this respect fall under the same rules as military surgeons. In fact, they have an advantage over these, having no pecuniary liability. I am, etc.,

HENRY TERRY, JUN.

Northampton, March 15th, 1864.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Monday, March 21st, 1864, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Bagshawe, Frederic, M.B.Cantab., 21, Connaught Square
Grant, James Alexander, M.D.Montreal, Ottawa, Canada West
Witherby, William Henry, Coombe, Croydon

APOTHECARIES' HALL. On March 17th, the following Licentiates were admitted:—

Colden, Edward, St. George's Hospital
Edwards, John Henry, Llangefni, Anglesea
Gaudy, William, South Street, Park Lane
Garlick, William, Park Square, Leeds
Iles, Daniel, Fairford, Gloucestershire
Morris, Joseph, Studley, Warwickshire
Philpot, Harvey John, Wilton Terrace, Kensington
Price, Charles Richard, London Hospital
Shorland, Edward Peter, Westbury, Wilts
Watts, Algernon Newbegin, Westminster Hospital
Whitehead, Walter, Windermere
Wraith, John Hargreave, Over Darwen, Lancashire

At the same Court, the following passed the first examination:—

Denton, Frederick George, Hornsea, Hull

APPOINTMENTS.

*WATSON, Thomas, M.D., F.R.S., re-elected President of the Royal College of Physicians of London for the ensuing year.

QUINLAN, Francis Boxwell, M.D., appointed Medical Superintendent of the Smithfield Prison, Dublin.

DEATHS.

BALL. On March 18th, at Heckfield Heath, Hants, aged 30, Mary Tyeth, wife of *Richard D. Ball, Esq.

BOND, Henry, Esq., Surgeon, at Echuca, Australia, aged 40, on January 2.

FOWLER. On March 21st, aged 3, Alfred, youngest son of Robert Fowler, M.D., Bishopsgate Street Without.

KING, Gilbert, M.D., Inspector-General of Hospitals and Fleets, at Gibson Square, Islington, aged 73, on March 18.

MACKENSIE, Thomas, Esq., C.B., late Inspector-General of Hospitals, Bombay, at Cheltenham, on March 17.

PERKINS. On March 15th, Sarah, wife of Thomas Perkins, Esq., of Snaith, Yorkshire, aged 27.

SMITH. On March 19th, at 16, Caroline Street, aged 35, Mary Anne, wife of *Henry Smith, Esq.

SYKES, J., Esq., Surgeon at Mile End Road, aged 42, on March 17.

TOBIN, John K., M.D., at Brussels, aged 79, on February 17.

THE ZAMBESI EXPEDITION. This year £12,500 has been voted for the Zambesi Expedition.

TESTIMONIAL TO DR. LIVEING. The students of Middlesex Hospital have presented their Demonstrator of Anatomy, Dr. Liveing, with a silver cup, as a token of their "appreciation of his uniform kindness and attention to them."

EPIDEMIOLOGICAL SOCIETY. Dr. Babington has resigned the office of President of the Epidemiological Society; and Dr. Gavin Milroy has been nominated by the Council as his successor. The office is in future to be held for two years. Dr. Chowne and Dr. Murchison have been placed on the list of Vice-Predents.

THE STAFFORDSHIRE HOSPITAL is found to be totally inadequate to the requirements of the district. The governors have, therefore, resolved to call a meeting for the purpose of enlarging it.

SMALL-POX AT PORTSMOUTH. The small-pox has made its appearance to a considerable extent among the naval and military at Portsmouth. On Monday the *Adventure* anchored at the Motherbank, owing to small-pox having made its appearance on board. The above ship was to have sailed on Monday for China with troops.

TEA. It appears that the quantity imported last year reached the enormous aggregate of 136,806,319lbs. (although only 85,206,779lbs. were entered for home consumption), nearly three times as much as in 1848, showing the prodigious stimulus which has been given to the demand by successive reductions of duty. So much for what old Cobbett endeavoured contemptuously to sneer down as "wishy-washy stuff."

DISTRICT LUNATIC ASYLUMS IN IRELAND. On Thursday week, Colonel Greville asked the Chief Secretary for Ireland if he had received the resolutions passed by the grand juries of the different counties affected by the changes proposed in the district lunatic asylums. Sir R. Peel replied that no resolutions passed by the grand juries had yet been received by him.

IMPROVEMENT IN THE PARIS HOSPITALS. A sitting room is to be attached to each dormitory, so that when a patient is sufficiently recovered to leave his bed, he may have a place to read or to play at some innocent game, such as chess or draughts. Besides assisting in a perfect recovery of the convalescents, this plan will enable the patients confined to their beds to enjoy more quiet.

THE CORNWALL LUNACY CASE. The trial of Samuel Porter, of Flushing, near Falmouth, for maltreating his brother, a lunatic, took place last week before Mr. Baron Martin, at Bodmin. The jury found the defendant guilty of neglect, but recommended him to mercy. Sentence was postponed till the opinion of the Court of Appeal on some points of law raised by the prisoner's counsel shall be known, and the prisoner was discharged on his recognisance.

PUERPERAL FEVER IN THE HOSPITAL COCHIN. The physicians of Hospital Cochin in Paris, having observed for some years past cases of puerperal fever among the women there, of which they have not been able to discover the cause, have determined to make a change in the arrangements. They have resolved that the wards devoted to female patients shall be occasionally left vacant for some time and exposed to a current of air. To carry out this arrangement, the Municipal Council of Paris are about to build a large addition to the hospital. The new building is to contain four wards for women. Three of them only are to be occupied at a time, and one left vacant.

INTERNATIONAL REGISTRATION OF WEATHER AND DISEASE. The Registrar-General has recently brought under the notice of the authorities of the great cities of Europe a plan for securing returns of diseases and of the weather simultaneous with those of London. Vienna, which is the seat of one of the greatest medical schools of Europe, has already responded to his application, and he expects to receive from that city a regular series of returns, which cannot fail to afford interesting comparisons with those of London. Vienna is about to adopt many of the sanitary improvements which have proved efficacious in England; and Dr. Glatter, a most zealous officer of the City Council, will be able to measure their effects on the reigning disease and the rate of mortality.

Trial of Dr. Courty de Lapommerais. The Chambre des Mises en Accusation on Saturday decided that Dr. Courty de Lapommerais, the homœopathic physician, shall be tried by the Court of Assizes on the charge of having poisoned his wife's mother in 1862, and, more recently, another lady, whose life he had insured for a considerable sum. The trial will take place in the first fortnight of May.

Health of Scotland. The Registrar-General's monthly report on the eight principal towns in Scotland describes February as another month of heavy mortality, far above the average. Typhus fever carried off 206 persons, and in Perth was the cause of a fifth of the whole number of deaths, and of above a sixth in Aberdeen. The month was characterised by cold and wet in no ordinary degree. So also, the mean temperature of the month in the towns, averaging 33·8, was lower, not only than in any February, but in any month of any year since registration was commenced, nine years ago.

Parisian Hospitals. The improvement of the hospitals of Paris is going on with great activity. The Bicêtre, now an asylum for lunatics, is to be enlarged by an addition for idiotic children, which will be supplied with baths and every convenience for washing. The idiotic and epileptic children occupy at present a separate building and courtyard, but when they require baths they must use those of the adult lunatics. The building to be erected for them will open on a square planted with trees, and provided with two halls for gymnastics, of which one is to be covered, and the other exposed to the air. A special school for those exercises was established in the year 1842, and at present contains more than one hundred pupils. The buildings of the Bicêtre are ranged round nine courtyards, five of which are allocated to lunatics, and four to indigent poor. This division is subdivided into sections which comprise the less violent, the violent, the adult idiots, and the idiotic children. There is likewise a hospital in a separate quarter for prisoners who fall sick before trial.

Medical Officers in India. On Thursday week, Mr. Bazley asked the Secretary for India why medical officers of Her Majesty's British and Indian Armies were deprived of the substantive pay of their rank in India; why medical officers of the Indian Army, of ten and fifteen years' service, ranking with captains, received when on sick furlough merely the pay of a subaltern; and when the nine hundred medical officers of the late Company's army, whose services were transferred to the Crown in 1857, would be informed of what their future prospects are to be as regards rank, pay, and pension. Sir C. Wood replied that medical officers in India were paid upon a totally different scale from medical officers in this country. The whole subject had been under the consideration of himself and Council, and not long ago he stated that they were prepared with a general plan which would put things on a more satisfactory footing. Some further steps, however, required to be taken before that plan could be carried out.

Action for Libel: Millett *versus* Edmonds. This case was tried last week in the Nisi Prius Court, at Bodmin, before Mr. Baron Bramwell and a special jury. The case, as may be recollected, created a great sensation at the early part of this year. The plaintiff, Richard Oke Millett, was a member of the College of Surgeons. The defendant was also a surgeon, and had married the sister of the plaintiff. The action was brought to recover damages for a malicious prosecution, which charged that the plaintiff had caused the death by poison of his own brother Jacob Cur, now Millett. The charge was made in the most deliberate manner, and was persisted in. The deceased resided with his brother, the plaintiff, at Penpoll. J. C. Millett was of peculiar habits, and had water on the brain. Last year he had been failing, his eyesight had become impaired, and he complained much of his head, and could take but little exercise. In February 1863, he altered his will, and bequeathed everything to the plaintiff. On December 30th, he partook of a very hearty dinner, and afterwards complained of feeling "sinking." The plaintiff gave him brandy, and he said he thought he felt better, but complained of cold. In the course of that evening it was evident that he had a seizure, and in a few hours he died. The plaintiff then sent for the coroner and the undertaker. An inquest was held, and a verdict returned that the deceased had died from natural causes; and he was in due time buried, but in a short time the defendant applied to the Secretary of State for an order for the exhumation of the body. This was granted, and on January 22nd, the plaintiff was arrested on a charge that he had poisoned his brother. He was taken before the magistrates four times, but was detained in custody all the time, as bail was refused; he was fourteen days in custody, but eventually he was discharged, and then brought this action. The plaintiff swore that there was not the slightest pretence for saying that he had anything to do with his brother's death or his uncle's death. Dr. Taylor stated that the appearances were quite consistent with death having arisen from natural causes. The defence was that, in consequence of the sudden deaths of several members of the family, there were rumours in the neighbourhood, which had at last reached the defendant, and that he had thought it incumbent on him to cause an investigation. In his examination the defendant stated that, although at the time he considered there were sufficient grounds for the course he had adopted, yet he was now fully convinced of the plaintiff's innocence of the charge. The jury returned a verdict for the plaintiff. Damages, £400.

The late Dr. Carlyon. Dr. Clement Carlyon, youngest son of the Rev. John Carlyon of Truro, was born on April 22nd, 1777. He was educated at the Truro Grammar School; and had for companions, Sir Humphry Davy, Henry Martyn the missionary, and Prebendary Kempthorne. He proceeded from Truro School to College; and went out as Tenth Wrangler in 1798. In the same year, he was chosen a travelling bachelor, with the annual stipend of £100. During his travels, which embraced Central Europe and the northern parts of Sweden, he had for his principal companion the late Dr. Parry; and their excursions were frequently shared by Samuel Taylor Coleridge. Of him, and of other remarkable men with whom he was more or less associated abroad, he has recorded many interesting and personal traits in his *Early Years and Late Reflections*. Dr. Carlyon was elected to one of the valuable Fellowships of Pembroke Hall soon after he took his B.A. degree, and he held it till his marriage in 1806. Before this conclusion of bachelor life, he had proceeded from the degree of M.A. to that of M.D., and settled as a physician at Truro, where he speedily acquired the confidence of a large circle of society, including many of the principal families of Cornwall. He was a model physician of the old school, a shrewd and quick observer of symptoms, full of ready resource for their treatment, clear and prompt in judgment, delicate in tact, and, above all, large and warm in heart—so that all his powers moved in active concert for the service of his patient. In 1827, he published a pamphlet on the *Endemic Typhus Fever of Cornwall*, in which the principles of sanitary science, of late familiarised to the public

mind through so many channels, but then quite novel, are enforced with the greatest clearness of detail and weight of argument. Before this time, Dr. Carlyon had become one of the physicians to the Cornwall Infirmary; and was, on his retirement in 1849, presented by the governors with a valuable salver. He withdrew almost entirely from private practice when he gave up his public medical appointment; but his interest in his profession—in its study as well as appliances—continued always lively. Dr. Carlyon now employed his greater leisure in the diligent promotion of the useful and charitable institutions of his town and county, for both of which he was a magistrate. To the Lunatic Asylum, at Bodmin, he devoted particular attention. In the municipal affairs of Truro, he had always taken a very active part, and five times he filled the civic chair. Dr. Carlyon has died within a few weeks of eighty-seven,—but without decay of faculties or anything like decrepitude. His benignant smile had not lost its glow, nor had his cordial "manly voice been turned again towards childish treble." Those literary pursuits which "Rome's least mortal mind" has called the delight of old age, also engaged much of Dr. Carlyon's later years. He held a facile and graceful pen, and his writings reflect the same qualities of mind and character which belonged to him in social life. His *Precepts of Health* is a pleasant and forcible exposition of his experience, in confirmation of the maxims of old Louis Cornaro, well supported, assuredly, by the hale and cheery aspect of the author. Dr. Carlyon was fond of the country, of nature altogether, of his farm, of his dog and gun, but especially of his fishing-rod. The last year of his life witnessed successes of this veteran Waltonian. He was a whole man, body as well as mind.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday. .....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 P.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Dr. E. Symes Thompson, "Indigestion in Early Phthisis."

Tuesday. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."

Wednesday. Chemical (Anniversary).

Thursday. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."—Royal.

Friday. Western Medical and Surgical Society, 8 P.M. Mr. Vasey, "On the Management of Children's Teeth."

Saturday. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Pathological Society.—The whole matter is in a nutshell. The Royal Medical and Chirurgical Society either does or it does not charge the Pathological Society a fair rent for the accommodation afforded by it. Let the Pathological Society prove that the terms are exorbitant, and we are sure that the Royal Medical and Chirurgical Society will do what is just in such case. Any one who reads the correspondence and remarks on this question will see clearly enough that the Pathological Society has got the idea into its head that the Royal Medical and Chirurgical Society is bound to pay towards its sustenance, or to give it a helping hand in some way or other. The threats of the Pathological gentlemen, who say they will take their custom away from Berners Street if the Royal Medical and Chirurgical Society does not come down in its rent, are simply laughable. We repeat it again: the transaction, to be equitable, must be a purely commercial one. The Pathological Society must pay the market price for the article they require.

Provincial Surgery.—Sir: What does one of your contemporaries mean by saying or insinuating that no cases of severity are treated in country hospitals? He must be very ignorant of what he is writing about. Why we excise joints, remove jaws, operate for stone, practise ovariotomy, take off thighs and legs, operate for ununited fracture, perform plastic surgery, etc. We do all this in our hospital, although it is situated nearly two hundred miles away from the Great Metropolis!

I am, etc., A Country Surgeon.

[Our correspondent need. not apologise for country surgery. Every year diminishes the conventional distinction between London and provincial surgeons. The distinction would disappear at once if country surgery were duly represented in the Council of the College of Surgeons. Editor.]

A New Anæsthetic: Anæsthetic Quackeries.—Sir: A good deal of *quasi* scientific explication or evolution of the virtues of a new anæsthetic, *nitrous oxide*, is to be found this month and last in the journals; its chief advantage, as there emphasised, being, that it is much more safe than chloroform. It so appears, however, that one most melancholy death is noted this year already in New York from this new fantastic anæsthetic, nitrous oxide. It was that of a fine young woman, in perfect health, who went to a dentist to have a tooth out, but never recovered from the effect of this gas. Another of the quackeries of anæsthetics, as one cannot help designating these sensationalisms and novelties, is a story (a "cock and bull" story, let me *pro hac vice* term it after the manner of Sterne) to be found in a popular magazine this month and last, for which story, the authoress, it is said, has got two thousand pounds! the chief point or plot hinging on two poor surgeons who are engaged to perform a surgical operation. We have the "high-born damsels" in great feather in the story. One high-born lady says, she has a kind of spiritual manifestation and celestial answers from table-knocking; that the patient about to undergo the surgical operation ought not to have the chloroform; and then a melancholy but idiotic sensation chapter follows, with the surgical operation, the doctors differing, the patient dead from the chloroform in the confusion, and taken away dead downstairs after the manner of a funeral! Several persons, to my knowledge, have been terrified at the use of chloroform by this story; it bears on it, however, the impress of the utmost ignorance of all about surgical operations and chloroform; and as such, members of the Association and readers ought to discountenance it.

Sackville Street, March 5th, 1864. I am, etc., C. K.

P.S. How much better would it be if in place of medical journals settling the political claims of Denmark, or touting for pugilists, or giving us dreary and weary furlongs of articles, they would permit subjects like chloroform to be discussed, or lunatic asylums, and not permit *Household Words*, or any other words, to deluge the public with vulgar unmeaning trash, as in the memorable lunatic rubbish of "Hard Cash", or this tale just referred to on chloroform, which has now as great a run in the libraries. We have had a sickening of the Townley case. *Punch* is now the best of our medical reformers; he is nearly infallible on medical questions; one would almost say or wish, with a sigh, *si sic omnes!* One of these poor surgeons, in the tale above referred to, is ruined or tried for malpraxis, because he did not hear the table-knocking, and gave the chloroform. It will be somebody else's turn next, in the present temper of ignorant juries of coroners.

Gulstonian Lectures

ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO ST. MARY'S HOSPITAL.

Mr. President and Gentlemen,—I should have hesitated in bringing under the notice of this learned assemblage, so commonplace—I may say, so trite—a subject as is that of Venesection—the effects of the abstraction of blood in diseases—had I not, sir, received your sanction in doing so. What especially influences me in selecting such a topic as the subject matter of these discourses, is the very strong conviction, founded on a careful consideration of the whole question, which I hold—that the practice of the present day, in respect of the abstraction of blood in diseases, is not unfrequently prejudicial to the interests of the sick; and that it is neither in accordance with the opinions of the profession at large, nor with a scientific consideration of the value of venesection as a remedy. A strange influence, whose source and progress it is not easy to trace, has—as we are all well aware—in these latter days, quietly, and I may say irresistibly, pervaded and passed into the practice of medicine; forcing upon men's actions, if not upon their convictions, the conclusion, that abstraction of blood in disease is, at this period of the world's history, *pro tanto*, something akin to the abstraction of life from the patient's body.

This revolution in therapeutics, which, amidst the many remarkable revolutions in treatment which this day witnesses, may still perhaps be called extraordinary, has, to all appearance, been accepted and acquiesced in by the profession, almost without a question. So far, indeed, from doubting its propriety, men have busied themselves rather in attempting to find excuses for, or explanations of, the change in practice, than in questioning and arguing as to its fitness. And the result is that, in respect of the use of bleeding, the most powerful of therapeutical agents, we find ourselves placed in this position: that our practice is directly opposed to the lessons handed down to us for our instruction, as the results of the experience of all the great master-minds who have ever practised medicine in the past; opposed also to the recorded teachings of all our great modern medical authorities—the authorities of the day; and, what is still more remarkable, opposed also, in a very considerable degree, to the belief and convictions of many who adopt the negative practice solely under obedience to the imperious force of custom.

Moreover, it is to be noted, that this unnatural dread of the evil consequences of bleeding is not now confined to men of medicine. It has, through our teachings and practice, taken firm hold on the public mind; so that, in truth, patients, under the bias of this new idea, have imbibed as great a horror of being bled as doctors have of bleeding them. The result of all this is, that the practitioner, whose experience and judgment might have led him, in a given emergency, to perform venesection, not unfrequently withholds his hands; dreading lest, should his patient die, the *onus* of the death may be put to the account of his fatal lancet. There are few of us, indeed, who, when the question of the use of venesection as a desirable remedy in any given case comes before us, do not find ourselves under the biassing influence of this anti-venesecting epidemic, and allow it to exercise an undue sway over our judgment.

If such be the position of this matter, may I not reasonably ask you to consider with me, whether there may not be some fallacy in the arguments which have brought us to such a remarkable conclusion? Surely, it is hardly credible that a remedy—undeniably the most rapid and powerfully telling in action of all remedies—which has, from the earliest and during all ages of medicine, been ever found a sovereign remedy in the hands of the greatest masters of our art—should have, all at once, become something worse than useless in our hands. Granting even, for the moment, the truth of the idea that some great change has of late years come over the constitution of human bodies; that this man of modern civilisation has undergone some mysterious constitutional modifications; that diseased entities, imaginary or otherwise, or the bodies wherein they manifest themselves, have changed their type; still, surely, ought this remedy, like every other standard remedy (if it were ever an useful therapeutical agent) to hold its own as such. Reason seems to plainly tell us that, so long as this tangible body of man, with all its component parts, remains the same—the same in structure, the same in vital manifestations, the same in its functional operations, the same in its diseases—so long must the effects of the loss of blood upon it in health and in disease be ever the same in kind. Whatever be the nature of those supposed altered conditions of the body, which are represented to us in this change-of-type idea, still the agencies which move the animal economy, and the parts of it, must be ever the same in kind. The kind of effect, consequently, produced by bloodletting now, should be precisely similar to what it has ever been—in those other days when bloodletting was admittedly a princely remedy of diseased humanity. The influence of the remedy must be ever the same in quality; and, if changed at all, changed only in respect of the quantity of blood that requires abstraction for the cure of disease.

But, in truth, sir, from whatever point of view the subject is regarded, the conclusion seems to me inevitable; viz., that blood-letting does not hold in our estimation its rightful position as a therapeutical agent; and that, therefore, and in so far, the interests of the sick are prejudiced. That such is really the case, I hope to be able to satisfy you; and the strong, and I trust rational, feeling which I hold on the subject, must be my apology for discussing this question here. And I may express a hope, that the discussion of the subject within these walls will perhaps induce the profession at large to re-consider the position which blood-letting at present holds in therapeutics. I cannot but think, that a calm survey of the causes of this modern decline and fall of venesection in professional estimation—a nearer consideration of the

actual effects produced by venesection, and, I might add, a truer reading of the lessons taught by modern physiology—will be found to demonstrate, that the practical conclusion adopted by us is not justified by sound premises.

With this object in view, I will, therefore, in the first place, briefly relate the causes, real or supposed, which have brought about this modern revolution in practice, and examine their reasonableness. And having done this, I will then inquire more particularly what are the actual effects over diseases produced by the loss of blood; and shall attempt to deduce from such considerations the conclusion, that blood-letting, rightly applied, is now, as it ever has been, a good remedy in diseases.

The first cause which presents itself for our consideration, as explanatory of this present bloodless epoch of medical practice, is the *change in type* which diseases are said to have undergone; and undergone, indeed, as some assure us, even while the present generation of doctors has been passing from youth to advanced age. This explanation has been accepted by some of the very highest authorities in our profession, and therefore demands our most careful and respectful consideration. With the profession at large, I believe the idea has been admitted without any very critical inquiry as to its merits.

And, *in limine*, without wishing to prejudice the theory, I cannot help remarking that, unless I am much mistaken, this theory has been called in, I will not say as a *Deus ex machinâ* to explain the difficulty, but certainly after the difficulty had presented itself for explanation. I look in vain for any proof of the assertion, that doctors left off bleeding because they began to note that their patient's bodies would no longer suffer the bleeding as in former days.

Bleeding, indeed, as an universal and infallible remedy in all diseases, appears to have begun its fall into disrepute—I mean its present fall—at the very time when our art, under the enlightenment of modern scientific investigation, was emerging from what I would call the dark ages of medicine. And I, therefore, cannot help calling your notice to the suspicious circumstance, that the asserted facts on which this change-of-type theory is founded—the disrepute of wholesale blood-lettings, the departure of the antiquated humoral theory, and the life of our modern scientific medicine—apparently all occurred at a somewhat similar period of the history of medicine. I think, therefore, that even at the threshold of the inquiry, the theory may be fairly regarded with some degree of suspicion.

I know not to whom is due the credit of first suggesting the term of change of type in diseases, nor when it first appeared in medical literature; nor do I know what was the precise idea attached to it by its inventor; but by the term is meant, as I understand it, not any imaginative alteration in the essential nature of diseases themselves, but some change in the condition of the body which is the subject of diseases. Inflammations, I suppose it would be argued, are the same now, in so far as their characters, anatomical and dynamical, are concerned, as they ever were since diseases fell on man; but the body in which they manifest themselves is somehow changed. The general diathesis of humanity has undergone some gradual transformation, so that the manifestations of the reactions of diseases upon mankind are different now from what they were in former days. Moreover, this change, some supporters of the theory tell us, is no partial one; the whole civilised human family has come under the novel phasis. Not only here, but at the antipodes, men will no longer bear the bleedings to which they were once beneficially subjected. And I believe that even veterinary surgeons have found, or have thought to find, the same to be true of the constitution of the animals subjected to their care.

Besides this, it is not to be imagined that now, for the first time in the history of nosology, such peculiar modifications have occurred in man's nature. The course of diseases amongst mankind, authority assures us, has ever, at different epochs, been marked by variableness and shadows of change. To use the words of the authority referred to: "There are waves of time, through which the sthenic and asthenic characters of disease prevail in succession, and we are at present living amid one of its adynamic phases." "I share in the belief" (he adds) "which has grown out of the experience of many thoughtful and observant men, that, in this country at least, the human constitution has for several years been suffering a gradual change; that almost all inflammatory disorders assume now-a-days a more adynamic type, and require less energetic treatment than in the early part of the present century."

It must also be remembered, that this supposed change in constitution is something quite distinct from the changes in man's bodily state which result from any of the well defined influences of occupation or climate to which he may be accidentally subjected. This peculiar change is, in fact, the resultant of an influence—an unknown influence—totally distinct from those ordinary influences, whose good or evil operations on the body we can note and appreciate; and, as I understand it, it has fallen alike upon all—upon the ruddy rustic, the corpulent alderman, the thin, sallow, anxious-faced man of business, and the pallid artisan; affecting each of them, and more and less, according to the varying merits of their constitutions.

Let me now ask you to consider the grounds upon which is based this change-of-type theory. Have we, indeed, good reason to believe that the human constitution has undergone some decided and inexplicable modification—the modification being manifested to us in an alteration of the effects produced by venesection in inflammations? for you will remember, that the entire basis of the argument in favour of the theory rests upon the assumed conclusion, that venesection produces different effects now from what it formerly did.

In approaching the subject argumentatively, we at once perceive that the theory rests on very unsatisfactory evidence; that it, in fact, is founded mainly on what I may be permitted to call the fluctuating basis of personal opinion, rather than upon clear and tangible facts. Consider what difficult problems we have to satisfy before we can rightly accept the conclusion involved in this change-of-type theory. The theory rests upon the assumption, that the effects of blood-letting now are different from what they were in other days—rests consequently upon a comparative estimate of blood-letting at different and distant periods of time. Could a more difficult question be proposed for solution? To answer it, we have, in the first place, to determine absolutely what were the effects of blood-letting in certain given diseases at

different periods—in the past and at the present time. We have, in truth, as it seems to me, to compare things which are utterly incapable of any fair comparison; viz., the practice of men of medicine of the past generation with the practice of these times. Or, again, we have to compare the results of our own practice at long and distant intervals of time. We have to satisfy ourselves that the remedy which was a good one in the hands of our forefathers is a bad one—or rather no remedy at all—now; that the bleedings of twenty-five and fifty years ago were good, useful, and justifiable bleedings, and are neither good, useful, nor justifiable now. And we have to do all this out of a comparison of the recorded practice of past days with the practice of the present day; or out of a recollection of what happened to us in our treatment of diseases when we were a quarter of a century and more younger in ideas and younger in experience than we now are, and, of course, completely innocent of all the important facts and theories which the last quarter or half-century has added to our knowledge. No easy task this, I venture to think; and especially when attempted at this present age of fluctuating therapeutical opinions.

It must be remembered, as I have said, that the proof of this change in type of disease rests mainly upon the assumption—rather is, in fact, deduced from the circumstance—that men did bleed in other days, and that they do not bleed now; and that, in both cases, the practice was equally right. But how is it possible for us to compare to any useful purpose the curative (the bleeding) practice of men who lived half a century and more ago with the practice of men of the present day? Where are the data for such a comparison? The clinical medicine, the diagnosis, the pathology, and the therapeutics, of Cullen and Gregory, are not the clinical medicine, the diagnosis, the pathology, and the therapeutics, of this present day. Where are the tangible records left to us by them, from which we may draw anything like a reasonable comparison between what were the effects of bleeding in their hands, and what they are in our own? Where are the clinical records left by Cullen and Gregory to which we can refer, as to tests of the real value of their practice? At this period of day, when our whole therapeutical proceedings are subjected to the rudest shocks—are, I may say, being revolutionised—is it possible to admit, that the mere use or disuse of a remedy at different epochs of time can be any real or proper test of its merits; and especially when the real virtues of the remedy have never been, and still actually are, matter of disputation? In such a difficult case as this, and in such a fluctuating business, as is the treatment of disease—ever so much a matter of personal opinion—surely, except on the very strongest proofs, no one can reasonably ask us to repose unlimited confidence in the mere assertions even of the very highest authorities who have adorned the practice of our most fallible art. But it is in truth, on the strength of mere assertion, that the change-of-type theory is founded. And if so, then it follows, that the practice of bleeding, said to have been so largely and universally adopted by those great men in past days, affords in itself no proof demonstrative of the actual value of the remedy, or of its proper application in all the cases in which it was employed by them; any more than does the general abstinence from venesection which characterises the present day absolutely prove its inutility as a remedy now.

And here, perhaps, I may usefully draw an illustration from the pages of an authority highly esteemed by all of us, to show how dangerous it is to adopt conclusions as to the value of a remedy from the mere fact of its being largely employed and highly extolled by a master of our art. Had Andral, like Cullen and Gregory, left us no clinical records of his practice, but merely the general assertion of his admiration of blood-letting as a remedy in acute inflammations of the chest, his authority, like theirs, might have been quoted in favour of the theory that diseases have changed in type. Andral asserted, some forty years ago, that, of all remedies in pneumonia, there was none to compare with blood-letting. The experience of ages, he tells us, has taught physicians to be more prodigal in the abstracting of blood in this disease than in any other. There is no period of the disease, no condition of the pulse, no debilitated state of the system, no age, in which the remedy may not be used. Such was the conclusion which his experience led him to entertain of the value of blood-letting.

And now let us see the results of his practice, as given in his truthful and admirable pages. He records sixty-five cases of pneumonia; and of these, thirty-six, or more than one-half, died. Of nine uncomplicated cases of pneumonia, which reached only the first stage of congestion, two (or about one in four) died. Of thirteen who reached the second stage, five (or about one in two and a half) died. Of seven in the third stage, gray hepatisation, all died; and of thirty-six complicated cases, twenty-two died. I need not stop to say, how little Andral's practice justifies his eulogium of blood-letting. But we may surely judge from this fact of the value of Cullen's, Gregory's, and other opinions, upon which Dr. Alison laid so much stress, in this matter. They, like Andral, bore the warmest testimony to the excellent effects of blood-letting in inflammations; but, unlike Andral, they have left no record whereby to test the worth of their conclusions. But why should we trust their recorded assertions any more than the recorded assertions of Andral? Why may not they, equally as Andral, have misinterpreted the effects of bleeding, the results of their own practice? I have referred to this instance in Andral, not for the purpose of showing that blood-letting rightly used is an improper remedy in pneumonia, but solely to show how ill sustained this theory may be when supported on the assertion of mere authority. Andral's fatal practice, in my view, proves only the abuse and bad application of a most excellent remedy in pneumonia.

Another useful illustration of the difficulty of drawing satisfactory conclusions concerning the change of type in diseases from a comparative consideration of the treatment adopted by our forefathers and by ourselves, may be obtained from the history of the treatment of acute rheumatism. Here we have an acute inflammatory disease, striking and simple in its aspects, which must have been as familiar to our forefathers as it is to us—requiring none of our modern methods of diagnosis for its determination; moreover, a disease bearing with it, in a very marked degree, the characters to which the idea of phlogistic especially appertains; and which, in truth, has in past times ever been regarded as an inflammation demanding, in an especial manner, the free use of antiphlogistic remedies for its cure. But who, at this day, will venture to affirm, from the

mere fact that such was the practice of the greatest authorities in the past, that venesection was ever, at any time, a right and proper remedy in acute rheumatism? I suppose no one thinks it necessary in this case to call in the change-of-type theory to account for the change of practice; though it is hard to see in what particular the case differs from that of pneumonia, which is so especially used as illustrative of the change-of-type theory. The purer pathology and the better knowledge of the nature of diseases which belong to the medicine of this day inevitably bring us to the conclusion, that venesection neither is, nor ever could have been, the right remedy in this disease.

In this case, then, of acute rheumatism, there is no pretence for concluding, from the fact of the change in its treatment, that the disease has undergone a change in type. We know, indeed, that blood-letting neither is, nor ever could have been, a right remedy for the cure of acute rheumatism, even though there are present in it all those signs which, as we are assured, incontestably indicated the propriety of blood-letting to Cullen and Gregory and their predecessors.

Gregory and his predecessors, it has been argued by Dr. Alison, might have been ignorant of the exact condition of the thoracic organs of their patients—whether, in fact, they had to deal with pneumonia, or pleurisy, or pericarditis, or other inflammation of parts within the thorax; but the state of the pulse, and the tongue, and the fever, and the abstracted blood, were facts which they could appreciate as well as we; and that, therefore, they knew when to bleed as well as we do. But, surely, those who thus argue will not assert, that those things—the hard, full pulse, and the coated tongue, and the high fever, etc., of acute rheumatism—were a justification of blood-letting in this disease. And if so, then it clearly follows that the main argument—viz., the propriety of the practice of Cullen and Gregory—upon which is based the theory, that the diseases of humanity in the time of Cullen and of Gregory required blood-letting for their cure, but do not require it now, falls to the ground.

Another illustration of the position I am asserting, may be drawn from the history of the treatment of fevers. There have been times when blood-letting has been a very favourite remedy in the treatment of these diseases; and, in truth, never was it more so than during the first thirty years of the present century—the epoch which is connected in this wise with the names of Armstrong, and Clutterbuck, and Bateman. Never, indeed, has more blood flowed from the veins and arteries of mankind, under the authority of medicine, than during the first quarter of the present century; during the time, remember, when "the asthenic tide" was rolling in upon us. Let me give you an example of what was done about forty years ago, and in the words of a living authority. "I remember," says Dr. Stokes, "when I was a student of the old Meath Hospital, there was hardly a morning that some twenty or thirty unfortunate creatures were not phlebotomised largely. The floor was running with blood; it was difficult to cross the prescribing hall for fear of slipping. Patients were seen wallowing in their own blood, like leeches after a salt emetic." Dr. Rush tells us that ninety ounces were at one sitting taken from his friend Dr. Dewees, and of course with advantage. Dr. Dewees, again, on his part, took eighty ounces from a young delicate woman in puerperal convulsions; and from another like woman, under similar circumstances, he drew 120 ounces within five or six hours, and twenty ounces more on the next day. This patient, however, lost her sight for a fortnight, and did not recover for six months; but do not (says Dr. Clutterbuck, who tells the tale to his students) hastily conclude that the loss of blood caused the blindness; "a much more rational cause is to be found in the affection of the brain which caused the convulsions." Dr. James Currie of Liverpool was bled to 200 ounces between October and May, and was rescued from pulmonary consumption, says the same author; but he nevertheless died eventually of the same. Another physician gives us the case of a boy suffering from diabetes, from whom 209 ounces (thirteen pounds) were taken in the course of fifty-one days. A taste of his own practice is also given us by Dr. Clutterbuck. In 1836, he visited a Mrs. M., in consultation, who had suffered from various attacks of inflammation. The uterus, the chest, and latterly the brain, had all been in turn violently affected, "so as to call for frequently repeated blood-letting, which always produced great, though only temporary, relief." A minute account of this lady's loss of blood had been kept; and the sum total is worth note, considering it was taken during the so-called asthenic phase of disease. Fifty-eight was the number of her bleedings in the arms; five times she had been cupped; and at least 1000 leeches had been applied to her body. Dr. Clutterbuck considered himself a very cautious practitioner; and, therefore, has to draw illustrations of what he considered boldness in the use of the lancet outside his own practice. In one of our great hospitals lately, he says, a case occurred where 12 ounces (eight pounds) were drawn at one time, in order, by inducing syncope, to facilitate the reduction of a dislocated thigh. The patient died in a week after the blood-letting; of course, not from loss of blood, but from inflammation of the vein.

I need not occupy your time by giving you other illustrations of the fact, that blood-letting saw its palmiest days during the period I am speaking of—a supposed asthenic phase of time. But does the fact of the frequency of its use in fevers, in any way prove, or satisfy you, that blood-letting was a proper remedy in fevers? Is it not almost clear as the simplest demonstration, that we do not bleed in fevers because our pathological views of their nature show the inutility, and worse than inutility, of the practice? Is it not certain, that Clutterbuck, and Armstrong, and their numerous disciples, bled because their pathological views led them to see in local inflammations the essential characters of fever? Are we not all ready to predict that, whatever be the future ebbs and flows of diseases in their sthenic and asthenic aspects, never again will blood-letting be a proper remedy in fevers? We recognise, what neither Armstrong nor those others did, the essential nature of these diseases; we see that they have a prescribed course to run; and that to take the whole mass of the blood out of the body would not remove the disease out of it. As these fevers are, so have they ever been, and so may we conclude that they will ever be. True, we do read of wonderful benefits which have attended blood-letting in fevers; but these supposed benefits were obtained by comparing the results of the practice at different periods,

nowing a less mortality in one particular epidemic f fever than in some other epidemic. The results eally show nothing more than that in certain forms f fever blood-letting is less injurious than it is in thers—for example, in relapsing or inflammatory nan in typhus fever.

I ask you, then, are you ready to maintain that ne practice of our forefathers, in this matter of leeding in fevers, was a proper practice? I may urely answer, No. And if such be the answer, then hat follows is this: their practice was wrong; and ll conclusions founded on the assumption of the pro- riety of such practice must be ill founded, and there- ore the conclusion that diseases have changed their ype.

I might apply the same kind of reasoning to the ases of tubercular and other adynamic diseases, and sk if the mere fact that blood-letting was a common emedy with our forefathers in those diseases is any roof of the propriety of its use? and whether, nerefore, we can fairly draw any reasonable conclu- ons as to a change of type in diseases from the mere ict that we do not resort to blood-letting now in neir treatment, as our fathers did? Does not nodern pathology inevitably show that blood-letting either is nor ever could have been a right remedy or the cure of such tubercular diseases?

[*To be continued.*]

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

Lock Ward, No. II.

CASE OF PHAGEDÆNIC ULCERATION: USE OF MERCURY.

Under the care of K. E. Knight, Esq.

[. M., aged 20, was admitted November 3rd, 1863, ith a sloughing ulcer over the right trochanter; a eep ulcer three inches in diameter, over the right ates; an immense sloughing ulcer of the calf of the ght leg, the fleshy portions of the gastrocnemius nd soleus being eaten away, and the deep popliteal ascia laid bare. The patient was obliged to lie on er face. She was ordered to have bark and am- onia wine, and liberal diet; opium at night; and a nseed poultice to the sores. Under this treatment, ne sloughing was arrested. She was ordered to take ve grains of blue pill and half a grain of powdered pium night and morning; and to have a lotion of ilute nitric acid applied to the painful part.

As soon as the mercury affected the system, the ffect was magical. The ulcers assumed a healthy spect, and healed rapidly. The patient left the hos- ital at the end of two months, cured. Practical nen can draw their own conclusions from this case.

EPITHELIAL CANCER OF PENIS AND SCROTUM; REMOVAL: RECOVERY.

Under the care of F. Page, M.D.

'. D., a pensioner, aged 63 years, was admitted Feb- uary 2nd, 1863, with epithelial cancer of the penis, nvolving a considerable portion of the scrotum, of two years' duration. The whole surface of the parts was ulcerated; and the urethra was destroyed from the orifice to the pubes. The inguinal glands were healthy.

Dr. Page operated as follows. Commencing below, he removed all the anterior portion of the scrotum, laying bare the testes, and amputated the penis close to the pubes. The hæmorrhage was inconsiderable. The patient recovered without a single bad symptom; and at the end of twelve months he appears in robust health, and the parts operated on in a perfectly sound condition.

The result of this operation would go to show that epithelial cancer of the genitals offers a better chance of cure by removal than when the disease is situated in any other part of the body.

Original Communications.

THE NATURE OF SO-CALLED "PARASITES" OF THE SKIN.

By W. Tilbury Fox, M.D.Lond.; University Medical Scholar; Physician to the Farringdon General Dispensary.

[*Concluded from page* 312.]

The effects of treatment are worthy of mention.

In the tineæ, if the parasite be destroyed, a cure is effected without the use of any internal remedies. It is so in herpes circinatus, in many cases of tinea tonsurans, and in pityriasis versicolor, for instance. Depilation acts in the same way by the removal of the parasite in part, and more especially by enabling us to reach the fungous elements more easily with parasiticides. Mr. Wilson admits that depilation "disposes to the cure of the local disease"; and adds: "But we do and must disbelieve that the removal of the fungus is the proper explanation of the cure." It is partly by removal, and partly by affording facility of access to the fungus; that is the true *modus operandi* of the operation. "We see," says Mr. Wilson, "in depilation a stimulant, and a valuable stimulant," etc.; and "we have been led to regard avulsion as one of the best, indeed, our only reliable remedy, for producing *deep stimulation of the cutaneous tissues*, for setting up a new action in the papillæ of the hair; as the only remedy, in fact, by which we can reach successfully the fundus of the hair-follicle." "It sets up a new action, a healthful inflammatory process, in place of a morbid inflammatory process—a process whose natural course is to end in resolution, instead of one whose nature is perpetuity. For morbid cell-germs, it establishes healthy and plastic inflammation, and sometimes healthy suppuration; when, as Bazin declares, the fungus is starved or drowned." Now, in the very worst forms of the disease, the hairs are perfectly loose, and can be even readily combed out; hence avulsion can do nothing here by stimulation, only by removing the sporules. Indeed, if there be a point of practical importance in the treatment of parasitic disease, it is the removal of all "dark stubs", which are quite loose, but which are literally crammed with "germs" of disease. How the mere removal of a hair from its follicle can set up a healthy process, and alter *in toto* the particular form of nutrition upon which depends the morbid cell-genesis, is a problem which would be indeed difficult to prove; it is curious pathology. The depilation is followed by a reparative action, by which the hair is reproduced in integrity, upon the same principle that all local injuries are remedied. "Even

Bazin has recourse to avulsion as a stimulant in old cases of mentagra, wherein the hair acts the part of a foreign body, of a thorn, in the skin, and so keeps up irritation". This is an admission that the hair acts as an *irritant*. But a healthy hair does not do so; consequently, the removal of the hair is effected not with the view of *stimulation*. In addition, it creates a free outlet for the retained contents of the follicle. Stimulation is best promoted by anything which increases the supply of blood (in harmony with proper nutrition) to the follicle and its papilla; at least, so teaches pathology. In ophthalmia tarsi, the extraction of the hairs acts in a great degree in like manner, by giving a free outlet for the contents of the inflamed follicles. Depilation, *plus* the use of parasiticides, is the most efficacious plan of treatment; for the least amount of fungus left behind will itself overcome the good effects of avulsion. These considerations are very relevant to the question under consideration.

At page 202 of Mr. Wilson's essay, we read: "We have remarked, that the chief difference between favus and the other forms of phytodermic disease is due to a pustular complication. In fact, we have observed that the layer of the favus-cup, which lies in contact with the basement-membrane, is composed of pus-globules." This is not consonant with general observation; it is rather the exception, according to most observation.

At page 215, we read: "Suppuration of the follicles performs the part of a natural cure of the disease. Bazin emphatically observes, that pus destroys the parasitic fungus; and therefore, in seeking to find it when suppuration has commenced, we must avoid those follicles and those hairs which are bathed with pus." So far, then, there is an evident contradiction. Pus is the great destroyer, and yet the great producer, of the parasitic growth ("granular degeneration"): to avoid which, Mr. Wilson adds: "That kind of inflammation which is productive of normal pus is not the form of inflammation which causes granular degeneration of the cell-tissues of the skin, but, on the contrary, is opposed to it." I dare call this argument pure assumption. My examinations have been carefully made, and have not resulted in determining the existence of the presence of pus and a luxuriating state of fungus; nay, the reverse. Nor does it occur to me to adduce, as a matter of fairness, any fact in support of the existence of a specificity in the attendant inflammation. An abnormal state of nutrition exists, which is seen by the presence in the follicle, in favus especially, of a secretion "possessing a fluid or semifluid state when first formed, and hardening into a kind of paste, which subsequently becomes dry and pulverulent," etc. This is not pus; it is observed in the convalescence from favus, when the true favus-matter has disappeared, and is typified by the "secondary eruptions" which follow the fully developed disease. It is an evidence of the existence of a special pabulum or soil; and, be it observed, does not give origin to the "granules" or parasites, which arise from out their own proper germs. Pus, then, is often absent; and there is no ground for believing in the existence of a specific kind of inflammation, but in a state of nutrition which, *per se*, does not give origin to parasites. But there is another consideration. It has been clearly shown that there is *great similitude* between the spores of favus (supposed by Mr. Wilson to arise from pus-nuclei) and those of the trichophyton and even oidium and torula, if there be not an identity.

"We can only say that we attach very little weight to the opinion of any man who has the temerity to pretend to establish a diagnosis between favus and trichosis tonsurans, on the more than doubtful differential characters of the achorion and trichophyton, as viewed by the microscope," says Mr. Wilson, in words which happily confirm the opinion advocated by myself in my work on *Parasitic Disease*, and which certainly imply that the "granular" bodies in the two cases have a common origin. How, then, come favus from pus, and the trichophyton from the epidermic granules?

The colour of favus has been attributed to the appropriation by that disease of the colouring principle of pus. Well, it may be. But, if the colour of parasitic vegetations (granular degenerations) be derived from the tissues, how are we to explain the red, golden, and yellow red aspect of the *zooglœa capillorum* discovered by Dr. Aloys Martin (*Med.-Chir. Review*, April 1863) upon the heads of two children ill with typhus? Such is the name given to a parasite which was found attacking the hairs after the usual method of parasitic growth. The colour of favus is, then, no very great argument in favour of the origin of the plant from pus.

It will be well to consider, in the next place, some subsidiary conditions, including also the manner in which proliferation takes place, according to my own observations. And, first, it appears to me that the trinuclear and binuclear character of the spore is not an established fact. It is not uncommon to find a nucleus and granular contents in the cells or sporules; and the arrangement may be bi- or tri-nuclear, as in torula; but this cannot be established as the rule in the parasitic fungi, except in trichophyton, achorion, and tri-sporuloides. In microsporon Audouini, nuclei are mostly invisible, and granules are even indistinct. This much is true, that whenever the nuclei are *double*, the cell has a *tendency* to assume the oblong form. The junction and growth of cells produces mycelium, and in the latter cellules are formed by endogenous growth. The sporules do not increase in number, as a general rule, by the process of budding, but by the discharge of cell-contents and the enlargement and growth of the discharged granules (or nucleoli). Dr. Bennett's doctrine appears to me to be the true one, that not division of filaments and cells, but *molecular growth*, is the true developmental process. On the contrary, Dr. Beale, in the controversy upon this point (British Medical Journal for 1863), asserts that cells grow until they reach a certain size, and then divide. But, as Dr. Bennett says, if the molecules divide, "how is it that the filaments can form at all?" Mr. Rainey's observations are confirmatory of Dr. Bennett's view, which is also shown to be applicable to the early formation of the ovum. The best example of the production of sporules by simple molecular growth is seen in the enlargement of the stromal (or nuclear) into the perfect form of fungus. It has never happened to me to see the division of a trinuclear cell, so as to produce a branched mycelial filament, but only a process of sprouting on a limited scale.

"Favus matter and the mucedinales of phytodermata are organic matter arrested in development at the lowest degree of life, the function of reproduction; the sporules are growing organic substance, aborted epidermic granules, the filamentary portion fully formed organic substance, beyond which there is no further growth, the highest and perfected form of development"—are the concluding words of Mr. Wilson (pp. 204-5) upon this part of the subject. It is strange that, in the animal body, we have no analogical instances to prove this view. Reference is made cursorily to the case of mucus and pus; but these two latter differ in every essential particular from the parasites, structurally, chemically, vitally. The increase of pus may take place by "cell-prolifera-

tion"; but parasites increase by endogenous growth and union of molecules (mycelium). Pus is a common product; but it never is seen to be "transformed" into a parasite, except supposedly in favus, where it is often absent.

In the last place, it is absolutely needful to scrutinise the question of the conversion of animal into vegetable tissues. Physiologists instruct us largely upon the laws of growth and reproduction; but deducible from the former is one which is second in importance to none, and it is the *law of limitation*. It is of wide and clear significance; by it tissues preserve their type, though they may deviate to a certain degree in this respect. The law of limitation, it appears to me, forbids us to entertain the conversion of which mention was made a moment since. Let us see, first of all, what Mr. Wilson's opinions are at p. 202 (*loc. cit.*). He says, after their escape, "the nuclei of the pus-globule are adherent to each other, so as to constitute the moniliform strings, etc.; and already, on the first birth of the granules, they are impressed with the type which subsequent development converts into a phytiform tissue": at p. 201, lines 22 and 23, "and which converts the higher animal organisation into a lower and phytiform organisation—an animal tissue into one which might be likened to a vegetable tissue": at line 32, "until we are led to the conclusion that we have before us no longer an animal organism, but a vegetable organism of the fungoid or mucedinous type": at line 45, "a combination which, out of the body and in the free air, would be regarded as a fungoid plant."

Dr. Willshire, some time ago, examined this question; and concluded that "low vegetable organisms are the result, and not the cause, of the maladies they are seen in connection with; and that their development is readily explainable according to well known laws ruling the so-called decomposition of organised matter."

Mr. Wilson, it would appear, thinks that the so-called sporules are altered animal tissues; but, as far as can be learnt, though he calls them phytiform tissue, he does not regard them as of vegetable nature. Then it only remains to examine Dr. Willshire's views, detailed in the *Medical Times* for 1848-49, vol. xix; which remain, I believe, with very little modification, the same in this year 1864. The presence of the oidium in thrush is admitted. Berg, Grüby, and others, taught that this was the sole cause of the disease. "Thrush" (so these writers say) "is the springing up and propagating of a parasitic fungus, the fine threads and fibres of which insert themselves in every direction amid the superior layer of the epithelial scales"; and (according to Grüby especially) even passing into the cells themselves. According to Berg, this generation of the fungoid parasite overwhelms, as it were, the mucous membrane; and is due to a reaction between the albumen and the acid in the mouth, the acid generated by the results of bad feeding, or gastric or other derangement, influencing the buccal secretion. He maintains, also, that local disorder of the buccal lining membrane itself is not to be recognised as the necessary, or even the frequent, antecedent of the true parasitic thrush disorder.

This view was soon refuted by clinical observation, which proved incontestably that "the presence of thrush deposit is preceded by symptoms, not only of a general and constitutional disorder, but of local disease of the mucous lining of the mouth . . . . the plastic deposit the result of a peculiar kind of membranous inflammation . . . . the presence of vegetable parasite, as perfectly irrelevant to the true or only essential pathology of the disorder; and consider its development as readily explainable according to well known laws ruling the so-called decomposition of organised matter." (Willshire).

With a little patience and care, the truth must have been established; the decided but erroneous views of Berg and others were, however, followed by a strong reaction; and pathologists framed a code of laws ruling the decomposition of organised bodies, which, in turn, required modification; at present little cared for, because the subject has fallen into utter neglect. What are the laws, then, *quoad* thrush, by which parasites are governed?

Dr. Willshire says: "Whenever or wherever organic matter, or the cells of vegetable or animal substance previously endowed with a special form of life, are passing into what we term a state of decomposition; a certain amount of the ultimate cells yield up their endowment of vitality to the overwhelming laws of pure chemistry and physics; their chemical elements separating and then re-combining according to these laws, and forming purely chemical compounds subservient to laws of a like nature. But other cells do not surrender up their vitality to any such influences of chemistry and physics; but preserve their great endowment of the spirit of life, and take on afresh a new kind of organic existence, differing from that expressed in the totality of such organism, of which they previously formed a part, or into the formation of whose existence they had before entered. . . . In the production of the fungus, or mould, or new organism, we observe the preservation of the vitality of certain cells, and their continued exemplification of this vitality, in the assumption of a new type of organised existence."

Here we have, then, the opinion of many moderns, that an animal may degenerate into a vegetable tissue; a doctrine which the theory of Mr. Wilson entirely upholds; affirming, as it does, the production of "granular degeneration" (shown to be vegetable in nature, *i. e.*, parasite) from an animal tissue. This extreme doctrine is a gross libel upon the laws of nature; it involves, at the outset, a total abnegation of the existence of a law of limitation; it presents a difficulty, in so far as it asserts that some cells in the decomposition undergo a chemico-physical change, and lose their vitality; but that others do not lose their vitality, and are not made subservient to chemico-physical laws. Yet the same influences and co-existences play upon the two classes in equal force and extent. How can we explain the difference? We know that the air is full of germs of the thrush and other fungi; that these have an existence independent of the body; that they grow upon vegetable structures, etc.; and that it is unnecessary to appeal to any such theory as the conversion of animal into vegetable for their production.

The experiments of M. Pasteur pretty clearly show by negative evidence, notwithstanding the recent experiments of Dr. Wyman, which are open to grave objection (as the reviewer in the *British and Foreign Medico-Chirurgical Review* for January 1864, p. 171, observes), that the origin of germs of low life is the air. We have had a view expressed in one, and a great reaction in the other direction; from which have resulted two absolutely conflicting and contrasting doctrines, and, as in all other instances of the kind, we shall find the truth to be between the two extremes, and to this present pathology is rapidly tending.

Having regard to the law of limitation, as it obtains generally; to the vegetable nature of the parasites; the differential attributes of animal and vegetable; the effects of inoculation (the latter now succeeding, now failing); the experiments of various observers, showing that nutrition is lowered in its standard in cases of parasitic disease, both in

man, animals, and vegetables; the experiments of Stilling on frogs; the free existence of the germs in the air; the existence of fungi generally in the hard structures of animals; the independent life of the parasite; the adaptation of certain soils to certain vegetations; the effects of treatment (a combination of local and general remedies succeeding best in tinea); the distinct evidence of the existence of a state of local malnutrition before the appearance of any fungus—*ex.* thrush, potato-disease, and the like—it appears certain that, in all cases of parasitic complication, two conditions are necessary: the presence of a suitable soil, which may or may not be appreciable to the naked or microscopic eye; and the implantation thereon of the germs of a parasite derived *ab externo*. These conditions may vary much in degree; the parasite may take hold upon the surface, and the soil may be too little developed to nourish it; hence its death and disappearance. This explanation holds good equally in tinea, in thrush, in the instances of fungi found in the cavities of tuberculous lungs, the stools of cholera, or the shreddy discharges of muco-enteritis, as in the ordinary "mouldy jam" or oidial vine disease. The doctrine that the tissue of animals can retrograde into vegetable structures like that of spontaneous generation, shocks my mind and offends my reason.

In the case of the caterpillar, the itch in animals, the vine or potato disease, the uredinous disease of corals, the thrush of infants, the favus of children, it has been incontestably shown that this double action is at work. It is a matter of very decided importance, as concerning the therapeutics of disease. We may treat the disease—favus—locally, and cure it. We may even treat analogous cases generally and cure them, if we can exert a profound influence upon the existing state of nutrition; but the combined plan of remedial action will save us an immensity of trouble and bring us greater *kudos*.

But then, limiting our observations to those forms of parasitic disease, which the physician is called upon to treat, if there be a peculiar malnutrition present, and a growing parasite, which is the more important to notice? Shall we regard tinea favosa, for example, more deserving the name of malnutrition or of parasitic? We may put it in another way. What is the action of a parasite? Does it exert any special influence?

We leave out of consideration the tendency it has to accelerate "fermentative" action"; and, on careful inquiry, we notice that it has some special action of its own over and above that exerted by the state of soil, and that is, to destroy the formation of hair, and to disintegrate already formed hair. The disease of the hair (and epithelium) is that pathognomonic of a growing fungus; this has been shown in my work on *Parasitic Diseases* (p. 28). General disease, whereby the whole vitality and nourishment of the body is lowered, may be followed by loss of hair generally—atrophy, in fact; but this differs in every essential particular from the active localised *destruction* in parasitic disease.

No disease, except it be accompanied by the growth of a fungus, can produce splitting up of the hairs, atrophy of the bulb, and alopecia. In parasitic disease, other structures may be involved, but not necessarily. Eruption is oftentimes present, but may be evoked by the action of any *irritant;* whereas nothing but the growth of a fungus can produce the damaged hairs, etc., of tinea. Take away the latter, and nothing *diagnostic* of the ravages of the parasite remains. *Per contra,* remove all the *eruptive,* and the parasitic remains in its integrity; the *necessaries* remain, but the *accidentals* are absent. The presence of the fungus increases the local irritation. There is nothing special in that; so do other irritants; but it is not unlikely that the force exerted in its growth and development, which we know belongs in an eminent extent to fungi, may be an additional degree.

At first sight, the behaviour of entophytes (parasites of the mucous surface) appears to contradict that of epiphytes (cutaneous parasites). Remak certainly greatly erred when he wrote, "there is a remarkable difference between the pathogenetic relations of the achorion and the fungi growing in the mouth, and probably also in aphthæ," etc. There is the existence of a suitable soil in each case, the presence of a parasite in a state of growth, and certain effects produced by the latter. In the case of aphtha, it amounts to local irritation only; in the disease in which achorion occurs, hairs and hair-follicles exist and become attacked so as to produce peculiar results, in addition to mere local irritation; it is a difference, not of nature, but of extent and degree in the two cases—a difference due to the character of the structure attacked, which alters, to some extent, the plan of treatment in the two cases. In aphtha, it is the alteration of the soil which demands attention with the destruction of the fungus; or, in other words, the removal of an efficient cause of irritation. We do not destroy it with the view of curing the disease; not at all. In favus (achorion disease), we alter the soil. We destroy the parasite with the view of removing a cause of local irritation; but more especially because vast damage and destruction will happen to the hair and hair-follicles unless this be effected. This cannot happen in thrush. There is no contradiction in pathological tendencies; surely not. If it arise in our minds, it must be from a want of correct appreciation; there is perfect harmony in principle, in law, and in result, as far as it goes.

These remarks will at once recall to memory, that parasites have been divided into those which are *true* and those which are *false* (represented, generally speaking, by epiphytes and entophytes), a distinction very important in a practical point of view; but suggestive of a difference in the pathological tendency of the two cases, which cannot be maintained in strict argument. The false parasites would inevitably give rise to disease and destruction of hairs, etc., if the latter existed on the mucous surfaces; but, this not being the case, the growth of entophytes (or false parasites) is comparatively harmless, still the contrast of true and false is by no means inappropriate in a *therapeutical* point of view.

Reference has been freely made to the essay of Mr. Wilson; for it contains doctrines which are diametrically opposed to the more usually accepted view—the view which guides and directs all our treatment; and upon which is based the most efficacious of all plans of treatment, that by local means. There should be no doubt in the matter; it is one of two things: either we are absolutely wrong or right—absolutely wrong, if the so-called parasites be not vegetable in their nature, or if they be produced by a transformation of animal structures. That neither of these two hypotheses are tenable, it has been the aim of these remarks to show. The view advanced by Mr. Wilson is similar to, indeed a resuscitation of, Unger's idea, broached in 1823, that the uredo (*a parasite*) was nothing more than "broken-up cells, a disruptured and altered condition of certain portions of diseased plants"; an idea which was refuted by the fact of artificial germination.

15, Old Cavendish Street, W.

MORTALITY IN LABOUR-CASES.

By James Cole, Esq., Bewdley.

I forward the following fatal cases of midwifery, thinking they may very well follow in the wake of Mr. Rigden's, reported at page 218 of the Journal for February 20th; although, in a statistical point of view, they may not be of much value, as I have never kept a register of my midwifery cases, which, nevertheless, could not be set down at less than 1500. Of the six cases I have to relate, four occurred in midwives' practice; the remaining two were incidental to my own.

Case i. A strong, healthy married woman, aged 23, had been in strong labour with her first child, under the care of a midwife, for two whole days and nights, when it was thought necessary to call in medical aid; and my neighbour, who had charge of the poor, being called in, found the woman very much exhausted, and an arm-presentation. His utmost endeavours to turn the child proving abortive, owing to the rigidly contracted state of the uterus, he requested my assistance. And beyond all question, I never experienced anything like the pressure that was inflicted upon my hand while *in utero*, during the recurrence of the labour-pains, which were described as being nothing in comparison with what they had been throughout the preceding day and night. By dint of great patience and perseverance, however, I succeeded in bringing down the feet; and the delivery was accomplished soon afterwards; but the patient died within a few hours.

Case ii. This case also occurred in a strong, healthy, young married woman, and in her first labour. As in the former, the assistance of my neighbour was not sought for until the woman was worn out with suffering and undue stimulation. The case proved to be one of impaction, requiring the use of the perforator, and, owing to the swollen state of the parts and the absence of expulsory pains, the delivery proved to be a very difficult task. She died very soon afterwards; in fact, she might truly be said to be dying during the operation.

Case iii. I was called to this case myself, and was very glad to have the assistance of my neighbour before it was over. The patient was a strong, healthy married woman, aged about 40; that is, healthy up to the approach of her labour. It was her first child. The midwife was of mature years and well experienced. As in the former cases, the woman was now in the third day of her labour, and in a very exhausted state. I asked the midwife, as I proceeded to make an examination, what the presentation was? She replied, "Oh, sir, that is all quite right—the head." I found, rather high up in the pelvis, something round, but could not find either suture or fontanelle; and said that whatever it was, it was not the head. At this, the old woman suddenly awaking to a full consciousness of the serious character of her mistake, threw up her hands, and in an agony exclaimed, 'Oh, my God." I soon found an axilla, which at once demonstrated that the round body was a shoulder very much swollen; and, after the usual preliminaries, I proceeded to turn the child, which proved to be in a very corrupted and putrid state. There was no particular difficulty in doing this, or in effecting the delivery of the body of the child; but when the head came to be delivered, there was great difficulty; and, in truth, while I was striving to bring it forth, the neck suddenly gave way, leaving the head behind. There are many disagreeable things connected with the practice of midwifery; but I never encountered anything like the foul air that issued from the putrid body of this child, coming forth in an audible blast as if from bellows. Finding that there would be great difficulty in removing the separated head, and seeing that the woman was very sure to die, possibly before the delivery could be effected, I called my neighbour to my assistance. And, as if the case were not already sufficiently repulsive, we found it necessary to use the perforator, and even then the operation was accomplished with difficulty. She died within two hours.

Case iv. This occurred in a delicate young woman, in her first labour. The midwife had been long in practice, and was rather an intelligent woman than otherwise; yet, strange to say, she mistook a hand for a foot. I turned the child, and effected the delivery without difficulty. As far as the labour was concerned, all seemed in a promising way; but, some hours before I was called in, when the pains were described as being of an unusually severe and forcing character, the patient broke a blood-vessel, and expectorated nearly half a pint of blood. It was this that made the parties anxious about the case, and led to my being called in within twenty hours of the commencement of the labour. She died on the third day after delivery, from the affection of the lungs. But whether more timely aid would have prevented the lesion in those organs, is more than I will venture to determine.

Such, then, according to my experience, is the character of midwifery in the hands of female practitioners. That three out of the four women might and would have been saved, had they fallen into the hands of the medical practitioner from the first, is not to be questioned. Let those who advocate the general employment of women as midwives give these cases due consideration.

Case v. Of the other two cases that occurred in my own practice, one may very properly be said to have been a case of death *in* midwifery, but not *of* it. It occurred in a delicate middle-aged woman, the mother of a numerous family, who was subject to severe attacks of bronchitis, always attended with copious expectoration of frothy mucus, and who, for a week previously to her confinement, had suffered from one of these attacks, having expectorated a pint-basinful during the day preceding her labour. This was in every respect natural and comfortable; but she died within an hour of her delivery, from want of breath.

Case vi. The last of the series was truly a fatal case of midwifery. The victim was a farmer's wife, living five miles from my home, and the mother of twelve or thirteen children. Being near her confinement, while stooping over the side and into an oak-chest, arranging its contents, without any previous pain, she was seized with a violent flooding. Her attendant said the blood flowed from her like water from a pump. I was sent for in great haste; and, when I arrived at the house, found her lying on the bed with her clothes on, her face being very much blanched, and her pulse small and weak. She had no labour-pains, but there was a continuous draining of blood from the parts. On making an examination, I found the os uteri somewhat open and in a very dilatable state, with the head of the child resting upon it, there being no trace of placenta within reach. What was to be done? I decided to wait for a time, supply nourishment, and watch the progress of events; stating to the husband that I thought his wife in a most perilous situation; that there was no safety except she was delivered; and that in all probability she would die, whether I proceeded to deliver her or not. After waiting two or three hours without any material improvement, and the drain still continuing, I resolved to risk the delivery, as giving her the best chance. She bore the operation pretty well,

and very little loss attended the expulsion of the placenta; but the labour was no sooner over than she became exceedingly restless, though the uterus was well contracted and of proper size; the restlessness ended in a convulsion of short duration; and that ended in death.

It is an awful thing to feel that the life of a fellow-creature depends upon the correctness of our judgment, and more so, when the issue has proved unsuccessful, and we have misgivings as to its correctness; when we feel that it is just possible we may have decided wrong, and that our course of conduct may have led to the very catastrophe that we have been most anxious to prevent. But the whole subject of midwifery was ever a source of anxiety in my hands, as indeed it must ever be to others, who rightly appreciate the dangers and difficulties with which it is associated. That women do occasionally die in childbirth, and that, too, in spite of the utmost that art can do to save them, is unfortunately a fact too familiar to all; and, however this may be lamented, it is still more grievous that any should die through such ignorance as mistakes a shoulder for a head, or a hand for a foot, as displayed in the instances I have related.

British Medical Journal.

SATURDAY, APRIL 2ND, 1864.

PROFESSIONAL CHARITY.

As we do not like to deprive our readers of any little amusement which may turn up in our way, we beg to recommend to their perusal effusions of indignation to be found in the last numbers of the *Medical Times and Gazette.*

The writer reminds us of an occasional specimen of the volunteer Boanerges, who, with unctuous visage and profound personal satisfaction, deals out unlimited condemnation on all outsiders. Smooth-faced "Shepherds", of the genus immortalised in *Pickwick*, deal not in kind persuasion, or gentle reasoning, or calm argument; but work upon their hearers by the noisy use of a vocabulary derived from the deep and wide pit of general threatenings and disconnected abuse.

Now, we are not going to attempt to repay the indignant editor in any coin of his own kind; but simply, for the benefit of his readers, to tear off the veil of Tartuffism which is thrown over this pretence of high-sounding morality. Above all things, we detest a sham; and we repeat what we have so often said in writing down the folly of gratuitous medical services, that it is a mere and idle sham to pretend that our professional pursuits are Heavenly missions, in the sense that we sacrifice everything here for the sole purpose of working out a labour of love; that we are voluntarily devoting ourselves to this labour, our eyes directed to no reward which this world can give. All this, we say, is a sham; a stupid pretence, which the world mocks at. Medical men have mouths, and wives, and children, which tie them to this world, and they require food and raiment; and for the obtaining of these things they must receive a due payment for their services. A medical man enters the profession to get an honest livelihood—doing good to others whilst doing good to himself—and not, as some Pharisees would pretend, as a sublime missionary, who has severed all earthly ties, and whose business it is to devote himself and sacrifice himself to the gratuitous assuaging of the indefinite woes of humanity. A medical man can no more work gratuitously than can any other ordinary member of society; and it is as clear to us as argument and facts can make a thing clear, that the system of gratuitous medical services hitherto so widely given by him have had one only tendency; viz., the degradation of the profession in public estimation. To say that medical men give these gratuitous services out of a pure worship of charity is simply to state what is not the fact. They give these services solely out of a spirit of competition, and because they thereby obtain, or hope to obtain, indirectly, remuneration. We, of course, are here speaking of our public system of gratuitous medical services, and are not alluding to that truly righteous and charitable work of gratuitous advice, which all of us have abundant opportunities of performing in private—where we can, indeed, exercise charity with due discretion and propriety, and whence we can derive the conscientious sentiment of having done a work of charity. The public system of gratuitous medical services is, when sifted to the bottom, really little more than a means of public advertisement, and our conscience knows that it is so.

We have argued this question again and again in these pages; and it is a very remarkable fact, that no one has hitherto been able to deny argumentatively any one of the propositions laid down by us. The only answer now given by the *Medical Times and Gazette* is unctuous abuse. We proclaim the businesslike fact, that medical men injure themselves, and injure their profession, and injure society, by doing the work of society gratis. Thereupon, up jumps the man of high-toned morality, and declares that such teaching is horrible and unchristian, and so forth. But far better than all such noisy declamation would it be for him to come forward with argument and tell us why we doctors alone, of all classes of society, are to work gratuitously, *i.e.*, to do the work of society gratuitously.

That our efforts in this cause have not been without effect, we have lately had several occasions to note; and, we need hardly say, to note with satisfaction. We believe that our brethren are beginning to feel the truth of our arguments, and to comprehend the absurdity of the system, and to note the injury done to the profession by it, and are resolved to commence the inauguration of a new state of things.

It is really surprising to find the editor of a medical journal rivalling, or rather outbidding, anonymous writers in the Liverpool penny papers in their outpourings of abuse on certain of the doctors of Birkenhead, who object to work without remuneration. The editor would wish the world to think that in his breast alone is contained all the milk and kindness of humanity. Does he really mean to say that he believes all those medical men of Birkenhead alluded to are a set of hardened wretches? Will he dare to say, that they have not just as much charity and just as high notions of what the honour and dignity of their profession require as he has? But hear the goodly man! Oh! he says, let us be charitable to the Birkenhead doctors; let us suppose that they had some valid excuse, illness, fatigue, age, etc. Let us in mercy throw the veil over their scandalous conduct; let us forgive them, and vent our indignation on the cold-blooded atrocity of the journalist who proclaimed, that doctors do wisely not to work without proper remuneration for their services.

Now, we repeat it again, the Birkenhead doctors have taken a right and a proper standing in this matter. The argument is as clear as the day. It is the business of society to provide against all the contingencies of its social life. It is the business of society, therefore, to provide payment for the doctor who is called to cases of the kind which occurred at Birkenhead; for such cases are notorious contingencies. The doctor says to society: "The performance of this duty lies at your door. True, I have hitherto been silly enough to do your work gratuitously—viz., the work of society. I have been giving to society labour which belongs solely to myself and family, but I will commit the folly no longer. Do you loud-mouthed Pharisees, who proclaim indignation against my want of charity and so forth, prove that you mean what you say by putting your hands into your pocket and forming a fund for the payment of the doctor's services on such occasions. Do your share of the work, and I'll do mine." Yes, despite all the bluster of the Pharisees, we proclaim this to be common sense and common justice; and again we say, we rejoice to believe that the profession are opening their eyes to the truth. It is high time that all this delusion and pretence were done away with. Does the editor of the *Medical Times and Gazette* really want to make people believe that West End of London accoucheurs will jump out of their bed at night, or leave their consulting-room in the day, to attend the abode of the first casual pauper who raps at their door and declares that his wife is in labour and perhaps in danger, and that they must come directly? What would be the West End accoucheur's answer every man of sense knows perfectly well; and why should it not be the Birkenhead doctor's answer equally? The duty of medical charity weighs as heavily, nay, more heavily, on the wealthy and renowned accoucheur, than it does on the humble village accoucheur. His answer would be this: "If you are a pauper, go to the parish authorities. It is their business, the business of society, to find you relief." Does our eloquent editor mean to say that he himself is ready to obey these nightly calls to gratuitous attendance upon suffering humanity? or is his indignation really all words and frothy declamation? If the editor were calm enough to appreciate the commonest rules of argument, he would see at once that it is the business of society to appoint a doctor to meet accidents of this nature. Instead of all this uncharitable abuse, put forth under the solemn pretence of a pious indignation, let him answer the argument, if he can. Let him show the fallacy of our premises, and the fallacy of our conclusions.

And we would venture to offer him one word of advice. We cannot follow him, it is true, in his airy flights through the misty regions of high pretensions; but, from a lower standing, we would bid him, in future, in his fervour of medical humanitarianism, to admit a ray of charitable sentiment towards those from whom he may differ in opinion. We would bid him reflect that the monopoly of good works and of honest charitable sentiment is not the sole property of those who blow their trumpet at the corners of the street; and that we, who have heartily and conscientiously endeavoured to elevate the status of our profession, to win for it greater esteem and higher honour and more influence, and so a larger field for the exercise of its powers in the world at large, may perchance be engaged in furthering the cause of humanity somewhat more effectually than he who, under the garb of a highly moral profession of faith, indulges in virulence of language against those from whom he has the misfortune to differ.

We leave our readers to judge of the charity of the journal which anathematises others for their want of Christian and moral sentiments in language of the following character:—"Tradesman-like, unprofessional, and barbarous," is the conduct of the Birkenhead doctors; "a shocking scandal"; "an abominable scandal"; "British medical tradesmen". In his attacks upon this JOURNAL, the medical moralist says: it is "the apostle of inhumanity"; "cold-blooded and degrading is its teaching", not to be "accepted without loathing"; "abominable sentiments"; and so forth. Such is the stump-oratory style used by this expounder of the duties of the Christian, the moralist, and the physician! But even he has his touch of worldly-mindedness. He winds up with a caution and a hint. He says: "We could show that few things pay like a reputation for humanity." We quite agree with him in this opinion of his; and who knew the truth of it better than the irrepressible Tartuffe? but we must venture to suggest that, however profitable such a "reputation" may be, it is still a far better and higher thing to possess, if

possible, the "humanity" itself, as well as the "reputation" of it. A good thing also—no doubt, ofttimes a "paying" thing—it is to have a reputation for charity—a reputation such as the editor of the *Medical Times and Gazette* assumes to himself. But here, again, we must suggest, a far better and higher thing than the mere reputation for charity is the possession of the thing itself.

The article before us is, we regret to say, a glowing example of the fact that it is one thing to *be* charitable, and another to assume the possession of a reputation for being charitable.

When our contemporary next enters the lists with us, we trust that he will condescend to common sense and connected argument, and raise himself above the vulgarity of substituting abusive language for reasoning. He should have more respect for his auditory.

MEDICAL EDUCATION.

The subject of medical education continues to be a prominent topic of discussions. Mr. Callender, of St. Bartholomew's Hospital, has published a pamphlet on the subject; and at the last meeting of the Edinburgh Medico-Chirurgical Society, Dr. Andrew Wood discoursed at length on the matter before a large assemblage of the profession. Dr. Wood made, as most other persons have done, Mr. Syme's remarks the groundwork of his consideration of the present condition of medical education. Dr. Wood differs in certain particulars from Mr. Syme; but it seems to us that, in the main, his views are very much the views of Mr. Syme; that is, in reference to the chief practical question, What should be done to improve the present system?

The following is Dr. Wood's "*Resumé* of Proposed Plan for Adjustment of Course of Study"; and it appears to contain the chief things pointed out as desirable by Mr. Syme:

"Make the preliminary studies and examinations in truth preliminary. For this purpose raise the age of commencing strictly professional study to 18; prune the professional course, so that the student may have fewer courses of lectures to attend, and fewer lectures in each course; re-arrange the sessions; make class-examinations imperative on teachers and students; see that ample time is left to the student for reading and reflection, and that his course of reading is properly directed; see that he has ample time and opportunity to avail himself of practical instruction in the dissecting-room, in the wards of the hospital, at the dispensary, in the laboratory; see that, while the class-examinations be as minute and searching upon all points connected with the subjects taught as may be desirable, the final examinations be chiefly based upon the requirements of practice, and be directed to ascertain whether the student retains that knowledge which he ought to retain, and without which he cannot practise safely; see that a distinction, as is right, be made between the curriculum and examinations for a simple license to practise, and those for a license to practise accompanied with a title of honour, such as the degree of an university."

Dr. Andrew Wood, in his discourse, has handled the subject carefully and wisely; only it appears to us that his mistake has been in taking it for granted that Mr. Syme desires "a complete *bouleversement*" of the present system. Certainly this is not the impression which we have derived from a perusal of Mr. Syme's proposals. He seems to us to want reform, not revolution. We, in fact, believe that Dr. Andrew Wood will find himself in the Medical Council voting with Mr. Syme in the matter of medical education.

Dr. Wood said that, in his view, the present generation of medical men was much superior to any which had preceded it. He defended the system of lectures; but he properly pointed out the fact, that certain qualities were required in the lecturer to make his teaching effective. And he was not blind to the abuse of lecturers.

"Three, or at most four, lectures a week on each of several subjects are quite as many as a student can properly listen, digest, and read up to; nor would more be required under a system where the lecturer, as he ought to do, refers the student to private reading for much that is at present unnecessarily and wearisomely treated of in the lecture-room."

He also pointed out the advantages of Class Examinations, and would have them made imperative on teachers and students.

Some excellent and true remarks, also, Dr. Wood made on Preliminary Education, insisting on a sound classical knowledge.

"Too long the medical profession, which ought, *par excellence*, to be a learned profession, has been accessible to men of very rude and imperfect education. A man might even become *doctor* though in no measure *doctus*."

The sessions he would have re-arranged; viz., a winter and a summer session, each of four months, with an interval of a month; and the final examination of a strictly practical character.

"In regard to the expediency of combining and concentrating the too numerous licensing boards" (he says), "I must state it as my conviction that there is no one measure which would do more to equalise and make efficient medical education and testing than the formation of combined boards for licensing in medicine and surgery, composed—in England, of the Colleges of Physicians and Surgeons and the Apothecaries' Company; in Scotland, of the Colleges of Physicians and Surgeons and the Glasgow Faculty; and in Ireland, of the Colleges of Physicians and Surgeons and the Dublin Apothecaries. Thus there would be constituted only three instead of nine separate boards."

In the discussion which followed, Professor Laycock objected to all interference; and thought the Medical Council was too meddling. He saw no reason for diminishing the number of courses; and, indeed, suggested an addition. He saw no reason why 18 should be the age for commencing study; the period should be left open. A knowledge of Greek and Latin he considered very important. Professor Balfour approved of class examinations, and of a preliminary scientific and literary training for the student. Professor Simpson strongly agreed in the

two four-months sessions proposed; and also concurred in the class examinations. Mr. Spence pointed out that there ought to be some regulated order of study laid down. Upon the whole, it may be said, that there was a pretty general agreement upon the points requiring reform.

Mr. Callender, of whose pamphlet we must say a few words, takes a very different view of these things. He considers the present system of teaching to be so perfect, that "little, if any, change is desirable." His large experience of students and of teaching at St. Bartholomew's has led him to that conclusion. He enters at length into an examination of the present required courses of lectures, etc., and finds that they are right well adapted for the purposes in view. Mr. Syme, he thinks, is wrong in supposing that the student has no time for thought, and that "medical education has become an effort of memory rather than a process of mental training."

We would refer those who are interested in this subject to Mr. Callender's pamphlet, where will be found clearly stated all that can be said in favour of our present system of education. Unfortunately for his argument, Mr. Callender seems to us to have demolished, in half-a-dozen lines at the end of his pamphlet, all that he had been constructing in his fifteen previous pages. Mr. Callender relates the following anecdote; and surely Mr. Syme could wish no better illustration of his position, that "education has become a matter of memory."

"Not long ago" (says Mr. Callender) "one of our pupils, who had distinguished himself for his knowledge of practical anatomy, went up for and passed his Primary (Scientific) Examination at the College of Surgeons. Six months later, he went up for the corresponding examination at the College of Physicians. We all know how anatomy slips from the memory. I was not surprised to learn that he had, to use a common expression, made a mess of it; though, as he said, he had looked up his anatomy from books before essaying the examination. What a pity" (Mr. Callender adds), "that he should have been compelled to get up his anatomy twice."

If we understand the tale aright, it means this, that the student's anatomy is admitted by his teacher to be a matter of memory, which even a student "distinguished for his knowledge of practical anatomy" cannot be supposed to retain more than six months. Well, may not Mr. Syme fairly ask for some change in a system which produces such fruit as this? If the groundwork of a medical man's knowledge be anatomy, what sort of foundation must his knowledge rest upon, if it cannot hold together six poor months?

We have been favoured with a paper on Medical Apprenticeship, read at the South-Eastern Branch of the Association, by Mr. Martin of Reigate, in June 1847. Mr. Martin therein defends the system of apprenticeship. A five years' apprenticeship he considers too long a term; three years is long enough. A youth cannot, he says, commence his professional studies better than in the occupation of an apprentice. He learns the art of compounding, and the properties of medicines, and educates his senses in manipulating these articles; and he also acquires thereby some chemical knowledge. The smaller operations of surgery he becomes acquainted with, and gains some insight into therapeutics and medical practice. No slight advantage, too, is the superintendance exercised over his moral habits at this period of a young man's life. His apprenticeship ended, he can advantageously commence his hospital studies and his attendance on the schools.

Sir Charles Locock has this year accepted the office of President of the festival of the Medical Benevolent College. He is the first "professional" president who has sat in that chair of festivity. We are, therefore, satisfied that our medical brethren will show by their attendance on the occasion—viz., on the 14th of May—that they know how to honour a member of their own profession. We trust the results will show, that the highest aristocrats of the land have not been on any occasion mere successful as Presidents of the Medical Benevolent College Festival than this respected member of our own profession.

At the Surgical Society of Paris, M. Guérin related a case, unique, we fancy, in the annals of surgery, of complete separation of the arm, produced by traction exercised for the purpose of reducing a dislocated humerus. A woman, aged 63 years, came into St. Louis with a dislocated humerus of three months' standing. M. Guérin employed, in its attempted reduction, the force of four students; the point of traction being at the forearm and above the elbow. Suddenly, during the operation, a crackling sound was heard, and the forearm fell to the ground, the blood spouting forth and covering the assistants. M. Guérin immediately seized the artery, and, cutting off the end of the broken bone and shaping the torn flaps, made a suitable stump. On examining the stump, all the tissues were found softened and friable throughout the whole limb, bones, muscles, nerves, veins, etc., breaking down under pressure. The microscope also demonstrated the degenerescence of the structures.

"The ancients," says the *Gazette Méd. d'Orient*, "in treating their patients, did not bleed them to death, nor cram them with a mass of drugs, which either neutralised each other, or set up fresh disturbance in the system, such as could be neither foreseen nor appreciated; but they confined themselves to the most simple medication. They treated diseases hygienically, whilst we treat them almost wholly with drugs."

M. Le Fort, whose report on London hospitals excited much attention in 1862, has been appointed by the Director of Public Assistance to visit many of the hospitals of Europe, and especially those of Germany and Russia.

M. Nélaton has lately injected twenty-five drops of perchloride of iron into an aneurism of the sciatic artery as large as the fist, and situated beneath the glutei muscles. The aneurism had returned after ligature of the artery, performed by M. Sappey in 1852.

Notwithstanding police regulations, syphilis in large towns, M. Fournier tells us, is ever on the increase. It is certain also that the disease is chiefly spread by the women who are under surveillance. Of 367 patients carefully questioned, 234 contracted chancres from "*filles inscrites*". M. Puche's statistics show a similar result. Of 510 cases of syphilis, 374 were derived from prostitutes under police regulations. Thus, in three-fourths of the cases, the disease is derived from our *filles publiques*. He argues, of course, that the women should be more frequently visited than every eight or fifteen days.

An order has been issued by the government at Constantinople, that the sale of haschisch shall no longer be allowed in the *cafés* for smoking-purposes, and that it shall only be sold by *pharmaciens* as a medicine prescribed by physicians.

We read, in M. Chevalier's report to the Academy of Moral and Political Sciences, the following figures. From 1853 to 1860, there have been found 5.3 still-born children for every 100 births in the Department of La Seine, 5.16 in the town, and 3.65 in the rural population.

Dr. Fredianelli, *L'Imparziale* tells us, has been assassinated at Santa Croce. His assassin had called him there under the pretence of seeing a dying person.

The French medical journals announce that a French doctor is wanted at Trebizonde, to replace the doctor who has recently died there. The salary, etc., is said to be satisfactory.

M. Broca lately ligatured the common carotid artery, in consequence of hæmorrhage produced by the separation of a slough after the removal, by M. Maisonneuve, of a cervical tumour by cauterisation.

Dr. Daremberg, librarian of the Mazarin Library, has been authorised by the Minister of Public Instruction to give a course of lectures on the History of Medicine.

A correspondent of the *Wiener Med. Wochenschr.*, writing from Schleswig, says: "There is a custom here amongst the Danes not to bury the dead before two days, and not later than eight days, after death. Through this northern respect for the dead, bodies are left as long a time as possible in the dead-house. I have seen bodies buried which had been nine or ten days in the dead-house; even in summer, they are kept unburied for four or six days. The number of the sick in some of the Austrian corps exceeds five per cent. The prevailing diseases are ophthalmia, pneumonia, and catarrh. The sick are well cared for in numerous small hospitals, which are under the charge of ladies of the district, who visit them daily.

M. Flourens tells the Academy of a living centenarian now in his 122nd year. "Centenarians," he said, "are not rare; and only a few days ago I talked with a woman 108 years old, who charmed me by her resignation, her cheerfulness, and placid disposition. The normal age of man, the physiological limit of his life, is 100 years; but the extreme limit which human beings may attain is not easily stated. Authentic facts on this head are too few."

A French journal announces the last new thing in the cure of hooping-cough. It is, we need hardly say, rapid and effectual in its action. Under the advice of a learned physician, parents now send their children attacked with hooping-cough to the gas-works, where they are made to respire the vapours which arise from the lime used in the purification of the gas. Amelioration usually follows the first inhalation. Two or three visits suffice for the entire annihilation of the hooping-cough. The director of the works offers his facilitating services, and names of cured children are at the service of parents and guardians.

No one, perhaps, has had more experience in the treatment of itch than Dr. Hardy of Hôpital St. Louis. He has lately published the treatment now adopted at that hospital. The treatment is founded on the fact that the disease is caused by the presence of the *Acarus Scabiei*. The whole of the body, excepting the head, is first of all scrubbed for half an hour with black soap. The object of this is to clean the skin, and remove foreign particles adherent to it. The patient is then at once placed in a warm bath, where he remains for an hour, and continues to rub himself with the soap. Under this treatment, the epidermis becomes swollen and macerated; the furrows between the acari are opened; and the skin prepared for the final friction with the following ointment, consisting of sixty-four parts of lard, twenty of sulphur, eight of carbonate of potash, and eight of water. This ointment, thus employed, is a veritable parasiticide. The ointment should be rapidly rubbed over the whole of the body, and the clothes put on without removing it, as it is requisite for the ointment to be in contact with the skin for several hours. During eleven years, 37,429 patients have been subjected to this treatment; and of this number, 535 only have required a second treatment. Thus sixty-nine out of seventy were cured. Since this method of treatment was introduced at St. Louis, patients do not remain in hospital; and thus 120 beds previously occupied by itch-patients are placed at the disposal of more serious skin-affections.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Shropshire Scientific. [Conversazione.]	Museum, Shrewsbury.	Friday, April 8, 6.30 P.M.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thurs., April 28, 8.30 P.M.

NORTH WALES BRANCH: GENERAL MEETING.

The intermediate general meeting of the members of this Branch was held on Tuesday, the 22nd ult., at the residence of J. H. Wolstenholme, Esq., Holywell, under the presidency of Llewellyn Lodge, Esq., of St. Asaph. There were also present twelve members. An elegant luncheon was handsomely provided by Mr. Wolstenholme and Mr. James Williams of Holywell for all who attended the meeting.

New Members. Dr. Williams (Mold) proposed, and Dr. Hughes seconded the election of Edward Griffith Clarke, Esq., of Mold, as member of this Branch, and of the British Medical Association, which was unanimously carried. Upon the proposition of the President, seconded by Dr. G. T. Jones (Denbigh), — Griffith, Esq., of Abergele, was also elected member of this Branch, and of the British Medical Association.

Annual Meeting. It was agreed to hold the annual meeting on Tuesday, July 5th, at 1.30 P.M., at the Black Lion Hotel, Mold. The invitation given by Dr. Hughes of Mold for luncheon at his house at 12.30 P.M. upon the above day, was cordially received and accepted.

Papers and Cases. The following were read:

1. On Compound Dislocation of the Astragalus. By T. T. Griffith, Esq., Wrexham. An interesting discussion took place after the reading of this paper by Mr. Griffith, who has consented to publish it in the Journal. Mr. J. Williams of Holywell related a case in point. Dr. Roberts of St. Asaph had also met with a case of simple dislocation successfully treated.

2. On Diphtheria. By Owen Roberts, M.D., St. Asaph. This case elicited an animated debate, in the course of which Dr. Hughes of Mold, Dr. John R. Hughes of Denbigh, and others, adduced cases to prove the dissimilarity of diphtheria and scarlatina.

Dinner. At 4 P.M., all the members, with some guests, assembled at Dr. Davies's house to dinner, and were entertained by him in a most hospitable and kind manner. The cordial reception and attention accorded by him were deeply appreciated, and suitably acknowledged.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An ordinary meeting of this Branch was held at the York House, Bath, on Thursday, March 24th, at 8.30 P.M.; the President, F. K. Fox, M.D., in the chair. There were also present thirty-one members and three visitors.

New Members. The following gentlemen were elected members of the Association and of this Branch: R. Budd, M.D., Barnstaple; Carey Pearse Coombs, Esq., Beckington.

Papers. The following papers were read.

1. On the Presence of Indigo in Purulent Discharges. By W. B. Herapath, M.D., F.R.S.

2. Notes of a Case of Entire Avulsion of the Scalp, with Recovery. By J. W. Teale, Esq., M.A.

3. Case of Separation of the Epiphysis of the Tibia, simulating Dislocation of the Knee. By J. W. Teale, Esq., M.A.

4. Dr. Falconer then started a discussion on the Prevalence of Scarlatina of late; which was followed up by Dr. Budd, Mr. J. K. Spender, and others.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 8th, 1864.

R. Partridge, Esq., F.R.S., President, in the Chair.

A NEW OPERATION FOR OBTAINING UNION OF AN UNUNITED FRACTURE, WITH REMARKS ON ITS APPLICATION IN CERTAIN CASES OF RECENT FRACTURE. BY E. R. BICKERSTETH, F.R.C.S.

In cases of ununited fracture the author had frequently tried, in vain, friction, acupuncture, and subcutaneous division; and though resection of the ends of the bone had been successful in some instances, it involved a considerable risk to life. Dieffenbach's method had proved to be more successful; but this operation, though conducive to the formation of new bone, in no way provided for absolute immobility of the opposing fragments. The large external wound, and the injury done to the soft parts in introducing the ivory pegs, were also objections to this operation. Recognising the happy influence of Dieffenbach's plan of exciting ossific deposit, and at the same time feeling the importance of keeping the ends of the bone in a condition of absolute immobility, the author was induced to try a modification of the operation; and in the case of a man admitted under his care at the Liverpool Royal Infirmary, with an ununited fracture of the radius, he drilled a hole through the ends of both fragments, and, passing a stout wire through it, secured the bone in perfect apposition. Union took place in seven or eight weeks; but on endeavouring to remove the wire, so much traction was necessary that it caused the fracture again to be ununited. This difficulty of removing the wire induced the author to think of some other plan; and in the case of a man with an ununited fracture of the thigh, he bored, by means of a common Archimedean drill, two holes in such directions that each passed obliquely through both ends of the fractured bone, and into each he introduced a steel rod with a screw at the end. To do this it was necessary to make an incision three inches in length. Much constitutional disturbance followed, the wound suppurating freely. In ten weeks the splints were removed, but no union had taken place. The limb was then confined in gum and chalk bandages. Symptoms of pleuropneumonia came on, and the patient gradually sank. A *post mortem* examination showed tubercular deposit in the ends of the bone and other parts of the body. There was no attempt at repair at the seat of fracture, except where the drills had pierced the bone, and here there was a deposit of new bone. This proceeding showed that it was quite feasible to fix the bone in the manner described, without exciting too much inflammatory action; and also that the steel rods caused the formation of new bone.

The next case was a fracture of the lower maxilla, where the bones had united in such a position as to render the patient a most unsightly object. As the incision that would be necessary in this instance, for

the purpose both of putting the bone into proper position and removing the deformity of the soft parts, would not allow the use of external splints or supports, and as it was found impracticable to effect this object by fixing the teeth by an appliance within the mouth, it was absolutely necessary that some means should be devised by which the divided portions of the jaw could be securely fixed; and it occurred to the author that pegs or nails would answer the purpose. Accordingly, at the operation, the apposition of the fractured portions was secured by means of two round-headed nails. They most effectually answered their purpose, and no external splint or bandage was required. The case did well, no undue action being set up. On the twenty-second day after the operation, one of the nails came away. The patient left the infirmary perfectly well, the jaw being firmly united in its proper position, and the deformity of the soft parts removed. One of the nails still remained in; and the last account states that its presence caused no inconvenience.

The third case recorded was one that presented many points in common with the one just narrated. No external incision was made, and ordinary drill-heads were substituted for nails. The result was everything that the author could have wished.

These cases shewed how readily and with what good effect fractured bones may be fastened together. Surgeons have ever recognised the use of sutures with regard to the soft parts. Why should we not, in cases of difficulty arising from an inability to keep the surfaces in proper apposition, adopt the same plan with the bones? Might not this process be applicable in some cases where division of the tendo Achillis is required, or where such an operation as sawing off the ends of the bone is indicated? From a consideration of the cases narrated, Mr. Bickersteth proposed to treat an ununited fracture by passing one or more drills through the broken ends of the bone in such a manner as to secure their perfect immobility, and without making any external wound beyond that caused by the entrance of the drill. The limb should then be secured by properly adjusted splints, and kept at perfect rest. After two or three weeks the drills may be removed, and water-dressing applied to the punctures. For several weeks afterwards, it would, of course, be desirable to continue the use of the splints. In conclusion, the author placed upon record three cases of ununited fracture recently treated by his friend Mr. Fletcher, on the plan that he (Mr. Bickersteth) had suggested, in each of which the result had been most satisfactory.

HARVEIAN SOCIETY OF LONDON.

Thursday, February 18th, 1864.

W. Adams, Esq., F.R.C.S., President, in the Chair.

Herpes Circinatus and Favus Combined. Dr. Tilbury Fox brought before the Society a child affected at once with herpes circinatus and favus. There were numerous patches of the former on its body, and under one axilla was a patch of favus, portions of which being placed under the microscope exhibited the cells of the achorion Schöleinii. Dr. Fox thought that in this case, perhaps, the one disease had developed into the other.

Mr. Squire said that the cells under the microscope were those of the achorion Schönleinii; but it did not follow that the occurrence of the two diseases on the same child was anything more than coincidence.

Dr. Cundell Juler thought that the favus might have appeared after the herpes circinatus by chance.

Dr. Camps remarked that the patch of favus did not appear to be implanted upon any of the patches of herpes.

Dr. Drysdale asked whether Dr. Fox had ascertained that no children in the family or in the house were suffering from favus capitis, as it might easily have been inoculated.

Dr. Fox replied, that he had carefully interrogated the mother on this subject; but that no child in the house was the subject of this complaint. He believed that the cells of herpes circinatus might develope into those of favus.

AN INQUIRY INTO NERVOUS REFLEX ACTION, AS THE CAUSATION OF DISEASES OF THE SKIN; WITH REMARKS ON THEIR TREATMENT.

BY H. CUNDELL JULER, M.D.

The author commenced by shewing that the opinion generally received of morbific blood being the *fons et origo* of diseases of the skin was erroneous; that the past discoveries of the pathologist, the histologist, and the chemist, did not warrant our arriving at such an assumption. He quoted from the works of various authors to show how many affections of the skin, as zona, erythema, pemphigus, urticaria, elephantiasis Græcorum, leprosy, etc., had been traced to a nervous influence. He instanced many cases as being clearly referrible to a morbid reflex influence on the nutrition of the sensitive nerve-fibres, passing to the cerebro-spinal axis, either from the skin or from the intestinal mucous membrane. He considered derangement of innervation as a necessary preliminary to the appearance of parasitic diseases; the different conditions of the skin in various places accounting for the appearance of two or more varieties of parasites upon the same individual. Dr. Juler stated it to be his opinion, that specific forms of diseases of the skin were induced by the morbific element in the blood, acting primarily upon the nervous centres and secondarily through the centrifugal nerves, upon the cuticular surface. He stated his conviction, that all skin-diseases had their origin in some disorder of the nervous system, and that many were attributable to nervous reflex action. He mentioned alternations of temperature as being a fruitful source of skin-disease; heat and cold being most powerful irritants to the nerves of the skin. He instanced furunculi, urticaria, lichen, erysipelas, etc., as being rapidly developed in this manner.

Dr. Juler then passed on to say that he thought that, upon the recession of a chronic cuticular eruption, the internal lining membrane of the bowels sometimes became the seat of a disease similar, in its pathological character, to skin eruptions, inducing the discharge of shreddy adherent mucus from the bowels, probably depending upon a rapid shedding of the epithelium of the mucous membrane. The reappearance of the disease upon the skin, he said, restored the bowels to their former healthy condition—the internal and external affections being vicarious of each other. He next demonstrated how skin-diseases might assume a chronic character by a morbid alteration in the blood-vessels and tissues of the skin, and thus remain after the nervous irritation which had brought them into activity had subsided. In this condition, these diseases only needed external remedies for their removal.

After showing how irritants to the afferent nerves of the skin might produce eruptions, and abnormal states or ulceration of the skin or lining mucous membrane of the body, as in burns, Dr. Juler referred to many cases to prove the converse as being also the case by the action of irritants upon the centripetal nerves of the bowels, etc., causing pain and diseases of the external surfaces of the body or intestinal surfaces. He instanced many cases to show

how skin-affections were attributable to the irritation of the nerves of the intestinal mucous membrane by indigestible ingesta, etc. He explained how irritation of afferent nerves might not always induce skin eruptions; but give rise to other nervous phenomena. He quoted Brown-Séquard to show how insanity, epilepsy, chorea, catalepsy, extasis, hydrophobia, hysteria, and other varieties of nervous complaints, might arise from slight irritation of centripetal nerves; and explained how irritation of the dental nerve, or of the nerves of the bowels in infants, gave rise at one time to skin-eruptions, at others to a discharge of a shreddy mucus from the bowels.

In discussing the treatment, Dr. Juler attributed the curative influence of arsenic upon skin-diseases to its power of establishing a counter action in the system, and so exhausting the undue irritability of the nervous system. So long as it had a morbid condition with which to contend, its action was strengthening and curative; but as soon as the disease was removed, or the system became more saturated with the remedy than by the disease, it was no longer strengthening, but set up an irritation in the system similar to that which it had removed; producing similar cuticular manifestations and all the nervous phenomena of a poison acting upon the nervous centres.

After advocating the employment of electro-galvanism in some forms of skin-disease clearly referrible to nervous reflex action, and having said a few words as to general treatment, he concluded by recording cases illustrative of his theory, and the treatment based thereon.

Dr. Fuller thought that all would agree with the author, that we should not look on arsenic as a sheet anchor in skin-disease. There were many cases in which tonics were much more serviceable. Diet is of the utmost importance in the treatment. Stimulants and generous diet are often necessary to affect a cure; and eczema is often curable by these means alone. Arsenic sometimes aggravates instead of curing. Tartarised antimony is often of use. He scarcely thought that alternations of temperature could be called frequent causes of skin-disease; for persons who used the Turkish bath were not subject to such disease. Indigestible food was a very frequent cause of skin-disease; and it was reasonable to conclude that this was caused by the absorption of some irritant into the blood, rather than by affecting the nerves.

Dr. Tilbury Fox observed that of late years the humoralists had had all their own way; but now the neuropathists were again beginning to attract attention. Perfect nutrition required good blood and correct innervation. The treatment of psoriasis was, in nine cases out of ten, entirely internal. Hebra treats psoriasis by local means—by poultices and oil, and afterwards by stimulating applications, such as oil of cade or sulphur ointment. Devergie had remarked of arsenic, that he believed that it rather injured than benefited in cases of psoriasis.

Mr. Squire remarked, that weals of urticaria were considered to be caused by excitation of the nerves of the skin. He thought that first attacks of psoriasis and eczema were more amenable to arsenic than later ones. Donovan's solution, which contains mercury, iodine, and arsenic, was, in his opinion, a most valuable remedy.

Mr. Ernest Hart mentioned that, in Brown-Séquard's experiments on guinea pigs, the spot at the side of the head, which, on being irritated, produced epileptic fits in the animal, was invariably covered with lice. In burns also, the bowels were apt to become ulcerated; and, again, persons who use the Turkish bath much are liable to eruptions of boils.

Dr. Hare had given arsenic for periods as long as twelve months at a time with no ill effect; but, on the contrary, good had followed. We ought not to trust, however, to one remedy in psoriasis; but study the patient's constitution. Acetate of potash was sometimes an excellent remedy; and tar ointment locally applied is often of service. In eczema, local means are often most useful, and in cloasma are all that is necessary; in the latter, the nitric oxide ointment is a good application. Tinea tonsurans also requires no internal remedy.

WESTERN MEDICAL AND SURGICAL SOCIETY.

March 4th, 1864.

W. Martyn, M.D., in the Chair.

Pulmonary Abscess. By R. T. Daniell, M.B. M. L., a tall healthy-looking Belgian girl, aged 17, was seized on November 14th, 1861, with violent pains in the hypogastric region; painful defæcation and micturition; tenderness of abdomen, particularly in the right iliac region; and all the other symptoms of inflammation in the pelvis. The illness had come on after suppression of the catamenia from the direct application of cold. The symptoms were alleviated by anodynes and purges of castor oil; but for three weeks a hardness and fulness in the right iliac region remained, with a frequent pulse, periodical sweats, and other symptoms of hectic fever. The formation of a pelvic abscess was expected. As the foregoing symptoms subsided, she was attacked with an acute pain in the right side of the chest, about the sixth and seventh ribs, extending upwards to the right shoulder-joint. There was a frequent short cough, and an expectoration of clear mucus, soon becoming thick, tenacious, and muco-purulent. There was a slight attack of hæmoptysis. As the pain was relieved, the cough became more troublesome, particularly when lying on her right side or on her back. The expectoration now became offensive. Her pulse was 130; there was great emaciation, particularly of the limbs; the appetite was voracious. Pus was subsequently coughed up, in paroxysms, to the amount of six ounces or more at a time. Two or three fleshy-looking pieces were occasionally observed in the sputa. In four months the patient entirely recovered her former healthy appearance, and the cough and expectoration had ceased. The author inclined to the opinion that this was an abscess of the lung, consequent upon matter forming in the pelvic region, and its subsequent absorption.

Chronic Ulcer of the Duodenum, terminating fatally from Hæmorrhage. By W. Martyn, M.D. R. A., aged 62, had a severe attack of Asiatic cholera twenty years ago in India, where he lived many years. From this date he suffered continually from indigestion. He was first under Dr. Martyn's care fourteen years ago; he was then a big, fat man, of florid complexion, of temperate habits, but lived well, though cautiously. He occasionally admitted that he had slight uneasiness after a full meal, and complained of his digestion. About twelve years since, Dr. Martyn was suddenly summoned to him. He was found vomiting blood, and passing it by stool in great quantities; he fainted, but rallied again. Upon careful examination, no hardness or tumour could be discovered in the epigastric region. There had been no pain; but there were some rigors, followed by sweating. Subsequently, every two or three years, he had a similar attack; and in one attack there was obstruction of the bowels for nearly a fortnight. The last illness commenced in July 1863, after some uneasiness in the stomach, with violent vomiting, chiefly of dark

brown sour fluid, in immense quantities, followed by a severe rigor. He then vomited blood, and passed it by stool, as on previous occasions. He rallied several times, but subsequently died from exhaustion. The *post mortem* examination showed the stomach to be very large, and to contain a large quantity of blood. The mucous lining was dark and reddish towards the pyloric end. The first part of the duodenum with the pylorus were found adherent to the under surface of the liver. A large ulcer was discovered, filled with a clot of blood, occupying the posterior wall of the first part of the duodenum, just beyond the pyloric opening. Its edges were thickened and rounded. It was deep and large enough to contain a large walnut. The duodenum with the adjacent parts were exhibited to the Society.

Correspondence.

IRIDECTOMY.

Letter from James Dixon, Esq.

Sir,—I wish to say a few words in reply to Mr. Bowman's last letter, for the purpose of plainly re-stating what I really have said about hardness of the eyeball as a morbid condition.

In reply to a question put by your correspondent, "A Surgeon", Mr. Bowman wrote thus (British Medical Journal, Nov. 28, 1863, p. 593): "Our better acquaintance with the subject causes us to include at present, under the term glaucoma, or glaucomatous, several forms of disease which formerly were never recognised as such. *All that are attended with augmented tension of the eyeball should now be embraced within that term, and as a rule should be treated by iridectomy.*"

To this sweeping rule I demurred (British Medical Journal, Dec. 26th, p. 697); and observed that tension of the globe was present in several inflammatory conditions in which iridectomy was wholly inadmissible"; and I added that "to say that all inflamed eyes which are harder than natural are to be subjected to iridectomy, would be to inflict that operation upon numerous cases of keratitis, iritis, etc., which can be perfectly and readily cured by judicious medical means." This statement of mine Mr. Bowman misrepresented (British Medical Journal, Jan. 8, 1864, p. 55) by saying that "*ordinary* corneitis, iritis, choroiditis, retinitis, in fact, all the *ordinary* inflammations of the internal tunics, are not characterised, as a rule, by undue tension."

In my next letter of Jan. 16th, I explained that I had never said that "ordinary" inflammations of the tissues I had named were, "as a rule," attended by hardness of the eyeball; but I had stated, and I then re-affirmed, that very many cases were so. In fact, I never used the word "ordinary" at all; neither could I be supposed to assert that the hardness of an eyeball attacked by severe keratitis, iritis, etc., had that almost stony feel which we are so familiar with in true confirmed glaucoma.

Mr. Bowman's last letter (March 19th, p. 323) more fully discusses the question of tension in inflammatory conditions of the eyeball. He still dwells on the word "ordinary", as if I had asserted that increased hardness existed in all common cases of iritis, keratitis, etc.; whereas I had stated that the phenomenon was present in many of the severer, as distinguished from the "ordinary" cases. I wrote against Mr. Bowman's sweeping statement, because I felt sure that, by acting upon it, those less experienced in eye-diseases would be encouraged to perform iridectomy unnecessarily. The fact is, that a group of symptoms, taken together, make up the picture of that form of glaucoma which is curable only by operation. Of course, we all know that hardness is a prominent symptom; but the rapid diminution of sight, the progressive inactivity of the pupil, the uneven condition of the corneal epithelium, the indistinctness of the fundus oculi under the ophthalmoscope, the pain, redness, etc.—all these, taken together, constitute the unmistakable picture of acute glaucoma.

In the same way as I stated my opinion that mere hardness of the eyeball could not safely be taken as an indication for iridectomy, so had I, at a much earlier stage of the glaucoma controversy, combated the notion that cupping of the optic nerve formed, *per se*, a distinctive sign of intraocular pressure; and I mentioned cases as sometimes occurring, in which, while the optic nerve, examined with the ophthalmoscope, presented a depressed extremity, the lens and iris were not pressed forwards—a condition which could hardly fail to be the result of any eccentric force acting upon the walls of the eyeball with power sufficient to compress the very tissue of the optic nerve backwards into its sheath. Gräfe subsequently modified his statement; and allowed that there were cases in which the cupping of the optic nerve was due to wasting of its substance, and that such cases of cupping were not improved by iridectomy.

Here, then, are two signs, each of which is insufficient by itself to indicate iridectomy—*mere* cupping of the optic nerve, and *mere* increase in the hardness of the globe—always supposing I am correct in my statement that cases of severe keratitis, iritis, and other mixed forms of inflammation, sometimes occur in which the globe is harder than natural. Mr. Bowman denies that such cases are met with; and it seems useless to dispute any further about a matter of fact, which any skilful eye-surgeon is able to test for himself.

I am, etc.,

James Dixon.

2, Portman Square, March 19th, 1864.

GRATUITOUS MEDICAL SERVICES.

Sir,—I was glad to observe such practical common sense views, on the subject of gratuitous medical services, as lately appeared in a leading article of the Journal, and in letters from correspondents. The public has been so long accustomed to draw freely upon us gratuitously, that we are beginning to find there is no reasonable limit to the demand; and this is consequently producing a revulsion of feeling on our part. If we received due thanks and respect from the recipients of our unpaid services, it would be more tolerable; but such is not the case. On the contrary, we too frequently experience the most base ingratitude. As one of your correspondents observes, "the public regards what is given for nothing as worth nothing."

Contrast the estimation in which our profession is held with that which is enjoyed by the Church and Law, although these bodies afford no such gratuitous services. It might be fairly asked, which of the sister professions (Divinity, Law, or Physic) has the greatest claim to the respect and gratitude of the public for services actually rendered? Which makes the greatest sacrifice of comfort and convenience? And how are they severally requited?

The parson is previously aware of the duties he has to perform, and can conveniently apportion his time. His labours are confined to one parish, and his income is independent of ordinary contingencies.

The lawyer can generally arrange his own time for the discharge of his duties, and is very certain of

being paid for his services, having the law (to enforce it, if necessary) in his own power.

On the other hand, take the case of the medical man. He never has a minute which he can call his own, day or night, wet or dry. His labours are both mental and physical. He must promptly assume the highest responsibilities, which occasion a corresponding intense anxiety of mind; and as, in country practice, his patients may be scattered over more than a dozen parishes, so his bodily labour is in proportion. His income is precarious, a large percentage of what he ought to receive being annually lost; and, if he adopt proceedings for the recovery of his debts, or withhold his services from those who can but will not pay, the most base motives are imputed to him by individuals whose incomes are not liable to the same contingencies.

I will just mention an example of how clergymen, when necessary, enforce payment of their pecuniary rights. A farmer in my neighbourhood, who did not pay his tithes, had his property seized and sold off to the required amount. The same is done with regard to church rates, etc. I am not alleging that there is anything wrong in such proceedings, but notice them as a counterstroke to the disparaging way in which the clergy frequently speak of medical men when we show a justifiable regard to pecuniary considerations. A great deal more could be mentioned in the same strain, but it is unnecessary. It will suffice to say that, from the prince to the peasant, the "bread and butter" question is the same in kind, although worked differently, according to the rank or degree of the individual.

While demanding a proper recognition and pecuniary consideration for our services, I would be sorry if our beneficent calling were to be exercised in an illiberal spirit.

I fear that, as a public body, our services will never be properly acknowledged until, like other professions, we have parliamentary representatives in the councils of the nation. At the present time, when any medical question is discussed before these assemblies, we are for the most part *mis*represented.

I am, etc., J. U. B.

March 1864.

Letter from William Curry, M.R.C.S.

Sir,—Allow me to make a remark on the all-important subject of Gratuitous Medical Services, which you so tersely and faithfully handled in one of your leaders last week. The "sapient juryman" at the Birkenhead inquest, when he said, "There ought to be a law to make the doctors go when they are sent for," only reiterated what the majority of the public already believe to be the law. Why, sir, I am continually being told—aye, and by those who ought really to know better—that their impression was, we could be compelled to attend, even if we were quite sure we should never be paid. How such an absurd notion should get possession of the minds of people, and why our profession solely should be expected to make such unreasonable sacrifices, I cannot imagine. Let us, then, quickly disabuse them of their gross misapprehensions; for little honour and dignity, still less profit, will be awarded us, so long as we ourselves continue to underrate our services. We should, therefore, unanimously combine to do away with the gratuitous system; then, if society still looks for us to work for nothing, and we resolutely refuse, society must be the sufferer, and not the doctor.

I am, etc., William Curry.

East Rainton, March 22nd, 1864.

HARD WORDS: MEDICAL EDUCATION.

Sir,—Dr. Laycock's letter in your impression of this week brought to my recollection a curious circumstance which bears on the point at issue between him and his reviewer. When going one day to the Hôpital de la Charité in Paris, I saw the following, or nearly the following, word written on the wall of the stair that led to the wards of an eminent professor: "Cerebrosplanchnohæmatipiorrypathie". I have myself a high appreciation of Professor Piorry as a pathological anatomist, and as an original scientific physician. His dictum, "Il n'y a pas de douleurs sans lésion d'organ," is carried out throughout all his writings with great acumen; and nowhere does his talent and grasp of his subject appear more conspicuous than when he treats of mental affections. But I do think it is much to be regretted that he should have wrapped up his nosology in such nomenclature as to make it a standing joke among his pupils and among the profession at large. His writings, I submit, ought to be a beacon instead of a model to others. All new Greek terms may take well enough with one or two medical Dominie Sampsons, but will, I am sure, be a bore to serious students. Ours is a practical age. "What new facts or discoveries can you teach me?"—that is the question. But I do not thank any one for puzzling me with jawbreakers which would make a Greek shrug his shoulders, asking, Τι θελει λεγειν αὐτος;—trophesia, kinesia, parakinesia, etc.?

The discussions in your Journal on medical education, from the admirable article of Dr. Latham downwards to writers of less authority, are all highly suggestive. There seems to be considerable unanimity among professional men on that point. There is a feeling abroad that the system pursued by some parties, of monopolising students' time with lectures, at the expense of hospital attendance, is highly detrimental to the cause of medical education, and not in keeping with the spirit of the age. I wonder whether the thought ever suggested itself to those learned lecturers, that one hour's reading is worth a dozen lectures. The truth cannot too strongly be impressed upon the minds of students, that it is *only* in the hospital and in the dissecting-rooms that medicine and surgery is to be studied to advantage. These remarks are of a more general application, and have no reference to Professor Laycock, whose reputation as a teacher stands, to my knowledge, very high among his pupils. I am, etc., Anthropophronesis.

March 1864.

A Physician Kept by a Druggist. Our attention has been called to the following advertisement, cut from a morning paper:—"Erson's Gout and Rheumatic Liniment effectually cures recent cases. In Bottles, 2s. and 1s. each. Chronic Patients introduced to *an eminent Physician of acknowledged repute in this department of Medical Science.*" (*Dub. Med. Press.*)

Provision for Recruits. We have already called attention to the great necessity of better provision at the rendezvous of recruits. It was currently reported that five persons froze to death at the rendezvous at Riker's Island. It is only surprising that the suffering was not much greater. The men are poorly clad, poorly fed, and poorly housed, and, in consequence, cold only adds the final consummation of death. There have been periods when the single surgeon on the Island had not a particle of medicine, and patients sank and died without let or hinderance. (*American Medical Times.*)

Medical News.

University of London. Degree of Master in Surgery, 1864.

Hewlett, Richard Whitfield, M.D., King's College
Rivington, Walter, B.A., M.B., London Hospital
Taaffe, Rickard Patrick B., M.B., St. Bartholomew's Hospital

Examination for Honours. First Class.

Hewlett, R. Whitfield, M.B. (Scholarship and Gold Medal), King's College
Rivington, Walter, M.B. (Gold Medal), London Hospital

This was the first examination for the M.S. degree in this University.

Apothecaries' Hall. On March 23rd and 24th, the following Licentiates were admitted:—

Evans, Evan, Llandyssil, Carmarthenshire
Fox, Francis, Ringwood
Hall, John, East Retford, Notts.
Lloyd, Albert, Bristol
Philips, Alfred, Lamb's Conduit Place
Powles, Revett Coleridge, Ipswich
Ricketts, James, Liverpool
Shaw, Edward Thomas, Packington Street, Islington

At the Court on the 24th, the following passed the first examination:—

Worthington, Frederick Edward, Manchester

APPOINTMENTS.

Armstrong, James H., Esq., appointed House-Surgeon to the District Infirmary, Ashton-under-Lyne.

Jackson, T. Vincent, Esq., elected Surgeon to the South Staffordshire General Hospital, Wolverhampton.

Army.

Fogo, Surgeon J. M. S., Royal Artillery, to be Surgeon-Major, having completed twenty years' full-pay service.

Mostyn, Staff-Surgeon J. W., M.D., to be Staff-Surgeon-Major, having completed twenty years' full-pay service.

To be Staff-Assistant-Surgeons:—

Atkins, C. A.
Baker, J. E., M.B.
Barker, J.
Barry, J., M.D.
Beattie, J. F., M.D.
Bolton, R. H.
Byrne, F. J.
Collier, H. C.
Condon, E. H., M.D.
Cuffe, C. M'Donogh
Cunynghame, R. J. B., M.D.
Delmege, J. P. De Gorrequer, M.D.
Dick, F., M.D.
Elgee, W.
Fearon, G.
Forsayeth, R. W.
Gouldsbury, V. S., M.D.
Greene, H. R.
Greenhill, J. R.
Haines, C.
Howard, F., M.D.
Knaggs, Assistant-Surgeon H., Cape Mounted Riflemen
Kynsey, W. R.
Lawless, R. W.
Lyons, P. P., M.B.
Morris, H.
Preston, A. F., M.D.
Shaw, J. A., M.D.
Smith, W. P.
Thomson, A., M.D.
Troup, R. W., M.B.
Turner, A., M.D.
Weir, C. J., M.B.
White, T., M.B.

Royal Navy.

Fennell, Charles J., Esq., Assistant-Surgeon, to the *Wellesley*.
Strickland, Charles, Esq., Assistant-Surgeon, to the *Supply*.

Militia.

Lenton, D., Esq., to be Assistant-Surgeon Northamptonshire and Rutland Militia.

Volunteers, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

Barnes, G., Esq., to be Honorary Assistant-Surgeon 16th Staffordshire R.V.
Fowler, W. C., M.D., to be Assistant-Surgeon 1st Midlothian R.V.
Grayling, J., M.D., to be Assistant-Surgeon 4th Administrative Battalion Kent R.V.
Henderson, J., Esq., to be Assist.-Surg. 3rd City of London R.V.
Nicholls, J., Esq., to be Hon. Assistant-Surg. 10th Somerset R.V.
Patterson, A., M.D., to be Surgeon 5th Lanarkshire R.V.
Perry, R., M.D., to be Surgeon 2nd Administrative Battalion Lanarkshire R.V.
Platt, R., Esq., to be Hon. Assistant-Surgeon 1st Flintshire R.V.
Ross, J., M.D., to be Assistant-Surgeon 3rd Lanarkshire R.V.
Swete, E. H. W., Esq., to be Assistant-Surg. 27th Somerset R.V.
Tomkins, C. J., M.D., to be Honorary Assistant-Surgeon 2nd Tower Hamlets R.V.
Wotherspoon, W., Esq., to be Assistant-Surgeon 3rd Lanarkshire R.V.

DEATHS.

Bryden. On March 24th, at Uffculme, Devon, the wife of *R. Bryden, Esq., of a son.

*Martland, Richard, M.D., and J.P. for the county of Lancaster, at Blackburn, aged 69, on March 28.

Calcutta is in a very unhealthy state just now, and the hospitals are full of cholera patients.

The Abbé Moigno's translation of Professor Tyndall's *Heat as a Mode of Motion* is announced in Paris.

Professor Owen had on Tuesday the honour of delivering before the Queen and Royal family the first of a course of four lectures on Natural History.

The Royal Infant. On March 17th, the infant child of their Royal Highnesses the Prince and Princess of Wales was vaccinated. The vaccine produced the desired effect in the most satisfactory manner.

Production of Sulphur. The sulphur at present produced in Italy amounts to no less than 300,000 tons a year, the value of which in the rough state is, 30,000,000 francs.

An Inducement. A man advertises for a competent person to undertake the sale of a new medicine, and adds that it will be profitable to the "undertaker."

Birth Extraordinary. On the 22nd ult., Mrs. Kennaby was delivered, by Dr. Simpson, of the City Road, of four fine female infants, who, with the mother, are doing well. Mrs. Kennaby is in her twenty-fourth year.

Health of the Austrian Army. The health of the Austrian troops is less good than it was a fortnight ago, and many of the men are suffering from that disease of the skin for which sulphur is said to be a sovereign remedy.

Royal College of Surgeons. Professor Huxley brought his course of lectures on the Structure and Classification of the Mammalia to a close on Saturday last. Professor Fergusson will not commence his course until June next, when he will deliver six lectures on the Progress of Surgery during the present century.

Society of Arts. The following six lectures on "Chemistry applied to the Arts" will be delivered by Dr. F. C. Calvert, on Thursday evenings, at eight o'clock, commencing March 31st:—Lecture 1. *Bones.* Lecture 2. *Gelatine, Glue, Bone-size, Chondrine.* Lecture 3. *Leather.* Lecture 4. *Animal Fatty Matters.* Lecture 5. *Flesh.* Lecture 6. *Animal Liquids.*

Employment of the Electric Light for Scenic Effects. The electric light appears to have permanently taken its place amongst theatrical properties. In Paris where more attention is paid to scientific effects than in this country, the celebrated optician, Duboscq, has devised some marvellous imitations of lightning and of the rainbow. The former is obtained by a concave mirror, in the focus of which are the two carbon poles of a powerful battery nearly in contact, and so adjusted that when the mirror is rapidly moved in the hand, the poles touch for a brief interval, and flash a dazzling beam of light across the stage. But more wonderful than this is the rainbow. In the representation of the opera of *Moïse*, it is requisite, in the first act, to introduce a rainbow. M. Duboscq, by a happy modification of his spectrum apparatus, and by employing a curved, instead of a strait slit, and a small-angled prism, has succeeded in projecting the very brilliant electric spectrum on the scene, with the proper curvature and the identical colours of the real rainbow; and this is of such a vividness that it is plainly visible in the full light of the stage. (*Quart. Jour. of Science.*)

Royal Society. The following medical gentlemen are proposed for election as members of the Royal Society:—A. Armstrong, M.D.; W. Baird, M.D.; W. Brinton, M.D.; J. C. Bucknill, M.D.; T. S. Cobbold, M.D.; William Henry Flower; George R. H. Gueneau de Mussy, M.D.; W. A. Guy, M.B.; G. Harley, M.D.; B. Hobson, M.D.; W. C. Hood, M.D.; W. Jenner, M.D.; E. C. Johnson, M.D.; W. A. Lewis, M.B.: Sir C. Locock, M.D,; Sir J. Olliffe, M.D.; J. R. Reynolds, M.D.; G. C. Wallich, M.D.

Queen's College, Cork. The visitors of the Queen's College, Cork, are to hold a formal investigation into the cause of the memorable fire, on April 12th next. The inquiry will partake rather more of the character of a trial than anything else, and counsel are engaged on both sides. The occurrence of the fire the other day has tended to complicate the affair, especially as it appears the professor of surgery has sworn an additional information against the President, Sir Robert Kane, before the magistrates at Cork.

Resection. The German naturalists discuss at Stettin the subject of *resections*. Bardeleben explained the operation. He eulogised the plaster bandage in the after-treatment, and dwelt upon the following points. 1. None of the capsule of the joint should be allowed to remain. 2. The after-treatment must be carefully and minutely attended to. A plaster bandage strengthened by strips of wood is best adapted to this purpose, and it should be water tight, so that the water-bath may be employed. (*Medical and Surgical Journal.*)

An American Estimate of Sarracenia. Dr. N. C. Levings of New York says, in the *American Medical Times*, says that he has lately given the much vaunted remedy in small-pox to four children suffering from the disease, without in any way changing the course of the disease. Three of the children, Dr. Levings says, were not vaccinated; and the supply of the drug was obtained direct from "the putative father of the specific". He sums up thus: "Presuming to know the natural course of variola, and having three cases neither modified nor the sequence of the symptoms altered by the free use of the infusion of sarracenia purpurea, Dr. Jacobi and myself consider the sarracenia without any medicinal virtue whatever in shortening the period of variola, or 'causing the pustules' to wither or fall off' before the eighth day."

Medical Registration Association. The following contributions to the Medical Registration Association have been received up to March 28th, 1864, by Dr. Wright, of 23, Somerset Street, Portman Square, treasurer of the Indemnity Fund. J. T. Clover, Esq., £1:1; Dr. Tuke, £1:1; H. Obré, Esq., 10*s.* 6*d.*; R. Dunn, Esq., £1:1; Dr. Wright, £2:2; Dr. Savage, £1:1; J. F. Clarke, Esq., £2:2; — Slyman, Esq., £1:1; Dr. Webster (Nottingham), £1:1; Dr. Henderson, 10*s.*; Dr. Beckett, 10*s.*; Dr. Headland, £1:1; Dr. Ridsdale, 10*s.*; J. S. Wells, Esq., £1:1; G. Shepherd, Esq., 10*s.* 6*d.*; Dr. W. O. Markham, £1:1. There still remains £145:13:7 to be paid off, in the following items. Petition to Parliament (income-tax), £12:9; memorial to Medical Council, £8:10:7; stationery, £15:12:5; law expenses, £48; printing, £12:16:9; balance of rent, £30; advertisements, £18:4:10. We sincerely hope that the profession will clear off this balance, which still remains charged against the fund.

Surgeon-General Hammond. We speak the sentiments, we believe, of the American medical profession, when we pronounce the shameful persecutions of the Surgeon-General, which have culminated in the present court-martial, as a direct insult to itself. With no shadow of cause, but one of those vague rumours of malfeasance which now cluster so thickly around every department of the public service, the Surgeon-General was displaced and every effort made to remove him from office. It was only through the active interposition of those interested in the department that he was allowed to prove that the trivial charges made against him were without foundation. Such treatment the profession should resent as personal to itself. The trial is progressing, and we do not doubt that, though there may be many peculations proved to have been practised by subordinates in the medical department, yet the Surgeon-General will stand before the world without a suspicion of participation. We begin to hear vague rumours that he is to be relieved, even if the trial results favourably; that the whole proceeding was instituted to accomplish this purpose; and if it fail, he must be retired or summarily relieved. Is the profession prepared to submit to this further humiliation? (*American Medical Times.*)

Chemical Society. The annual meeting of the Chemical Society was held at Burlington House on the 30th ult. The following is the list of officers:—*President*: A. W. Williamson, Ph.D., F.R.S. *Vice-Presidents, who have filled the office of President*: W. T. Brande, F.R.S.; B. C. Brodie, F.R.S.; C. G. B. Daubeny, M.D., F.R.S.; Thomas Graham, F.R.S.: A. W. Hofmann, Ph.D., LL.D., F.R.S.; W. A. Miller, M.D., F.R.S.; Lyon Playfair, Ph.D., C.B., F.R.S.; Colonel Philip Yorke, F.R.S. *Vice-Presidents*: Walter Crum, F.R.S.; Alfred Smee, F.R.S.; John Stenhouse, LL.D., F.R.S.; Robert Warington. *Other Members of Council*: F. A. Abel, F.R.S.; Thomas Andrews, M.D., F.R.S.; Dugald Campbell; H. Debus, Ph.D., F.R.S.; J. B. Lawes, F.R.S.; A. Matthiessen, Ph.D., F.R.S.; Hugo Müller, Ph.D.; E. C. Nicholson; W. J. Russell, Ph.D.; Maxwell Simpson, M.B., F.R.S.; J. T. Way; C. Greville Williams, F.R.S. *Secretaries*: Theophilus Redwood, Ph.D.; William Odling, M.B., F.R.S. *Foreign Secretary*: E. Frankland, Ph.D., F.R.S. *Treasurer*: Warren De la Rue, Ph.D., F.R.S.

The Poor-Law Board and Dr. Moore. At a meeting of the Bethnal Green guardians, the clerk of the board read a communication from the Poor-Law Commissioners respecting the charges brought by the guardians against Dr. Moore. The Commissioners say that they have received the report of their inspector, Mr. Lambert, who had been appointed by them to investigate the case. On the first charge, that of neglecting the Mandrell family, the Poor-Law Board cannot see anything censurable in the conduct of Dr. Moore, except with regard to having issued a certificate of removal to the workhouse for one of the children without having seen him. With regard to the charge of sending a midwife to attend women in labour instead of Dr. Moore going himself, the evidence in the four cases brought forward went to show that the women had themselves sent for the midwife, Mrs. North. It appeared that the charge against Dr. Moore in this matter depended upon the testimony of Mrs. North, and it was proved before the inspector that the doctor had written a letter in a feigned hand and under a feigned signature to this woman, stating that some ladies were about to establish a lying-in hospital, and offering her a situation therein if Dr. Moore would become security for her. Dr. Moore's only explanation was that he wished to get her to his house, so that, before credible witnesses, he could remonstrate with her; the Poor-Law Board regarded this as being extremely unsatisfactory, and the letter as an unworthy subterfuge. As to the charge of getting up unnecessary inquests in order to disgrace the parish, the board

were of opinion that it was not proven; but the obliteration in the medical relief book, in connection with this charge, they consider calculated to excite grave suspicion. The doctor was also acquitted on the charge of making extraordinary claims for vaccination fees; but, again, the entries in the book were suspicious. No case against Dr. Moore had been made out as to demanding improper medical fees; but he was censurable, in one instance, on the charge of appealing to public charity instead of to the guardians of the parish. Passing over a multitude of minor charges, the Poor-Law Board consider that Dr. Moore was wholly unjustified in stigmatising the Bethnal Green guardians as "unblushing and mendacious slanderers," in a letter published by him on October 21st last. After an allusion to the evasive manner in which Dr. Moore answered certain questions put to him at the inquiry, the Poor-Law Board say that they consider him as having seriously neglected his duty in the case of Mrs. Dove, and conclude that, "having regard to the several circumstances affecting his conduct established against him at the first inquiry, and to the resolution passed by the guardians that they had lost all confidence in him, the board feel that they have no alternative consistent with their public duty but to require him to resign his present office."

The Leicester Infirmary. Dr. John Barclay in a lecture delivered at a literary society pointed out, as a warning to others, the errors committed in the late renovation of this building. He says: "I stood alone, to vote for an entirely new building. For the thousandth time people have now been convinced that the cheapest alteration of an old building is to pull it down. In this instance it was particularly desirable; for the retaining of one old wall, the front one, involved the adoption of the same style of building throughout. A very fine opportunity has now been lost for ever of showing what an infirmary might be. So far as the wards themselves are concerned, I believe the new ones to be the finest in England or out of it. Miss Nightingale deserves the credit of having first impressed on builders the truth that the only real ventilation is to be obtained by cross ventilation by windows. Air will not be controlled, and enter by ventilating holes and escape by others, or go up ventilating shafts to order. The faults of the infirmary are almost all due to the style imposed upon us. It left no freedom of action. Windows have to be placed where they ought to come in regular course, not where they are wanted. There is a handsome centre entrance, hardly ever used by any body, and to which a carriage cannot drive up. Patients—bad accidents and fever cases, have to be landed in the open street. Then the difference of levels involved by altering instead of rebuilding is a most serious fault. By the hoist, or lift, heavy articles, such as coals, are carried up one, two, three stories, but when they are wheeled along to the wards, we meet two, three, ten steps up or down. Everything has to be transhipped; and the ward which from its proximity to the entrance, should have been the accident ward, was rejected unanimously by the surgeons, from the dangerous descent of half a dozen steps. Further, the style adopted rendered impossible the proper construction of latrines and sculleries. The lessons taught, then, by the erection of this infirmary are these:—Have every floor on the same level from end to end; adopt the Gothic style which enables you to put windows and doors, big or little, just where they are wanted; trust entirely to nature's ventilation by windows on both sides of the wards; put your kitchens either in a separate building, or on the roof; and above all, never attempt to alter an old building, but have it entirely new."

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Clinical Discussion.—Epidemiological Society. Annual Meeting. Address by Dr. Babington, F.R.S., on his retirement from the Presidency.—Entomological.—Odontological.

Tuesday. Pathological.

Wednesday. Obstetrical Society of London, 8 P.M. Papers by Dr. Meadows, Dr. Day, Dr. Barnes, etc.

Thursday. Harveian Society of London, 8 P.M. Mr. Weeden Cooke, "On the Tumours affecting the Female Breast"; following a discussion "On Diphtheria."—Royal.—Linnæan.—Chemical.

Friday. Astronomical.—Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Delta.—A person *registered* as M.R.C.S.Eng. and L.F.P.S.Glasgow, can recover for medicine and attendance in cases *purely medical.*

Equiso.—J. Hutchinson, Esq., 4, Finsbury Circus, London, is the Secretary of the New Sydenham Society. We refuse no communication whose insertion may be of use to to the profession.

The Saturday Review assures the public as follows:—"We say it with reluctance, English practitioners, having no special school of instruction for this malady (venereal diseases), are less accomplished than any other European faculty in this particular line of practice."

THE BANTING CODE.

Some glutton has stated that brave Mr. Banting
Himself has succumbed to the system he taught.
'Tis false, and he lives, neither puffing nor panting,
But down to a hundred and fifty pounds brought.

He's done it, and so may each overfed nigger
Who'll simply adopt resolution severe
To avoid, if he wouldn't grow bigger and bigger,
All bread, butter, sugar, milk, tatoes, and beer.

Take a fresh lease of life, and commence a new era,
Mr. Banting's advice makes one long to begin—
"Drink claret and sherry, good grog, and Madeira,
Take four meals a day and—grow gracefully thin."

COMMUNICATIONS have been received from:—The Registrar of the Medical Society of London; Mr. R. S. Fowler; Mr. Lowndes; Mr. S. Wood; Mr. Martin; Mr. W. Date; Mr. John Lindley; Mr. R. Bryden; Dr. Kidd; Veritas; F.R.C.S.; Mr. O'Brien; Dr. Davey; Mr. Syme; Dr. J. W. Walker; Mr. James Cole; Dr. Wolfe; Mr. Jackson; Mr. W. Jones; Mr. Thomas Martin; Dr. Wm. Ogle; Dr. H. Marshall; Mr. J. H. Armstong; Mr. D. K. Jones; Mr. J. N. Radcliffe; Dr. Frederick J. Brown; Mr. J. W. Hulke; The Registrar of the Medical Council; Mr. Thomas Jones; Chirurgus; Dr. Lorimer; Mr. Griffin; Mr. A. Kempe; Delta; and Dr. Grailly Hewitt.

To the Editor of the British Medical Journal.

2, *Rutland Street, Edinburgh, 26th March,* 1864.

Sir,—The extreme impropriety of which Dr. Laycock has been guilty does not admit of any redress except through a court of law, and this could not be obtained without lowering the public respect for a profession which it is my duty and earnest desire to uphold. I therefore beg you will print the List of Fevers, in order that your readers may judge how far it was fairly employed as an illustration of the complexity which at present characterises some departments of medical teaching. As to the precise number of names, a few hundreds more or less do not seem to be of much consequence. I am, etc., JAMES SYME.

II. ETIOLOGICAL NOSOLOGY OF FEVERS.

Extracted from a "Syllabus of the Lectures on the Causes of Fevers, delivered during the Session of 1860-61*; with an Etiological Nosology. By* Thomas Laycock, M.D., F.R.S.E., &c., &c.)

A GENERAL FEVERS.

Pyrexiæ.—These general pyrexial states modify Specific Fevers.

Inflammatory Fevers—Fevers accompanying inflammations:

1. Acute Inflammatory Fever (Synocha).
2. Chronic Inflammatory Fever (Irritative Fever).
3. Suppurative Fever. Inflammatory Fever, accompanying inflammation, ending in suppuration:—
   (*a*) Acute. (*b*) Chronic (Hectic Fever).
4. Adynamic or Asthenic Synocha (Typhus-like Fever—Fever of typhoid type, but not a specific form).

i. Diathetic Fevers.

I. Articular, with inflammation of the articular structures:—
   (*a*) *Rheumatic Fever.*—Cause, Lactic Acid? Carbonaceous compounds? Fibrin?
      i. Bursal R. Fever—Inflammation of the Bursæ.
      ii. Aponeurotic R. Fever—Inflammation? of the aponeuroses, muscles, and fibrous structures of joints.
   (*b*) *Arthritic or Gouty Fever.*—Cause, Uric Acid? Nitrogenous compounds?
      i. Paroxysmal or Acute Gout.—Formation or deposit of Urates in synovial membranes and derma, with neuralgic inflammation.
      ii. Rheumatic Gout.—Formation or Deposits of Urates, with analogous transformation of articular tissues.

2. Visceral—With Rheumatic or Gouty inflammation of the serous, sero-fibrous, or elastic tissues of viscera; Diathetic inflammations and inflammatory fever:—
   (*a*) Meningitis, Spinal and Cerebral.
   (*b*) Endocarditis, Pericarditis, Arteritis.
   (*c*) Pneumonia, Pleuro-pneumonia, Pleurisy.
   (*d*) Hepatitis (Capsule of Glisson).
   (*e*) Splenitis (Trabeculæ of Spleen).
   (*f*) Nephritis (connective tissue of Kidneys—Renal Arteritis).
   (*g*) Hysteritis.—Rheumatic inflammation of Cervix Uteri).
   (Other inflammations of this class affect the ovary, testicle, prostate gland, fibrous tissues of eye, etc.

3. Cutaneous—With acute or chronic Diathetic inflammations of the derma (connective tissue), cutaneous glands, and blood-vessels.
   (*a*) Erythema.—E. fugax, nodosum, etc.
   (*b*) Roseola. (*c*) Urticaria. (*d*) Purpura.

B SPECIFIC FEVERS.

Group of Endemic Fevers.—Fevers caused by specific fever-poisons derived from without the organism.

I. Malarious Fevers—Caused by the products of vegetable decomposition; pyrexial phenomena, intermittent or remittent:—

1. Uncomplicated—without local inflammation or cognisable change in the blood.
   (*a*) Intermittent Fevers, or Agues proper.
   (*b*) Masked Agues—"The Chills."
   (*c*) Local Agues—The phenomenon of the paroxysm limited to a limb or portion of the body.
   (*d*) Periodic Neuralgiæ (nervous system exclusively affected).

2. Complicated—with Neuroses, Visceral inflammations, or Sepsis of the blood:
   (*a*) Neurose Malarious Fevers—*Cerebral*, with coma, mania, delirium, etc.; *Spinal*—Tetanus; *Sympathetic*—Visceral Neuralgiæ.
   (*b*) Remittent Fevers—Malarious Fevers complicated with visceral inflammations:—
      (a) Cerebro-spinal Remittents—Endemic Meningitis.
      (b) Pulmonary Remittents—Pleurisy, Pneumonia.
      (c) Bilious and Gastric Remittents:—
      i. Endemic Gastric Fevers (Gastritis, with hepatic and splenic congestion):—(*a*) Of Temperate Regions—Bilious Remittents:—(*b*) Of Tropical Regions—Endemic Yellow Fever.
   (*c*) Pernicious Remittents—Endemic Pernicious Fevers.—Malarious Fevers, complicated with septic or miasmatic poisons:—
      i. Complicated with Fœcal miasmata (sewer and dunghill evacuations); Choleraic Remittents; Dysenteric Remittents; Malarious Continued Fevers, with abdominal symptoms.
      ii. Complicated with Sepsis; Petechial and Scorbutic Remittents; Endemic Pernicious Fevers, with hæmorrhages, black vomit, etc.

II. Miasmatic Fevers—Fevers caused by products of decomposing animal matter.—Pyrexial phenomena continuous; Gastro-intestinal symptoms predominant.

1. Fœcal Miasmatic Fevers—caused by sewers and dung-hill miasms:—
   (*a*) Ephemeral Fœcal Miasmatic Fevers—terminating in one to four days:
      i. Endemic Summer Diarrhœa; ii. Endemic Summer Cholera; iii. Endemic Dysentery.
   (*b*) Continued Fœcal Miasmatic Fevers, terminating from seven to twenty-one days:
      i. Simple Continued Fever; ii. Typhoid Continued Fever (with adynamic symptoms).

III. Septic Fevers—caused by putrescent animal matter:—

1. Glandular Erysipelas (wounds poisoned by putrescent stuff).
2. Hospital Erysipelas
3. Hospital Gangrene.
4. Puerperal Fever?
   These three last may be classed also with the Ochlotic Fevers.
5. Septic Ileo-typhus—from drinking putrescent fluids, or eating putrescent flesh.

b Group of Epidemic Fevers.—Poisons derived from within the organism.

I. Ochlotic Fevers.—The Typhus Group. These are Fevers spreading epidemically, with cutaneous inflammations more or less distinct, and sepsis of the blood. The poisons which cause them arise *de novo*, during overcrowding of men and animals, from the consequent putrescent emanations from the lungs and skin. They vary in their nature according to race and climate, and are modified deeply by the operation of malarious and miasmatic fever-poisons, or by any of the causes of sepsis of the blood. When, from these concomitant conditions, the Ochlotic Fevers are intensified, and cause a great mortality, and death commonly occurs before the seventh day, they are termed Plagues, Pests, Pestilential Fevers One attack is generally prophylactic against a second; the fever-poison ceases, therefore, to spread in a district so soon as the entire population has been subjected to its influence. Numerous variations from the typical forms occur during the progress of an epidemic.

Three classes of Ochlotic Fevers are observed—the Cutaneous, Pulmonary, and Gastro-enteric:—

1. *Cutaneous* Ochlotic Fevers.—Typhus Fevers, with inflammation of cutaneous glands, and the phenomena of disordered function of the Nervous system:—
   (*a*) Exanthematic Typhus. *Synonyms:* Typhus exanthematicus; Spotted Fever; Pullicular (or Flea-bite) Fever; Hungarian Fever; Nervous Fever; War Typhus. In the European Typhus, head symptoms predominant: a rubeolar or mulberry eruption commonly appears on the fifth or sixth day.
      (a) Nosological varieties.—i. T. Mitior; ii. T. Gravior; iii. Petechial Typhus, with purpura-eruption; iv. Miliary Fever, with miliary eruptions and profuse sweats. (This occurs also as a Gastro-enteric Typhus.)
      (b) Epidemical Varieties (*i.e.*, variations from the typical form observed in the course of an Epidemic).—i. Gastric; ii. Cerebral; iii. Putrid; iv. Ambulatory; v. Latent; vi. Relapsing.

(*b*) Sweating Pestilential Typhus.—The "Sudor Anglicanus," or English Sweat. Transformed into the miliary typhus?

(*c*) Dysenteric Typhus.—With adynamic dysentery of a communicable character. Usually complicated with fœcal miasm, as in camps.

(*d*) Glandular Typhus.—*Synonyms:* Levant Typhus; the Levant Plague; Bubo Plague. Occurs in Asia Minor, Egypt, and on the shores of the Mediterranean. Transformed in Northern Europe into an Ex. Typhus? A rubeolar eruption, with or without buboes or carbuncles.

Epidemical Varieties of Levant Plague or Glandular Typhus:—i. Typical, with buboes or carbuncles; ii. *Collapse*, the "Pestis Siderans"; iii. *Continued*, Pestis Typhoides; iv. *Ephemeral*, Pestis Mitior; v. *Renal*, with urinary suppression; vi. *Icterode*, resembling epidemic yellow fever; vii. *Ambulatory;* viii. *Local*, buboes without fever.

2. *Pulmonary* Ochlotic Fevers of Epizootic origin? caused by Ochlesis of domestic animals?—

(*a*) Pulmonic Typhus.

(*b*) Epidemic Peripneumonia with Sepsis (the Black Death)

(*c*) Influenza.—Epidemic Catarrh.

Epidemical Varieties of Influenza or Epidemic Catarrh.—i. Coryza, or Catarrh, the typical form; ii. Gastro-enteric; iii. Renal; iv. Exanthematous—as (a) Miliary, (b) Scarlatinal, (c) Diphtherial; v. Sweating; vi. Remittent or Intermittent.

3. *Gastric and Enteric* Ochlotic Fevers. This class is specially complicated by the effects of malaria and miasm.

(*a*) Relapsing Fever.—After apparent recovery, relapses; Gastric symptoms, with splenic and hepatic congestion and inflammation. *Synonyms:* Febris recurrens; the Short Fever; Five-day Fever; Seven-day Fever; Bilious Remittent; Remittent Icteric Fever; Bilious Typhoid; Mild Yellow Fever. Prevails epidemically in Europe. A transformation of the Epidemic Yellow Fever? Appears with or without a rubeolar eruption.

Nosological Varieties—

1. British Relapsing Fever.—Gastric symptoms predominant; no well-marked eruption.
2. Silesian Relapsing Fever.—Very commonly there is a rubeolar or measly eruption.

Epidemical Varieties: i. Cerebral; ii. Collapse-form; iii. Renal; iv. Miliary or Sweating.

3. Bilious Typhoid; Relapsing Typhoid. A variety of Levant Plague or Yellow Fever?
4. The *Dengue*.—With scarlatinal exanthematous, and articular complications. Prevalent in the East and West Indies and South America. (The Nosological position of this Epidemic Fever doubtful.

(*b*) Gastro-enteric Typhus. *Synonyms:* Morbus Mucosus; Gastro-adynamic Fever; Gastric Fever; Entero-mesenteric Fever; Intestinal Fever; Adynamic Gastro-enteritis; Dothinenteria; Follicular-enteritis; Typhoide; Abdominal Typhus. Spreads over the towns of Europe and the United States, and probably also of India. Specially associated with sewer or fœcal miasm. Gastric and enteric symptoms predominant; frequently a papular inflammation of a rose colour appears about the seventh day.

Epidemical Varieties.

These very numerous, according to the class of blood-glands affected, and according to the visceral complications. They are determined by climate and season, or by domestic, dietetic, diathetic, and other social and personal conditions.

(*c*) Occidental Gastric Typhus—Epidemic Yellow Fever.—The plague of the Western Continent, having its centre on the coasts of the Gulf of Mexico; has spread in Europe, in Italy, Spain, and Portugal. Prevails most fatally where malaria and miasmata abound. Gastric symptoms, with hæmorrhage or black vomit, most predominant. An eruption occasionally observed.

Epidemical Varieties—

i. Remittent or typical form; ii. Prolonged or continued, passing into ordinary Typhus; iii. Adynamic—Typhus symptoms from the first; iv. Cerebral, with renal disorder; v. Collapse-form; vi. Ambulatory; vii. Ephemeral, with mild febrile symptoms; viii. Toxic: Hæmatemesis or Icterus, without pyrexia. The relations of this typhus to the Relapsing fever, European typhus, and Levant plague have yet to be investigated. It is certain that the specific-fever-poison is introduced into Europe, and probable that, modified by climate, and other conditions, thus introduced, it produces typhus symptoms, but not the usual phenomena of yellow fever.

(*d*) Asiatic Gastro-enteric Typhus—Epidemic Cholera.—Developed, *de novo*, in India amongst crowds of men subject to fœcal miasm and malaria. Naturalised in Europe. Typhus stage marked by rubeolar eruption.

Epidemical Varieties—

i. Typical-form—death in collapse-stage; ii. Dry Cholera, or Cholera Siderans—no diarrhœa or vomiting; iii. Cholerine, or Choleraic Diarrhœa; iv. Choleraic Dysentery; v. Renal complication—(*a*) with suppression of urine, (*b*) with diuresis; v. Continued form—Choleraic Typhus.

II. The Exanthemata—Are fevers arising from specific fever-poisons generated within living organisms, which usually are accompanied by or cause inflammation of the skin and mucous surfaces; and an attack of which is commonly prophylactic against a second. The cutaneous inflammation is congestive, desquamative, effusive, or suppurative, and commences on from the first to the fourth day of the fever.

1. Variolous Fever—Variola, Small Pox.—A fever of fourteen days' duration, in which the inflammation is usually first congestive, and then effusive and suppurative. It may, however, occur without cutaneous inflammation, or the inflammation may be congestive only, or congestive and effusive. The epidemical varieties are determined by variations in the inflammation, and in the course of the fever, and by the operation of other fever-poisons.

Varieties of Variolous Fever—

i. Varieties of Variola from variation in the character of the suppurative inflammation. These protect from a second attack.

(*a*) V. Discreta. Pustules few, and distinct from each other.
(*b*) V. Coherens. Pustules numerous and contiguous.
(*c*) V. Confluens. Pustules very numerous and confluent.
(*d*) V. cum Petechiis. Petechial papulæ intermingled with the pustules.
(*e*) V. sine Variolis. No eruption on the skin
(*f*) Inoculated Variola. Pustules few, and at first limited to the inoculated spot.
(*g*) V. Vaccinia. Variola from a variolous fever-poison developed in the cow.

ii. Irregular and Spurious Variolous Fevers. Varieties of variola from variations both in the order of the symptons and in the character of the inflammation. Fever usually of short duration; inflammation less destructive. Not protective against true Variola.

(*a*) Varioloid—Irregular small-pox. Occurs usually, but not necessarily, after a previous attack of regular Variola or V. Vaccinia.
(*b*) Varicella—Chicken-pox. Inflammation effusive, pock vesicular.
(*c*) Globular Varioloid—The Hives. Eruption in successive crops, mingled with varioloid and swine-pox.
(*d*) Conical pustular Varicella—Swine-pox. Terminates within seven days.

iii. Complex Variolous Fevers. Varieties of Variola from operation of other fever-poisons. Cutaneous inflammation often either wanting, or congestive only.

(*a*) Malignant; (*b*) Typhoid; (*c*) Erysipelatous; (*d*) Rubeolar; (*e*) Miliary; (*f*) Diphtherial; (*g*) Gastric; (*h*) Dysenteric.

iv. Complicated Variolous Fevers. Varieties with important visceral complications.

2. Rubeolar Fever. Morbilli; Rubeola; The Measles. Congestive inflammation of the mucous surfaces supplied by the respiratory nerves (Coryza); inflammation of the skin, usually seen on the fourth day—at first pulicular, then confluent, and forming crescentic patches. Fever terminates in fourteen days.

Epidemical Varieties—

i. As to the fever and inflammation:

(*a*) R. sine febre. Eruption, with little or no fever. Usually at the commencement of epidemics.
(*b*) R. sine eruptione. Specific coryza without cutaneous inflammation.
(*c*) R. retrocedens. Inflammation of skin suddenly ceasing.

ii. As to the character of the eruption:

(*a*) R. lævis; (*b*) papular; (*c*) vesicular or miliary; (*d*) hybrid or scarlatinal; (*e*) confluent; (*f*) petechial, with hæmorrhages; (*g*) livid or "black" (with pneumonia).

iii As to complication with other fever-poisons:

(*a*) Typhoid and Gangrenous or "putrid;"
(*b*) Diphtherial or croupose; (*c*) Enteric.

3. Scarlatinal fever, Scarlet fever, Scarlatina, Angina erysipelatosa &c., Congestive and Desquamative inflammation of the skin, kidneys, and mucous surfaces, with or without inflammation of the salivary glands and tonsils. Eruption usually on the second day; fever terminates in fourteen to twenty-one days: occasionally relapsing in character—

a. Nosological Varieties—

i. Scarlatina simplex—Inflammation of the skin and mucous surfaces of throat, without inflammation of the glands.
ii. S. Anginosa—inflammation of the tonsils with or without cutaneous eruption.
iii. S. Glandularis—eruption and inflammation of the parotid and submaxillary glands.
iv. S. Glandularis sine eruptione.—The Mumps, *Scottice* Branks, attacks pubescent youth, and is sometimes complicated with inflammation of the ovaries or testes. Is an allied form of scarlatina, and sometimes there is an eruption.

(*b*) Epidemical varieties of Scarlatinal fevers—

i. From variations as to the cutaneous inflammation and general symptoms.

(*a*) Rubeolar. (*b*) Arthritic, with neuralgia and inflammation of larger joints. (*c*) Rheumatic; the Dengue, a relapsing fever with scarlet eruption. (*d*) Relapse Form—return of inflammation and fever on the eighth or ninth day. (*e*) Anasarcous, with desquamative nephritis.

ii. Varieties from complications with other fever-poisons.

(*a*) Encephalic. (*b*) Gastro-enteric. (*c*) Relapsing. (*d*) Gangrenous; these termed Malignant. (*e*) Diphtherial.

III. Communicable Fevers, allied to the Exanthemata of Doubtful Nature and Origin:—

1. Diphtheria.—Fever, with pellicular inflammation of the

throat, extending thence to the air-passages, gastro-intestinal mucous surfaces, and skin. Is epidemic, endemic, and sporadic. Nature of cause doubtful; probably a hæmatophyte.

a. Nosological Varieties of Epidemic Diphtheria—

i. *Diphtherial* Angina. *Synonyms:* Diphtheritic Pharyngitis; Stomacace; Malignant, Putrid, Pestilential, Suffocating Angina; throat Croup. Asthenic inflammation of the tonsils and pharynx; pellicle amorphous, not plastic; glands of neck swollen.

ii. D. Stomatitis. Infantile or gangrenous stomatitis. Livid red inflammation of the lip and cheeks, ending in gangrene; pellicle pulpy, commencing with vesicles; parotids and submaxillary glands enlarged; gastric and gastro-enteric symptoms.

iii. D. Coryza. Pellicle, extending to the mucous membrane of the nares; occasionally profuse epistaxis.

iv. D. Trachealis. Diphtheritic tracheitis. *Synonyms*: Angina membranacea; Angina trachealis; croup; Larynx croup; Pellicular croup. Pellicular inflammation of the larynx and trachea, extending to the bronchi. Cough often spasmodic.

v. Diphtheria Cutanea. Pellicular inflammation of portions of the skin, conjunctiva, &c. Usually accompanies the other forms.

b. Complex Varieties.—Diphtherial inflammation complicates epidemics of Ochlotic and Exanthematous fevers. Hence varieties of a Complex character—(*a*) Erysipelatous (with Influenza); (*b*) Variolous; (*c*) Rubeolar; (*d*) Scarlatinal; (*e*) Aphthous; (*f*) Typhus; (*g*) Gastro-enteric or Typhoid.

c. Endemic Varieties—

i. Endemic Stomatitis. *Synonyms:* Muguet; Thrush. Is Ochlotic, and occurs in foundling hospitals, the wards of general hospitals, &c. Pellicle contains sporules and thalli of the Oidium Albicans, and extends from the tongue along the gastro-intestinal mucous surfaces.

ii. Contagious Blennorhœa. Inflammation of mucous surfaces from a specific fever-poison, communicable by contact only? due to a microscopic alga? (*a*) Vaginal and urethral Blennorhœa; (*b*) Contagious ophthalmia.

2. Vesicular Aphtha.—Vesicular inflammation of mouth. Epidemic; attacks only once.

3. Pertussis.—Inflammation of the respiratory mucous surfaces from a specific fever-poison, ending in a spasmodic affection of respiratory motor nerves. Attacks commonly but once in a lifetime.

VI. Impure Fevers.—Constitutional blood diseases, continuing or the most part for a prolonged period, with recurrent pyrexial ttacks, terminating within from seven to fourteen days. Inflamnation due to a specific poison, and manifested primarily on the skin nd mucous surfaces.

1. True Leprosy.—A constitutional disease of indefinite duration (arising from uncleanness or squalor?), with pyrexial paroxysms and congestive papular, or tubercular inflammation of the skin and air-passages, with or without neuroses. (Contagious?)

Nosological Varieties—

i. Erythematous; ii. Squamous, with rapid production of epithelium; iii. Black, with pigment-deposit in skin or scales; iv. Tubercular—with plastic deposit in connective tissue of skin and mucous surfaces; v. Gangrenous—with dry gangrene of the extremities, especially of the fingers and toes; vi. The Anæsthetic.—Loss of the sensibility of the surface of the body; cutaneous inflammation congestive or bulbose, rarely plastic; vii. The Cerebral—with mania, melancholia, &c.

2. The Syphilids.—Syphilitic Diseases—Constitutional diseases due to a specific poison, terminating in a definite period (one to three years?), and characterised by pyrexial paroxysms with specific inflammations of the skin, mucous surfaces, and periosteum.

a Nosological Varieties of European Syphilis:—

i. Benign Syphilis.—Inflammation superficial:—

(*a*) Virulent Gonnorhœa.—Primary ulcer simple, or a patchy excoriation; cutaneous inflammation congestive.

(*b*) Papular Syphilis.—Primary ulcer simple; cutaneous exanthem papular.

(*c*) Pustular Syphilis.—Primary ulcer with raised but not indurated edges; exanthem effusive and suppurative, ending in superficial ulcerations and crusts.

(*d*) Phagædenic Syphilis.—Primary ulcer either corroding or gangrenous; exanthem pustular or tubercular, ending in ulcers that extend by a margin (Rupia).

ii. True or Scaly Syphilis.—Inflammation of derma deep-seated. Primary ulcer excavated, with a thickened edge and base. Exanthem at first congestive and ending in (*a*) desquamation; (*b*) tubercles and ulceration; (*c*) condyiomata; (*d*) fungoid growths; (*e*) periosteal inflammation.

iii. Ethnic and Climatic Varieties of Syphilis.

(*a*) Yaws or Pian; Frambœsia: African Syphilis—Inflammation commonly superficial; ulcerations, Rupia-like with fungoid growths. Terminates in health in about two years.

(*b*) Radesyge, Norwegian Syphilis.—Inflammations figurate and tubercular, or pustular and papular; ulcerations rupious and serpiginous.

(*c*) Scherlievo.—Frambœsia of Eastern Europe, Inflammation pustular or tubercular; ulcers rupious; yaw-like growths and condylomata.

(*d*) Sibbens.—Frambœsia of Scotland. Inflammation both superficial and deep-seated, roseolar, condylomatous, fungoid.

(*e*) Button Scurvy.—Frambœsia of Ireland.

VII. Epizootic Fevers.—Acute fevers, due to a specific fever-poison communicated from brutes to man:—

1. Hydrophobia.—A fever terminating within seven days. Poison acts primarily on the pneumogastric system, and the surfaces supplied from it; secondarily upon the cerebro-spinal axis. Derived from the saliva of the dog and cat races when in fever.

2. Equinia of Maliasmus—Human Glanders.—Fever and inflammation usually of a septic character. Caused by the pus or mucus of a glandered horse or ass.

3. Carbuncular Fever--Malignant Carbuncle.—Acute typhus-like fever, with carbuncular inflammation, rapidly becoming gangrenous. Poison derived from cattle, with malignant typhus.

4. Contagious Furunculoid.—Inflammation of the skin, occurring epidemically—furuncular, carbuncular, ecthymatous or gangrenous; the cause of which is doubtful, but suspected to be of epizootic origin.

5. Epizootic Stomatitis.—Vesicular inflammation of the mouth, due to the poison of the disease of cattle termed Murrain. Is a contagious stomatitis.

6. Epizootic Peripneumonia?—The histories of some epidemics of influenza point to the lower animals as the probable first source of the fever-poison.

Liverpool Royal Infirmary and

SCHOOL OF MEDICINE. — The SUMMER SESSION ommences on Monday, May 2nd, 1864.

HOSPITAL PRACTICE—ROYAL INFIRMARY.

Physicians—Dr. Vose, Dr. Turnbull, Dr. Inman.
Surgeons—Mr. Stubbs, Mr. Long, Mr. E. R. Bickersteth.
House-Surgeons—Dr. Rawdon, Mr. Nash.
Dental Surgeon—Mr. Snape.

The Infirmary contains 270 Beds. The number of In-Patients is pwards of 2,300 annually, and 2,300 Surgical casualties were, last ear, treated as Out-Patients.

Clinical Lectures are regularly delivered by the Physicians and urgeons.

Six Dressers and Six Clinical Clerks are elected quarterly from ie Pupils of the Infirmary.

LECTURES.

idwifery and Diseases of Women—Mr. Batty.
iseases of Children—T. F. Grimsdale, M.R.C.P.Edin.
[ateria Medica and Therapeutics—J. Birkbeck Nevins, M.D.Lond.
edical Jurisprudence and Toxicology—E. Whittle, M.D.Lond., M.R.I.A., and J. B. Edwards, Ph.D.
otany—C. Collingwood, M.A.Oxon., M.B., M.R.C.P.
phthalmic Medicine and Surgery—R. Hibbert Taylor, M.D.
ractical Chemistry—J. B. Edwards, Ph.D.
athological Anatomy—R. Gee, M.D., M.R.C.P.
ental Surgery—Mr. Snape, L.D.S., R.C.S.
ental Mechanics—
ental Anatomy and Physiology, Comparative and Human—Mr. Fletcher and Dr. Waters.
etallurgy—Dr. Edwards.

F. D. FLETCHER, Secretary, 13, Mornington Terrace, Liverpool.

Royal Medical Benevolent Col-

LEGE. — The Council have the pleasure to announce that SIR CHARLES LOCOCK, Bart., M.D., has kindly consented to take the Chair at the TWELFTH ANNUAL FESTIVAL of the College, which will take place at Willis's Rooms, King Street, St. James's, on Saturday, the 14th of May next, when it is earnestly hoped that there will be a large meeting of the friends of the Institution.

Gentlemen who are willing to serve as Stewards on the occasion are requested to forward their names to the Treasurer, John Propert, Esq., 6, New Cavendish Street, W. There is no liability attached to the office. By order of the Council,

ROBERT FREEMAN, Secretary.

37, Soho Square, London, 30th March, 1864.

The General Hospital, Birming-

HAM. — There are VACANCIES for TWO RESIDENT STUDENTS, either as Apprentices for Five Years or Pupils for One Year. The Hospital contains 223 Beds for In-Patients, and it has a Convalescent Branch containing twenty Beds, recently established by Miss Ryland, at Spark Hill. The attendance of Out-Patients averages 400 per diem, and the number of Accidents and Urgent Medical Cases consequent upon the position of the Hospital in the centre of a thickly populated manufacturing and mining district amounts to upwards of 15,000 per Annum. Unusual facilities are thus afforded for the Student to acquire a thorough practical knowledge of his profession. Attendance on the Hospital and on the Medical Schools in the town qualifies for all the Examining Boards.—Terms, etc., may be ascertained on application to the undersigned, at the Hospital.

March 11th, 1864. WILLIAM R. HUGHES, Secretary.

Dover Union—General Medical

ATTENDANCE, VACCINATION, etc.—The Board of Guardians of this Union will be ready on Friday, the 15th April, 1864, to receive Applications from legally qualified Medical Practitioners, to supply Medical and Surgical Attendance upon the Paupers of the First Division of St. James's District, which comprises the Parishes of Charlton, Guston, St. James, and Whitfield, at a Salary of £60 per annum. Also for the First Division of the Haugham District, which comprises the Parishes of Alkham, Buckland, Caple, Ewell, Haugham, Poulton, and River, at a Salary of £60 per annum.

These Salaries are exclusive of the Fees set forth in Article 177 of the General Consolidated Order of the Poor Law Board; 10s. 6d. will also be paid for each case of Midwifery, and 1s. 6d. for every case of successful Vaccination if performed at or within two miles of the Medical Officer's residence, and 2s. 6d. if beyond two miles.

The Gentleman or Gentlemen who may be appointed, will be required to keep the several Books specified in the Orders of the Poor Law Board, and generally to carry out their Rules and Regulations, as well as the directions of the Board of Guardians.

By order of the Board of Ghardians,
Dover Union, Buckland, 24th March, 1864. WILLIAM CROSS, Clerk.

St. Bartholomew's Hospital

AND MEDICAL COLLEGE.
SUMMER SESSION, commencing May 2, 1864.

LECTURES.

Materia Medica—Dr. Farre.
Botany—Dr. Harris.
Forensic Medicine—Dr. Martin and Dr. Odling.
Midwifery—Dr. Greenhalgh.
Comparative Anatomy—Mr. Callender.
Practical Chemistry—Dr. Frankland and Dr. Odling.

The Hospital contains 650 Beds, and Clinical Lectures are delivered—on the Medical Cases, by Dr. Burrows, Dr. Farre, and Dr. Black; on the Surgical Cases, by Mr. Lawrence, Mr. Skey, and Mr. Paget; and on Diseases of Women, by Dr. Greenhalgh.

Collegiate Establishment.—Students can reside within the Hospital walls, subject to the collegiate regulations. Some of the teachers connected with the Hospital also receive students to reside with them.

Seven Scholarships, varying in value, from £20 to £50, are rewarded annually. Further information respecting these and other details may be obtained from Mr. Holden, Mr. Callender, or any of the Medical or Surgical Officers or Lecturers; or at the Anatomical Museum or Library.

St. George's Hospital Medical

School. The SUMMER SESSION Commences on FRIDAY, May 1.

LECTURES.

Midwifery—Dr. Robert Lee, F.R.S.
Materia Medica—Dr. Barclay.
Practical Chemistry—Dr. Noad, F.R.S.
Botany—Mr. Maxwell Masters.
Medical Jurisprudence—Dr. Fuller.
Pathology—Mr. Henry Lee.
Dental Surgery—Mr, Vasey.

On the payment of a compounding fee of £100, a pupil becomes perpetual to the Practice of the Physicians and Surgeons and to all Lectures, may compete for all Prizes, Exhibitions, and for the office of Surgeon, Medical and Surgical Registrar, and may become Clinical Clerk and Dresser for two periods of three months each.

On the payment of £90—one half, £45, to be paid at the commencement of the First Summer Session, and the other half, £45, at the commencement of the Second Summer Session—a pupil will be admitted to the Hospital Practice and Lectures required for Examination by the various Examining Bodies.

Gentlemen can enter to the Hospital Practice and Lectures separately, or to any one Course of Lectures.

The Hospital contains 350 beds. Clinical Lectures are delivered by the Physicians and Surgeons every week.

A MATERNITY DEPARTMENT, for the delivery of married lying-in women at their own homes, is established at the Hospital; and a Ward is devoted for the reception of woman suffering under diseases peculiar to the sex.

The following Prizes will be awarded at the termination of the Session:—

Sir Charles Clarke's Prize for Good Conduct.
The Thompson Medal.
Sir Benjamin Brodie's Clinical Prize in Surgery.
The Lewis Powell Clinical Prize in Medicine.
The Henry Charles Johnson Memorial Prize in Anatomy.

A General Examination will be held at the end of the Session, and a certificate of proficiency given to each Pupil who passes to the satisfaction, of the Examiners, and the following prizes to the most distinguished, viz.:—

A Prize of Ten Guineas to Pupils in their First Year.
A Prize of Ten Guineas to Pupils in their Second Year.
A Prize of Ten Guineas to Pupils in their Third Year.

Further information may be obtained from Dr. Barclay, the Treasurer of the School, from any of the Lecturers, or from Mr. Hammerton, at the Hospital.

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ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO ST. MARY'S HOSPITAL.

[*Continued from page* 363.]

ANOTHER argument, though of a like nature, adduced in support of this theory, is one derived from the personal observation of medical men, and of medical men of high repute and of large experience, whose opinions rightly claim our respect and full consideration. These gentlemen do not rely solely upon tradition—upon the records of the past—as proofs of the position they assume. They tell us that they have seen with their eyes the facts on which their belief is founded. They have witnessed the effects of blood-letting in other long-gone-past days; and they have also seen and noted its effects in these more recent times, and are therefore able, of their personal knowledge, to contrast the past with the present effects, and so to deduce the—to them—legitimate conclusion, that diseases have passed during the interval from a sthenic into an asthenic phase.

To meet this argument, which bears, on the face of it, strong apparent testimony in favour of the theory, I am necessarily driven to the somewhat presumptuous position of questioning the correctness of the observations referred to. Happily, however, the high authorities who have given their sanction to the theory are the very men who have always taught the profession, above all things, never *jurare in verba magistri* in matters medical; but to try all things by the light of their own reasoning and observation. They, therefore, I may confidently feel, are the last men who will object to the freest criticism of their opinions.

Let me here again remind you that the change in type theory rests solely upon the assertion that blood-letting was found by practitioners of medicine to be well borne and of high service in inflammations some thirty, forty, fifty, or seventy years ago; and that it is not found to be so borne now; and that the assertion is based solely upon a comparison of the effects of blood-letting in past days with its effects at this present day. I have already attempted to show you how impossible it is for us, practising medicine in the middle of the nineteenth century, to compare the results of our treatment with the results of the treatment of the past generation of practitioners. I shall now attempt to show, with the greatest deference to those high authorities who have sanctioned the theory disputed, that neither can any safe conclusions be drawn from a comparison of the practice of men of the same generation, made at distant intervals of time.

In the first place, I would ask, Where is the scientific man of medicine, who at sixty years of age sees diseases and treats diseases as he saw and treated them when under the influence of the ideas which held possession of his mind at twenty-five? His belief in his curative powers, his enthusiastic faith in the energetic power of his art to cure diseases, will probably have gradually abated, and *pari passu* with his advance in years. With the development of his reasoning powers, his questioning of the efficacy of his remedies will probably have become stricter. At all events, and most assuredly, the activity, the heroism of his treatment will be found to have declined with his increased age and better experience. Let any one call to mind the exact state of medical knowledge at the beginning of this century—during the first quarter of it, for example; let him turn to the works from which men of medicine then drew their inspiration in medical knowledge; let him compare that knowledge with the scientific knowledge of this day,—and then say if he can believe that even the calmest judgment and the most gifted observation, so trained and fed, would be able now, at this time of day and under the bright light of all our advanced and accumulated knowledge, to calculate and measure to any effective purpose the analogies and differences between the results of the practice of those past and of these present days? Where is the philosophic and experienced physician of modern days, whose ideal of medicine has not been revolutionised since the day when he first entered upon practice? Is it possible that, with these modernised views of his concerning the powers and virtues of his therapeutical agents, and the nature of diseases, he should be able, out of his general recollection of what the effects of blood-letting were some thirty or forty years ago, to draw trustworthy conclusions as to the effects of bleeding at this present day? With these difficulties before me, and calling to mind the deep meaning and profound truth of the aphoristic words of the wise man, who warned us that, in the practice of medicine, experience was fallacious, and a right conclusion hard to come at—I think I may fairly question the correctness of a theory which rests upon so unstable and fluctuating a basis. Every page of the history of medicine records the painful fact that, in matters medical, it is most difficult to extract the right conclusion from the lessons of experience; and that, in fact, theory has not been a more fertile breeder of errors in medicine than this so highly extolled experience. Men may observe and record the facts which lie before them most correctly; but still ever is it that some one or more essential items of the case may have escaped their observation—so compound are the phenomena touching disease and its treatment, so many and so hidden or dimly seen the disturbing causes which affect its right reading.

I have said that the change-in-type theory of diseases was not adopted until long after the practice of blood-letting in inflammations had been generally given up; and I must adduce what seems to me the proof of this very significant fact.

How comes it, that the authorities who now tell us that this present asthenic phase of disease came upon us soon after the advent of cholera in 1832, did not make the discovery or note it down at that time? How comes it, that the fact of this change in type—the fact that men would not bear bleeding as they formerly did—was not announced until twenty or twenty-five years after the asserted change displayed itself? Surely the asthenic change in type could not have been more clearly seen now out of a distant memory of past practice, than it was then, at the moment when (as we are told) men manifestly

bore bleeding ill—at the moment when they were actually under the lancet, and displayed the signs of the asthenia—at the time when physicians gave up the practice of bleeding, because they saw their patients would no longer bear the bleeding? We are, in fact, asked to give our assent to a theory based upon conclusions drawn from the observation of facts made a quarter of a century ago, the main significance of which facts (so far as records tell us) entirely escaped notice at the very moment when it must have been most prominently marked. We give up blood-letting twenty-five years ago; and it takes us twenty-five years to discover that we gave it up because patients would not bear it, or, in other words, because diseases had changed their type! It seems to me inexplicable, except on the supposition that there must be some fallacy in the argument, that Dr. Alison and other high authorities, who believe in this change of type, should have continued, for twenty years at least after the change is said to have occurred, to eulogise in the strongest terms the practice of blood-letting in inflammations. And, curiously enough, we even find these authorities actually explaining to the student how it is that they, who at that time so highly extolled blood-letting, so rarely resorted to it in their hospital practice. We should have expected that the first reason given would be this change in type; but nothing of the kind. The reason is, as Dr. Alison and others say: When this class of patients come under our hands, the time for blood-letting is past; and, besides, they have often been bled largely before they came into hospital. Everywhere, in fact, do these authorities extol in the highest language the virtues of blood-letting in inflammations; and nowhere do they tell—at least, until a very late date—that the human body is in an asthenic phase, and will not now bear blood-letting. Nay, years after the assumed advent of this asthenic type, do we find authorities actually warning the student against being led away by the fallacious therapeutics of Louis, who was misguiding the minds of the French youth by teaching them that pneumonia could be cured without blood-letting.

One remarkable exception, it is true, is made; but the exception clearly goes to prove the fallacy of the general argument. Fevers, we were long ago told—I mean, told in the recorded words of authorities—have not borne bleeding well since 1832. But how comes it, I would ask, that it has been recorded as a fact, that fevers did not bear bleeding; and yet no kind of allusion made at the same time to the *now* asserted fact, that neither have pneumonia and other inflammations borne bleeding well since 1832? How comes it, that the physician failed to note the asthenic character of pneumonia, as well as the asthenic character of fevers? How is it, that for the first time in 1857 we are told that pneumonia has been for a quarter of a century of an asthenic, non-bleedable type? If the fact could long ago be so clearly predicated of fevers, why was it so undiscernable in pneumonia?

Now, it does happen that we can give a very satisfactory explanation of why blood-letting was said, and no doubt truly said, to be so ill borne in fevers. Firstly, men's theories of fever were completely revolutionised about the year 1830; and, secondly, as Dr. Murchison has so well shown, the prevailing fever in this country at that date was typhus; the inflammatory or relapsing sort, which had previously been so common, having become then very rare. But it is a well known fact that blood-letting is infinitely better borne in relapsing than in typhus fever—*i. e.*, does infinitely less mischief. Consequently, blood-letting in typhus would naturally produce worse results in practice than blood-letting in inflammatory fever. No doubt, under the benign influence of better theories, men observed this greater injury done by bleeding in typhus, and therefore they wisely abstained from blood-letting; and therefore, I must also add, unreasonably assumed that diseases had changed their type.

It seems to me, therefore, that a consideration of this subject clearly leads us to this conclusion: that the high authorities to whom I have alluded very correctly recorded their views that fevers were injuriously treated by blood-letting, but that they fell into the *ex post facto* error of judging of the use of bloodletting in pneumonia and other inflammations by the light of the ill effects produced by blood-letting in fevers; and that, in truth, the change-of-type theory, as applied to inflammations in general, was in reality based upon what was observed of the result of blood-letting employed in typhus fever?

Sydenham has been called the prince of observers; but who, at this day, can read those beautiful lessons, and not note—I might almost say on every page—proofs of the fact, that his observation was trammeled by the preconceived ideas which possessed his mind when he came to engage in the practice of medicine? Can we believe that Sydenham's observation was based on a true record of what he saw, when he tells of the rapid changes—I suppose he meant what we call change in type—which fevers underwent, according to the particular constitution of the year? And it is interesting to note, that Sydenham appears to have judged, or rather to have learnt the existence, of these changes, just as they have been learnt in modern days; viz., from noting the different effects produced, as he believed, by his remedies at different periods. Thus, he tells us, that he often found a remedy which would cure a fever at the beginning of a year would kill the patient at the end of the year. "This, at least," his words run, "on the strength of a multiplicity of accurate observations, I am convinced of; that diseases of the character alluded to, and more especially continued fevers, differ from one another, north and south; and that the remedy which would cure a patient at the beginning of the year will kill him perhaps at the close." And, again, he says, "When once, by good fortune, I have hit upon the true and proper practice that this or that fever requires, I can, with the assistance of the Almighty, by taking my aim in the same direction, generally succeed in my results, respect being always had to the age and temperament of the patient, etc. This lasts until the first form of epidemic becomes extinct, and until a fresh one sets in. Then I am again in a quandary; and am puzzled to think how I can give relief. And now, unless I use exceeding caution, and unless I exert the full energies of my mind, it is as much as—nay, it is more than—I can do, to avoid risking the lives of one or two of the first who apply to me as patients."

Can we now, with all our modern knowledge of the nature of fevers, be satisfied that these diseases had really changed their constitution in the brief period alluded to? But if Sydenham fell into such error, is it not probable that we also may err in drawing con-

clusions in a like case from a comparison of what we saw twenty-five years ago with what we see now?

And, again, how comes it, that the other equally remarkable changes in the use of certain capital remedies which have occurred during the last quarter of a century, have not been also adduced as proofs of the change in type of diseases? If the conclusion, as drawn from the effects of bleeding at the present day, be good, why should it not be equally valid as drawn from analogous instances—the employment of other remedies? Thus, for example, why should we not argue that diseases have changed their type, because, at the present day, various acute diseases—peritonitis, pneumonia, meningitis, and carditis—are found to undergo resolution without the induction of salivation? Surely the revolution which has banished the use of mercury, or something like it, from our practice in such cases, is as remarkable as that which has discarded venesection. Why may we not with equal justice and reason say, these acute diseases no longer require mercury for their cure, and have, therefore, changed their type, as say that they have changed their type because we cure them without bleeding?

No one pretends that syphilis has changed its type, because doctors cure it now without mercury, or without giving mercury so as to run off three or four pints of saliva daily from the mouth of the mercurialised victim.

Moreover, the conclusion which I am combating, that men do not bear bleeding now as they did formerly, seems to be still further vitiated by the fact, that not only are we, as observers, unfitted to make the comparison, but that the actual elements of a fair comparison are wanting. In those other past days to which we are referred, bleeding was a sort of universal remedy. Whatever were their diseases, men were let blood for the cure of them. Surgeons prepared their patients for operations by a seasonable bleeding; and, in fact, men in perfect health had themselves periodically bled in order to anticipate the possible occurrence of disease. Hence, the medical man of long experience, who has such a vivid recollection of the excellent effects of blood-letting in his youthful days and in the supposed sthenic times of inflammations, derived his esteem of it from what he saw of the effects in cases which he counted by the hundreds: whereas he now condemns its use from what he notes of its effects in a few rare and isolated instances. He forgets that, in most of his ancient cases, the bleeding was never required at all; and that, being frequently practised on persons who were but little injured by disease, it was not likely to produce injurious effects. I would venture to ask this learned assemblage, how many there are of us who have given up the practice of bleeding through a personal witnessing of its pernicious and depressing effects on man at the present day? I think, indeed, I may safely assert, that the profession as a body has accepted the suspicious conclusion solely on the "word of the master"; this word of the master having been accepted without examination, and re-echoed again and again so repeatedly, that at last what was originally suggested hypothetically has been generally accepted as an undeniable and unanswerable fact.

Besides this, I might add that, in those other days, and under the lingering influence of the old humoral theory, men did not note the injuries inflicted on the human constitution by immoderate bleeding, as we, in our wiser generation, have been enabled to do. And they, therefore, never thought to lay to the charge of their lancet any ill effects of their blood-lettings; but put them all down to the credit of the disease for which the bleeding was practised. The data, therefore, for any true comparison between the effects of bleeding as the physician noted them in his youthful days, and the effects as he notes them now, are completely wanting; leaving out of the case all consideration of personal incapacity for making the comparison on the part of the observer, resulting from the revolution which his ideas must have undergone whilst passing from youth to advanced age.

Then, again, it must not be forgotten, that there are practitioners who to this moment refuse to admit the truth of the proposition, that the human body will not now bear losses of blood well, and who still practise blood-letting. Certainly, arguing from my own limited personal experience of the effects of blood-letting during late years, and from what I can learn on the subject from others, the conclusion—that men will not bear bleeding, and that we are living in an asthenic phase of time—seems to me erroneous. I cannot, indeed, help saying, that the evil effects of blood-letting have been greatly exaggerated at the present day; indeed, beyond all proof and reason. Where are the proofs of the facts asserted? Who can produce them? I fancy there are few of my auditors who could give any satisfactory reply to the question out of his own personal knowledge. Is not the idea, in truth, so generally accepted, of the dangers of blood-letting, founded rather on some vaguely floating notions—received from authority and accepted without inquiry—than on any tangible and real valid facts? On the other hand, have we not strong proofs to show that the human body still bears large loss of blood with as little prejudice as ever it did? Have we not the experience of those who still practise bleeding? Have we not also the constant fact before us that men lose large quantities of blood in various diseases, from the lungs and the stomach, etc., and yet note that they recover rapidly and well from the hæmorrhage? Again, women after parturition, at times, lose enormous quantities of blood now as formerly; but accoucheurs do not complain that women bear these losses less well at this time of day. Patients, in the hands of the surgeon, also, after accidents and under operations, often suffer severe hæmorrhage; but I never heard of a surgeon who invoked this change-of-type theory to account for any evil results of the same.

Again, even in diseases deemed of peculiar asthenic character, we often observe a similar result. In typhoid fever, for example, large quantities of blood are often daily passed by the half unconscious prostrate patient, who yet may make a capital recovery, and apparently none the worse for his loss. How is it, one cannot but ask, that no illustrations of the change-of-type theory have been afforded us from these quarters?

Moreover, I must also call your attention to the remarkable fact, that the idea of the human body bearing bleeding ill is not an idea of the present generation. There, probably, has never been an age, from the days of Galen to our own, in which blood-letting has not been denounced as injurious to the constitution. But, to keep closely to the case in hand, I will content myself with showing you that, for the last hundred years at all events, men of high authority

have never ceased to affirm, that man's constitution was growing weaker; the proof and test of their assertion being founded on the very fact which forms the base of the modern argument; viz., that men did not bear bleeding as formerly. The opinion of those physicians was, in truth, just the opinion which is now held; only, instead of saying that diseases had changed their type, they say that the human body is less tolerant of loss of blood than it was formerly. I will give you, rapidly, a few proofs of this.

I have already given you the words of those who affirm a present existing asthenic type of disease. I will, therefore, take you back about thirty years, and give you the high authority of Mr. Lawrence at that time, who refutes the theory, let it be observed, while referring to its existence. "A notion," he says, "has prevailed, that people who live in London and other large towns, do not bear depletion well. I consider that this opinion is supported neither by experience nor argument. The dread of depletion has been transmitted from one writer to another without examination or inquiry, and has led to an inert practice." Dr. Southwood Smith and Dr. Tweedie strongly recommended bleeding in fever in 1830; and at that time—the asthenic period, remember, of modern authors—Dr. Tweedie tells us, "No remedy in the treatment of fevers has been more abused than wine." Writing in 1816, Dr. Armstrong deprecates the stimulating practice of erysipelas "still followed in some metropolitan hospitals; for the sake of science and humanity, he earnestly hoped that it would be soon abandoned:" thus rebuking the dread of asthenia which at that time existed amongst certain physicians. Dr. Bateman, again, writing in 1818, thus speaks of blood-letting: "The other active remedy which I have mentioned as capable of abridging the course of fever, if employed early, is blood-letting. I believe there are few physicians, who, like myself, commenced their professional career impressed with the doctrines that prevailed in the schools *at the close of the past century, in which the term of debility was certainly predominant*, who will not acknowledge that their subsequent practice has been a continued struggle between the prejudices of education and the staring conviction of opposing facts, which were continually forcing themselves upon their observation; and that they have more especially been compelled to a gradual, but material, change in their views respecting the use of the lancet, not only in fever, but in other diseases. I am fully convinced of the extent to which my own practice has been cramped by this prejudice." Why, here, at the very time when, as we are told by some authorities, the sthenic phase of disease was in full operation, we have the learned Dr. Bateman assuring us that blood-letting is the remedy, and rebuking the ignorance of those who, in his youth, had such a dread of debility!

Still further back, we have the testimony of John Hunter that the physicians of his day, just like physicians of our own day, laboured under the idea that inflammations were more asthenic than formerly—*i.e.*, would not bear bleeding as well; the two phrases being then, as now, exactly convertible. "It is observed," he says, "by some of the ablest physicians of this day, that the fever called inflammatory is not now so common in this country as it was formerly represented to have been; that it is now seldom that in fevers they are obliged to have recourse to the lancet, at least to that excess which is described by authors in former times. They are now more obliged to have recourse to cordials than evacuations; and, indeed, the disease called the putrid fever and putrid sore-throat are but of late date. I remember when the last was called Fothergill's sore-throat, because he first published upon it and altered the mode of practice. I remember when practitioners uniformly bled in putrid fevers; but signs of debility and want of success made them alter their practice. I believe we have much less occasion for evacuations in inflammations than there was formerly. The lancet, therefore, in inflammations, and also purgatives, are much more laid aside."

Why! are not these the very words which are met with in our text-books at the present day? What could be said, or is said, more against the practice of bleeding, than what John Hunter said? And yet men actually base their theory of the change of type on the assumed fact of the greater tolerance of bleeding in men of Hunter's day, and even of days long subsequent to his time.

Another quotation from Hunter I must give, because, curiously enough, he finds in the fast-living of men of his time a reason why they bear bleeding so badly in inflammations; whilst, on the other hand, we find writers of the present day suggesting that we don't bear bleeding as our forefathers did, because we don't live as freely as they did! Never was a more remarkable illustration of the bending of facts to make them fit theory. Hunter says: "We certainly live now more fully than they did formerly. We may be said to live above par. At the full stretch of living, therefore, when disease attacks us, our powers cannot be excited further, and we sink, so as to require being supported and kept up to that mode of life to which we have been accustomed." Hence, then, we see that for a hundred years past, at all events, men of authority have continually, and at all periods of the century, maintained the same doctrine; viz., that men's constitutions were weaker than formerly; and that, therefore, they would not bear bleeding; that this theory of change of type, which now exercises so powerful an influence over our practice, is the very same theory which has existed for at least a hundred past years; and that John Hunter said the very same things about the incapacity of men to bear bleeding in his day, as authorities of this day say.

Surely, then, I may conclude that the practice of physicians at different periods tells little either in favour of or against bleeding. The remarks of Bordeu—the most sagacious Bordeu—delivered about a hundred years ago, express, as I believe, the actual facts of the case. They are golden words. "It has always been thus with physicians," he says. "Past ages ever exhibit them, sometimes storming against bleeding, and desirous of banishing it altogether from medicine; and sometimes using it as a cure for all diseases—counting their victories by the number of their bleedings. The public, too, has always taken a part in these quarrels. We have even known whole towns divided into sections—the friends of the bleeding doctor, and the friends of the doctor opposed to bleeding. Truth to say, bleeding has ever been a subject of dispute, and of most surprising dissensions. But let it be said, to the honour of medicine and of those who cultivate it carefully, that there have always existed physicians of judgment—*médecins*

d'élite—who have joined neither party, rejecting the extreme ideas alike of the ultra worshippers of bleeding and of its enemies. There have always been, and always will be, patricians of this high class in medicine." Elsewhere he sums up, and still in golden words, the actual value of bleeding. "It may be said that, as a rule, the partisans of bleeding overestimate the value of its effects and the necessity for its use; and that, on the other hand, those who rarely resort to bleeding have an unreasonable dread of its consequences. It is not true that numbers die from bleeding, as some would have us believe; and still less is it true that those who rarely ever bleed lose as many patients as the partisans of bleeding say they do. Daily observation in hospitals shows the fallacy of both these conclusions; and the truth is, that it is not easy to distinguish between bleedings which are useful and necessary, and bleedings which are hurtful and injurious."

[*To be continued.*]

Clinical Records.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO ST. GEORGE'S HOSPITAL.

XIII.—Unusually Severe and Protracted Case of Syphilitic Disease cured by Calomel Fumigation: with Observations.

In 1856, Mr. — contracted syphilis in India, and went under a course of mercury. In June of the same year, secondary symptoms made their appearance. These consisted chiefly of copper coloured patches, appearing first on the palms of the hands, subsequently on the arms and legs, and on the body. Numerous excoriations, very tender to the touch, appeared on the scalp. The nails of the toes and fingers became affected, and in two or three instances they fell off. Iodide of potassium and sarsaparilla were the remedies chiefly employed at this time. The eruption gradually disappeared, and the remedies were discontinued. In about a fortnight afterwards, however, all the symptoms appeared again. The same remedies were given, and the symptoms again disappeared. In about a month after he left off these medicines, the eruption appeared for the third time, now accompanied by sores on the tongue and lips. The tongue was also fissured, and presented some warty elevations. This third attack of symptoms did not yield readily to treatment. The eruption, however, gradually subsided and disappeared, while the patient was taking nitric acid; but reappeared a fourth time, soon after that medicine was left off. Various medicines were now tried, including the liquor potassæ.

In June 1857, the circular spots of discoloration were still apparent on the body; and the affection of the nails had reappeared. The tongue and lips were also at this time affected. A great variety of local applications were made to the nails, and also to fissures on the tongue, without benefit. The whole of the soft palate gradually participated in the disease, and, together with the sides of the tongue, were excessively tender. Nocturnal pain in the limbs and in the head now made their appearance; and Mr. — became generally out of health, and was subject to much dyspepsia, accompanied occasionally by vomiting and colic.

One of the testicles now became enlarged, and resisted all the ordinary modes of treatment. As there appeared no probability of Mr. —'s being restored to health, he was recommended to return to Europe, which he did in October 1857.

Mr. — remained in England, being under treatment the whole time, until August 1859, when he returned to Bombay. He continued tolerably well until June 1860, when he contracted fever. This was followed by the appearance of ulcers on the legs. These ulcers healed under the internal use of iodine; but were followed by others of a much more intractable character. The latter were treated by nitrate of silver, zinc ointment, and iodine internally. The ulcerations ultimately healed; but shortly broke out again, and he was now treated by nitro-muriatic acid internally.

Mr. — now appeared to recover; but after being again attacked with fever, the ulcers again broke out, and extended much farther than before. Mineral acids, iodine, guaiacum, and a variety of other medicines, were now given without any apparent benefit.

Fearing that Mr. —'s stomach would become impaired if any more medicine were forced upon him, the surgeon under whose care he was recommended him again to proceed to England with all convenient despatch.

Mr. — arrived in England the second time in September 1861, and underwent treatment by a country practitioner for nine months.

In August 1862, I saw Mr. — for the first time. The upper part of the left tibia was much enlarged and extremely tender to the touch. He suffered much from nocturnal pain in the leg and in the head, accompanied by occasional profuse perspiration.

His legs were scarred in every direction with dark brown cicatrices, and there were some remains of the secondary syphilitic eruptions on the skin. He complained particularly of "flushings of heat", and of pains in the limbs, which were, to use his own expression, "excruciating." Feeling his health undermined, and broken in spirit, he contemplated leaving his profession, and had almost made up his mind to do so.

This gentleman commenced the use of the calomel vapour-bath in August 1862, and continued it steadily for nearly three months. He used occasionally other remedies; but the calomel vapour-bath was the only specific treatment that was adopted. From a very short period after commencing his treatment, his improvement was marked. The enlargement of the upper extremity of the tibia disappeared. The pains in the limbs subsided; the flushings of heat and perspirations ceased. He gained flesh; his spirits revived; and at the expiration of eleven months, he left again to join his regiment in India, apparently cured, and having during that period had no fresh symptom of a specific character. I have had the satisfaction of hearing from this patient that he continued in better health than he had enjoyed for years, on the 1st of January last.

The foregoing is one out of a large number of cases in which the use of the calomel bath has appeared to have been eminently successful, after all other ordinary remedies had failed.

It very frequently happens that patients return from India or China, having suffered from syphilis, and with their constitutions more or less impaired by the influences of a tropical climate. Such patients have often already taken large quantities of mercury internally; and the further use of the medicine in that form is, for many reasons, inadmissible.

When given internally, mercury produces a direct effect upon the liver, probably in consequence of its absorption into the portal system; and, in patients

who have previously suffered from liver complaints, any prolonged irritation of this nature may act most prejudicially.

The absorption of mercury through the skin and mucous membrane of the nose, mouth, and throat, affords, in such instances, an admirable mode of producing the specific action of the medicine without communicating any additional irritation to any of the abdominal organs previously affected.

The symptoms of constitutional syphilis are sometimes masked by the coexistence of other diseases in tropical climates; and, at other times, they do not there appear to develope themselves as they would in more temperate regions. Some of the most protracted cases of syphilis that have fallen under my notice, have afforded instances of the secondary forms of the disease appearing when the patients have been suffering from diarrhœa, or from some form of fever, and when they have, consequently, not been subject to any sustained specific treatment. In some of these cases, the character of the eruption has long remained unrecognised, and the disease has continued to reappear for years in succession, always being attributed to the depressed state of the patient's health.

As soon as the real nature of the affection has been ascertained after a return to England, such patients have not only been relieved of their eruptions by the judicious use of the calomel bath, but have, at the same time, regained their general health.

Such cases as the preceding afford the best practical answer to those who, on the one hand, maintain that syphilis can be cured without mercury; and to those, on the other hand, who believe that syphilis can be satisfactorily treated by mercury administered internally.

Original Communications.

ON THE VALUE OF OIL OF MALE-FERN AS A REMEDY FOR TAPE-WORM, AND ON THE MODE OF ADMINISTERING IT: WITH CASES.

By J. D. Rendle, M.D., Medical Officer of the Government Convict Prison, Brixton, Surrey.

The report of Dr. Fleming, published in the British Medical Journal on January 16th of this year, on the value of the oil of male-fern as a remedy in tape-worm, has induced me to publish the following cases, all of which were successfully treated with this remedy.

The preparation of the patients by abstinence from solid food, and the mode of administering the oil, were somewhat different from that of the cases given in Dr. Fleming's report. I have, however, in every case of tape-worm which I have treated for the last few years, invariably given the remedy in question, in the way I am about to describe; and the result in every instance, has been the rapid expulsion of the worm after *a single dose* of the drug.

The prisoners confined in the Brixton Prison are women under long sentences—penal servitude for three years and upwards. Cases of tape-worm are not of unfrequent occurrence among these prisoners during the early part of their sentences. The whole of the cases which follow have occurred since last July.

I will first give a short record of each case, and afterwards add the remarks I wish to make thereon.

Case I. A. J., aged 22, a thin delicate woman, formerly resident in Liverpool, had been treated for tape-worm for many months before her admission to the Brixton Prison. Portions of the worm had been expelled, and the treatment gave temporary relief, but in a few weeks all the unfavourable symptoms returned. In July 1863, I ordered one dose of the oil of male-fern. A worm six yards and a quarter long was passed, since which she has never complained.

Case II. S. S., aged 26, a strong and stout woman, formerly resident at Wakefield, had suffered from tape-worm for nine or ten years, for which she had been repeatedly under treatment, taking various remedies, including castor-oil and turpentine. Tape-worms, she stated, had frequently been passed after taking the remedies mentioned, but in two or three months there had always been a relapse. In August, after one dose of the oil of male-fern, a worm four yards and a half long was passed, and from that time she has been quite well.

Case III is particularly important and interesting. A. B., aged 22, a healthy-looking strong woman, whose former place of residence was Manchester, was brought to the infirmary from her ward on August 27th, 1863, apparently in an epileptic fit. There had been no previous knowledge or suspicion of the existence of tape-worm; but, in an evacuation from the bowels consequent on the action of a black draught, a single joint of a tape-worm was discovered. The cause of the fit was thereby suspected, and the treatment directed for the expulsion of a worm. After a single dose of the oil of male-fern, a worm four yards in length was passed. This patient had suffered from occasional fits since the age of eleven years, but there had not been, as I before stated, any suspicion of the existence of tape-worm. I have repeatedly seen this woman since August, and up to this time (March 8th), she has been altogether free from the fits she formerly suffered, and her general health has been good. During the first week of October, she thought that one or two joints of a small worm had on one occasion been passed from the bowels; I therefore at that time, subjected her a second time to treatment, and a thin narrow tape-worm, four inches in length, was passed after the usual dose of the male-fern.

In every case of tape-worm which I have treated for the last three years, the mode of preparing the patient, the dose of the male-fern, and the way in which it was given, have been the same; all of which I will now briefly describe. The patient is sent to the infirmary, and late in the evening on the day of admission, the treatment is commenced by giving an ordinary two-ounce black draught; on the following day all solid food is forbidden, but an almost unlimited supply of beef-tea is allowed; even milk, which is said to be the favourite food of the worm, I purposely forbid. On the evening of this day, half an ounce of castor oil is administered; and early on the following morning, about thirty-four hours after taking the black draught, two fluid drachms of the oil of male-fern are given, suspended in two ounces of thin mucilage of acacia. The result without an exception, in every case which I have thus treated, has been the expulsion of a dead worm within two hours after taking the remedy, and in one instance the worm was passed in fifteen minutes.

I have had no difficulty in getting the patients to submit to this mode of treatment, nor have they complained of hunger. In order, however, to enable them to bear without much discomfort the prolonged abstinence from solid food, the supply of good beef-

tea has, as I have stated, not only been unlimited, but each patient has also been kept in bed during the whole of the treatment.

The principle of this mode of treatment is, evidently, simply that of emptying the stomach and small intestines by abstaining from all solid food, and by purging; and so, by thus thoroughly uncovering the worm, exposing it to the full and almost immediate action of the remedy.

I have never, in a single instance, given more than one dose of the drug before the parasite was expelled; nor has the two-drachm dose given as I have mentioned, caused vomiting or troublesome purging; and in every case the worm was passed dead, and generally in one unbroken piece. No medicine of any kind is given except that which I have before mentioned; and, in a few hours after the worm is passed, the patients are restored to their ordinary diet.

Before I was in the habit of preparing patients by the previous purging and abstinence which I have described, I generally found that the oil of male-fern failed as a remedy for the cases under consideration; but since I have adopted the mode of treatment which I now make public, I can say that I have never known it fail; and I cannot but feel certain that the remedy in question, if given as I have mentioned, will invariably, first poison, and then quickly dislodge this troublesome parasite from the human body.

CASE OF GLAUCOMA WITH ACUTE INFLAMMATION, TREATED BY IRIDECTOMY.

By J. W. Hulke, Esq.

At the present moment, when so many persons doubt the efficacy of Iridectomy in Glaucoma, the following case is peculiarly valuable, from the circumstances under which the operation was performed, and from the fact that the results, after an interval of more than two years, are stated by an independent observer.

A lady, aged about 50, mentally deranged, residing under the charge of a physician to an asylum situated about sixty miles from town, lost the sight of her right eye from a deeply seated affection attended with severe inflammation, which rapidly ran its course, in spite of a well directed treatment. A few months after this, her left eye was similarly attacked. Her anxiety lest she should lose this, her only eye, was extreme. She was now brought to town by the physician, with an attendant, and reached my house at noon, August 24th, 1861.

The right eye was in the fourth stage of glaucoma —the stage of degeneration. The left eye was in the second stage of "glaucoma with peracute inflammation". The globe was very hard (T+3). The pupil was dilated and motionless. The anterior chamber was very shallow. The cornea was hazy. The optic nerve and retinal vessels could not be distinguished with the ophthalmoscope; owing to the cloudiness of the transparent media, the fundus returned merely a faint red glow. The sclerotic and conjunctiva were very red; the latter was very œdematous, and overlapped the cornea. The upper eyelid was œdematous. Acuteness of vision had rapidly decreased. A couple of days previously, she had been able to read, but now the figure of a person at a yard's distance appeared to her as a dim shadow. The field of vision was much contracted; but her extreme distress prevented an exact estimate of the extent of this diminution. She was suffering constant violent pain, with paroxysmal exacerbations. In her own words, "I feel as if my head were coming off".

In this condition, I knew that immediate iridectomy alone could prevent the destruction of the eye; and I proposed that she should remain in town a few days, when I hoped she might be able to travel home. She readily acceded to the proposal of iridectomy. But then a difficulty arose: the physician held himself responsible for the safe charge of his patient; and he could neither remain with her in town, nor leave her safely in lodgings with the attendant. Thus it was evident that she must either forego the only measure which could save her eye, or submit to it notwithstanding the disadvantages of a fatiguing journey shortly after. I strongly urged the operation, in spite of this unfavourable circumstance. At 1 o'clock, she was put under the influence of chloroform; and I performed iridectomy, removing about one-seventh of the iris. She awoke after sleeping about an hour, and took a light meal. At 4 o'clock, she left town by rail, wearing a light compress upon the eye, which felt sore, but was free from the violent pain experienced before the operation. The swelling of the eyelids was less—perhaps, in part, from the pressure of the compress. A fortnight afterwards, I heard that "the pain has not returned; all redness is gone; the eye is still weak; sight is improved." In reply to an inquiry, the physician, under whose care she still continued, wrote me the following letter.

"November 13th, 1863.

"My dear Sir,—I am glad to be able to inform you that the operation on Mrs. ——'s eye was a great success. Her vision is really good, as she can read No. 2 (pearl) on your test-type sheet with facility. She cannot manage No. 1 (brilliant); nor could many others of her age, without previous disease. She wears spectacles, as she has done some years. The pain before the operation was very great; it, however, ceased entirely and immediately; and she has had none since. (The eye, however, which had been lost when you saw her, is still the seat of occasional pain, at times rather severe.) The tension of the eyeball is now natural, the hardness having disappeared. It would look like an ordinary eye, except for the change in the figure of the pupil, which is elliptical, with the iris curiously thinned at one edge; and there is a small fleshy tubercle at the cicatrix, which nevertheless is no inconvenience to her. I regard the case as one of the most successful I ever saw in surgery. I know, by the rate at which she became blind with the other eye, how soon she would have been totally blind, but for your help; and this, too, is her own thought on the subject. It is the more interesting, as she is decidedly insane, of a very passionate temperament, and in delicate health. "Very sincerely yours,

"——."

The Highly Moral Journal. The *Dublin Medical Press* and the British Medical Journal appear to be the only journals determined to put down the gigantic and still increasing evil of "gratuitous services," for which the latter journal comes in for an immense amount of editorial abuse from the *Medical Times* of the last two weeks. "Is Medicine a Human Profession?" Its last "leader" on the subject was no doubt intended by the writer for the approaching "Spring Meetings" at Exeter Hall; but being short of an article it appears this week in the *Medical Times and Gazette*, and was intended to annihilate the *British Medical*, which journal, however, returns again to the attack on the "gratuitous" humbugging system now prevailing, and, undeterred by the Pecksniffian sermonising of any journal, produces proofs every week of the injurious effect of the system on the profession at large. (*Dublin Medical Press.*)

Transactions of Branches.

BATH AND BRISTOL BRANCH.

THE PLEA OF INSANITY.

By James G. Davey, M.D., Northwoods, Bristol.

[*Read at Clifton, February 18th*, 1864.]

You will all have heard of George Victor Townley, and of the circumstances attending the sad fate of his victim, Miss Goodwin. The case is one which is eminently deserving our best attention; and I have thought the present a very favourable opportunity to demonstrate to you what I conceive to be the very unreasonable and inconclusive nature of the arguments adopted by the lawyers in reference to the *plea of insanity*. I will put before you the most prominent fallacies contained in the speeches of Mr. Boden and Mr. Baron Martin; and I make no doubt that, having done so, we shall directly perceive the necessity there exists for an immediate and complete revision of all that relates to the plea of insanity in criminal cases.

Mr. Boden said: "If he regarded it rightly, the question for them to consider would be, *whether he had sufficient reason to be capable of knowing that the act which he did was contrary to law and an injury to mankind*. Now the prisoner might be, as Dr. Winslow said, in a state of derangement—that was to say, not in a perfect state of soundness and rationality; *but if he had sufficient reason left to know that the act he committed was prohibited by law, and was wrong, then he was held, in law, responsible criminally.*"

Mr. Baron Martin alluded at some length to the law of insanity, to establish which, he said, "it must be shown that, at the time the prisoner committed the act, he believed he was doing an act which was not wrong, and that he was doing an act of which he did not know the nature or the consequences. . . . . If the prisoner did not know the difference between right and wrong—between what the law of man called right and wrong and the law of God called right and wrong—then he should be considered insane."

Such, then, are the fallacies which are expected to influence a jury of our countrymen when deciding on the sanity or insanity, the responsibility or irresponsibility, of a prisoner at the bar. Let me add in this place, that the law involved in the foregoing extracts from the speeches of Mr. Boden and Mr. Baron Martin assumed for the first time, I believe, a definite and essentially practical shape so lately as 1843. Until then, the authorities on the plea of insanity in criminal cases were Lord Hale, the Chief Justice Mansfield, Sir Simon Le Blanc, and Lord Lyndhurst; but in 1843 occurred the murder, by Macnaughten, of Mr. Drummond; and this circumstance it was which caused the House of Lords to address to the judges "several questions relating to crimes committed by persons supposed to be insane or afflicted with monomania." These questions, five in number, with the replies thereto, relate, as do the fallacies I have quoted from the speeches of Mr. Boden and Mr. Baron Martin, exclusively to the state of the mere knowing faculties of the mind in him accused. Can we, by any possibility, as physiologists, be satisfied with so meagre an exposition of this plea of insanity, as explained or advocated by the lawyers? Why, it must be asked, do they ignore the very existence of the ever active emotions and moral feelings in him charged with crime? On what grounds are the lawyers justified in taking no kind of heed of the propensities—*i. e.*, the passions—in man? They can know nothing of the mind, as the Creator has formed it. The specific character of an individual man is to be found in the quality or force of his moral nature, and not in the particular state of his mere knowing faculties. The character of each gentleman to whom I address myself resides, so to speak, in the measure of his benevolence, conscientiousness, veneration, self-esteem, caution, love of approbation, firmness, attachment, acquisitiveness, amativeness, and so on, through the whole of the primitive faculties or feelings which belong to the genus *homo*, not forgetting their co-operation and reflex action the one on the other. Now Mr. Boden and Mr. Baron Martin told the jury nothing of all this. They dwelt with pertinacity on the "reason", the "capability of knowing", etc., possessed by Townley. They insisted that, to prove his insanity, it is necessary to show that, at the time the murder was committed, he (Townley) "*believed* he was doing an act which was not wrong," and that "he did not know the difference between right and wrong;" that the law holds that a man is insane who supposes a state of things to exist that does not exist, whose mind is in such a state that he thinks things real that are not, and acts accordingly;" and that, as Mr. Justice Le Blanc said, "the question was, whether the person, when he committed the offence with which he was charged, was capable of distinguishing between right and wrong."

Do the expositors of our laws require, at this time, to be informed that the springs of all human action are to be sought for in the tone or quality of our moral feelings—*i. e.*, the affections and propensities—which, in fact, constitute the very essence of individual character? The fact is, the lawyers have much yet to learn in respect to the sound mind.

The manner in which Mr. Baron Martin treats the question of delusion occurring to one insane, is singularly infelicitous. "Delusion", regarded as a symptom of mental alienation, is one which is to be referred not so much to a perverted intelligence, as to depraved moral feeling or sentiment.

The very best thing for Mr. Baron Martin and Mr. Boden to do, in order to be rid of their fallacies, would be to visit our lunatic asylums. I can fancy their astonishment at beholding the mass of the patients at Hanwell and Colney Hatch, for instance, in the exercise and enjoyment, day by day, of their mere knowing or intellectual powers. In the various workshops and scenes of industry which therein meet the eye, they would find tailors, shoemakers, carpenters, masons, cooks, gardeners, etc., all well and honourably employed. They are all mad enough; but they lack not the full knowledge of their surroundings. Speak to the tailor, or carpenter, or gardener, and you will find that he has lost none of his peculiar skill; that he can still command the same success that he ever did in his particular calling. Analyse the mind of either one of them, taking care to avoid any reference to his diseased emotional faculties or moral feelings, one or two or more of which will be sure to be at the root of the mental malady; and you will find (or I am greatly mistaken) that he still knows as well as he ever did; and that, if he have delusions, these are located in the moral man, and not in the intellectual man; that, in fact, these are, to speak figuratively, of the heart, not of the head.

It is concluded, then, that consciousness, or the ability to distinguish right from wrong, is no criterion of either a sound mind or of responsibility; that, in fact, nine-tenths of those insane persons who possess the physical power necessary to commit violence *know* full well what is going on about them; and that, moreover, they will commonly manifest, during even the greatest excitement, an acute intelligence, and not unfrequently really surprise one by the force and brilliancy of their reasoning powers. Writing on

this subject so long back as 1843, I have these words: 'The maniac is acutely sensible of his unhappy condition; and like the hysterical maiden, or the sufferer from St. Vitus's dance; or like him goaded by the delirious impulses of hydrophobia; or, in point of fact, like him worn and shaken by the deadly rigors of a tropical intermittent fever,—*he* (the maniac) is unable to restrain the indications of the disease which afflicts him; he, like them, is very commonly without delusion of any kind, perfectly capable of distinguishing right from wrong, and in all respects sensible of every individual act; but he (the maniac) is, nevertheless, as completely irresponsible for his actions as the veriest idiot which has existence."

In regard to the nature of the case of Townley, it is not a little difficult to judge of his present state of mind. I am quite inclined to think that Dr. F. Winslow and Mr. Gisborne were pretty close to the truth in their report of him. The Lunacy Commissioners, Messrs. Forster, Campbell, and Wilkes, have certified in effect, as you are aware, that, whilst agreeing with Dr. F. Winslow and Mr. Gisborne, they feel that he (Townley) was very properly found guilty of the murder of Miss Goodwin. The Commissioners apparently regard Townley as medically, not legally, insane; as if the one affected in no way his responsibility for the crime committed, whilst the other not less necessarily absolved him from punishment.

The only way for the country to be rid of so unscientific a view of cerebro-mental disorder is to insist on another plea of insanity—one in harmony with the principles of physiological and pathological science.

The last piece of information of Townley has, I fancy, taken us all by surprise. Drs. Hood, Bucknill, Meyer, and Helps, may or may not be right. However, I doubt not that Townley was, to all intents and purposes, insane and irresponsible at the time when he murdered poor Miss Goodwin. A very few words will explain to you my reasons for so thinking. Townley is by nature a kind and amiable man. His life has been passed in the obedience of the higher, the moral, laws of our nature. He becomes deeply attached to a young lady. They are engaged to be married; his hopes of life and happiness are centered in Miss Goodwin. After some years of fond anticipation, the lady named alters her mind. The intelligence shocks him. Now, the natural (mental) elasticity of a healthy man rises, ere long, to a level with the necessities of the case. But Townley came into the world *minus* the essential elements of *mental health*; his parents transmitted a certain predisposition to mental disease. Without the normal elasticity of mind, Townley was, or is, without the power to bear the heavy blow; and he succumbs to it. His mind is prostrated; he can scarcely sleep or eat. Small doses of morphia are given to him, to relieve his sufferings; but with the very opposite effect. Now, Mr. Baron Martin tells us that it was with "*the greatest anguish and distress of mind*," the "*most painful and agonising suffering*," and with "*feelings deeply hurt*," he (Townley) sought a last fond look of her whom he had so long and deeply loved. Under such circumstances, we, as medical men, are driven to the conclusion that Townley killed Miss Goodwin under the influence of a paroxysm of impulsive and homicidal mania. The absence of all premeditation in regard to the crime justifies, in itself, this conclusion. It is important, too, that on the first occurrence of insanity in him—now a year and a half since—he was affected with "eccentric delusions", under the influence of which he bought no end of hats and umbrellas, turned the pictures in his room upside down, jumped into swimming-baths without removing his clothes, and "played no end of pranks", "equally significant of craziness". His conduct on the occasion of the death of Miss Goodwin, gives to this conclusion no little weight; for a criminal would not have remained by his victim as Townley did; nor have helped her in any way; nor sought to modify or lighten the sad consequences of his rash act. The criminal makes the best efforts he can to escape his responsibilities; the insane man seldom if ever—a fact of much diagnostic value to the practical psychologist.

No medical man requires to be told that mania is essentially a paroxysmal disease. Like neuralgia, or asthma, or angina pectoris, etc., it comes and it goes. The insanity of Townley was very likely but a very temporary affair. The disorder may have begun and ended in him during his interview with Miss Goodwin. Since 1840, I have had patients under my care, the character of whose deep afflictions justifies me in making the above remarks. I attended, some twenty years since, a lady in her accouchement with twin children. On the third or fourth day after her confinement, she became maniacal. The attack lasted barely one hour. Not a month ago, a lady in this county was attacked with a strong desire to commit suicide; she could not, she said, get rid of the dreadful thought. After some hours only, the mind recovered itself. A patient, under my care, awoke in the night, having gone to bed in her usual health; and, under the pressure of a paroxysm of homicidal mania, sought to kill her infant child. When I saw this poor creature in the morning, she was distressed beyond measure at the idea of the crime which had pressed on her. The removal of some temporary indisposition of the body very effectually relieved the mind. An eminent lawyer, a year or two since, went to bed in his usual health. He awoke from his first sleep in a state of acute mania. He remained insane eight months, and then recovered. The recovery of the insane from long standing cerebro-mental disease is, now and then, and under peculiar circumstances, not less sudden and unlooked for than the first origin of this dire malady. A patient of my own, a lady, after some years of mental suffering, became all at once sane when walking home from church. To hear Miss —— recite this strange fact of her sudden restoration to health is indeed interesting. Many similar cases are on record. Homicidal and suicidal acts occurring to those of doubtful mental health, and to those to all intents and purposes insane, are, for the most part, capricious and impulsive. Doubtless, "transitory homicidal mania", as it is called, is a fact in pathology; and as such it must eventually be recognised.

It can matter but little what the newspaper press has to say on this subject. With us rests the responsibility of compelling the recognition of a rational plea of insanity. The Insane Prisoners Act Amendment Bill, as it is called, must be in harmony with the facts of medical science. Can Mr. Hardy suppose for one moment that the commission he recommends, "for the purpose of instituting a solemn judicial and open inquiry as to the fact" of a prisoner's insanity, would prove satisfactory, if "lay persons were introduced to settle those questions on which doctors differed"? Mr. Hardy says he should be sorry to see a commission such as he suggests composed of doctors alone. Where are the lay persons to be found in any way competent to overrule medical men on a question of medical science? The idea of the thing is simply absurd. Mere law must give way to science. The legal element must be made subordinate to the medical one. Mr. M. Smith advises the old constitutional tribunal, viz., trial by jury. Twelve honest butchers, or bakers, or tilers, he believes, are much "more likely to be nearer the truth than the same number of professional men". Sir G. Bowyer and

Mr. Alderman Rose are little in favour of the medical element in the proposed congress. The first named gentleman says that physicians should not be asked to judge of the question of insanity, but should be required merely to tell an "independent and impartial authority" what they may know—*i. e.*, to answer questions. The second thinks that a "medical tribunal" would be impracticable, because "they might have, when they came to the medical evidence, as much as they pleased any way." So much for the opinions of our legislators. If, Mr. President, the British Medical Association were duly represented in our House of Commons, then would there be some hope that the plea of insanity would be amended as it should be; or, what is the same thing, that doctors, like astronomers, engineers, and other scientific men, would be required, at all times and under all circumstances, to do the work which belongs to them. In a paper on Medical Evidence written by me in 1856, and read before this Association at Bath, are these words: "I feel satisfied that the present anomalous relative position of law and medicine—*i. e.*, of lawyers and doctors—must cease; that the practice now adopted of obtaining the testimony of medical men in cases of suspected lunacy, as well as in criminal cases, is throughout objectionable, and fraught with much mischief; that it is desirable for the sake of science, and not less for the honour of the medical profession, that in all cases, of whatever kind, involving in any degree a knowledge of the principles and practice of medicine and its collateral branches, a plain statement of all the facts should be drawn up and submitted to a medical arbitration; and that then the various opinions of medical men would be found to approximate, and the medical chasms which now appear would be bridged over in an easy, graceful, and truthful manner."

Reviews and Notices.

ANNALS OF MILITARY AND NAVAL SURGERY AND TROPICAL MEDICINE AND HYGIENE; being an Annual Retrospect, embracing the experience of the Medical Officers of Her Majesty's Armies and Fleets in all parts of the World. Vol. I, for the year 1863. Pp. 376. London: 1864.

IT has often been made matter of regret that so much valuable information contained in the reports which arrive from all parts of the world, emanating from the Army and Navy Medical Departments, should not be made more available for the information and guidance of the public and the medical officers serving on the various stations. The Army and Navy Health Reports are becoming every year more valuable; but both these and the Medical Blue Books are issued in too bulky a form for general use. They are rather calculated for the use of the medical reviewer and the statistician than of the executive medical officers. Not very accessible at home, they will be found absolutely unattainable at some distant stations; to some extent, the same is the case with the medical periodicals and new works of interest which abound in metropolitan circles.

These wants this volume is intended to supply in some measure. Most medical officers will be glad to find the principal improvements in practice and hygiene brought into one focus, as it were, for their advantage. The editor says that each annual volume is intended to supply a retrospective history of military and naval medicine and surgery during each year, and hopes that the mass of materials selected, abridged, and arranged, may form an "accessible storehouse of departmental investigation, useful to his professional brethren, and well worthy of the attention of the soldier, the sailor, and the statesman."

The basis of this volume is the Army Health Report for 1861, combined with the Navy Report for 1860, from both of which copious extracts and analyses are made. A distinct part is devoted to each principal station of the army and navy. The reader will not be surprised to find that a large proportion of the space is occupied by the Home Station: partly, from the large number of troops and of garrisons on this station; partly, also, from the admission of various articles from the pens of eminent practitioners in the depôts and hospitals for invalided men, including the great Netley Hospital. But still larger is the space allotted to the news regarding practice and hygiene coming from the East India and China Stations. In fact, we have a valuable collection of topics relating to Tropical Hygiene and Medicine: not confined to the observations of the executive medical officers, British and Indian, at present serving in the east; for we find extracts from the publications of Sir R. Martin, McClelland, Professor Giraud, Dr. Davy, Deputy-Inspector Leith, etc.

The concluding part contains short obituary notices of some of the most noted surgeons connected with the militant services, who have died during the year.

We think that this volume will be welcomed by many classes, and particularly by the soldier and sailor doctors, as tending to supply the want of that impracticability on foreign service and at distant stations—an extensive medical library.

THE PRESCRIBER'S COMPANION. By ALFRED MEADOWS, M.D., M.R.C.P., Physician-Accoucheur to the General Lying-in Hospital, etc. Pp. 152. London: 1864.

THIS book has been compiled with the view of assisting the student and practitioner in their adoption of a new pharmacopœia. The book is divided into six parts:—Remedies for External Use; Medicines which act, or are supposed to act, on the Blood, the Nervous, the Ganglionic, the Secreting, and the Generative Systems; and lastly, Substances Useful as Disinfectants, and a Table of Poisons and their Antidotes. The author has retained many of the old pharmacopœial preparations, and has given others which he considers of value. Such preparations are distinguished from those of the *British Pharmacopœia*, by being set a little to the right; whereas, to the officinal drugs the letters B.P. are affixed.

Dr. MEADOWS has also given the composition of the various preparations, shewing the alterations that have taken place in their strength and composition, as compared with those in the old *Pharmacopœias*. The dose of each remedy is given for the adult and for the child; and occasionally, brief notes are added on the specific action of the more important and less frequently employed substances.

THE PRESCRIBER'S ANALYSIS OF THE BRITISH PHARMACOPŒIA. By J. B. NEVINS, M.D. Pp. 94. London: 1864.

THE object of this little volume is, Dr. NEVINS says,

to "enable the prescriber to see at a glance whether any change has been made in the formulæ that he has been accustomed to use; and if so, what is its nature and extent." Medical men will have need of all useful aids to enable them to comprehend the changes which have been admitted into the new *Pharmacopœia;* and therefore will doubtless find this little volume a help in time of need.

British Medical Journal.

SATURDAY, APRIL 9TH, 1864.

OUR MEDICAL ACT AND MEDICAL COUNCIL.

THERE are periods in the life of individuals and of corporate bodies, when it becomes fitting for them to survey their past history, to inquire into their present state, and to take stock of their actual position. The uses of such an examination are obvious. If past action shows a satisfactory progress, we advance hopefully on in our career; but if we find that our expectations have not been fulfilled, and that our efforts in the past have not produced the good anticipated, we then, if we are wise, endeavour to learn the causes of our failure, and from the experience of the past gather lessons of wisdom for the future.

The profession will, we believe, agree with us that the corporate body called the *Medical Council* may usefully subject itself, or be subjected, at the present moment, to an inquiry of this kind. More than five years have now elapsed since the Medical Act received the sanction of the legislature—the Act of Parliament which was to relieve all the many woes and throes of a long-suffering medical community. Now, this Act was designed for the fulfilling and carrying out of certain special purposes—for the remedying of evils and defects supposed to exist in the then state of the medical profession. We, therefore, now propose to inquire to what extent those objects have been actually accomplished during the past quinquennial period, and to take a measure, if possible, of the successes and the shortcomings of this legislative interference with the interests of the medical profession; to inquire to what extent the objects and purposes of the Act have been fulfilled, and what yet remains to be done.

The main objects of the Act appear to have been threefold: 1. To regulate the qualifications of practitioners in medicine and surgery; 2. To enable persons requiring medical aid to distinguish qualified from unqualified practitioners; and 3. To provide for the publication of a *British Pharmacopœia.*

To carry out these objects, of course, some intelligent machinery was necessary; and therefore was provided a Medical Council, composed of individuals representing the varied and often opposing interests of all the medical bodies in Great Britain and Ireland. This Medical Council was, in fact, selected as a grand national medical discussion-forum, wherein, under the influence of rational argument and by mutual self-sacrifices, conflicting interests were to be gradually worn down, and all the various medical bodies of the country reduced into the state of one happy family. Of course, such a Council required a certain liberty of action and certain powers of action; and these it received under the Medical Act. With these powers, it necessarily also accepted responsibilities. It had certain duties to perform, as well as power given it for their performance.

The duties imposed upon the Council under the Act were: to take orders for regulating the medical registers to be kept under the Act; to inquire into the courses of study, etc., required for obtaining qualifications; to take care that such courses of study were full and sufficient; and to bring before the Privy Council, for condign punishment, any medical corporation whose courses of study or examination were, in the opinion of the Medical Council, defective. Also the Council's business was to strike off from the *Register* names of persons guilty of infamous conduct; to keep good accounts (and to publish them) of cash received and expended; and to publish a *British Pharmacopœia.*

Let us now see what sort of an account the Medical Council can render of this its stewardship; and also consider the benefits which the profession may be supposed to have derived from the Medical Act, as so administered.

In the first place, the Medical Council has published a *Register*—has settled the registration of the medical profession; and this registration has been, we need hardly say, the milch cow, which has enabled the Council to live and operate. It was the golden key of the whole Act; and a most expensive key has it proved to the profession. During the five years which have elapsed since the passing of the Medical Act, the profession has paid down in hard cash £49,908 : 5 for the honour of being registered according to Act of Parliament, and of possessing a Medical Council. But few medical men will, we fear, be brought to affirm that the possession of this *Register* is worth £50,000 to the profession. Many say it is not worth 50,000 pence, and, indeed, boldly ask, Of what earthly use is it to us? Others there are, who do not at all appreciate the honour of having their names stuck cheek-by-jowl in this authentic and official document with all the loose characters who possess professional titles—with cancer- and consumption-curers; with kinesipathists; with mesmerists; with homœopathists; and other more or less well pronounced specimens of the *ambubiarum collegi* class. We will not, however, stop to uselessly discuss this foregone conclusion. It is the old

man of the mountain: we have it on our necks, and must wear it. We will content ourselves with observing only this, that obviously the *Register* is of infinitely greater service to the public than it is to the profession; and that, therefore, the legislature deserves no great blessings at our hands for mulcting us to the tune of £50,000 *for the benefit of the public.* We suppose the government knew how fond the profession is of doing the work of the public gratuitously, and took advantage of its generous weakness! Yes, £50,000 we have paid down during the past five years, and about £4,000 *per annum* we are paying at present, and shall pay for the future, thanks to the Medical Act.

But we have something for our money. We have, at all events, one great blessing—a Medical Council. For we may safely assume that, had no due remuneration been attached to the services of the Council, candidates for the honour of representing corporate interests in the council-chamber would not have been forthcoming.

Another of its duties the Council has also accomplished. It has published a *British Pharmacopœia.* And here, we regret to say, we may almost repeat our criticisms of the registration. Here again we have been playing the benevolent part of *sic vos non vobis.* We have paid a heavy sum for the fabrication of an instrument which belongs to the dispensing department—to the pharmaceutist—quite as much as it does to the purely professional man. Besides, if we are to believe the criticisms which fall from every quarter on this devoted book, the last title which can be aptly applied to it is that of a *British Pharmacopœia.* Never do we remember an issue from the press, which has been so lamentably battered by the English, the Irish, and the Scotch. We have paid an enormous sum (we will venture to put it, until better informed, at £8,000) for the mere composition—not the printing, be it observed—of a volume which, so far, has not been accepted into general use. Hard-working professional men naturally are averse to change; and the *Pharmacopœia*, like all innovations, has produced much confusion. The President of the Royal College of Physicians and many other men feel disinclined, after reaching a mature age, to go to school a second time and learn a new book. It is enough, surely, for a man to have mastered one *Pharmacopœia* in his lifetime; and to learn another, in which he has but small faith, would be an act of self-sacrifice scarcely to be expected, except in a devotee to drugs and chemicals.

Well, then, so much of its duties the Council has performed. It has given us a *Register*, and it has given us a *British Pharmacopœia.* Its third function it has yet to discharge; viz., the settlement of the education of the British medical student. Before, however, we come to this interesting remainder, our readers may perhaps like to know what the Medical Council has been paid for the work already accomplished by it. Here is the figure. During the five past years, £8,288 have been paid as fees to Council; as travelling expenses, £1,463; and as hotel expenses, £913. That is to say, we have paid the Council up to the present time, in round figures, £10,664 for the services rendered by them. Whether we have or have not had an equivalent for our money, people must decide for themselves; and, if the Council has not hitherto been happy in its performances, we must remember that it has been unfortunate in the kind of work imposed upon it, rather than in its execution of the work. This *Register* and this *Pharmacopœia* were no voluntary works, but things ordained for completion by Act of Parliament. We have no right, therefore, to vent any useless anger on the Council, if we feel dissatisfied with the goods they have so far delivered us for our money. If the bargain has been a bad one, it was one we made with the government before the Medical Council had an existence; and it is one, therefore, which we must digest as well as we may.

But the grandest functions of the Medical Council have yet to be performed; and herein it must, indeed, answer to the profession; give an account of its behaviour; stand upon its trial, and prove its worth. It has to settle the vital question of medical education; or, in the words of the Act, to regulate the qualifications of practitioners in medicine and surgery. For this purpose, it possesses not only freedom of action, but has power to enforce the carrying out of its conclusions. What it has hitherto done—its gift of these comparatively insignificant, though most costly, appendices, a *Register* and a *Pharmacopœia*—is really nothing in comparison with the work which it has now to do for the profession.

The question of medical education is one which the Council—a "Council of Medical Education"—is bound to investigate thoroughly and anxiously, and to regulate with extremest impartiality and patriotism. The whole profession, if necessary, should in this matter assist the Council by giving it that force of public opinion which may be necessary to bring it to a due performance of its functions. The duty of the Medical Council in this matter is manifestly this: To lay down a minimum of professional study and education; and by the power vested in it through the Privy Council, to force the acceptance of such minimum upon all the medical corporations of the country. Its duty also is to direct and arrange the courses of study of the student. If the Council do not this, it abrogates its special duties, and becomes little more than an expensive millstone on the necks of the profession.

We earnestly call the attention of the profession to this matter; and we are satisfied that those gentlemen in Council who are really anxious to settle, not nominally but in reality, the important question of

medical education will feel themselves greatly strengthened by the pressure of professional opinion urging the Council to an energetic performance of its duty. And such professional opinion must be quickly awake; for the Council will, before another month is passed, have come, have met, and have gone.

We will next week consider more particularly the subject of medical education, and the special duties of the Council in relation to it.

IRIDECTOMY.

The subject of iridectomy has been so fully discussed in the Journal that we apprehend there is little more to be said *pro* or *con* on the subject in the present state of our knowledge. No one can doubt that the discussion has been productive of great service both to science and to humanity. It is impossible that the interchange of opinion which has been thereby elicited can have failed in enlarging as well as testing the views of our surgical brethren, whatever their opinions may have originally been upon the subject. In discussions of this nature, it is certain that much more good is effected than appears upon the surface, the way for the settlement of differences being paved imperceptibly.

Our anxious wish has been, and still is, that the question should be handled in our pages solely and simply in its scientific bearings; and for obvious reasons. Nothing but disfigurement of a really deeply interesting question, could have resulted from the introduction into it of mere personal considerations. The point we would have debated is one solely of fact and of science; and from the high vantage ground of science alone can it receive full solution. We have felt compelled to refuse several very interesting communications on the subject, because we feel (as we know the profession feels) that all that science can say at the present moment has been said about iridectomy. That there is yet much to be worked out—much that is still obscure and uncertain in the matter—no one can deny. The operation is one which does not yet rest on principles capable of clear and satisfactory definition, as other surgical operations do. It rather reposes on that lesser kind of evidence, which usually guides the hand of the physician; viz., the results of practical experience. We readily admit that, if general and large experience determines a surgical operation to be of service, we are fully warranted in resorting to it, even though its *modus operandi* be not clearly explicable. We should, in fact, be guilty of worse than folly if we neglected to do so.

Now, we find (and we state this without pretending to enter into the merits of the operation) that there does appear to exist in the minds of a great many surgeons who have performed iridectomy, a very firm belief in the efficacy of the operation in certain cases; so that we may, in truth, say that the value of the operation has been tried by, and received the warrant of, a large experience. Some surgeons, it is true, altogether reject the operation as useless and inadmissible. But, amongst the majority of ophthalmic surgeons, the main difference of opinion seems to be rather in the matter of the right application of the operation than of its actual utility. Some ophthalmic surgeons assert it to be an operation which is very frequently requisite; whilst others, on the contrary, tell us that it is only very rarely that they encounter the case in which it is applicable. There is still, therefore, a deep and most important difference of opinion existing as to the uses and right application of iridectomy, amongst those even who accept the operation as a good and legitimate one. Future observation and experiment will, doubtless, compose this difference; and we need hardly add, that the sooner the accordance in opinion is arrived at, the happier will it be for humanity.

To elicit a discussion which might tend to the removal of these differences of opinion, in the interests of humanity as well as of surgery, was the object we had in view in raising this inquiry into the subject of iridectomy. The profession will, we are satisfied, feel that the discussion must have, both directly and indirectly, tended to the furtherance of the end desired; and we believe we may, without hesitation, say, in the words of a well known surgeon, that "the discussion has been the most important scientific surgical inquiry which has of late arrested the attention of the profession." In conclusion, we would again suggest that, as all that the science and practical experience of the day can say of iridectomy on the one side and on the other has been fully said, it is time that this discussion ceased.

As the matter now stands, and as Mr. Bowman puts it, the operation must be judged of mainly by its fruits. The great authority of Von Gräfe and of Mr. Bowman will naturally have its due influence with the profession; but, as other authorities differ from them on matters of fact and of observation, to facts and to observation must be the appeal for a final solution of the question. What, therefore, is now required, is a simple detail of clinical facts—we mean of clinical facts stamped with the seal of authority and of correct observation. There is no other criterion by which the question can be finally adjusted. Argument has said its last word.

Mr. Griffin has issued an able summary of the principal points of evidence relating to the medical relief of the poor submitted to the Select Committee of the House of Commons. We regret to learn that the Committee does not take a view favourable to the interests of the Poor-law medical officers. Mr. Griffin has fought the battle with wonderful energy

and perseverance; and, whatever be the results, the profession must be ever under great obligations to him.

We beg to recommend the following sensible and business-like resolutions passed on the 31st ult. by the Medical Society of Liverpool, to the consideration of the editor of the *Medical Times and Gazette*. We trust he will consider it a plain-spoken answer to his late very abusive article. We do indeed congratulate ourselves on finding that the profession is really getting alive to the destructive system of gratuitous medical advice.

"That the Medical Society of Liverpool regrets that sudden and dangerous accidents and illnesses occasionally occur among the poor of large towns, to meet which the present arrangements of the Poor-law Board and of the medical charities are inadequate.

"That the public has no right to expect that the members of the medical profession shall, *nolentes volentes*, be burthened with gratuitous attendance upon such cases, and insulted at inquests for declining to attend strangers.

"That it is the duty of boards of health or of the police to secure medical attendance on such cases by paying, out of the public purse, fees for all such urgent cases as the police officer on the beat may report as requiring immediate attendance."

M. Moura relates a case in which a pin which had been swallowed, and whose presence had been recognised in the pharynx, where it remained two days, by the aid of the laryngoscope, traversed the whole of the intestinal canal. M. Délore communicated to the Academy a case of contraction of the larynx, which had been successfully incised by the aid of the laryngoscope.

Dr. Caradec, in *L'Union Médicale*, calls attention to the great use of nitrate of silver in dysentery. He administers it both by the mouth and in the form of injections. He first of all clears out the intestinal canal with castor oil or Epsom salts; and then gives, night and morning, a lavement of about 4 or 4½ grains of nitrate of silver. Each time, immediately before giving the lavement, the rectum is washed out with a simple injection of water. A few drops of laudanum are added to the nitrate of silver injection, if the rectum be irritable. Pills he gives, of one *centigramme* (3-20ths of a grain) of nitrate of silver, if the injections should happen to fail.

The death of Dr. Lhonneur is another sacrifice of the life of a French surgeon to Mexican fever.

M. Legrand du Saulle, *physician-expert* attached to the Civil Tribunal of the Seine, has published a volume of 624 pages, which should contain matter of very high interest to all of us. The title of his book is, *La Folie devant les Tribunaux* (Madness from a Legal Point of View). M. Legrand seems to possess especial qualifications for the treatment of this subject. He was originally a student of law, as well as a student of medicine, and was during many years occupied in the service of lunatic asylums. Since then, he has made the study of lunacy almost a special one. The *Gazette des Hôpitaux* gives us an idea of the contents of his work. He shows the relation of the different forms of insanity to criminal acts. He insists on the characters which distinguish the lunatic from the criminal, and shows how a medico-legal inquiry should be conducted. Among other important questions are discussed the following: the degree of responsibility; the responsibility of persons under restraint; lucid intervals regarded from a legal point of view; the medico-legal condition of the drunken delirious; natural somnambulism; the mental condition of the leprous, the hysterical, the epileptic," etc. "If, as I believe," said M. Flourens, "M. Legrand has given a true definition of insanity, if he has pointed out the line of conduct to be followed by magistrates in this matter, his work will have rendered a great service."

Two French *pharmaciens* have been lately fined, each of them 500 *francs* (£20), for making up and selling medicines not prescribed by the physician; and also 15 *francs* for illegally practising medicine. What would say our pharmaceutical chemists and druggists to this kind of treatment?

M. Ollier has again called the attention of the Société de Chirurgie to the subject of the regeneration of bone. According to his experiments, the regeneration of bone is a settled fact. It occurs most readily and rapidly and certainly in the long bones. The preservation of the periosteum is an essential condition. In the case of the long bones, the extremities remain a long time in the state of cartilage before they consolidate into bone. The flat bones may be reproduced from their external periosteum. M. Ollier has in this way produced a solid bony covering for the nose out of flaps of periosteum taken from the frontal bone. The internal periosteum of the cranial—the dura mater—will also produce ossification. The mucous periosteum of the nasal fossæ, of the palatine arch, and also produces bony matter; but the production takes place slowly, requiring five, six, seven, and even eight months for its completion. The short bones may likewise be reproduced. M. Ollier has reproduced the calcaneum, the cuboid bone, etc., in animals. The new bone, he says, in these cases, sometimes attains a size even larger than that of the original bone. Certain conditions are necessary for the success of the regeneration; and of these, especially, he refers to the thickness of the periosteum, and its firmness.

Dr. Gayetant, who was born in 1777, has just published a volume on human longevity. In 1777, he says, the value of man's life in Francc was 23 years; in 1798, it was about 26 years; in 1836, it was 33; and at present it is 39 years. He totally objects to the modern doctrine, that the human race is falling into a state of decay.

THE STATE OF LUNACY IN ITALY.

By G. Mackenzie Bacon, M.D.

Having long felt, with Keats, "a languishment for skies Italian," I gladly availed myself of an opportunity to visit a land so famous, and have spent in it and some other parts of the continent the last four months. During this period, I have made a point of seeing the principal asylums of the countries through which I passed; and beg to offer some of my *impressions de voyage* on these institutions.

The first feeling of every Englishman on visiting the continental asylums must, I imagine, be one of disappointment, so inferior are they, as a rule, to those of this country in size, comfort, and general arrangement. The wealth, political condition, religion, and even position, of a country, are each and all influences having a direct bearing on the state of its social institutions; and in all these points England differs very widely from other nations.

The liberty which this country enjoys has enabled local governments to provide for their insane poor almost at will, allowing a freedom of action which contrasts most favourably in its results with the centralised authority of paternal governments, whilst the wealth of the kingdom has furnished the most ample means for the furtherance of such beneficent efforts. On the continent generally, where the people have little or no share in the regulation of their own affairs, social reforms depend almost entirely on the will of an absolute ruler, and the character of the government is reflected in the institutions of the country.

In France, where revolution has for years distracted the land, the provision for the insane is lamentably bad and insufficient; and a people who are fond of considering themselves the first among civilised nations, cannot show more than two asylums equal to that which even the little Duchy of Baden has possessed for nearly twenty years. Austria, where everything is "royal and imperial", has produced but one modern asylum, though that is of the highest character. Switzerland—an oasis of liberty in the deserts of despotism—has some of the most creditable institutions on the continent. And Italy, so long "an house divided against itself," is only now taking the first steps in the much needed reforms. But, besides these points, the prevalent form of religion, the Roman Catholic, has had some influence in arresting progress; and in this way, that till recently the care of lunatics, in common with most exercises of public charity, devolved exclusively on the religious bodies. While it will be readily understood that the exclusive care of the insane by the religious classes, even in Catholic countries, is not a plan compatible with what is now considered proper management, I do not wish to convey the idea that the presence of these persons is always objectionable; for I am convinced I have seen their influence most usefully exerted, and attended by the happiest results. In Belgium, the insane are almost universally under the care of the religious, who perform their duties in the most conscientious manner. The difficulty which every superintendent feels in the management of an asylum—that of finding good and trustworthy servants, who take an intelligent interest in their work—does not exist in Catholic countries; for in them their place is filled by a body who have no object in life, but the simple fulfilment of appointed duties, and who are protected by the aid of their religion from many of the fallibilities of those who mix more freely in the world. That their presence and moral influence are both respected, even by lunatics, and usefully exerted, may be gathered from the fact that they never meet with violence from their patients; and I have more than once seen a furious and ill-tempered woman obey instantly the gentle touch and ready smile of a sister of charity.

Whatever be the present condition of foreign asylums, one is glad to see that on all sides there are signs of progress; that everywhere the need of reform is admitted; and that in many places the work is commenced.

Thus, in France, the legislative body last year voted the sum of ten million *francs*, to be increased to fifteen if needed, for the construction of new asylums in the Department of the Seine, and nine are to be erected around Paris and within a short distance of the capital. When at Lyons, I was told that the authorities there had almost settled the plans for a new building, which would soon be commenced. In that city, at present, the lunatics share a very old hospital with syphilitic male patients, and children with skin-diseases, chiefly of the scalp. I may also mention that, in June last, an imperial decree fixed the salaries of the asylum officials at the following rate throughout the whole of France. Directors—First class, 7000 *francs*; second class, 6000 *francs*. Medical directors, 5000 *francs*. Medical officers-in-chief, 4000 *francs* and 3000 *francs*. Assistant ditto—First class, 2600 *francs*; second class, 2100 *francs*; third class, 1800 *francs*.

Italy, as a whole, is so newly formed, and at present so imperfectly consolidated, that it is hardly fair to discuss the asylums in the recently acquired dominions now dependent on the government of Turin. Most of these establishments are still found in the cloistered buildings in which they took their origin; and in many the religious orders conduct the routine under a medical director; but, without exception, these houses are condemned by the directors, and are manifestly unsuitable for their present purposes. In Piedmont, the asylums are, though old, larger and better than in Central or South Italy; and in Genoa, there is a comparatively modern one; but the newest and best was at Bassens, near Chambery, and formed, therefore, a part of the price paid by Italy to Napoleon for his "generous" assistance in the late war. At Milan, the great establishment of the Senavra is soon to be replaced by one more suitable in a different and more healthy situation; and this measure was even projected by the hated Tedeschi just previously to their expulsion. The only modern, and certainly the best, asylum in Central Italy, is at Reggio, in the old duchy of Modena. The building is well arranged, and the patients well cared for in many respects; but as I was positively refused admission to the quarter of the *furiosi*, this being never shown to strangers, I think we may conclude that there are some dark shades to this otherwise fair looking exterior. Perhaps, more interest attaches to the asylum at Aversa, near Naples, than to any other; for here has been placed as director one of Italy's most remarkable men—not to say heroes—Dr. Miraglia. This gentleman has distinguished himself by his study of phrenology among the insane, and by the zeal with which he has cultivated mental pathology, as well as by the interest he has taken in the improvement of the asylums in his country, and he has received from Victor Emmanuel the gold medal and cross of St. Maurice, the highest scientific honour; while he also enjoys the celebrity of having spent eight years in prison for expressing his opinions too freely against the Bourbon government.

All the insane of South Italy were sent to the three

houses at Aversa, where the accommodation was as bad as possible; but some new buildings have just been completed after Dr. Miraglia's plans and are in excellent order.

Even at Rome, there are signs of improvement; and *non possumus* is by no means the motto of the Monsignore who directs the asylum. The most remarkable thing there is the suite of baths which has just been re-modelled, and deserves the highest praise; and the building has been enlarged and improved in many ways. I do not know that in any other part of the continent, the people are making such good use of their liberty to help themselves and raise their establishments to the level of the present day, as they are in the new provinces of the Italian kingdom; witness the following facts.

"The Council of the province of Milan has voted two million *francs* for the erection of an additional hospital for the insane poor of the province.

"The provincial deputation of Como, considering that the province requires an asylum for 300 patients, has ordered the erection of the same.

"The provincial Council of Bologna, in order to provide for the proper treatment of its lunatics, formed a commission of inquiry, composed of five professors, a lawyer, and an architect, who made suitable plans, and reported the urgent necessity of building a new asylum.

"The authorities of Bergamo have set about improving the asylum at Astino, substituted a better diet, and built an additional house to receive those capable of being employed."

There is, however, one feature in which Italy, though at every disadvantage, can give us a lesson; and that is, clinical instruction in lunacy, a matter virtually ignored in England. The *Gazetta di Medicina Mentale* regrets that there are only six Universities in Italy, where there is an "alienistic clinique." But how many has England? At Florence, Professor Bini; at Turin, Bonacossa; at Bologna, Monti; at Naples, Miraglia; at Pavia and at Cagliari, Lumbroso and Dessi-Caboni—give instruction in this branch, illustrating their lectures by reference to actual cases and practice in the wards. Professor Miraglia, in his inaugural address at the University of Naples (March 1863), recounted how, in 1849 and previous years, he had, in his works, advocated the necessity of studying the physiology of the brain in connexion with insanity; and how, after being called a materialist and atheist by the priests in the service of the then government, he was forcibly silenced; and he does not seem to have escaped the same abuse on this occasion; for he mentioned a clerical periodical which raised the same cry, though happily with but little effect.

The Austrians, though half ruined by the necessities of their enormous army, have two new asylums in hand—one at Venice, where they are building a large and good house on the island of S. Clemente for women only; and another at Ofen, in Transylvania. The latter is a very extensive three-storied building, and will be even superior to the magnificent one at Vienna, judging from a photographic plan I was shown at the Ministry of the Interior, while staying in the Austrian capital. At Venice, the work, though urgently needed, goes on very slowly, so conscious are the Austrians of the uncertainty of the duration of their hated occupation.

At Frankfort-on-the-Maine, a new asylum is just completed, and will be occupied by patients in a few weeks. It has all the appointments we are used to see in England, and would rank with some of the best in this country. It is for the city of Frankfort, situated about a mile beyond the gates, and surrounded by several acres of land for cultivation.

With respect to the question of restraint,* I believe there is not one asylum on the continent where it is not practised and justified by the medical men; but in the better conducted there is much less of it than in others. In one asylum in Italy, I counted thirty-three women sitting in a long room, all restrained, either by means of a jacket, or by the hands being locked in a "muff"; but this was certainly exceptional.

At Vienna, I found the work of a celebrated German psychologist on European asylums, and turned with some curiosity to the account of the British. The date of the book is 1863; but the statistics given are of three years earlier, and the general description is fairly accurate; but there are some exceptions which would rather amuse the residents in the several places, and I noted a few as follows. The Bedford Asylum is said to have no bath accommodation and *no water-closets;* Cambridgeshire has only 100 patients; Cumberland has no asylum; at the Devon, there is mild restraint; at Colney Hatch, there is the only asylum-school in England; at St. Luke's, mild restraint; at Hanwell, the cures are only 3.5 per cent.; the Norfolk has only five acres of land; the Bethel (really an old-fashioned lunatic hospital in the heart of the city) is, we read, half-a-mile from Norwich, and part of the hospital; at Northampton and Stafford, there is mild restraint; while Oxford is particularised as having ten acres of land, attendants without uniform, non-restraint, and 18 per cent. of cures; the Surrey County Asylum, situated at Springfield, near Wandsworth, has only 4.10 per cent. cures, and is under the direction of Dr. Diamond, assisted by Drs. Biggs, Meyer, and Snape; at the York Retreat, restraint is practised "as in Germany"; at the North and East Riding, there is no padded room, "because Dr. Hill prefers the use of the jacket"; and the Wakefield is under the charge of Dr. Gorsellis as sole medical man!! The licensed private houses are mostly, we learn, in the hands of laymen, though there is a growing inclination to hand them over to physicians! The term "lunatic hospital" is evidently a stumbling block, and is always translated as meaning a division of a general hospital.

In one particular, the character of mental disease differs in Italy from that observed in other countries; viz., that drunkenness is a very rare cause of disturbance of the brain-functions. In South Italy, where vice is by no means *less* prevalent than in England, inebriety is almost unknown, and a very uncommon cause of insanity; as one reaches further north, it becomes more frequent. In Lombardy, alcoholism is as potent for mischief as in Middle Europe; and in Sweden, Norway, and Russia the evil assumes serious proportions. It seems, indeed, as though one might map out the surface of Europe in zones according to the degrees of temperance observed by the inhabitants, in the same way as one makes zones for botanical purposes, knowing that certain plants and trees will be met with in certain temperatures.

To these desultory remarks I may add one more; that, as regards treatment, the chief means relied on by foreign physicians is the use of baths of greater or less duration, but generally prolonged to a degree quite unknown in England.

Not wishing to be supposed to exalt English asylums at the expense of those on the continent, or to depreciate the really fine and good ones which exist in some places, I can only say, in conclusion, that while I believe we have, from our greater wealth and

* Since the above was written, Baron Mundy's paper, "An Oasis in the Desert of German Restraint", has appeared, announcing that Dr. Meyer "has had the courage to defend and practise the non-restraint system in the Hamburg Asylum."

freedom in government, more and better asylums than other European nations, and a more rational treatment, no one can suppose we stand alone in our glory who has visited the splendid establishments which exist at Vienna, at Munich, at Illenau, and at Frankfort, or the Hospice Guislain, so near our shores as Ghent; and I have to acknowledge very gratefully the uniform courtesy I met with at the hands of the medical and lay authorities wherever I went.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 3RD, 1864.

W. ADAMS, ESQ., F.R.C.S., President, in the Chair.

Sudden Death. Dr. HICKMAN related the case of a man, aged 32, a butler, who had died suddenly. He had been quite well on going to bed; but a young man, going to call him in the morning, found him lying dead. On making an examination thirty hours after death, no changes were discoverable sufficient to cause death. The blood was fluid. There was no disease of the heart, or of the great vessels. The right side of the heart was flabby and full of blood. The brain and kidneys were healthy. Naturally suspecting that this might have been a case of suicide, Dr. Hickman removed the stomach. At the inquest, however, there was no evidence to prove that there was the least probability of suicide; nor was there any history of previous illness. Dr. Hickman not being able to pronounce as to the cause of death, the verdict was an open one. On examining the contents of the stomach, there was no poison found. Since the inquest, he had ascertained that the man had for some time complained of pain in the right side, and that he had had a fit some time before. For many years he had complained of pains in the right side on walking fast. Did he die of angina pectoris? The coronary arteries were not examined. The arteries in the brain appeared healthy.

Dr. BALLARD mentioned two cases of sudden death which he had witnessed. A healthy man, with orchitis, was lying on his sofa with a lotion on the testicle. He died suddenly, without any warning; and, on making a *post mortem* examination, no lesion could be discovered sufficient to account for his death. In the other instance, a magistrate, a patient of Dr. Ballard, had been at Goodwood races a few days before his death. On that day, at 12 noon, he was walking up and down Marylebone Lane. Being constipated, he requested Dr. Ballard to give him some medicine to relieve his bowels. Dr. Ballard sent him a draught, and also an enema; and was horrified, in about an hour afterwards, to hear that the patient had died while at stool. *Post mortem* examination disclosed ossification of the coronary arteries as the sole lesion in his body.

Mr. SEDGWICK related a case of sudden death. A young man went to bed feeling rather poorly; and his landlady had given him some warm drink, as he felt chilly. When she awoke, she found that her lodger was dead, and had apparently been dead for some time. Mr. Sedgwick, on making a *post mortem* examination, could not discover any lesion sufficient to account for death; and the verdict was left open. The young man used oxalic acid in his business, but Mr. Sedgwick could find none in the stomach.

Dr. TILBURY FOX mentioned the case of a coachman of Dr. Walshe, who, having been ailing the day before, was brought into University College Hospital, and died a few hours afterwards. No lesion was found to account for death. His urine was slightly albuminous; and possibly his brain might have become poisoned, and the heart's action thus stopped.

Dr. HICKMAN remarked, that uræmia rarely caused sudden death. He thought some alteration ought to be made in coroners' law, as there was a disposition on the part of juries to hurry on to a verdict in such difficult cases.

Spontaneous Gangrene in a Child. Dr. COCK mentioned a case of spontaneous gangrene occurring in a child eight years old. The child had been feverish for some days, when the left thigh began to swell about four inches above the knee upwards. There was no pulsation in the femoral artery or posterior tibial of the left limb. The limb was shrunken, mottled, and cold.

Dr. VINEN thought it probable that a plug of fibrine had occluded the artery.

Dr. BALLARD said that Dr. Murchison had seen thirty or forty cases of phlegmasia dolens after typhoid fever; and that the *left* thigh was almost invariably the one affected.

Dr. VINEN had lately had a similar case after typhoid fever.

Dr. HICKMAN had lately seen a case of spontaneous sloughing of the skin in both feet, small in extent, but very painful; also a case of sloughing of the skin in the breast of a young woman without any specific taint.

Mr. ADAMS had recently had under his care a case of phagedænic ulcer of the leg, extending deeply down, almost to the bone. There was no special history attached to the case, except that the patient, a girl, had been kicked on the part. This was the largest sloughing ulcer he had ever witnessed, and he had had much difficulty in making the foot useful. The girl was, however, now at service. He had also under his care now a case of sloughing of the skin of both feet from frost-bite. Both legs and feet were much swollen.

Death apparently from Inhalation of Sulphurous Acid Gas. Dr. DRYSDALE related a case where death had apparently been caused by the inhalation of sulphurous acid gas. The patient, aged 30, a healthy man, without hereditary taint, was with three other workmen engaged in a gallery in the Mint, when they became involved in the fumes of the gas. All became insensible. On recovery, the patient felt a tightness at the chest; and, a week afterwards, he had profuse hæmoptysis, after which the percussion-note was high pitched under both clavicles, more under the left. Profuse sweats ensued, bronchial breathing, and all the symptoms of rapid pulmonary phthisis. The patient walked about, but became very emaciated, and in four weeks became insane; and, on being removed to Hanwell, he died suddenly. No *post mortem* examination was obtained.

Dr. VINEN mentioned the case of a child which became insane after drinking sulphuric acid. He thought that phthisis and insanity were nearly related.

Dr. T. FOX thought it possible that the case had been one of acute abscess of the lungs, without tubercles.

Dr. COCK observed that, although the man had had no hereditary predisposition to consumption, yet, being a townsman, he might have had a disposition to it, which was excited by the irritation of the gas.

Dr. HICKMAN thought that the delirium at the close of the case might have been caused by the occurrence of tubercular meningitis.

Correspondence.

IRIDECTOMY.

LETTER FROM WILLIAM BOWMAN, ESQ., F.R.S.

SIR,—Your readers will judge for themselves whether, in my replies to Dr. Browne, I have evaded any question worth notice.

I have taken part in this controversy as a practical man, addressing practitioners, and in the interest of all those present sufferers from glaucomatous disease in Great Britain and Ireland who are now under treatment, and to whom it is of the greatest importance, as I conceive, that right views of practice should prevail. I have done so, that I might lend my humble aid in stemming the tide of altogether unmerited and mistaken disfavour with which iridectomy in glaucoma has been encountered in this country, greatly, as I believe, to the disadvantage of our patients. It has become obvious enough to those who have mastered the subject of glaucoma as at present understood, that its symptoms, course, nature, are not yet appreciated here, I do not say by the profession at large, but by many eminent ophthalmic surgeons, whose combined field of practice is extensive, and their influence deservedly great; so that much perplexity arises in the minds both of practitioners and patients as to the course to be pursued in numerous individual cases. I have painful evidence of this in daily practice; and, indeed, every one who has seen the extraordinary opposition of opinion elicited lately in your own pages, must be at once aware that such strong differences between competent men ought no longer to exist; but should be reconciled by an acknowledgment, on one part or the other, of a change of view.

Let me recall a few facts. This treatment was introduced in 1857, *seven years ago*, and was at once brought by its illustrious proposer to the full notice of the profession in Germany, France, and England. This was done principally, after some earlier notices (*Verein für Wissenschaftliche Heilkunde: Berlin*, Feb. 1857; *Wiener Wochenschrift*, No. 19, 1857):

1. In a *Note sur la Guérison du Glaucome au moyen d'un Procédé Opératoire.* Addressé à l'Institut de France. Par le Dr. A. de Gräfe, Professeur d'Ophthalmologie à l'Université de Berlin. Berlin: 1857.

2. In an oral communication to the Ophthalmological Congress at Brussels in Sept. 1857, at which I may say, the whole of Europe was represented (England by Mr. Dixon and others, including myself). And

3. In a more detailed memoir inserted, in October 1857, in the *Archiv f. Ophthalmologie*, a work read by every one pretending to keep pace with the progress of this branch of knowledge, and which had contained most important preliminary contributions on the subject of glaucoma in the years immediately preceding.

As regards the adoption of Von Gräfe's doctrines *on the continent*. In the several visits I have made there since 1857, I have not met with any one practitioner who had not adopted them in their main particulars. That they have been universally accepted there, is conclusively attested by a letter, which it would be unbecoming in me to quote at length, written, *à propos* of the present controversy in your pages, by Dr. A. Testelin of Lille, the able and accomplished translator of English works for the universally read *Annales d'Oculistique*. Dr. Testelin says, "the cause of iridectomy has not an opponent on the continent."

And now for *our own countrymen*. Early in 1858, *six years ago*, the profession had an exposition of the new views in our own journals, accompanied by the positive favourable testimony of facts observed and openly exhibited in our greatest ophthalmic hospital that of Moorfields, and vouched for by men not accustomed to observe inaccurately, or to relate their experience unadvisedly. (See report of the discussion at the Royal Medical and Chirurgical Society, on Jan. 12, 1858, in the *Lancet* and *Medical Times and Gazette* of that time; and a paper by Mr. Hulke in the *Medical Times and Gazette*, May 27th, 1858.) I had first operated in May 1857; and ever since the autumn of the same year, the public hospital of Moorfields has exhibited continuous and unequivocal proofs of its value.

Now, in this age, men of science in all countries form one community. It surely *ought not* to have taken *seven years* to gain for a great and important improvement, originating in one of the great centres of intelligence on the continent, a wide—indeed, an universal—acceptance wherever medical man are able to appreciate matters of science; to say nothing of their own comfort in practice, and their patients' advantage. Particularly should this not have been the case where the boon conferred relates to a disease producing blindness, and up to that time acknowledged by all to be irremediable.

It was not wonderful, indeed—and I did not complain or remonstrate—when, during the first year or two, able and accomplished men—most competent as oculists, but who did not yet know the splendid ability of Von Gräfe, and the brilliancy of the recent progress of ophthalmology, of which this formed a part and out of which it sprung—opposed with more or less warmth, and with varying force of argument what appeared to them so contrary to all they knew of what alone had previously passed under the name of glaucoma. Nor, perhaps, was it remarkable that such misconceptions should lead a few of the least instructed and more prejudiced minds to affect contempt for the new proposal, and to regard it as the absurd and fleeting fancy of an enthusiast, soon to be abandoned and forgotten. Such arguments were promptly and sufficiently met; and as to the absurdity, it was properly left for time to decide, in its own quiet and sure way, to which side that charge really attached.

But in 1862, *five years having elapsed*, the whole subject having been now elucidated by a great body of facts and observations, and the interval having been long enough for pardonable prejudices to subside, I thought it a simple matter of duty to give a plain sketch of the results of our experience, and to advocate in the strongest terms the necessity of adopting the new views, if we would perform our duty to our patients. This I thought I might conveniently do when the British Medical Association met in London, in August of that year; for my object was to spread the new knowledge we had acquired of glaucomatous diseases, so that, as then stated, "those suffering from so serious a malady might no longer be drifting as before into hopeless blindness." I added, that "were the scientific knowledge of them now possessed by a few, diffused universally among all the members of our profession, failure of sight from this cause in Great Britain would be to a considerable degree prevented, and total blindness would be rare indeed."

I hoped that this paper would have been useful to practitioners; perhaps it was so in a limited degree. But though I was still aware, in the autumn of last year, when you, Mr. Editor, after seven years, opened this discussion with an apparent leaning against iridectomy, that there were still differences of opinion on this subject among men in large practice, I had

not, I assure you, the least idea how deeply some minds were entrenched in the positions they held. On discovering this, I thought it my duty to take some trouble in combating what I regard as erroneous notions acting injuriously on the interests of numerous patients, and consequently on that of our profession; and I propose to continue to do what I can to make what I know to be more correct views prevail, so long as any serious opposition to them shall be maintained.

To return to Dr. Browne. After all that has been written on this subject, which he tells us in his first letter he has carefully studied, and after my categorical reply to every point of the slightest importance raised by him, after having imputed to me, and not afterwards withdrawn, charges entirely unsustained of improper treatment of some of my colleagues in the course of my recent letters, he asks, with the air of a man anxious for information, and as a reason for maintaining his present views and opinions unaltered," for a *plain, brief, unequivocal description of the exact pathology of the disease now called glaucoma;* and says I have "evaded" the question when he has demanded, "What are the *definite principles* of iridectomy?"

My description of glaucoma must be *plain*. It must not, I suppose, comprise scientific technicalities, or enter into anything so recondite as ophthalmoscopic minutiæ or the other niceties of physical diagnosis. These have been already given; but Dr. Browne is not satisfied. He wants such a plain summary of them, for plain men, as may teach them all about a highly specialised subject, without leading them beyond "the recognised principles of scientific surgery," such as apply to the treatment of a fractured leg or a popliteal aneurism. My description must be *brief*, too; for brevity is the soul of a scientific question, no less than of wit; and if a new and extensive subject cannot be stated and explained in a formula, it must be all a delusion. My description must also be *unequivocal*, forsooth; as if we had been playing with words, using them in equivocal and ambiguous senses. The words used must be also such as all plain men can comprehend, without chance of misconception, who are only acquainted with Dr. Browne's "recognised principles of scientific surgery." Moreover, the *exact* pathology of the disease now known as glaucoma" must be thus *plainly, briefly, unequivocally* given, or Dr. Browne will emerge triumphantly from his little discussion.

Let me at once confess my inability to comply with his demand. The *exact pathology* cannot yet be given, because it is not known; though our knowledge now is light itself, as compared with the thick darkness of ten years ago. It is now the subject of earnest investigation by many able men; and Dr. Wolfe intimates the direction in which progress is likely to be made, though very much of his explanation of the course of the phenomena, and of the *modus operandi* of iridectomy, seems to be defective. The ciliary muscle is the active organ of accommodation, the lens the passive organ. Von Gräfe has proved that accommodation may remain perfect after total removal of the iris; and Donders, that absolutely no accommodation is left after removal of the lens. So that the iris plays no essential part in that function.

But I have all along in this controversy purposely abstained from mixing up the great *practical question of whether iridectomy will lessen exalted intraocular pressure and thus arrest glaucoma*, with that other *theoretical question of how or why it so acts*. This latter would have been beside my object, because it would have led us into the mazes of what is still doubtful and obscure, which *the fact of the efficacy of iridectomy is not*; and because it is *this last fact* which the English and Irish profession and their patients are principally concerned with at present. Let iridectomy be accepted on its practical merits, and let the "exact pathology" and the *modus operandi* of the remedy be worked out by all means as soon as practicable, now or hereafter. I should be the last to disparage or discourage such inquiries, which are not merely interesting but must necessarily arise out of and accompany the observation of the facts. But in nothing has the true philosophical spirit of Von Gräfe been more clearly exhibited, than in the care with which he has always abstained from crude and premature speculations, and drawn the line between experience and hypothesis. He has thus shown himself great alike as a practitioner and man of science.

For myself I have followed such speculations and questionings, and joined in them, with the greatest interest, but I do not think they would illustrate the present discussion. Doubtless when solved they will reflect a light of their own upon practice, as all true knowledge must. But meanwhile it astonishes me beyond measure, to find men calling themselves practical, and "too old to be led away by specious theories, however ably propounded and warmly supported," refusing to accept a great practical improvement in surgery, the use of which would be an inestimable comfort to themselves and their patients, because "a *plain, brief,* and *unequivocal* description of its *exact* pathology," up to the standard they profess to require, cannot as yet be given. What, I may venture to ask, have they themselves done to advance our knowledge of glaucomatous diseases, that they should refuse the benefit of iridectomy to their patients, until those who advocate it on the grounds of positive facts shall have worked out its "*exact pathology*" to their satisfaction? It is not unlikely that had its acceptance been pressed upon them on the basis of an hypothesis not precisely fitting in with their preconceptions and their prejudices, they would have taken the opposite course, and called out—as plain, practical men—for *the facts*.

But let me say, in conclusion, that "the principles of iridectomy in glaucoma" have been already made abundantly plain to the apprehension of all really practical men, who have been content to accept the broad facts on adequate testimony, and to leave the details and the scientific handling to those who are specially devoted to this branch of surgery. All surgeons know something of the effects of *intracranial pressure*, and of its reaction on the functions of the brain; and it is surely a simple transition from this to *intraocular pressure*, and its reaction on the function of the retina. In the case of the *eye*, we can do more than in the case of the *head*. We can *feel with our fingers* that there is such pressure in glaucoma. We can often *see the arteries of the retina pulsating*, in a way absolutely demonstrative of a too high pressure on their outer surface. The region of the ocular wall through which the optic nerve passes, being weaker than the rest, yields most under continued pressure, and *we see*, as we say, *the optic disc cupped*. The area of vision contracts or is abolished, and the acuteness of sight is blunted in a manner resembling that which takes place when the globe is experimentally compressed from the exterior.

On the other hand, *after iridectomy*, the too great hardness is lessened, the *eye feels softer to the fingers*. *We see* that the arteries of the retina no longer pulsate. *We see*, too, that the vessels generally return to a more natural appearance. *We often see* that the cupping of the optic disc diminishes. *It is demonstrable* that the visual field expands, and that the sight becomes sharper; these last results being proportioned to the degree to which the retina had previously suffered, whether from mere temporary pres-

sure, not sufficient as yet to have inflicted permanent structural damage—or from such intense or long-continued pressure as had already entailed irremediable structural changes in the nervous tissue, such as no one can ever have supposed that iridectomy would remedy, however effectually it may relieve the tension. I am, etc., W. Bowman.

5, Clifford Street, April 4th, 1864.

PUNCTURE OF THE CORNEA FOR THE RELIEF OF TENSION.

Letter from T. Pridgin Teale, jun., Esq.

Sir,—I gladly avail myself of Mr. Bowman's suggestion in your Journal of January 30th, and beg to relate the following cases in which tension of the globe and its attendant evils were relieved by paracentesis corneæ.

Case i. In November 1862, I extracted a hard cataract from the right eye of Mrs. G. of Leeds. The wound healed rapidly, leaving a perfect pupil; and she was able to read No. 1 Jäger. There remained, however, a semiopaque film across the lower half of the pupil, which impaired the vision of distant objects and of the causeway. On September 29, 1863, I tore through the opaque capsule with needles. For three or four days, the eye was sound, and the vision good. The eye then became painful, red, and dim, and continued so, with slight remissions, for several weeks, and then became quiescent, vision being defective. In December, I related the case to Mr. Bowman; and he suggested that I should puncture the cornea, passing the needle through the iris and posterior chamber into the vitreous humour. On my return home, I found that, during my absence, she had a return of the irritation in the eye in a much more intense form. On visiting her (December 13th), she was quite prostrate with agony, which opiates had failed to relieve. The globe was hard (T 3); the iris was bulging, and almost in contact with the cornea; the sight was very dim, and at times there had been complete blindness. I immediately punctured the cornea and iris. The pain was relieved in a few minutes, and in half an hour had ceased. The eye rapidly recovered, and is now quite sound. She reads No. 1 Jäger fluently; the pupil is perfect; the tension is natural; and the anterior chamber is of full size.

A fortnight later I had a parallel case.

Case ii. In the beginning of last November, G. A., aged 10, was struck in the left eye by a skewer, which pierced the cornea and wounded the lens. Eight weeks afterwards (January 1st), I extracted what remained of the opaque lens by the "suction-curette".* The posterior capsule appeared to have been ruptured at the time of the accident. Next day, the eye became excessively painful and hard, T 3; the iris bulging towards the cornea. He was ordered to use atropine drops; and to take five grains of Dover's powder at bed time. On January 4th (fourth day), as he had received no relief whatever, I punctured the cornea, transfixing the iris. The relief was instantaneous. On February 13th, he had had no return of pain, or any other unfavourable symptom. On Jan. 13th, he read No. 20; he now read No. 4, notwithstanding a slight opacity of the cornea. Tension was natural; and the anterior chamber had regained its normal size.

The foregoing cases, in which tension was caused by the temporary disturbance produced by an operation, simple puncture of the cornea and iris gave effectual relief. In glaucoma, however, and some other diseases attended by increased tension, it has been abundantly proved that puncture, even when frequently repeated, is not sufficient to arrest the disease. I am, etc.,

T. Pridgin Teale, jun.

Leeds, February 13th, 1864.

* I propose giving a drawing and description of this new instrument in the next number of the *Ophthalmic Hospital Reports*.

MERCURY IN SYPHILIS.

Letter from Charles R. Drysdale, M.D.

Sir,—In your number of March 12th is contained a letter from Mr. Gaskoin on the subject of mercury in syphilis, in which that gentleman does me the honour to allude to a criticism of a little work of mine contained in your number of February 6th. Perhaps, sir, you will allow me, in your impartial Journal, a few words in reply to the friendly criticisms upon my views with regard to mercury.

Mr. Gaskoin informs us that Sir B. Brodie was a partisan of the mercurial treatment of ulcers on the organs of generation and their secondary symptoms, and that he had recommended his pupils to read Pearson; also that he believed mercury was now far too little used. "So far from advancing, we have gone backwards; the disease being far more mismanaged than in days gone by." Now, sir, we are almost interested in the opinions held by so eminent a man as Brodie; but, at the same time, we must all be desirous to learn the steps of the evidence which led him to such a conclusion as the above. We have, alas! in the history of medicine, so many examples of great men having adopted opinions which now appear to us quite unwarranted by our present knowledge, that we are all, I believe, less liable to take for granted any assertion in therapeutics than our predecessors were.

Now, I am quite unable to discover any published data by which Brodie, Ricord, Actor, De Méric, or other partisan of the use of mercury in syphilis, has come to the conclusion that the drug is beneficial. On the contrary, however, I find, on reading over the voluminous evidence given by Fergusson, Guthrie, Hennen, John Thompson, Desruelles, Fricke, the French and Swedish Councils of Health, Syme, Hughes Bennett, Cooke, Bœck, etc., all of whom have tried *both methods*, that whenever mercury is abandoned in the treatment either of the sore or of the eruption, both of these become, in the overwhelming majority of cases, a most tractable and mild disease.

Thus Fricke, John Thompson, Syme, Cook, Hughes Bennett, Bœck, Spencer Wells, and, I believe, also Dr. Addison and Mr. Cock of Guy's Hospital (*Medical Times and Gazette*, March 5th, 1864), with many other eminent men, assert that so-called syphilitic bone disease is not found in the natural history of the disease without mercury. Consequently, I conclude that it is *extremely rare* when mercury is not given. The Professor Bœck (*Recherches sur la Syphilis*, 1863) tells us that he has made comparative experiments in Christiania Hospital lately; and that nearly twice as many secondary symptoms were observed after treatment with mercury; and, moreover, that both the primary sore and the eruption took nearly twice as long to get well when mercury was used, as when abandoned. Besides which, he never sees now any tertiary symptoms among those patients who have not taken the drug.

How, then, I ask, have those practitioners who, like Mr. Lawrence, etc., still follow in the footsteps of John Hunter, arrived at their conclusions? By experience? If so, I cannot find any where published the results of that experience in a form calculated to convince any one who, like myself, in common with others, has arrived at a contrary conclusion; while

on the other hand, Fricke, Bœck, Desruelles, John Thompson, Guthrie, Hennen, etc., have kept long and accurate accounts of their comparative experiments both with and without mercury, and have shown that the so-called remedy is most pernicious in all cases of the disease.

Mr. Gaskoin, in common with Mr. Acton, etc., tells of cases which had become very bad on account of never having taken mercury. But if such be the case (and I believe, in this assertion, he ascribes the result to a cause which is quite foreign to it), how many could men of such large experience as these gentlemen not relate, where all the sorrows man is capable of have resulted from the use of the drug. Let me quote from Pearson's work—one of the authorities recommended to students. "When mercury," he says, "is under the direction of an unskilful man, it will fail of effecting a cure more frequently than it will succeed. . . . . The complaint will be generally exasperated by it, and rendered more intractable than if no mercury had been given."

In fact, sir, I believe that mercury, in the hands of M. Ricord and his school, of six-months daily dose of iodide of mercury for indurated sores, is one of the most destructive agents of modern times to the human health; and I refer those sceptical on this point to Dr. Diday's work on the *Natural History of Syphilis*, where he points out the distressing results of what Professor Syme calls the "mercurial delusion". Dr. Hughes Bennett says, what I believe will be agreed to before many years are past, that "the idea that mercury is a specific for the venereal poison, and the incalculable mischief it has occasioned, will constitute a curious episode in the history of medicine of some future day."

If Mr. Gaskoin, or Mr. H. Lee, or others, will have the kindness to point out the flaws in the evidence adduced against mercury by Fricke, Bœck, John Thompson, Cooke, etc., I shall gladly resume any little belief I have ever had in the efficacy of the drug. Until then I shall humbly attempt to show its injurious effects on the animal frame.

I am, etc., CHARLES R. DRYSDALE.

Southampton Row, W.C., March 23rd.

[Has Dr. Drysdale read the review of his work on *Mercury* in the BRITISH MEDICAL JOURNAL for last February 6th? How does he explain away the facts there stated? EDITOR.]

FOREIGN BODIES IN THE EAR.

LETTER FROM JOHN LINDLEY, ESQ.

SIR,—Under this head I find, in your JOURNAL of March 19th, Dr. Voltolini's experience detailed, in which he says that, "beyond a bent forceps, an ear-scoop with a long handle, and a small corkscrew, almost all the instruments recommended for this purpose are mere toys, or dangerous." For all ordinary cases this may be true enough; but I feel convinced there are others that require a much greater number of instruments than is given in this list.

Some time since, a boy was brought to me who had had a cherry-stone in his ear for ten days. A great many ineffectual attempts had been made to extract it. The meatus was red and swollen. He was also suffering from great pain in the head, giddiness, and vomiting. On examination, I discovered the stone deep in the ear—in fact, loose in the cavity of the tympanum; the membranes having been ruptured in the fruitless attempts made at extraction. It is clear, I think, in such a case as this, that the above instruments would be utterly useless. A thought occurred to me that I had, when a boy, made chains of cherry-stones by boring holes in them; and that, if I could do so here, it would be easy to introduce a hook and remove it. With this view, I had several small drills made, and found that the spear-shaped one did its work the quickest, and required the least pressure: indeed, in a soft stone, a few rapid revolutions between the finger and thumb sufficed to make a hole. Having made these experiments, I proceeded to operate on my patient; but found the stone so loose in the tympanum, that it slipped away from the point of the drill when any pressure was brought to bear upon it; but, by introducing a speculum, I was enabled to steady it, and with the greatest ease succeeded in making a hole large enough for me to insert a crochet-needle, with which the stone was almost immediately withdrawn.

As cherry-stones are not unfrequently put in the ear by children, and are difficult to remove, their size being often greater than the passage, this suggestion may not be unimportant; whilst, when in the tympanum, I believe there is no other mode of procedure than the one I describe. It is, perhaps, needless to say my patient lost his hearing on that side, from the injury done, before I saw him. I have, however, the satisfaction of feeling that, but for this timely contrivance, a series of symptoms already set up might have gone on, and ultimately have proved fatal; whereas my patient soon recovered, and remains well to this day.

I am, etc.,
JOHN LINDLEY.

Derby, March 23rd, 1864.

POOR-LAW MEDICAL REFORM.

LETTER FROM R. GRIFFIN, ESQ.

SIR,—Be good enough to allow me space to inform the Poor-law medical officers that, on March 30th, I forwarded to the Select Committee on Poor Relief, a pamphlet containing a summary of the principal points of evidence, relating to the medical relief of the poor, which I had the honour of submitting to them last February. I did so, in consequence of observing in *Knight's Official Advertiser*, that "it is understood the committee have determined not to examine any further witnesses, and are now considering their report." Having, therefore, great fear my evidence might not be taken into consideration, I adopted the simple course of sending a condensed report of it to each member of the Select Committee, thinking it just possible that during the Easter recess he might have leisure to read it.

Mr. Cane, in his "statement" to the Committee, took my evidence and replied to it almost *seriatim*. I have adopted a similar course with his statement, and, in like manner, have given a rejoinder, which I hope will entirely refute his plausible but erroneous conclusions. I regret that the low state of the finances would not permit me to print a sufficient number of copies for all the Poor-law medical officers; one, however, I have sent to each of the subscribers to the Association for this year; and so far as the remaining part of the two hundred copies will go, I shall be glad to forward them to those who may send their subscriptions.

I understand that it is probable the Committee will shortly make their report to Parliament. I sincerely trust that it may be favourable to our views; but whether it be so or not, I feel convinced that we have proved our case, and that judgment ought to be given in our favour.

Since March 20th, I have received the following subscriptions. R. T. Morris, Wigan, £1; P. A. La Fargue, Meriden, 5*s.*; W. Prowse, Amersham, 2*s.*; G. Fairthorne, Amersham, 2*s.*; B. A. Buckwell,

Amersham, 2s.; Dr. Barker, Aldershott, 5s.; T. Odell, Atfield, 10s. 6d.; J. H. Dowling, Cerne, 5s.; T. M. Kendall, Freebridge, Lynn, 10s.; T. Harper, J. N. Stevens, J. H. Hicks, W. Dale, and J. H. S. May, all of Plymouth, 2s. 6d. each; A. S. Kingdon, Bideford, 10s.; T. L. Pridham, Bideford, 5s.; A. Fernie, Barnstaple, 10s.; J. P. Berryman, St. Austell, 6s.; W. B. Irving, Newark, 5s.; G. Harding, Rugby, 5s.; Dr. Smith, Weymouth, £1:1; G. T. Smeathman, Wycombe, 5s.; H. S. Wood, Tavistock, 5s.; W. B. Young, Reading, 10s.; T. L. Walford, Reading, 5s.; F. Workman, Reading, 5s.; H. Hodgson, Cockermouth, 5s.; H. Bell, Cockermouth, 5s.; H. Giles, Witham, £1; E. Moore, Bethnal Green, 2s. 6d.

I am, etc.,
RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, April 2nd, 1864.

SCHOLARSHIPS AT CAMBRIDGE.

LETTER FROM WILLIAM OGLE, M.A., M.D.CANTAB.

SIR,—The following comment upon my letter in last week's JOURNAL gives an instance of the pecuniary help which an intelligent and industrious student may obtain at Cambridge. Such an one writes to me:

"You understate the advantages of Cambridge in the money endowments. At Caius, there are special medical scholarships in chemistry, and anatomy, and physiology; besides the Tancred Scholarships 'for poor men', of £113 a year, tenable for eight years. In one year, I received £60 from scholarships; and when I came out in the Natural Science Tripos, the Caius Senior Fellows voted me £50 a year, to the time of my taking the M.A. degree. At John's, I believe, the same thing may be done; and the Natural Science place has been allowed to count towards a fellowship."

Add to this, "the chief prize", the mental training which is within the reach of every one; and Dr. Humphry may well express "regret and surprise that so few comparatively avail themselves of the advantages offered."

I am, etc.,
WILLIAM OGLE.

PAUPER IDIOTS. Mr. Millard of the Eastern Counties Asylum for Idiots and Imbeciles, makes the following proposals:—1. That pauper idiots deserve to be specially cared for by the State. 2. That, as a large proportion of youthful idiots can be greatly improved by skilfully adapted training, and be thereby enabled to do much towards earning their own livelihood, such training ought to be provided for them. 3. That, as a large grant is annually voted from the Consolidated Fund towards the education of the intelligent poor, it would be equally right, as well as expedient and humane, to vote a sufficient sum to establish training schools for pauper idiots throughout the kingdom. 4. That such idiot training schools might belong to two or three counties united, and be managed by visiting justices appointed at quarter sessions, subject to the supervision of the Commissioners in Lunacy. 5. That large empty houses, or disused lunatic asylums which have proved too small for their purpose (of which there are several in different parts of the country), might be found suitable for idiot training schools, and it would be a boon to many poor families if cases not paupers were allowed to be admitted upon low rate of payment. Considerable additional provision for the training of idiotic children is being made at the Bicêtre; and surely this country will not be backward in bestowing similar care upon this afflicted portion of our population, when the widely spread want is clearly appreciated.

Medical News.

APOTHECARIES' HALL. On March 31st, the following Licentiates were admitted:—

Booth, William Reuben, Great Queen Street
Colman, Walter Tawell, London Hospital
Hadwen, Eugene St. Paul, Waterloo Road
Moore, John New, Moreton-in-the-Marsh, Gloucestershire
Osbaldeston, Lyttelton Frederick, Hatfield, Herts
Philps, Philip George, Westbourne Park Road
White, George, Thatcham, Berks
Wilson, William Samuel, Hereford Road North, Bayswater

At the same Court, the following passed the first examination:—

Brown, George Arthur, King's College
Evans, Edward Charles, King's College
Langley, John Thomas, St. Bartholomew's Hospital
Garrett, Miss Elizabeth, 22, Manchester Square

APPOINTMENTS.

HOLYOAKE, Thomas, Esq., appointed Junior House-Surgeon to the Royal Infirmary, Liverpool.

ROYAL NAVY.
GORDON, William L., M.D., Surgeon (additional), to the *Victory*.

MILITIA.
SEATON, D., Esq., to be Assistant-Surgeon Northamptonshire and Rutland Militia.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—
MATTHEWS, W. C., Esq., to be Honorary Assistant-Surgeon 33rd Lancashire R.V.
MOORE, G., Esq., to be Hon. Assistant-Surgeon 19th Durham R.V.
PERCIVAL, W., Esq., to be Assist.-Surg. 4th Northamptonshire R.V.

DEATHS.

CAMPLIN. On March 23rd, at Islington, aged 67, Sarah, widow of *John M. Camplin, M.D.
FERGUSSON. On April 1st, at George Street, Hanover Square, aged 27, William Ranken, second son of W. Fergusson, Esq., F.R.S.
KING, George H., M.B., at Horncastle, aged 40, on March 29.
M'GILCHRIST, John, M.D., at Edinburgh, on March 27.
MARTIN. On March 27th, at Brighton, aged 12, Helena, second surviving daughter of the late *Peter Martin, Esq.
SANDERSON, John T., M.D., Staff-Surgeon Indian Army, at Kurrachee, Scinde, on February 15.
WARDEN. On March 26th, at Birmingham, aged 14 months, Alice Mary, daughter of *Charles Warden, M.D.

ROYAL NAVY. The sum of £64,350 has been voted for medicine and medical stores.

DR. LIVINGSTONE. A private letter from Cape Town contradicts the report that Dr. Livingtone had met with an untimely end on his expedition to the Zambesi.

ROYAL MEDICAL BENEVOLENT COLLEGE. Miss Margeretta Elizabeth Good (daughter of the late eminent physician of that name) has just left to the College £250 duty free.

AN UNIVERSITY FOR WALES. A movement has been commenced with the view of promoting the establishment of an University in Wales. The proposed University will, as far as circumstances permit, be similarly constituted as the London and Edinburgh Universities, and entirely unsectarian.

THE VOLUNTEER REVIEW. At the late volunteers' review at Blackheath, some few, and one fatal, accidents occurred; a burnt face from explosion; a burnt arm from explosion; fatal wound of abdomen and thigh from injury through a ramrod; fractured leg; and sprained ankle. The accidents were all at once attended to, proper hospital arrangements on the ground of operation having been made for the occasion.

The British Association will hold its next meeting at Bath during the week commencing Wednesday, September 14th, under the presidency of Sir Charles Lyell, F.R.S.

The Middlesex County Asylums. On December 31st, 1863, there were in Colney Hatch 774 male and 756 female patients; and in Hanwell Asylum, 593 male and 1,009 females.

Mr. J. Sampson Gamgee, of Birmingham, has had the distinguished honour conferred upon him of Corresponding Member of the Society of Surgery of Paris. The diploma was accompanied by a very gratifying letter from the General Secretary, M. Legouest, Surgeon of Val de Grace.

Murderous Attack on a Surgeon. On Saturday last, a murderous attack was made upon Mr. Rowe, a medical practitioner in Liverpool, by two men named Rice and Scott. The general facts of the case have been given in the public papers; and, as the accused have been committed for trial, we shall probably hear more particulars. Mr. Rowe's life was considered at one time in danger; but we are glad to hear that an improvement has been manifested.

The Townley Case. At the Derbyshire sessions on Tuesday, the visiting justices presented a report, in which, referring to the affair of Townley, they state that "the conduct of the surgeon of the gaol in reference to that prisoner's case was so much impugned, and excited such general animadversion, that the visiting justices thought it necessary to discuss the question as to whether he ought not to be dismissed from his office; but, as they were unable to arrive at a unanimous decision, they determined to make no recommendation on the point, but to leave it to the court to decide." Colonel Wilmot moved a resolution to the effect that Mr. Gisborne, the surgeon of the gaol, be relieved from his duties. A discussion, mainly on a point of form, followed; and it was ultimately resolved that the question be referred back to the visiting justices, and that they be requested to make a recommendation upon the subject at the next quarter sessions. It was stated that seven of the visiting justices were for a dismissal, and three for the retention of Mr. Gisborne's services. (*Manchester Courier.*)

The Pharmaceutical Society is about to ask Parliament to adopt a Bill for the regulating of pharmacy. The Society thinks it can manage its own affairs better than the Medical Council. The following are the heads of the measure. "After the 1st of January, 1865, no person to keep open shop for dispensing the prescriptions of legally qualified medical practitioners who is not registered as a pharmaceutical chemist under the Pharmacy Act, or a chemist and druggist under this Act.—Examination established for all who commence business after that date.—Examiners under Pharmacy Act to be the Examiners under this Act.—Registrar under Pharmacy Act to be Registrar under this Act.—Persons in business in Great Britain before 1st January, 1865, entitled to be registered as chemists and druggists, and saving to them all their existing rights, on payment of a fee not exceeding one guinea.—Assistants and Associates under Pharmacy Act, who have passed minor examination, to be registered as chemists and druggists on commencing business.—Council of Pharmaceutical Society to make orders for regulating Registers to be kept.—Duty of Registrar to make and keep correct Register.—Evidence of qualification to be given before registration of examination on the part of those who enter business hereafter; of having been in business before a certain date by others.—Annual Register to be published and be evidence.—Penalty on wilful falsification of Register.—Penalty for obtaining registration by false representations.—Penalty for falsely pretending to be a registered person, or keeping open shop for dispensing, etc., prescriptions, not being registered.—Registered chemists and druggists, having passed minor examination, may be elected as, and continue and use title of, Associate of Pharmaceutical Society, and may vote at meetings of the Society.—Saving of rights of duly qualified practioners.—Benevolent fund may be applied to past Members and Associates; also, to pharmaceutical chemists and registered chemists and druggists."

Health of the Metropolis. The total number of deaths registered in the week that ended last Saturday was 1,679; being in excess of the estimated number by 132. The deaths of persons under twenty years of age were numerous. The deaths from pneumonia were high (122.) Phthisis was fatal in 214 cases; the averages being 174. Seventy-nine children died of whooping cough, all of them under ten years, and a great majority under two years of age. Five fatal accidents in the streets by carriages, were recorded. A child died from having swallowed a halfpenny a year previously; it caused enteritis and marasmus.

A French Medical Register. Paris, like London, is blessed with many doctors, who fill the journals and cover the walls with their advertisements; such being the case, it appeared desirable to the Commission of the General Association of Doctors of the Seine, that there should exist exact lists, comprising the names of all the doctors or officers of health authorised to exercise the art of medicine, and that these should be easily accessible. In answer to questions on this subject the Minister of Public Instruction states that such lists are carefully preserved in a special répertoire, where they can be consulted. By means of these it may be easily ascertained whether a medical man is a recognised practitioner.

The Carmichael School of Medicine. The late eminent surgeon, Mr. Carmichael, of Dublin, bequeathed £10,000 to rebuild the Richmond Hospital, to which he had already given a large sum of money to found the Carmichael Prizes. The bequest was not to be available during the life of his widow, but recently Mrs. Carmichael generously placed the money at the disposal of the conductors of the institution, and on the 29th ult. the Lord-Lieutenant, in presence of a large assembly of visitors, laid the foundation of the building, to be henceforth called the Carmichael School of Medicine, on a new site in front of the Hardwicke Hospital. An address to his Excellency was read by Dr. R. M'Donnell, giving a history of the hospital, to which he replied, pronouncing an eloquent eulogium on the character of the late Surgeon Carmichael.

Fire at the Apothecaries' Hall, Dublin. Last week a fire broke out in the stores at the rear of the Apothecaries' Hall, which for a time menaced the main building. The fire brigade, under the command of Captain Ingram, were in attendance in a few minutes after the alarm was given, and exerted themselves with praiseworthy promptitude to subdue the flames. The steam fire-engine and the brigade hand-engines were put into requisition, and eventually the copious and well-directed streams of water poured upon the burning premises were successful in confining the fire to the building in which it originated. The store is, however, completely gutted, and its valuable contents, consisting of oils and chemical preparations, totally consumed. The laboratory escaped injury, and consequently no interruption to the ordinary business of the establishment will take place.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Dr. Salter, "On Tracheal Dysphagia."

TUESDAY. Royal Medical and Chirurgical Society. 8 P.M, Ballot; 8.30 P.M., Mr. Solly, "Cases of Intestinal Obstruction—Amussat's Operation": Dr. Morell Mackenzie, "On the Invention of the Laryngoscope by Dr. Benjamin Babington."—Ethnological.—Zoological.

WEDNESDAY. Microscopical.—Geological.

THURSDAY. Royal Society.

FRIDAY. Royal Institution.

SATURDAY. Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MR. F. H. H.'s letter, and several others which are delayed for want of space, shall appear next week.

GARIBALDI AND GRATUITOUS MEDICAL SERVICES.—A correspondent writes:—In your last week's number, you said of "Gratuitous Medical Services", that they were, "when sifted to the bottom, really little more than a means of public advertisement." What do you say then to the following extract from the *Evening Star*.

"*Garibaldi and the Medical Profession*. In addition to Dr. Ferguson, Mr. Henry Thompson (the eminent surgeon whose attendance lately upon his Majesty the King of the Belgians has been attended with such beneficial results) has also tendered his valuable professional assistance to General Garibaldi during his stay in England, free of all charge. This offer was accompanied by a very graceful letter, and was made before that of Dr. Ferguson was announced. There is no doubt but that the illustrious visitor will be able to command during his short visit to this country the gratuitous assistance of the most eminent men in the profession; and it is expected this, combined with the change of air, will restore him to complete health."

[What we have to say is this: that neither of the distinguished persons alluded to in it can be held responsible for the proceedings of their very injudicious friends. We have no evidence beyond that of mere newspaper reports, to show that either of them have proffered their services to Garibaldi. But we have no hesitation in saying that, in our opinion, those surgeons who do not so offer their services, show a much higher appreciation of their own position and of the dignity of their profession, than those who do. The illustrious patriot who is supposed to be the subject of such misplaced generosity needs no such alms as these. As an admirer of Garibaldi, we should deem all such offers, from whatever quarter they may come, as petty insults played off on his noble nature; and, from a professional point of view, as an impertinence to the profession. The above report is, doubtless, merely one of the ordinary newspaper slips which fly about on occasions of this kind.]

MEDICUS writes:—Am I strictly correct in practising exclusively an obstetric physician or "physician-accoucheur", and describ myself as such, on the ground of the license of the Royal Coll of Physicians of London; and if so, can I use the "Dr.", and myself "doctor?"—separating the idea of this title entirely fr M.D. or Doctor of Medicine. The London College prohibits Fellows, Members, and Licentiates, from the use of certain titl but I cannot quite tell which it refers to; and, being in doubt, quite willing to be guided entirely by the decision of the Edi of the JOURNAL.

[The question asked is one involving an answer of much i portance. We have therefore obtained the opinion of a gentlem of high authority in the College of Physicians on the subject. says:—"A Licentiate of our College, if he be registered under Medical Act, may call himself what he will, provided only that do not assume the title of Doctor of Medicine, or imply that h a Graduate in Medicine of a University, not being one, or virtue of his license represent himself as a Fellow or Membe a College of Physicians. Licentiates, however, acting on advice given by Hamlet to his mother to 'assume a virtue if y have it not', take the title of doctor in virtue of the license implying, of course, that they are Graduates in Medicine of University), but clearly doing so under the belief that it gi them status, or will bring them practice, or add something public estimation which plain Mr. does not confer. This may strictly legal; but is it honest? The Licentiate is a Physicia which, in its old interpretation, means a person practising, or o who may practise, Medicine, Surgery, and Midwifery. To a 'accoucheur', is putting out another sign-board, and is of mode origin. Those who practise midwifery only, or surgery, or me cine only, do not adopt this mode of signifying their branch practice; and yet the public soon learn in which department th do practise, and so it would be with general practitioners. 'P sician and surgeon', a joint title used in olden time (and whi some of modern days have adopted), has the advantage of bei expressive, trite, and true. If this eagerness to assume by pr titioners distinctions or designations to which they have no cla by right or reason, was discouraged, much of the confusion whi has arisen of late would subside, and a spade would be call once more a spade."]

COMMUNICATIONS have been received from:—Mr. CHRISTOPH HEATH; Mr. LOWNDES; Dr. R. W. FALCONER; Mr. WILLI BOWMAN; Mr. J. W. HULKE; Dr. DAVEY; THE REGISTRAR OF T MEDICAL SOCIETY OF LONDON; Dr. J. D. RENDLE; Dr. FREDERI J. BROWN; Mr. MARTIN; Mr. J. N. RADCLIFFE; Mr. RICHA GRIFFIN; Mr. HAMMOND; Mr. J. G. PARSONS; THE HONORA SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIET Dr. DAY; Mr. BRODHURST; Mr. KEMPE; Dr. COTTON; Mr. HEN LEE; Mr. W. W. JONES; Mr. HARRISON; Dr. C. HOLMAN; M T. HOLYOAKE; Dr. G. M. BACON; and Dr. WM. OGLE.

ADVERTISEMENTS.

Horological Productions.—"Ranged around the base of the clock were the Watch which Mr. Benson exhibited, and which have been universal admired for the beauty and elegance of the designs engraved up them. The movements are of the finest quality which the art horology is at present capable of producing."—*Illustrated Lond News* Nov. 8, 1862. Chronometer, duplex, lever, horizontal, repeate centre seconds, keyless, split seconds, and every description watch, adapted to all climates. Benson's Illustrated Pamphlet Watches (free by post for 2 stamps) contains a short history of watc making, with prices, from 3 to 200 guineas. It acts as a guide in t purchase of a watch, and enables those who live in any part of t world to select a watch and have it sent by post. Prize Medal a Honourable Mention, Classes 33 and 15. J. W. BENSON, 33 and 3 Ludgate Hill, London. Established 1749.

Watch and Clock Maker by Special Warrrant of Appointment H.R.H. the Prince of Wales.

Surgical Instruments.—Arnol & SONS continue to supply Instruments of the best workma ship at moderate prices, manufactured on the premises under the own superintendence.

ARNOLD & SONS, 35 and 36, West Smithfield, E.C.
Established 1819.

Weiss's Illustrated Catalogue containing nearly 800 engravings of Surgeons' Instrument and Apparatus, classified for their various purposes. Price, 5s.
62, Strand, London

"This catalogue has many and great merits. It is modest, truthf carefully arranged, and extremely well illustrated. In the gre majority of cases the name of the surgeon is appended to the mod fication which he has introduced, and frequently other makers' nam are honourably attached to instruments which they first originate These are large principles of honour which we are glad to see strict observed in this catalogue."—*Lancet*, September 12th, 1863.

Lectures

ON

RTHOPÆDIC SURGERY.

BY

BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture XI.

N THE CAUSES OF CONGENITAL AND NON-CONGENITAL DISTORTIONS.

STORTIONS of the trunk, neck, and limbs, arise m affections of and injuries to the muscular, liga-ntous, and osseous systems, and from affections of its (whether these be occasioned by inflammation by dislocation). These, together with some con-ctions of, and injuries to, the skin and cellular ue, and malformations, constitute what is under-od as orthopædic surgery.

All distortions arising from affections of the mus-ar system may be both congenital and non-con-nital. I propose to consider, first, the causes of genital distortions; secondly, the causes of non-genital distortions; and, thirdly, to address myself detail to each variety of muscular distortion.

The *causes of congenital distortions* are probably ilar in every form of congenital muscular retrac-n; varying in degree only, but not in kind.

In the anencephalic monster, for instance, every own form of distortion may exist; such as scoliosis, ticollis, talipes, strabismus, etc.; and luxations of ry kind, complete and incomplete. The spine y be curved laterally, so as to diminish by one-rd or more the height of the trunk; or lordosis y exist, the occiput being drawn down to approach sacrum; or the extensors of the leg may, being racted, cause the leg to be bent forward upon the gh; and in the same manner retraction of the ceps cubiti will draw the forearm backwards upon arm. Again, a similar state of things is found to st together with hydrocephalus and hydrorachis. ere is no known form of distortion that does not ur together with lesions such as these. Thus, ry congenital muscular distortion may be induced nervous irritation.

Other causes were believed by the ancients to be icient to induce these distortions. But, since dolphi, physiologists are agreed that there is one se only of congenital muscular retractions, and t intrauterine pressure is insufficient to occasion scular retraction which shall give rise to distortion. en though the liquor amnii were in great measure ent, how should the pressure of the walls of the rus on the fœtus induce spasmodic contractions? t only does this spasmodic condition exist, but xists to so great an extent, that distortion may ur after section and re-union of tendons have en place.

Like other nervous affections, congenital distortions hereditary. For instance, five boys in one family ne under my care for congenital talipes varus; ir father, uncle, and paternal grandfather, having wise suffered from similar forms of distortion. In each generation, females were added to this family, but none of them were distorted at birth. "We cannot admit," as Dr. Little observes, "uterine influence in hereditary propagation of varus, through an uninterrupted succession of male parents." Thus we may conclude that congenital distortions depend on irritation of the cerebro-spinal nervous system.

The *causes of non-congenital distortions* are paralysis, spasm, and local inflammation; and the various forms of distortion which are induced bear strong resemblance to the analogous congenital distortions, but with certain differences, which render their diagnosis easy.

A single muscle may be affected, as the sterno-mastoid, or a group of muscles; and, according to the effect which is produced, so is the resulting distortion. For instance, spasm of the adductors of the foot induces varus; but paralysis of the same muscles gives rise to the opposite form of distortion—valgus. Again, spastic action of the muscles of the calf of the leg occasions talipes equinus; but paralysis of these muscles occasions dropping of the heel—calcaneus; and so on, through all the distortions which are occasioned by muscular and nervous influences.

Paralysis presents itself especially in three distinct forms; namely, that arising from organic change in the nervous centres; that which is occasioned by the action of cold on the muscles of the limbs, and which is known as infantile paralysis, or the essential paralysis of infants; and that which is induced by traumatic lesion of nerve-trunks.

A. Paralysis, whether hemiplegia or paraplegia, is common at every age, as a *consequence of organic change*. Hemiplegia is the result of an epileptic fit; and it may take place without the formation of a clot, and without rupture of the fibres of the brain, But loss of muscular power may occur also through congestive apoplexy and without effusion of blood; or it may take place with effusion.

During infancy, paralysis not unfrequently occurs without evident cerebral disturbance, perhaps during sleep or while a child is at play, without previous indication, and while the child is apparently in its usual health. Three such cases have been brought under my notice this day. A child, two years of age, was playing in his father's garden, when he suddenly lost the power of his lower limbs, and became perfectly paraplegic. Some of the muscles partially recovered power, and certain contractions in consequence took place. When he was 28 years of age, I was consulted. On the left side was talipes equinus, and on the right was talipes calcaneus. The muscles of the hips were not paralysed.

Again, a child was brought to me with paralysis of the external rectus of the right eye, of the extensors of the wrist and fingers, and of the flexors of the foot of the right side. The child was ten months old, and the paralysis was observed at the tenth week; that of the eye before any head symptoms were observed; then a slight epileptic seizure took place, and immediately afterwards paralysis of the extremities was noticed. I saw the third case with Mr. Squire. At six months, the child was convulsed, and lost consciousness for several hours. Hemiplegia succeeded, the left side being affected.

In cases such as these, a single muscle may be affected or a group of muscles, or a limb, or the power of one side may be lost, or both upper and lower extremities may be simultaneously paralysed.

Florid children are scarcely less frequently the subjects of these attacks than the weak and ill-nourished. Over-excitement may produce a similar result to that which is due to insufficient nourishment.

B. *Infantile paralysis or essential paralysis of infants, or myogenic paralysis*, is very common during infancy, and it rarely occurs except at this age. It takes place without appreciable nervous lesion. After paralysis has existed for some time, atrophy of the nerves which supply the paralysed muscles takes place. Sensation is seldom impaired, but the power of motion is lost.

This form of paralysis usually attacks before two years of age. It is occasioned by throwing off the bed-clothes during sleep, or by other sudden exposure to cold, such as sitting on a stone or other like cause. Loss of power usually occurs without pain: acute pain is, however, occasionally found to exist in these cases. Perhaps the extensor muscles of the leg and some of those of the thigh are more frequently affected than any other groups of muscles in this form of paralysis.

C. *Traumatic lesion of nerve-trunks* is a rare cause of distortion. I have seen talipes calcaneus produced by the removal of a portion of the posterior tibial nerve, together with a tumour, from the back of the leg; and I have also seen somewhat similar results from gun-shot wounds; indeed, they were far from uncommon after the Crimean war. Traumatic lesions, when they occur, are seldom remediable.

Spasm and paralysis not unfrequently co-exist—spasm of one limb together with paralysis of another. Cerebral disturbance usually accompanies spasmodic muscular contractions: probably a succession of slight convulsive attacks takes place, which are followed by rigidity of the muscles—tonic spasm; and the most powerful muscles remain the most affected, or they appear to be most affected. Thus the thighs are in these cases usually flexed upon the trunk; the knees are approximated, and they are even crossed one over the other. Frequently, they are maintained in this position so rigidly, that the application of considerable force may be insufficient to separate them; the legs are flexed upon the thighs, the feet are extended and inverted, and the toes are flexed. The arms are bound to the sides by the combined actions of the latissimus dorsi and pectoralis major muscles, or the latter muscle alone acting on both sides, the arms may be crossed on the chest; the forearms are flexed upon the arms, the hands are prone, and the fingers are flexed. The internal rectus muscle is also not unfrequently affected, occasioning convergent strabismus; or, as in a case now under my care, the superior and external rectus of each side may be at the same time affected, causing a hideous and meaningless countenance. Thus every muscle may in one case or another be subject to this undue action.

Spasm of the extremities of one side is much more common than more irregular muscular action. And strabismus, when it occurs, is found to exist on the same side as the rigid muscles. In spasm, as has been already said, the strongest muscles usually distort the limb; they overcome their antagonists simply because they are the most powerful; and thus it is that the adductors and flexors are especially the muscles which act on the limbs in these cases.

The countenance is, for the most part, indicative of cerebral disturbance; there is a vacant expression, and the child is dull and listless, or very excitable. These children are, however, not unfrequently mo intelligent than a casual observer might perhaps b lieve. In some, the intellect remains absolutely u impaired. These cases are rare, however.

Cerebral symptoms are generally preceded b spasmodic contractions. These are frequently ove looked, however; or their importance is not unde stood; so that symptoms, which should be premon tory, such as squinting, etc., are, perhaps, onl alluded to with any degree of importance so late tha the mention of them becomes unimportant. Th cause of irritation not having been recognised, irr parable mischief is allowed to occur, which migh perhaps, have been warded off.

It cannot be doubted that congenital distortio and non-congenital distortions which are occasione by affections of the nervous system own a commo origin. Every circumstance—the forms of distortio and their modes of production—tends to show tha this must be the case. This spasmodic action is o casioned by the want of proper stimulation—by a insufficient supply of red blood, for the most par and through a deficiency in the several vital agenci which act as stimuli on the muscles. Formerly, was thought, that spasm was induced by excess nervous stimulation; now, however, it is recognise as an irregular action consequent on debility.

Inflammation resulting from injuries and wound occasions distortions. Contraction takes place wit cicatrisation, and even after this seems to be com plete; and it gives rise to every form of distortio The amount of distortion depends much more on th position of the cicatrix than on its extent. The are very few positions, however, in which distortio may not be prevented entirely or in great part.

Ancient Man. The proofs, says Mr. Falconer, the remote antiquity of man are derived from tw sources—1, the ancient, or river gravel-deposits; the ossiferous caves. The former carries man furthe back in time, and with the greatest certainty; but is of the most meagre and restricted character, co sisting merely of flint weapons. Not a single instan has yet occurred of a fragment even of an unquestio ably authentic human bone having turned up in the deposits. On the other hand, the evidence yielde by the caves, although less certain as an index remote time, is infinitely more instructive. It te us, in certain cases, the division of the human race which man, the early tenant of the caves, probab belonged; what was his stature and what his phy cal powers; what the animals which were his c temporaries; what the mollusks, fish, flesh, and fo upon which he fed; that he cooked his meat by fir that he extracted the marrow from the bones, an how he did it; how and with what weapons he kill his game; how he flayed and dressed the hides; th he scraped the meat off the bones; that he careful cut the sinews of his slaughtered deer for harpo lines, or for the fibre of sewing thread for his fin pointed pierced needles; where and in what dire tion he cut the sinews; what the implements an weapons—in stone, bone, and deer's horn—which used; what his ornaments, and how he disposed his dead. In short, beside the bare fact that prim val man existed during the early "fluviatile drif period in Europe, all that we know of him—exclusi of the later "kitchen-middens" and "pile-habit tions"—is derived solely and entirely from the ossif ous caves.

Gulstonian Lectures

ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,
PHYSICIAN TO ST. MARY'S HOSPITAL.

[*Continued from page* 389.]

To show the difficulty of rightly appreciating the real effects of bleeding in disease—at all events, when the mind is occupied with preconceived views of the nature of the disease for which the bleeding is practised—I think I may safely mention a fact which has left a lasting impression on my mind. I refer to the treatment of typhus fever in the Edinburgh Royal Infirmary some twenty-five years ago. At that time, the fever-patients were massed together in separate wards in one wing of the hospital; the wards being one above the other, and containing a similar number of beds on each story. Dr. Alison, at the time I refer to, was physician of the first floor; Dr. Craigie of the third floor; and Dr. Shortt, whose house-clerk I was at the time, ruled in the second floor. The fever-patients were all of them contributions from the famous, or rather infamous, wynds of Edinburgh; and, as they were indiscriminately introduced into these wards day after day, I suppose nothing need here be said of any difference of type. Now these patients were subjected to the following treatment. Dr. Alison, from first to last, carried out a sustaining treatment; stimulants and wine and nourishment being his main therapeutical agents. On the second floor was followed no one particular line of treatment; there was bleeding and blistering and wine-giving, according as the patient's actual state seemed to require one or the other kind of cure. The treatment was, in fact, something of the expectant; for Dr. Shortt had no particular theory about the nature of fever. On the third floor, Dr. Craigie reigned; and, indeed, a very sanguinary government his was. In his wards, bleeding, leeching, cupping, blistering, were the order of the day, and, I may say, of the night; and a Maine liquor-law was rigidly enforced. I need not say that each physician was thoroughly satisfied of the correctness of his method of cure, and found nothing in the results to induce him to change his plan. Now here we have physicians of the highest repute practising, not at different times and in different places, but at the same moment, in the same hospital, and on identical cases of disease, diametrically opposite methods of treatment, and each fully convinced of the excellence of his method—of the use and of the hurtfulness of bleeding. No one, surely, would conclude that bleeding was the right method of cure for typhus, merely because it was so extensively used by one of these physicians. Yet this is just what they have done, who support the change-of-type theory on the strength of the practice of certain admirers of bleeding in other days.

Perhaps some of my hearers may be curious to know what was the actual result of these different methods of treating typhus; and I will just mention, the sequel, to show the fallacy to which we are exposed in judging of the effects of remedies from the statistical method point of view; and therefore, I may add, the double fallacy into which we may fall through concluding, because men of high repute in other days employed a remedy, that therefore it was a right remedy; and that, consequently, if men of high repute employ it no longer, diseases have changed their type. It happened, at the time to which I am referring, that Dr. John Reid was pathologist of the Edinburgh Infirmary; and perhaps I may be pardoned for saying that the mention of that name brings before me the memory of one of the most profound, accomplished, and philosophic minds with whom it has ever been my good fortune to hold intercourse: so kind, so gentle, and so generous to his inferiors in age and knowledge—himself with the most masculine and powerful of intellects, as simple as a child in the acquisition of knowledge; and, above everything, calm, honest, and truthful in research, and in the story of his researches.

Dr. John Reid's duty at that time was to record the *post mortem* examinations of hospital patients, and his attention was particularly drawn to the facts I have mentioned here; and he thought that, from the very large number of fever-patients who were then crowding the hospital wards, some authentic results, as regarded the effects of treatment, might be obtained. He, therefore, carefully noted the number of deaths in the fever-wards of the three physicians alluded to; and he assured me that the year's account showed that, as regarded mortality, there was not a pin to choose between the three methods of treatment. That such was Dr. J. Reid's deliberate conclusion I can have no doubt; for, within the last few months, I heard Sir D. Brewster say that Dr. Reid had, many years afterwards, made a similar statement to him.

I think, therefore, the argument, that men ceased to bleed because patients would not bear the bleeding—*i.e.*, because diseases had changed their type—cannot be accepted.

A well-known writer (Buckle) has said words to this effect, that there is no example in the world's history of a theory having been put away through observation of the practical evils which it produced. Change in knowledge, he says, comes and upsets the theory; and not till then do men see the viciousness of the practice. I believe his saying finds an apposite illustration in the case before us.

In advanced physiological knowledge, and in the birth of a more scientific humoral theory, must we seek an explanation of the change in practice which occurred about the year 1832. Let me remind you that this change in practice began coincidently with the rise of a new era in medicine. The researches of Prout, Andral, Magendie, Liebig, and a host of other observers, touching the blood, etc., revolutionised our notions of diseases, and created quite a sensation in the minds of physicians. The theories which sprang out of those researches undoubtedly had a most powerful influence in arresting the blood-letting treatment. By these theories, men were taught that bleeding neither was nor ever could have been a proper remedy for many of the diseases in which it had been used so freely. They, therefore, began to doubt of its use in other diseases.

Let it also be remembered, that the time preceding the use of our modern humoral theories was one of the

most sanguinary epochs of English medicine: so that physicians, under the light of their new theories, had an especial occasion to be impressed with the evil effects of the indiscriminate and baneful bleeding which was going on around them. Their theory was there to lead them to a distrust of blood-letting; and then were their eyes opened to the evils which now showed themselves so flagrant to their observation.

With the deepest respect, therefore, to the great authorities to whom I have referred, I must, and as I think most reasonably, ascribe this change in practice —this non-bleeding in inflammations—to our better scientific knowledge; to the rise of modern animal chemistry and physiology; and partly also to the observation of the fearful mischief thereupon noted as done by the murderous bleedings of the first quarter of this century. I see no necessity for the calling in of this change-of-type theory; and I can find no sufficient evidence on which to satisfy myself of the validity of the theory.

[*To be continued.*]

Original Communications.

CASE OF NEURALGIA OF THE ABDOMINAL MUSCLES FOLLOWING ACUTE TONSILLITIS: RECOVERY AFTER SIX MONTHS' ILLNESS.

By W. H. Day, M.D., L.R.C.P.Lond., Newmarket.

Miss —, aged 34, a pale and delicate-looking woman, was making a good recovery from a very severe attack of tonsillitis, when she was seized with pain in the right side of her abdomen. Her former attacks of quinsy appear to have been less severe, but of longer duration. The tonsils were large, causing painful respiration. Incisions were made into them, from which a very fœtid discharge of blood and pus escaped. Portions of the tonsils sloughed, leaving a moderately clean and healthy surface. The treatment consisted at first in the administration of effervescing salines with spirits of nitrous ether and chloric ether; and brandy and soda water to allay thirst, and to support her feeble circulation. Milk and water was the only nourishment relished for the first few days; but afterwards strong beef-tea, jellies, and port wine, were taken daily. Contrary to my advice, she left her room at an early period of convalescence, and walked out of the house. She returned home, complaining of discomfort (rather than pain) in the right iliac region. As her bowels were sluggish, she took the previous night two strong pills, of her own accord, without effect. During the next day, I ordered a mild aperient; this also failing, it was followed by a warm water enema, to which the bowels responded. The uneasiness now increased to absolute pain, and occupied the right iliac, hypogastric, and left iliac regions, extending through the right flank to the gluteal region. No pressure could be borne. The pulse was slow and weak, and the skin cool and moist. Her face indicated suffering. On the following day, every thing she took made her sick; the pulse was weak, and averaged 70; the tongue was large and clean; and there was headache. She lay with her knees drawn up, unable to turn in bed.

On the 26th of February, she was ordered five grains of citrate of iron and quinine with half a drachm of aromatic spirits of ammonia twice a day; ancintment composed of one part of extract of belladonna and nine parts of extract of white poppy, to be applied, on linen rag, to the abdomen; six ounces of port wine daily, and strong beef-tea.

Feb. 27th. She had had no sleep during the night, from the violence of the pain. When she took food or drink, she had most acute pain, especially in the groin, through the right iliac and lumbar regions. The pain never left her entirely, and she had occasional severe paroxysms. The pulse ranged from 60 to 80, and was very small and weak. She still felt sick.

February 28th. The pain was excessive, and the slightest pressure could not be borne; especially in the right iliac region, through which, at uncertain intervals, she had most severe lancinating shooting pain. There was also severe pain in the epigastrium, descending colon, and left iliac region. She was perfectly helpless, and cried out when any attempt was made to move her. Scanty menstruation set in today, but there had been no action of the bowels since the 24th, and the belly was rather tympanitic. A turpentine and assafœtida enema was immediately ordered; an opiate liniment to the body; and half a grain of the muriate of morphia every six hours.

The pain was described as unendurable; she tossed her head to and fro, and spoke in a low faint voice. She had severe crampy pains in the lower limbs, which were relieved by smart friction. The pupils were dilated and fixed, and her expression remarkably vacant and meaningless. She had been once or twice very incoherent. She had had no rest, notwithstanding the morphia. The steel mixture and morphia were omitted. A draught of quinine mixture and chloric ether was ordered every four hours; and one tablespoonful of brandy every two hours in place of the port wine.

March 1st. She slept about two hours, and was more calm and rational this morning. The pain occupied the same situation, but was much less acute. She complained of similar pains under the left breast, and in the left groin. The urine was clear; there was no action of the bowels without the use of an enema. She had taken a good allowance of nourishment regularly; but any attempt at swallowing was painful. She made the most extravagant remarks about people, and imagined her family close to her, and her brother on the bed.

March 2nd. She was improved, except that the pain in the right iliac region prevented her from getting a moment's sleep. A small blister was raised on the right side of the body over the seat of pain, and dressed with a lotion of morphia (eight grains to the ounce of water).

March 3rd. There was pain on slightly pinching up the fleshy portions of the muscles; but the most severe was in the abdomen on the right side. She lay moaning at intervals of a minute, there being partial opisthotonos with the recurrence of pain. The spine and sacro-lumbalis muscles were painful on pressure; and almost any part of the surface when touched was uneasy. The catheter was passed. The turpentine and assafœtida enema was repeated. A belladonna plaster was applied to the back. Thirty drops of chlorodyne were ordered to be taken every night; and a draught containing ten minims of tincture of sesquichloride of iron, ten minims of chloric ether, and five minims of tincture of nux vomica, three times a day.

March 4th. As she was sick, champagne was ordered instead of the port wine. In addition to her mixture, I ordered five grains of compound galbanum pill three times a day.

March 8th. The pain now occupied the left side principally. A liniment of equal parts of compound camphor liniment and tincture of aconite was ordered

be applied to the body. This produced no relief; nd on March 11th, an ointment of aconitina was ap- ied, also without any good effect; and on March 2th, galvanism was tried over the seat of pain on the ft side.

March 20th. I met Dr. Paget in consultation. He dvised a return to the compound galbanum pill, and ve grains of bromide of potassium, with a drachm of ncture of valerian three times a day; and, if the otions were scybalous, three grains of compound locynth pill and two of extract of henbane every six urs. After taking a few of the pills, the pain greatly ncreased; the body was more distended; and there as no disposition to action of the bowels. I, there- re, gave a rhubarb and carminative draught, fol- wed by a copious enema of tincture of assafœtida nd turpentine. During the action of the bowels, hich was free, the poor woman cried out with tor- ure; and she had great exhaustion, a feeble pulse, nd clammy skin. A pill of belladonna, and after- ards a full dose of chlorodyne, were given.

Two days later, I gave, every six hours, two pills of x-gall, henbane, and aqueous extract of aloes.

On the 26th, she had taken eight pills, which only ave rise to more tympanitis, and pain radiating over he whole abdomen, with greater aggravation of the ain in the left side. She had neuralgia over the ight eye and cheek.

March 30th. She was removed to her own home in Lincolnshire, where she fell under the care of Mr. Collingwood of Corby, who kindly acquainted me of ner state from time to time. In answer to one of my letters, he informed me, on April 7th, that he thought ner considerably better since she had been at home. The pain in the left side of the body continued; but was much less. She had rather severe pain in the right temple; but with an anodyne pill, she generally had a good night. The bowels were less obstinate; and she had passed her urine in the last two or three days without the use of a catheter. The treatment consisted of tonics and good diet.

More than three months have elapsed since her return home; and she cannot now walk without some help, although the pain has recently and entirely left her.

She has now resumed her occupation for upwards of two months, and is perfectly well in health.

Remarks. The nature of this case may be described as a condition of abdominal cramp or spasm. The abdominal muscles were the seat of the chief suffering; and they were not excited to morbid action by organic visceral change, by the presence of inflammation, or by irritant matter in the bowels.

For an elaborate explanation of the physiology of nervous and muscular action, we may very profitably read Dr. Radcliffe's lectures, which commenced in the *Lancet*, of Feb. 14th, 1863.

Dr. Radcliffe proves that excessive muscular action, convulsion, spasm, tremulousness, etc., are due, not to an excess, but to a deficiency of vital action. He says, that "*the amount of nervous influence generated is in direct relation to the supply of arterial blood to the nervous system*"; and that muscular relaxation is not disturbed by convulsion or contraction, so long as the muscles receive a due supply of nervous influence. Now, when any of the great nervous centres are deprived of a proper supply of healthy blood, some disturbance is the result.

The occurrence of violent delirium, cerebral exhaustion, and even epilepsy, in persons who have suffered great losses of blood and general convulsions, especially in children who have sustained wounds or undergone operations attended with great hæmorrhage, are familiar instances. If ligatures be placed around the vessels of the neck of an animal so as to cut off the supply of arterial blood to the brain, its nutrition is arrested, and convulsions supervene.

The blood holds precisely the same relation to muscular action as does nervous influence. We infer, then, that deficient or impoverished blood primarily exhausts the nervous system, and unfits it to generate sufficient nervous influence to maintain healthy muscular action. Arterial blood and nervous influence favour muscular relaxation by their presence, and muscular contraction by their absence. (*Lancet*, March 21 and June 20, 1863.)

The spasmodic state of the muscles depends on an enfeebled state of the circulation. The spasms increase with the failure of the heart's action. This is the case in tetanus, in cholera, in hydrophobia, etc.; and we are probably right in supposing with Dr. Radcliffe, "that the morbid muscular contraction is connected with a deficient manifestation of vital power in general and of nerve power in particular."

That pain and spasm of the muscular system are the result of fatigue and over-action, without implication of the nervous system at the first, needs no proof. Mr. Hilton, in his *Lectures on the Therapeutic Influence of Rest*, has shown how fatigue is followed by muscular exhaustion; and how the aching limbs of the pedestrian and the inflamed ankle regain their wonted activity from rest alone. Here quiet and repose are wearied Nature's restoratives, without the aid of food or medicine. During the past autumn, I was consulted by several persons for severe pain in the back, which they believed to be lumbago or renal disorder. These persons had been stooping for many hours in the day, mowing or reaping, and were not cured till they gave their over-stretched muscles rest. It appears to me that there are two classes of these cases; one where the nervous system is first exhausted, leading to muscular spasm and cramp, as in the case under consideration; and the other, where the muscles are simply affected from over-work. The diagnosis may be difficult; but I believe in their existence. It is not always easy to decide what is muscular pain and what is nervous pain. In the case before us, if the patient had not attempted to walk, and to exert herself in her weak state, she would have escaped the suffering which her disobedience entailed. The constant action of the abdominal muscles in walking and ordinary respiration, caused them to manifest that shape of contraction which may be expected to ensue in a person whose constitution was delicate, and whose nervous system was lowered by impoverished blood and over-anxiety. The mischief did not originate in the muscles, but in the blood and nervous centres. What is the explanation of the difficulty in swallowing, but a spasmodic condition of the œsophagus, consequent on deranged health and impoverished blood?

Dr. Habershon, in an excellent and practical paper in the *Lancet* of May 9th and 16th, 1863, on Idiopathic Anæmia, thus writes: "The symptoms of chlorosis are familiar, and it is a state recognised with great facility, and one of those in which right treatment soon manifests a most beneficial result; but the source of the changed condition of the blood is not known."

What is chlorosis, but a state of anæmia? Like anæmia, it originates not exclusively in deficient uterine action, but in a weak and watery condition of the blood, which gradually brings about dyspepsia, vomiting, œdema, palpitation, hæmorrhage, and even atrophy, if the source of the evil be not remedied. It leads to various degrees of mischief from malassimilation and defective nutrition. In some cases preceding or following this state of anæmia, we have strumous disease developed in the brain and lungs, fatty degeneration, albuminuria, and other cancerous ca-

chexia; but in some cases, Dr. Habershon says, "although closely allied to chlorotic malnutrition, no source of disease can be traced."

The patient's strength fails, pallor of the countenance ensues, and atrophy slowly advances, till the exhaustion becomes extreme. We occasionally come across cases of this kind, where there is pallor of the face, loss of appetite, pain after eating, weak, slow pulse, and clean tongue; there may be vomiting and depression of spirits. No disease can be detected in the various organs of the body; the patient is, to all appearance, prostrate and nearly lifeless; and our remedies, as in the case before us, are too frequently inert.

As to treatment, I cannot flatter myself that medicines were of any real service. They too frequently become irritants, where malassimilation is so great. If good nourishment and stimulants be tolerated, and the patient do not grow worse, and no organic mischief be lighted up, we may look forward hopefully. Where our art has sustained so complete a defeat, steady pressure, to diminish the action of the muscles of the abdomen, and a rigid avoidance of all aperients, are most to be relied on. Alluding to pressure, Dr. Inman of Liverpool has, in a letter with which he has favoured me, spoken strongly in favour of the efficacy of this remedy, applied by means of bandaging or strapping.

There may be some ready to ascribe these symptoms to *hysteria*, and to what is called *spinal irritation*; and it may be that the hyperæsthesia of the abdominal muscles, and other parts of the body, and the great susceptibility of the nervous system, is shewn at one time, to go far to strengthen such an opinion; but whether it be truly hysterical or not, there is no question about the severe torture which the woman suffered. Pain is real when it can cover the skin with a cold and clammy sweat, and render the pulse too feeble to be found. Sensation is disordered or perverted in the parts involved; this is kept up by the patient's attention being constantly directed to them. Any causes that weaken the body, and exhaust the nervous system, are fertile sources of hysteria, long illness, exhausting discharges, sleeplessness, mental anxiety, etc. "We consider," says Dr. Inman, "that there are *primâ facie* grounds for considering that the connecting link between hysteria, spinal irritation, and myalgia (muscular pain), is, that there is in all cases general and very readily recognised constitutional or acquired debility; and that, in hysteria, the debility shews itself by disorder of the nervous system.

"In the other instances we have described, debility has shewn itself by disorder of the muscular system. The more debilitated the individual, the greater is the irritability or excitability of his muscular system. The more debilitated the individual, the greater is the irritability of his nervous system." (Dr. Inman, *On Mialgia.*)

Medical Oratory in New York. The Academy of Medicine does not, like its great prototype of Paris, maintain a very high order of oratorical reputation. Its discussions are too generally diffuse and pointless, As a profession, we cultivate far too little the art of speaking. In the Academy of Medicine of Paris, the very highest order of rhetoric is often displayed. But a loose and random style of speaking is not the only fault of those who enter the arena of debate in our societies. Not unfrequently language is used by no means befitting a scientific association. No association can ever attain to any very commanding influence which allows its members to indulge in coarse and vulgar language. (*American Medical Times.*)

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF TETANUS, TREATED WITH ICE TO THE SPINE: RECOVERY.

By R. W. Falconer, M.D., Bath.

[*Read January 21st*, 1864.]

The following case of tetanus, though not presenting the extremely violent symptoms which often characterise other examples of this fearful and intractable malady, is submitted to the consideration of the meeting on account of its having recovered after treatment by ice applied to the spine.

Dr. Watson, in his work on the *Principles and Practice of Medicine*, says that, "Dr. Todd has suggested to him the application of ice to the spine; a measure which he has found eminently beneficial in convulsions. This mode of employing cold as a remedy in tetanus seems well worthy of trial. It would have the advantage of not inflicting any shock which might excite or disturb the reflex function of the cord, through its incident nerves." (Vol. 1, p. 581, 3rd edit.; and 4th edit., p. 585.) Though this suggestion was made sixteen years ago, I have not as yet been successful in discovering any report of a case in which it has been carried into practice. The employment of cold affusion, and occasionally the throwing of a tetanic patient headlong into the water, was resorted to several years ago; in some instances, the sufferers escaped with life from this trial by water; more often the result was fatal.

The subject of the following case was a boy aged 11 years. He was admitted into the Bath United Hospital on November 2nd, 1863. The history given of him by his friends was, that on October 20th, while riding on a gate, he fell backwards, and struck his neck on some stones. He walked home in pain from the contusion he had received, but no mark of any injury of the neck was to be seen. The following day the pain of the neck was greatly increased, and he was unable to move his head. The third day after the accident his jaws were partially closed, and the least movement induced a paroxysm of screaming, apparently caused by pain; and this latter condition appears to have been the main cause of his being brought to the hospital No twitchings or irregular muscular movements had been up to this time noticed. When admitted into the hospital, on the thirteenth day after the accident, there was no mark of any injury to the neck, but great tenderness on touch about the fifth and sixth cervical vertebræ. He presented a peculiar appearance from the manner in which he carried his head, which was bent forwards, and somewhat downwards; the cheeks swollen, and the slightest movement causing paroxysms of screaming. The jaws were not completely closed. He had lost much flesh since the accident occurred.

Between the 2nd and 11th of November, he had been subject at intervals to slight but distinct spasmodic attacks, with twitchings of the muscles of the arms and back, accompanied by violent screaming. On the 8th, he was described as being unable to move his arms, but not his legs. His jaws were firmly closed, and every quarter of an hour he had a general spasm, with twitchings of the arms and back. He passed urine freely, and voluntarily; the bowels were costive, and only acted on by means of a terebinthinate enema. During this period he had taken small quantities of calomel and opium, and his diet had consisted of beef-tea and wine.

Nov. 11th. The patient was placed under my care,

having previously been under my colleague Mr. Brace. At this time his face presented a swollen appearance from the strong contraction of the muscles of the jaw, which were as hard as a board to the touch. The jaws were firmly closed, and the lips puckered up. There was no unnatural hue of the complexion, nor marked anxiety of expression. The head was fixed and immoveable, and was drawn downwards and forwards on the chest, the muscles of the neck being strongly contracted. The pectoral muscles were hard and contracted, but the intercostals appeared to be unaffected. The recti muscles of the abdomen were strongly contracted, and the abdomen generally tense and flat. The large muscles of the back were similarly contracted. Both arms were stiff, and their muscles tense; but they could be flexed by gentle and sustained force, and the patient himself could move them a little, but the movement caused much pain. The lower limbs were extended and stiff, and the patient was unable to move them; the feet were extended and arched; tickling the soles, or moving the limbs, however slightly, caused intense suffering, and cries of pain. Intelligence was unaffected; the eyes were natural; respiration gentle and slow; deglutition unimpeded; speech thick, and very indistinct; pulse 100. When the patient was moved, or anything refused him which he asked for, his face became convulsed as with passion, and for a few minutes he screamed violently through his clenched teeth. There was no pain so long as he was at rest. The bowels had been freely acted on by the calomel he had taken, which was directed to be continued for the present; and in addition to have pounded ice applied to the spine, and a warm bottle to the feet. The ice was to be kept constantly applied to the spine, but the back to be examined at intervals, and wiped dry. The diet was ordered to be beef-tea and wine as before.

Nov. 12th. He had a restless night, and paroxysms of screaming; his general condition was the same as on the previous day.

Nov. 13th. He had a quieter night. The bowels had been purged. The calomel was ordered to be suspended. In other respects, he was the same as on the 12th.

Nov. 14th. At 7 A.M., and again at 9 A.M., he had a spasmodic attack, which lasted from ten minutes to a quarter of an hour, in which he was seen by Mr. J. W. Teale, the house-surgeon, who was summoned by the nurse, as the patient was thought to be dying. He was, as Mr. Teale reports, strongly convulsed; the head bent back, the arms bent at right angles across the chest, and rigid. The recti muscles of the abdomen, and the whole belly were intensely rigid. The feet were arched forwards so as to rest on the toes. On each occasion there was distinct opisthotonos. The respiration was laborious; the cheeks were blown out, and the breath forced violently through the clenched teeth. The screaming was fearful, and almost continuous. The veins of the head and neck were congested, and the lips livid. These attacks gradually subsided, leaving the patient in a weakened condition.

Nov. 15th. He had had two more attacks this morning similar to those of yesterday, but more violent. The jaws were still closed, and the muscles of the neck rigid, those of the arms less so. Pulse 100.

Nov. 16th. He had had no fit since yesterday; had passed a quiet night; in other respects he was much the same. His bowels were confined; he was ordered to have a terebinthinate enema; and the beef-tea was increased to three pints, and he was ordered to have four ounces of wine.

November 17th. The muscles of the neck and arms were less rigid; movement did not cause much pain. The lower extremities were much in the same condition as above described, but they could be moved without inducing much pain.

Nov. 18th and 19th. He was much in the same state.

Nov. 20th. He had not had a fit since the 16th; and was much the same. The bowels had been confined the last two days; the enema was repeated.

Nov. 21st. He was improving in every respect. The muscles of the arms, chest, abdomen, and lower extremities were less rigid, and could be moved without producing pain. The muscles, however, of the neck and jaw continued contracted and rigid. An ice-pad was ordered to be applied to the upper part of the neck.

Nov. 22nd. He had been gradually improving since the last report. The muscles of the neck and jaw were relaxed; the pursing up of the lips had disappeared. He could separate his jaws about the eighth of an inch, and spoke more plainly. He had been able this morning to turn himself on his side. The ice to the spine, which had been constantly kept applied since November 11th, was ordered to be left off for three hours during the twenty-four; the ice-pad to the neck to be continued as before.

Nov. 23rd. He was improving. He had expressed a dislike to the beef-tea, which was to be exchanged for veal-broth with four ounces of sherry in it; the wine to be continued. The bowels were open by the enema.

Nov. 25th. He opened his jaws so as just to separate his teeth. The abdominal muscles were less rigid; he moved his arms and feet.

Nov. 27th. He continued to improve; and opened his jaws so as slightly to protrude his tongue.

Nov. 28th. He was much improved; and ate some bread and milk for breakfast. The bowels were opened to-day for the first time spontaneously.

Nov. 29th. The mouth was much more open; the swollen appearance of the face was much diminished. He moved his head about easily. His voice was natural. He was allowed to sit up during the time when the ice is not applied.

Dec. 2nd. He had been gradually improving since the last report; and was able to walk a short distance with some help. He fed himself, and masticated his dinner, a mutton-chop, with ease. The muscles of the arms and lower extremities were in a natural state; those of the neck still somewhat contracted. The abdominal muscles were much softer and scarcely at all contracted; but, if rubbed, or called into special action, they became rigid for some time. The bowels had been open naturally for the last three days. The application of ice was ordered to be discontinued gradually, diminishing the time by an hour daily; the ice-pad to the neck to be continued as before.

Dec. 13th. The ice had to-day been wholly discontinued. He was steadily improving, and had gained flesh. There was still some rigidity of the abdominal muscles. He walked about a little without assistance.

Dec. 29th. The improvement since the last report had been steady and continuous. He could open his mouth wide. There was no tenderness at the back of the neck. During the last few days, the bending forward of the head had entirely disappeared. The abdomen was much less tense; though when he was standing quite upright, the muscles became slightly rigid. He could walk and run as well, he said, as ever he could; and thought he was stouter than when he met with the accident which caused his illness. He was this day discharged recovered. A week after his discharge, he came to the hospital, and expressed himself as being perfectly well.

I am informed by my friend Mr. J. K. Spender,

that, in 1851 or 1852, he saw a case of tetanus, under the care of Dr. Todd, in King's College Hospital, which was treated by means of ice applied to the spine. It terminated fatally. Those who, with Mr. Erichsen and others, divide tetanus into an acute and a subacute or chronic tetanus, will probably be disposed to locate the case now related under the latter division, and to regard the treatment as having little to do with the result. Those, however, who coincide with the view taken by Romberg in the following extract may be inclined to consider the remedy used to have been efficacious in the recovery of the patient: "The distinction as to time—acute and chronic tetanus—is as little tenable as the classification, according to the region affected; the same conditions are the causes of the disease, whether it runs its course in a certain number of hours or days; besides it would be difficult to justify the application of the term chronic to a cycle of a few weeks." (Romberg, *Diseases of the Nervous System*, vol. ii, Sydenham Soc. Edit., p. 107.)

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON AMPUTATION BY SINGLE FLAP.

By Henry D. Carden, Esq., Worcester.

[*Read at Birmingham, Feb.* 11, 1864.]

The object of the present paper is to bring before you the practical results of a plan of operating in amputation of the thigh adopted by me in 1846, as shown in a series of thirty-one cases occurring in my practice during eleven years from that period; and which I have called amputation by single flap, or, more precisely, single skin-flap; and, at the same time, to state my reasons for adopting this method in preference to any other.

Every surgeon who has had much experience as a dresser, must be familiar with the difficulties that especially beset him in dressing patients after amputations of the thigh; nor will he readily forget the anxious time he has passed in taking charge of a painful and twitching stump, looking out for secondary hæmorrhage, or his subsequent task of having to deal with profuse suppuration, unmanageable or insufficient integument, retreating muscles, and obtrusive bone; and how he inwardly purposed to avoid all this in future, if he should haply succeed to wield the knife himself.

Under these impressions, I commenced hospital practice in 1838; when chloroform, the handmaid of conservative surgery, was unknown, and when celerity of execution was the order of the day; when we were taught to stab the limb with Lisfranc's long knife, and, having made two cuts outward with the rapidity of lightning, and sawn the bone with breathless haste, to consign the severed limb to the sawdust in less than sixty seconds.

I adopted these somewhat theatrical performances at that time, operating by the watch as others did; and, I believe, with about the same amount of satisfaction and success. Occasionally, however, shattered limbs presented themselves, which did not admit of such rapid manœuvres. There were two cases in particular, where the accident had left nothing but cold and flimsy shreds of skin to cover the shoulder-joint and exposed acromion in one case, and the tibia and fibula in the other; and I was driven to the necessity of shaping and economising them as best I could; and the result of these two cases is not without significance.

In 1845, my attention was drawn to a few of my old cases of amputation; and I was much struck by the fact that, where double muscular flaps had been employed to cover the end of the bone, the cicatrix had been drawn gradually over the sawn part, rendering the stump incapable of bearing the least pressure; whereas, in the two cases referred to, the flaps were plump and painless, and capable of bearing very considerable pressure on the end without flinching.

Under these circumstances, I determined to try the method of amputation by a single flap of skin; and I have been so well satisfied with the results that I have never since that time used any other.

The operation consists in reflecting a rounded or semioval flap of skin and fat from the front of the joint (Fig. 1); dividing everything else straight down



Fig. 1.—Line of Incisions.

to the bone; and sawing the bone slightly above the plane of the muscles; thus forming a flat-faced stump with a bonnet of integument to fall over it. (Fig. 2.)



Fig. 2.—Flap covering Stump.

The operation is simple; and is performed easily in two ways.

The operator, standing on the right side of the limb, seizes it between his left forefinger and thumb at the spots selected for the base of the flap, and enters the point of the knife close to his finger, bringing it round through skin and fat below the patella to the spot pressed by his thumb; then, turning the edge downwards at a right angle with the line of the limb, he passes it through to the spot where it first entered, cutting outwards through everything behind the bone. The flap is then reflected, and the remainder of the soft parts divided straight down to the bone; the muscles are then slightly cleared upwards, and the saw is applied.

Or, the limb being held as before, the hand and knife may be brought round under the limb, as in the circular operation, and the blade entered near the thumb and drawn round to the opposite side, when the ham may be cut across by turning the edge of the knife upwards, and the operation completed as before. This requires rather more dexterity and flexibility of wrist than the first method.

Or the flap may be reflected first, and the knee examined, particularly if the operator be undetermined between resection and amputation. In amputating through the condyles, the patella is drawn down by flexing the knee to a right angle before dividing the soft parts in front of the bone; or if that be

inconvenient, the patella may be reflected downwards.

In this operation, the arteries are easily found and secured, without loosening the tourniquet; but there is a point worth noticing whilst tying the popliteal artery in this situation; namely, its close proximity to the vein, and the tendency to secondary hæmorrhage from the vein in consequence. This occurred to such an extent in two of the early cases, that I had to re-open the dressings, and found the closure of the vein prevented by the stroke of the artery. This was immediately checked, and afterwards always prevented, by gently separating the vessels for an inch upwards. The flap falls easily over the end of the bone; and, when united to the posterior integuments by a few pins or sutures, is drawn strongly upwards and backwards by the greatly retracted flexors, and has a somewhat puckered and redundant appearance at first, as shewn in Fig. 2. This is no disadvantage.

The dressing may be of the lightest and simplest kind; a few strips of soap-plaster between the sutures, and a light bandage perhaps. I have often been content to use a cap of soft porous linen, drawn over the end of the stump, and secured above by a broad circular strip of plaster. Whatever dressing be used, it is of great importance to loosen it and examine the stump early, and to carefully provide for the free escape of serum.* I remove the pins or sutures at from twenty-four to forty hours at furthest, and never find that I have opened the dressings too soon.

* I lay the more stress on this point from the first, as Mr. Fergusson, in his work *On Surgery* (page 134), is liable to be misunderstood.

TABLE I.—*Amputations at the Thigh by Single Skin Flap, performed by Mr. Carden from July* 1846, *to December* 1856.

No.	Date.	Name.	Age.	Disease or Accident.	Result.	Remarks.
	1846.					
1	July 14.	James George.	32	Disease of knee.	Recovery.	Hæmorrhage from vein. Fig. 6.
2	October 12.	Charles Good.		Disease of knee.	Recovery.	Hæmorrhage from vein.
3	November 18.	Mr. Godsall.	45	Disease (cancer) of tibia.	Death.	Advanced encephaloid of head of tibia. Death from hæmaturia, Dec. 14th. Stump healing favourably.
	1847.					
4	April 6.	James Jones.	20	Disease of knee.	Recovery.	Bears his weight on the end of stump; uses peg-leg, 1863.
5	April 15.	Saml. Walker.	49	Disease of knee.	Recovery.	
6	April 15.	Joseph Stanton.	19	Disease of knee.	Recovery.	Whole weight borne on the end; walks thirty miles a day. Fig. 5.
7	July 6.	Mary Bourne.	40	Disease (cancer) of tibia.	Recovery.	Old diseased tibia after burn, assuming malignant character.
8	August 19.	Wm. Jackson.	24	Disease of knee.	Recovery.	Amputation through anchylosed joint. Old fractured patella. Figs. 3 and 4.
9	October 15.	Abel Vine.	36	Disease of knee.	Recovery.	Under treatment nine years; great pain and emaciation; bears full weight. 1863.
	1848.					
10	February 19.	James Bridges.	11	Disease of knee.	Recovery.	Bore very firm pressure on the end in a fortnight.
	1849.					
11	June 25.	Wm. Cooper.	22	Disease of knee.	Recovery.	Bore half his weight before leaving.
12	June 4.	Caroline Jeffs.	19	Disease (cancer) of femur.	Recovery.	Advanced encephaloid of femur. (Museum.) Amputation at upper third. Discharged cured on July 21. Disease returned in liver two years afterwards.
13	August 30.	Ann Jones.		Disease of knee.	Recovery.	
14	November 9.	Wm. Coborn.	30	Disease of knee.	Recovery.	
	1850.					
15	August 29.	Charles Hook.	14	Disease of tibia.	Recovery.	
	1851.					
16	April 3.	Wm. Andrews.	20–30	Accident.	Recovery.	Leg smashed into knee-joint. Primary amputation.
17	November 8.	Wm. Hill.	18–25	Accident.	Recovery.	Extensive laceration extending into joint. Primary amputation.
19	December 19.	John Finn.	21	Disease (cancer) of tibia.	Death.	Encephaloid disease of head of tibia. Died from exhaustion on January 15.
	1852.					
20	May 12.	Maria Lea.	46	Accident.	Death.	Smashed leg and knee. Extensive contusions. Primary amputation. Died in twenty-four hours. No reaction after accident.
	1853.					
21	July 23.	Elizth. Bishop.		Disease of knee.	Recovery.	
22	December 24.	John Watts.	28	Accident (railway).	Recovery.	Compound fracture of right leg, with fracture of left; contusions. Secondary amputation.
	1854.					
23	February 26.	Wm. Ashton.	15	Accident (machine).	Recovery.	Primary amputation.
	1855.					
24	March 12.	Captain H.	40	Disease of knee.	Recovery.	Extensive suppuration of knee-joint and thigh. Old fractured patella. Slow recovery. Fig. 7.
25	May 12.	Wm. Stone.		Accident.	Recovery.	Severe contusion of pelvis and abdomen. Secondary amputation.
26	September 20.	John Weaver.	35	Disease of knee.	Recovery.	
27	September 29.	Mary Ely.	20	Accident.	Recovery.	Secondary amputation.
	1852.					
28	February 26.	Joseph Liddell.	50	Disease.	Death.	Acute gangrene. Died on March 7.
	1856.					
29	March 20.	Wm. Insull.	48	Disease (cancer).	Death.	Encephaloid cancer of leg and knee, advanced. Admitted on March 19th. Exhausted from profuse hæmorrhages. Died exhausted on April 14th.
30	November 15.	Mary Jackson.	30	Disease of leg.	Recovery.	
31	December 24.	Ann Trenfield.	53	Disease of knee.	Recovery.	Had severe attack of erysipelas, after secondary hæmorrhage. Disease supposed to be malignant. Amputation at the middle of femur. Fig. 8.

The principal advantages obtained by this plan appear to me to be the following:—the facility afforded for amputating, either through the knee or through any part of the lower end of the femur; thus proportionately avoiding the shock of higher amputation, and the risks of exfoliation, pyæmia, etc., attendant on sawing through the cylinder of the bone; the simplicity of the whole proceeding, and small extent of the wound; the favourable position of the flap for dressing and for the escape of discharge; painlessness and quietude of the stump, the principal nerves being divided high up and drawn out of reach of pressure or exposure; the fitness of the stump to stand and walk upon; the bearing being broad, and the skin employed being accustomed to bear the weight of the body in kneeling; the cicatrix being drawn clear of the point of the bone, out of the reach of pressure.

The rate of mortality is very favourable as far as the numbers go; as will appear by an examination of the accompanying summary of the table of thirty-one cases. (See Table I.)

		Deaths.	Recoveries.
Primary, for accidents. .	4	1	3
Secondary, do.	3	0	3
Advanced cancer . . .	6	3	3
Sloughing gangrene . .	1	1	0
Disease	17	0	17
Total	31	5	26

Of the deaths, the largest number was 3 in 6 from cancer. Of these, Godsall (No. 3), aged 45, died of hæmaturia in twenty-six days; the stump was healing. John Finn (No. 19), aged 20, with advanced encephaloid, died exhausted in twenty-six days. And William Insull (No. 29), aged 48, died in eighteen days, exhausted by previous repeated hæmorrhages.

Of primary amputations for accident, 1 in 4 died; namely, Maria Lea (No. 20), aged 46, with smashed leg and knee and extensive contusions; she died in twenty-four hours; there was no reaction. (The recoveries were healthy young men, and a boy aged 15.)

There was one death from sloughing gangrene; viz., Jos. Liddell (No. 28), aged 50; death in nine days.

Of secondary amputations for accidents, 3 in number, all recovered; viz., Nos. 22, 25, 27—two railway guards, and Mary Ely, aged 20.

Of amputations for disease, 17, all recovered; the ages were from 11 to 53; 13 were males, and 4 females.

Of the 26 recoveries, sketches and photographs of some cases will fairly illustrate the average character of the stumps at different lengths of bone from the knee-joint to the middle of the shaft, at periods after amputation, varying from six weeks to eleven years; and one has been especially selected as the worst stump, taken about three years after amputation.

Case I (No. 8). Wm. Jackson, aged 24, was admitted into Worcester Infirmary July 24th, 1847, with soft anchylosis of the knee. He had been in the Gloucester Infirmary a year and a half previously, for fractured patella. He went out, and walked too soon. Inflammation and abscess followed; the joint was left to take its chance. On admission, the joint was bent and anchylosed at an acute angle (Fig. 3); the front of the tibia was adherent to the posterior surface of the condyles. The fragments of the patella were separated to the utmost. The joint was intensely painful; the slightest movement was insufferable.

August 19th. Amputation was performed through the joint (Fig. 4). The flap was reflected from the anterior tuberosity of the tibia upwards, sufficiently high to admit the knife through the joint down to the adherent bones. The muscles and tendons in the ham were divided, when the bony adhesions gave way. The rough surfaces were smoothed down; and

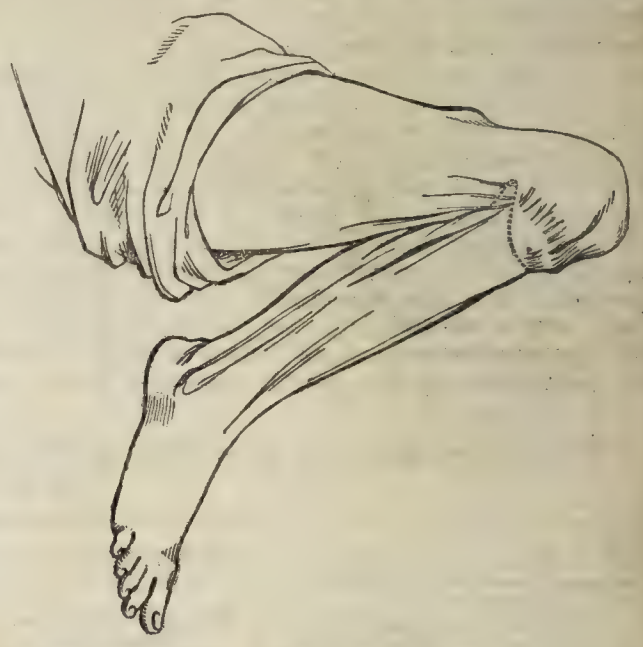


Fig. 3.—Wm. Jackson. Position of Leg and Lines of Incision.

the skin came together easily, and healed in twelve days. In September, he could bear his weight on a padded seat, before he left the hospital.



Fig. 4.—Wm. Jackson, after Amputation.

Case II. The next in length is from Joseph Stanton (No. 6), whose leg was amputated on April 15th, 1857. Fig. 5 represents the stump eleven years afterwards. He walks very long distances, bearing on the end.

Case III. James Jones, aged 20 (No. 4), had his leg removed one inch and a half above the condyles. He can walk fifteen or twenty miles a day, bearing on the end, with a common wooden leg. (1863.)

Case IV. James George, aged 32 (No. 1). Amputation was performed July 14th, 1846, two and a half inches above the end of the femur (Fig. 6). He bears nearly his weight on the end.

Case V. Charles Good (No. 2). The stump is of the same length as in Case IV. Amputation was done on October 12th, 1846. He bore pressure well in six weeks.

Case VI. Captain H., aged 40 (No. 24), had old pulmonary disease, and was much worn and wasted by profuse suppuration in the knee-joint and extensive abscesses of the thigh. Amputation was performed March 12th, 1855. The case was protracted.

There was slight exfoliation. Fig. 7 is from a photograph taken in 1858, when more than half the weight was borne on the end with Gray's artificial leg. This worst stump was much praised by Mr. Gray for its capability to bear weight.



Fig. 5.—Joseph Stanton. Stump eleven years after Amputation.

Case viii. Mary Jackson, aged 30 (No. 30), had amputation performed two and a half inches above the condyle. She walks well on a wooden leg made by her husband, bearing on the end.



Fig. 6.—James George.

Case ix. Ann Trenfield, aged 53, December 24th (No. 31). Amputation was performed through the middle of the shaft. She had secondary hæmorrhage and erysipelas. She can bear pressure well on the end, but had not walked when the photograph was taken. (Fig. 8.)

With the exception of No. 12 through the upper third, for encephaloid disease of the femur, the remaining eighteen cases of recovery were amputations at the lower end of the femur, and corresponded in their capability of bearing weight on the end. In none was there any loss of skin from sloughing, although the skin in many cases was pale and puffy, frequently scarred with issues and other appliances, and occasionally perforated by sinuses. One of the most striking features in these cases is the remarkable thickening which the skin speedily undergoes, and the brawny firmness it afterwards acquires, when exposed to graduated pressure.

Having been frequently urged, by friends who had witnessed the results of my method, to publish the foregoing cases, I had prepared the table in 1858, accompanied by the sketches and photographs, with that

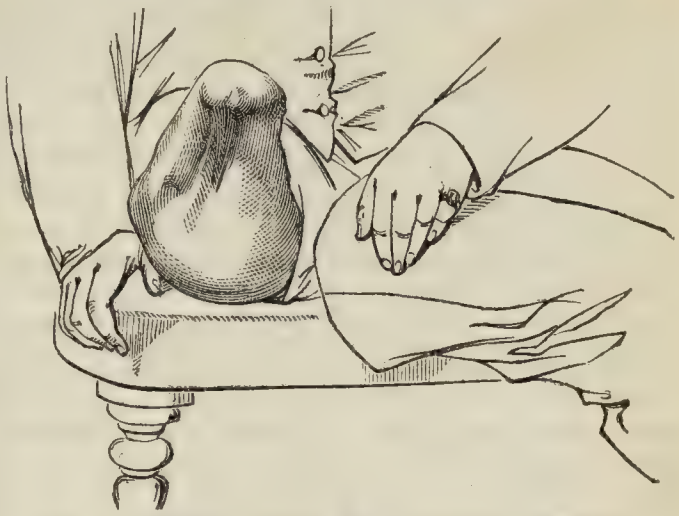


Fig. 7.—Captain H. Stump three years after Amputation.

intention, when Mr. Teale's valuable work on *Amputation* appeared, and seemed to me, at first sight, to render anything further on the subject unnecessary on my part. Mr. Teale's method of operating with a long and a short rectangular flap appears to provide an excellent stump to walk upon, when the materials for forming it are attainable. The evidence of Messrs. Grossmith and Heather Bigg is conclusive as to the great superiority of Mr. Teale's operation in this respect over the double flap and circular. His rate of mortality, also, is greatly in favour of his plan, compared with



Fig. 8.—Ann Trenfield.

the usual methods. It appears to me, however, that an eight-inch muscular flap is not always to be had, with due regard to the essential principle of removing the point of severance as far as possible from the trunk. (Erichsen's *Science and Art of Surgery*, second edition, page 20, lines 33, 34). The extent of wound is certainly great, being thirty-two inches in a circumference of sixteen; whilst the division of muscles longitudinally for eight inches can scarcely be accomplished at all times without risk of bad consequences, particularly by surgeons less skilful than Mr. Teale.

Mr. Lister's observations on Teale's method, in his essay on Amputation in the third volume of Holmes's *System of Surgery*, just published, bear so directly on the subject of this paper, that I may be allowed to quote his opinion. He says, page 162: "Thus, in a particular instance, where the development was by

no means extraordinary, the dimensions were such that, supposing the anterior transverse incision made at the level of the upper border of the patella, it would have been necessary, in order to preserve Mr. Teale's proportions, to saw the bone eleven inches further up, or full five inches higher than if the modified circular operation were performed. This must, *cæteris paribus*, very seriously increase the risk, which is always greater the nearer the seat of amputation is to the trunk. The cut surface is also very extensive; and this would give rise to a correspondingly large amount of suppuration, if immediate union failed. It therefore becomes an important question, whether the advantages of Mr. Teale's plan may not be obtained in some less objectionable manner."

He then proceeds to propose a modification by an anterior flap of six inches in front, without any posterior flap at all, retracting the muscles two inches before dividing the bone; and observes: "That such a procedure would answer well is not, however, a mere matter of inference; for, since the appearance of Mr. Teale's work, Mr. Spence of Edinburgh has performed some amputations of the thigh according to his directions, and others by cutting from without inwards a large rounded anterior flap, dividing the posterior parts at the level of its base by a perpendicular sweep of the knife, and retracting the muscles before applying the saw. I have had the opportunity of comparing the fulness of the cushion in both cases; and Mr. Spence tells me that, where it has been formed after the latter mode, it has proved capable of bearing a large proportion of the weight of the body.

"Still this proceeding would involve as high a division of the bone as Mr. Teale's, if the anterior flap had the length above mentioned; and the question yet remains, whether it may not be curtailed, and eked out with a short posterior flap, without impairing the usefulness of the stump. Provided the covering of the bone be sufficiently full, the essential thing to be attained is, that the tender cicatrix shall be so placed as to be free from any chance of being squeezed between the bone and the bottom of the socket of the limb. Now, it fortunately happens .... that the bone lies forward among the muscles, so that even its posterior surface is considerably anterior in position to the longitudinal axis of the limb. Hence a flap half the diameter of the limb would more than cover the bone; and one as long as two-thirds of that diameter would ensure the scar being considerably behind the point of pressure; especially as the absence of the two inches of bone above the base of the flap would allow it to drop lower than it otherwise would. Also, in the further progress of the case, the contraction of the muscles will draw the cicatrix still further back; an effect long since noticed by Alanson" "after his circular operation."

Mr. Lister then proposes that, "in order to compensate for the diminution of the anterior flap, a posterior one must be made of rather more than half its length, and of rounded shape, for adaptation to it; and the integument of this flap should be dissected up before the posterior muscles are divided, so as to set it free from the effects of their contraction. On the other hand, the anterior flap, after being marked out by carrying the knife through the skin and fat, should be raised so as to contain a good deal of muscle, which will be useful, both by insuring the vitality of the rather long flap, and also by increasing the thickness of the cushion below the bone; while any tendency to contraction that it possesses (small, compared with that of the posterior muscles) will be counteracted by the force of gravity, through which it will naturally tend to occupy its proper place."

"By this mode of amputating, the bone will be divided about as low as in the modified circular operation; and, though I have not yet had much opportunity of trying it on the living subject, I feel satisfied from the above considerations, and from experiments on the dead body, that it will attain the essential objects of Mr. Teale's plan, while it will occupy less time than either of the methods alluded to. The flaps, when brought together, will be free from tension; and the stump, if properly dressed, most favourably circumstanced for safe and speedy healing."

In his observations on dressing, Mr. Lister lays great stress on providing a free escape for serum. This, I can say from experience, is a most important point, and one that cannot be too strongly urged.

It will be obvious from the above extract, that Mr. Lister still considers that no plan hitherto adopted has fulfilled the requisite conditions in amputations of the thigh; namely, that of obtaining a long and useful stump in this situation by a sufficiently safe and simple operation in amputations of the thigh.

The foregoing table of thirty-one cases, performed with the definite object of testing the application of a particular principle to amputation of the thigh, will, I venture to hope, not be without its use, if it can be proved, on a more extended scale, that skin and fat only, when placed properly over the end of a sawn bone, is quite equal, with a little attention to graduating the pressure at first, to sustain the weight of the body. When we find all the bony prominences and resting-points of the body and limbs covered only with skin and fat, why should not the broad ends of the femur and tibia be sufficiently protected by the same hardy covering? Having already tested its capabilities in amputations of every part of the extremities (except the hip-joint) for the last eighteen years, I feel great confidence in recommending its adoption, or at least a trial, on the part of the profession generally.

Mr. Sheppard has kindly favoured me with a record of cases kept by him of thirty-two amputations on this principle at the Worcester Infirmary, from June 1859 to the end of 1863, performed by himself, Mr. Budd, Mr. Walsh, and myself, with a mortality of seven in thirty-two. These numbers are not sufficiently great to warrant in themselves any general inferences, but, as far as they go, are very favourable, when the cases are sifted. (Table II.)

Of fourteen primary amputations for accidents, nine recovered. Of the five deaths, one, No. 10, aged 41, was complicated with fractured spine; one, aged 37, No. 13, was a double amputation of leg and arm; two, No. 14 and 19, were apparently sinking from hæmorrhage when admitted (thigh cases); and one, No. 7, died from pyæmia (leg).

Of disease, two died, sixteen recovered. No. 20, aged 68 (arm), died of pyæmia. No. 21, aged 59 (leg), died eleventh day, of exhaustion, bronchitis, and fatty degeneration of heart.

This table gives the following results.

			Deaths.	Recoveries.
Thigh 11	Accident 5	....	2	3
	Disease 6	....	0	6
Leg 10	Accident 5	....	2	3
	Disease 5	....	1	4
Arm 5	Accident 1	....	0	1
	Disease 4	....	1	3
Arm and Leg 1	Accident 1	....	1	0
Forearm .. 5	Accident 2	....	0	2
	Disease 3	....	0	3
32	32		7	25

TABLE II.—*Amputations by Single Skin Flap, performed in the Worcester Infirmary, from June 1859 to December 1863.*

No.	Date.	Name.	Age.	Accident or Disease.	Part amputated.	Operator.	Result.	Remarks.
	1859.							
1	June 14.	Wm. Taylor.	61	Disease.	Forearm.	Mr. Carden.	Recovered.	Skin flaps. Muscles divided circularly.
2	June 20.	Thos. Carter.	44	Disease.	Forearm.	„ Budd.	Recovered.	Nine days before admission wounded the thumb. Inflammation and abscesses followed, which rendered amputation necessary.
3	July 27.	Adam Keller.	40	Accident.	Forearm.	„ Sheppard.	Recovered.	
4	June 20.	Wm. Davis.	19	Disease.	Leg.	„ Carden.	Recovered.	Amputation in the lower third of tibia.
5	July 9.	T. Reynolds.	19	Accident.	Thigh.	„ Carden.	Recovered.	Gun-shot wound of the knee-joint, a large charge entering on the outer side, and remaining in the joint, completely destroying the cancellous structure, and splintering the femur for nearly two inches.
6	Aug. 17.	Wm. Petford.	34	Disease.	Arm.	„ Sheppard.	Recovered.	Disease of the whole shaft of the humerus, commencing in acute ostitis, immediately above the elbow-joint, thirteen months before admission into the hospital.
7	Aug. 23.	J. Merriman.	10	Accident.	Leg.	„ Sheppard.	Died.	Amputated below the knee. Died of pyæmia on the tenth day.
8	Sept. 15.	Susan Stag.	30	Disease.	Thigh.	„ Budd.	Recovered.	Cartilages found to be softened and ulcerated; surrounded with pus. Tibia and femur enlarged.
9	Oct. 17.	Jas. Hughes.	20	Accident.	Leg.	„ Carden.	Recovered.	Amputated in the lower third of the leg.
	1860.							
10	Jan. 21.	J. Bachelor.	41	Accident.	Leg.	„ Carden.	Died.	Amputation was performed, but with little hope he would long survive the operation, as the lower limbs were completely paralysed from a fracture of the dorsal vertebræ.
11	March 17.	Sarah Delve.	47	Disease.	Thigh.	„ Sheppard.	Recovered.	Amputated about the middle of thigh.
12	Feb. 23.	Allen Bullock.	11	Accident.	Forearm.	„ Sheppard.	Recovered.	
13	Sept. 18.	Jno. Poulson.	37	Accident.	Arm and leg.	„ Sheppard.	Died.	Amputation below the shoulder- and knee-joints. The patient lived but a few days.
14	Sept. 19.	Thos. Farley.	11	Accident.	Thigh.	„ Sheppard.	Died.	Loss of blood very great before he arrived at the hospital, to which cause death may be referred.
	1861.							
15	Feb. 16.	R. Churchyard.	43	Disease.	Thigh.	„ Carden.	Recovered.	Inner condyle carious. Cartilages ulcerated.
16	Sept. 14.	G. Caldicott.	50	Disease.	Arm.	„ Budd.	Recovered.	Amputation was preferred to excision, on account of the patient's health. He died of phthisis a few months after.
17	Sept. 26.	R. Davis.	55	Disease.	Forearm.	„ Budd.	Recovered.	The whole of the carpus was completely carious.
18	Oct. 31.	Betsy Newman.	31	Disease.	Thigh.	„ Budd.	Recovered.	Recovered, with a good stump.
19	Oct. 29.	Ann Moore.	39	Accident.	Thigh.	„ Budd.	Died.	A large quantity of blood was lost previous to the operation.
20	Dec. 15.	F. Turner.	72	Disease.	Arm.	„ Sheppard.	Recovered.	The joint was found extensively diseased.
	1862.							
21	Jan. 2.	T. Bristow.	59	Disease.	Leg.	„ Sheppard.	Died.	On the eleventh day, symptoms of exhaustion set in, with bronchitis. He died on the twelfth. *Post mortem.* All the organs were healthy, with the exception of the heart, which was small. The cavities were empty. Both ventricles were exceedingly thin and softened, and in a state of advanced degeneration.
22	July 14.	Elzth. Glover.	24	Disease.	Leg.	„ Budd.	Recovered.	Amputated about the middle of the leg.
23	July 22.	Jas. Dallow.	13	Disease.	Thigh.	„ Walsh.	Recovered.	This patient had hæmorrhage a few days after the operation.
24	July 22.	Emily Jones.	12	Accident.	Thigh	„ Walsh.	Recovered.	A bad railway accident, rendering amputation necessary about the middle of the thigh.
25	Aug. 10.	Saml. Groves.	8	Disease.	Thigh.	„ Sheppard.	Recovered.	The child's parents would not permit excision to be performed.
26	Aug. 25.	Wm. Clarke.	10	Accident.	Thigh.	„ Sheppard.	Recovered.	A thrashing-machine accident. Amputation at the middle of the thigh; muscles divided circularly; skin flaps.
27	Sept. 25.	Wm. Selby.	55	Disease.	Leg.	„ Walsh.	Recovered.	Amputated in lower third of leg.
28	Oct. 23.	John Lyes.	23	Accident.	Leg.	„ Budd.	Recovered.	Amputated below the knee.
29	Aug. 22.	Thos. Powell.	68	Disease.	Arm.	„ Walsh.	Died.	Removed about the middle of the arm. Died from pyæmia.
30	Dec. 27.	C. Prossor.	17	Accident.	Leg.	„ Sheppard.	Recovered.	Amputated immediately below the knee.
	1863.							
31	March 14.	Jas. Shewell.	28	Accident.	Arm.	„ Walsh.	Recovered.	There was hæmorrhage from the nutrient artery of the bone, requiring the actual cautery to suppress it.
32	Dec. 10.	J. Treherne.	30	Disease.	Leg.	„ Sheppard.	Recovered.	This man lost both feet from frost-bite.

British Medical Journal.

SATURDAY, APRIL 16TH, 1864.

THE MEDICAL COUNCIL: ITS DUTIES.

We last week pointed out the main objects of the Medical Act; the nature of the machinery by which its provisions are to be carried into effect; and alluded, in particular, to the duties of the Medical Council as enjoined by the Act. We stated that a portion of these duties had been already accomplished, the Council having published annually a *Register*, which up to the present time has cost the profession £50,000, and which continues to abstract some £4000 every year from the same source. The advantages and uses of this expensive *Register* we examined, and regretted to find them of a very problematical character. We said, also, that the Council had discharged another of its functions; it had issued a national — the *British* — Pharmacopœia; a work which has proved, of its kind, one of the most remarkable phenomena of the day; having cost, we believe, a larger sum of money for its publication than has ever been expended on a similar amount of labour since the days when authorship first became a business. The manuscript of Milton's *Paradise Lost*, we are informed, was purchased by a bookseller for ten guineas. The authorship of the *British Pharmacopœia* will, we venture to guess in anticipation of forthcoming accounts, cost "the worst paid of all the professions," as we delight to style ourselves, some £8000.*

The pharmaceutists assure us that they could have produced a *Pharmacopœia*, quite as comprehensive, and certainly not less accurate, for £500. *Valeat quantum valere potest.* The *Pharmacopœia* is, in truth, remarkable in having received the most unlimited condemnation from both friends and foes. It reminds one of poor old declining Falstaff, "All the world takes delight in girding at me."

The Council, however, in publishing the *Register* and the *British Pharmacopœia*, has performed duties enjoined by the Medical Act; and if the profession has not appreciated these publications at their true value, they must be endowed with some rare merits not yet recognised.

But the principal and especial business of the Medical Council yet remains to be performed. The Council is one essentially of Medical Education; and the medical education of the country is in a most unsettled and unsatisfactory state. To the Medical Council has been delegated the very arduous and responsible duty of regulating this education, of removing the evils which attach to the present system, and of promulgating in its stead one more perfect. This is now the business, *par excellence*, of the Council; this is its duty, and it stands responsible to the government, the public, and the profession, for a due and proper performance of this duty. Should it fail in this, there will be no excuse. Any regulations which the Council may deem it right to recommend, it has full powers to enforce; and should any recalcitrant College or University turn a deaf ear to these recommendations, the Medical Act has, in the twentieth and twenty-first sections, provided a remedy; making it lawful for the Privy Council, upon a representation by the Medical Council to that effect, "to order that any qualification granted by such College or body, after such time as may be mentioned in the order, shall not confer any right to be registered."

It must be manifest, that the business of the Council is a serious affair; and we trust that its members will bear in mind that it is not to advocate or defend their own corporate interests that their meetings are held; but to deliberate and decide on questions of vast importance to the community; inasmuch as they involve measures for elevating the status and improving the medical knowledge and skill of practitioners of medicine.

Need we remind the Council that its operations are somewhat costly? and that, on this ground also, the profession may reasonably keep a watchful and suspicious eye on its proceedings. The £2000 *per annum* which the Council costs will, however, cheerfully be paid by the profession, provided the responsibilities of office are rightly estimated, and its duties conscientiously discharged. Every individual member of Council no doubt feels all this more fully than we can describe; and if we remind them of these things, we do so in order to impress on their attention the exact relation in which the Council stands in the matter of duty to those whom it represents; viz., the whole body of the medical profession and the public at large.

Well, then, when the Medical Council assembles, as it shortly will, it must be prepared to stand face to face with the great question of medical education. To the solution of this problem, its collective wisdom and its corporate energies will be directed and concentrated. This, indeed, we may say, will be its sole business; and should the Council meet and terminate its sittings without promulgating some definite and practical propositions regarding medical education, we need scarcely say that great and general disappointment will be felt by the profession.

But it must not be supposed that the Council has hitherto been wholly idle in this matter. Indeed, it may be said to have done much. It has talked much, inquired much, and recommended much; but it has

* We of course conclude that the sale of the book will pay for its printing, etc. We have not made allowance for any loss under this head, because we are unwilling to suppose that such a misfortune can happen.

not entered as yet on the great subject for inquiry. It has, speaking professionally, diagnosed certain excrescences and found out some weak parts and irritable places; but the treatment has been expectant, or, at the most, palliative only—a gentle alterative at one time, or something soothing at another. Indeed, we could scarcely have expected the Council, at the commencement of its operations, to have acted otherwise; for it found itself composed of representatives from many corporations entertaining very different views, and having opposing interests. We feel, and strongly feel, that any jealousy which rival corporations may entertain towards each other ought not to find expression in the Council; that any considerations which affect the pecuniary or other interests of any particular body, ought not to be allowed to exercise a prejudicial influence on the decisions of the Council; and we may add that, in our opinion, the pleasures of social intercourse, or private professional business, ought not to occupy time and thought which of right should be devoted to those very important considerations on which the Council is now about to enter. If such things have been, we will look at them as things of the past, and regard the present Council as really a patriotic body having one sole object in view, the good of the profession and the public.

The Council, as we have said, has already done something in the matter of general education. It has issued certain recommendations, and it has recognised the testamurs of several educating bodies, although the value of these testamurs is very different. As regards professional educations, it has also issued recommendations. It has fixed the minimum age for obtaining a qualification to practise at 21; four years as the required minimum period of professional study; and the minimum number of examinations to be undergone at two—one to be passed at the end of the second, and the other at the end of the fourth year of study.

These recommendations, the Council has already formally issued; but the recommendations, we regret to say, have been hitherto not generally adopted by the examining bodies; and although the College of Surgeons and the Society of Apothecaries may see reason to differ in opinion from the majority of the Medical Council as to these recommendations, we feel certain that no one will approve of the continued opposition offered by those bodies to the carrying into effect recommendations which a majority of the Medical Council has deliberately approved. This opposition is the more painful, when contrasted with the readiness with which other corporations have brought their regulations into the strictest conformity with the recommendations of the Council, thus giving a moral power and influence to that body by publicly acknowledging and submitting to its authority.

The Council, by what it has done, has undoubtedly prepared the way for its future proceedings; and what it has now to do, seems to us somewhat as follows.

In the first place, it should fix definitively the minimum period of professional study; and having fixed the minimum, should take care that the rule be enforced on the examining bodies.

In the second place, it should determine and name the subjects of study, and the minimum time which should be devoted to each.

Thirdly, it should point out the order in which these subjects would be most advantageously studied.

And, fourthly, it should fix the number and the nature of the examinations to be undergone before the student can obtain a qualification to practise; remembering always that, by the eighteenth section of the Medical Act, power is given to the members of the Medical Council, or to persons deputed by them, to be present at the examinations conducted by the different examining boards; a fact evidently pointing out that it is one of the duties of the Council to satisfy themselves both of the character and sufficiency of the examinations.

The first question probably which will engage the attention of the Council, will be the number of lectures which students shall be required to attend. Happily, on this point, there appears to be a pretty general accordance of opinion; viz., that the number is at present unnecessarily and mischievously excessive. Hence, we may fairly hope that the Council will recognise the necessity of giving the student some effective relief. The complaint of the multiplicity of lectures now enforced on the student is nearly general; nothing, indeed, could more clearly demonstrate the necessity for some authoritative interference to regulate and limit these lectures, than the differences in the number of lectures comprised in the courses, and the variety of subjects taught, at the different medical schools. Every school entertains its own opinion on these matters; but is it possible that all, so widely differing as they do, can be right? What is the bewildered student to do? or how is his perplexed parent or guardian to decide under such circumstances?

Mr. Callender, in his pamphlet *On the Present System of Medical Education in England*, assures us that medical education has been brought to such a height of perfection in London as to be incapable of improvement; but how does his statement accord with the simple fact, that each school has a different estimate of the requirements of study, and adopts different measures of teaching? Or is it that he considers the standard and method adopted at St. Bartholomew's to be the perfection of an educational course?

Let us look a little closer into this matter. Mr. Syme complains of the number of lectures given at the medical schools in Edinburgh; but we will venture to say that we can at least match the number in

London. We do not desire to take our reader's breath away; but we think we shall astonish him, and perhaps Mr. Callender himself, by simply relating the courses of lectures, etc., actually delivered, or at least advertised as to be delivered, in the different schools of medicine in the metropolis. We have, *imprimis*, the following courses of lectures:—

Anatomy, descriptive and surgical.
Anatomy, physiological and general.
Anatomy, comparative.
Anatomy, histological and minute.
Anatomy, morbid.
Anatomy, pathological.
Dissections.
Chemistry.
Chemistry, practical.
Chemistry, experimental and analytical.
Botany.
Materia medica and therapeutics.
Midwifery, and the diseases of women and children.
Midwifery, clinical.
Medicine.
Medicine, clinical.
Surgery.
Surgery, clinical.
Surgery, aural.
Surgery, dental.
Surgery, ophthalmic.
Surgery, operative.

Then we have—

Demonstrations, anatomical.
Demonstrations, surgical operative.
Demonstrations of cutaneous diseases.
Demonstrations, microscopical.
Demonstrations of morbid anatomy.

Next we come to Practice, and here we find—

Practice, hospital medical.
Practice, hospital surgical.
Practice, hospital, diseases of women and children.
Practice, hospital, out-patients' department.
Practice of midwifery.
Practice of ophthalmic surgery.
Practice of dental surgery.
Practice of aural surgery.
Practice of pharmacy.
Practice of vaccination.
Practice of bandaging.
Dressership.
Clinical clerkship.

In some schools, a few extra *hors d'œuvres* are added to this educational feast; viz.,

Palæo-zoology.
Natural philosophy.
Experimental philosophy.
Medical classics.
Public health.

Such is the banquet which the collective wisdom of the different educational purveying bodies in London has provided for the literary appetites of the rising generation of medical students; and which Mr. Callender considers may be safely devoured without risk of producing intellectual flatulence or other mental disorder. We will simply leave this catalogue of London lectures, demonstrations, and practical duties, to the consideration of the Medical Council. What need of argument to satisfy the Council that it must interfere in this direction, and at once? It is manifestly its duty; it is as evidently a necessity. Let Jupiter then issues his decrees; and out of his Council Chamber put an end to the perplexities of parents and guardians, telling the willing but bewildered student the kind and the extent of study best suited to his mental capacity.

"Quid valeant humeri, quid ferre recusent."

GERMAN *v.* ENGLISH OPHTHALMOLOGY.

The first number of a new quarterly journal, *The Ophthalmic Review*, made its appearance on the 1st of April, under the editorship of Mr. J. Z. Laurence of London and Mr. T. Windsor of Manchester. Its contents have, we confess, surprised us. It makes one ask, Is there such a thing as English ophthalmic surgery? Does all ophthalmic knowledge grow and spread from Germany? If this *Review* be really a true exponent of ophthalmic science, all we can say is, that English ophthalmology is sadly behind the bright light of German scientific inquiry. Of the five original papers contained in this new *Review*, three are written by Germans; viz.: 1. On the Form of Cataract Knives, by Dr. Zehender of Bern; 2. On the Calabar Bean, by Professor Von Gräfe; and 3. On Retinitis Pigmentosa, by Dr. A. Mooren. Other two papers there are: on Iridectomy, etc., by Mr. Windsor; and on Cases of Paralysis of Accommodation, etc., by Mr. Moon. Mr. Windsor also gives the Retrospect of British and Foreign Medical Journals, which is followed by a review of English Ophthalmoscopic Literature. On casting an eye through the Retrospect, we deeply regret to find that, as regards *British medical journals*, Mr. Windsor can scarcely find anything worthy of record in the ophthalmic way. Mr. Hilton is made to say a few words on the Treatment of Orbital Abscess, and Mr. Power on the Division of the Ciliary Muscle—in all, about a page and a half. But it takes seventeen pages to tell the retrospect of German doings in ophthalmic surgery. These figures, we trust, do not actually represent the relative merits of German and English eye-surgery. The Retrospect tells of the doings of Schirmers, of Bardlebens, Frederichs, Rühles, Von Gräfes, Horners, Weckers, Jacobis, Demmes, and Knapps. The doings of French surgery are represented in the name of M. Colin, in

half a page. A Review of English Ophthalmoscopic Literature winds up the journal, and may, in short, be summed up as a general comparative laudation of things Germanic, and as a very low estimate of English oculists in general. Dr. Mackenzie, Mr. Wharton Jones, and Mr. Dixon, are quoted to show how unpardonably ignorant they have shown themselves of the ophthalmoscope through their published writings. Dr. Rainey had good intentions, but has failed in carrying them out. Mr. Hulke is accurate as far as he goes; but his book is useless, because it does not go far enough. It opens a glimpse of a new region, and then slams the door in the face of the intelligent reader. Mr. Jabez Hogg's turn comes next; and, as his book has been most lengthily and particularly abused, we suppose we may conclude, on the ordinary principles of criticism, that it is considered by his abuser as the most important work hitherto written on the subject.

Is this, we again repeat, really the lamentable estate of British eye-surgery? Are all our literary oculists merely literary failures? And is there no wisdom oculistic except what comes from Germany or bears the magic stamp of a German name? Have we no "modest and sagacious Helmholtz"? Are our ophthalmic writers indeed so gravely rebuked by the doings of Coccius, Van Trigt, Ruete, and Sämann, Anagnostakis, Schamenburg, Jäger, Stellwag von Carion, Cramer, Donders, Müller, Henke, as this new *Review* would lead the world to believe? We shall leave our ophthalmic surgeons to answer the question.

BETHLEHEM HOSPITAL.

Our readers will see that a meeting of the Governors of Bethlehem Hospital has been held to discuss the question, raised by the Commissioners of Lunacy and Sir George Grey, of the removal of the hospital into the country. Evidence was read, medical evidence, to show that the present site was in every way excellent; and that it would be worse than folly to think of removing the hospital into the country. Medical evidence equally good, no doubt, could be readily produced to show that its removal into the country is in every way most desirable; but, strangely enough, no evidence of the sort was produced.

Dr. Wood, one of the medical evidence in favour of the present site, said that no reason had been given for the removal. We think, on the other hand, it may be very truly said, that neither has any reason been given why the hospital should not be removed. *A priori*, it is self-evident, that a lunatic asylum ought to be placed in the country. No man, we suppose, would be mad enough to propose establishing Bethlehem Hospital where it now is, if the building had to be started anew. The only possible defence for its existence on its present site is, that there it is, a magnificent pile of buildings. If anything were required to prove this, it would be found in the so-called arguments used by the medical men called in defence of the *status quo* (as given in the *Times*).

Mr. Lawrence argued that the interference of Sir George Grey was repugnant to the Governors of Bethlehem; that the present site was open and well suited for a lunatic asylum *or a hospital*. Dr. Goode concurred, and asked, how could the patients be taken ten or twenty miles into the country? Dr. Wood said that the building was handsome, and the hospital healthy, and the grounds sufficiently large. There is, we take it, no need for us to refute such statements as these. They really amount to absolutely nothing; and, in fact, indicate pretty clearly the weakness of the cause in whose defence they are adduced. The only really valid argument which can be suggested in defence of Bethlehem Hospital remaining where it is, is simply the fact of its existence there—a money question.

It does, we confess, surprise us to find gentlemen deeply conversant with lunacy bold enough to affirm that lunatics confined, immured, between high walls, with no rural occupations, with none of the happy employments of life which are open to them in the country, are in as good a position as they might be. They seem to have argued as if the mental and bodily occupation of these wretched creatures were a thing of no account. The site is healthy; what more can you desire? How are the lunatics to be got to a hospital ten miles from London? asked Dr. Goode. And said Dr. Wood, the patients at Bethlehem have more space per head than have the patients at Hanwell with their twenty-eight acres and a farm of seventy-seven acres; therefore, the patients are better off and happier at Bethlehem, immured within its lugubrious walls, than they are whilst merrily planting cabbages at Hanwell!

Notwithstanding these opinions, we sincerely trust that the Commissioners of Lunacy will still force on its governors the necessity for the removal of Bethlehem into the country. It is not too late for that other fatal error to be rectified; viz., the non-purchase of Bethlehem site by St. Thomas's Hospital. We have heard, and we trust it is true, that an appeal has been lodged against the decision of the Vice-Chancellor given in favour of the Stangate site; and that it is possible even some hitch may take place in reference to the title of the Stangate property. Why should not such happy difficulties be seized upon to do an act of lasting and most manifest great public utility; viz., to build St. Thomas's on the Bethlehem site, and to take the lunatics of Bethlehem into the green fields. Notwithstanding Dr. Goode's remark, we think the carriage of lunatics ten, or even twenty, miles (!) into the country is not an impossibility.

We understand that a handsome memorial tablet is about to be erected within the nave of Winchester Cathedral, to the memory of the late Mr. W. J. Wickham, by his friends, unconnected with his family, in that city and elsewhere. The Dean and Chapter, with the clerical officials, have given it their support. Mr. Wickham and his ancestors were associated with that venerable city for nearly a century, and commanded an universal respect. Mr. Wickham was amongst the number of our oldest associates.

The Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity has, within the past week, received a Royal Charter of Incorporation, and has become the Society for Relief of Widows and Orphans of Medical Men, the name having been somewhat shortened. The anniversary dinner will take place on May 28th, at the Albion Tavern, Aldersgate Street.

At the Medico-Chirurgical Society on Tuesday last, a paper by Mr. Solly was read, giving details of four cases of Amussat's operation performed by him. Mr. Solly thought that the value of the operation was not generally sufficiently appreciated in this country. When performed in suitable cases for obstruction of the rectum or of the sigmoid flexure of the colon, he considered it an operation which always gave very great relief to much suffering, and was capable of prolonging life; and that it was justifiable even though the obstruction was of a malignant character. The operation itself, opening the colon in the left lumbar region, was neither difficult nor dangerous. Mr. Curling quite concurred in the value of the operation; but he went further than Mr. Solly; he thought it was of very great service in cases of obstruction of the rectum, in which a fistulous opening had formed between the bowel and the bladder or the vagina, and, as often happened, gave rise to very great suffering.

The April number of the *Journal of Mental Science* still flourishes in the hands of its present talented editor. Dr. W. C. McIntosh treats us with Stray Notes on Foreign Asylums, etc. Dr. Hitchman details his interview with the irrepressible Townley, and draws a moral from the history. The Rev. W. S. Davies, chaplain of the Lunatic Asylum at Abergavenny, tells of the Memory and the Brain. Dr. H. G. Stewart of Edinburgh gives some interesting statistical details on Hereditary Insanity. He concludes that the duration of life in hereditary insanity is shorter than among insane generally; "the mass of the hereditary cases die between 30 and 60, while the mass of the insane generally die between 40 and 70." Baron Mundy, M.D., praises the non-restraint system practised at Hamburg by Dr. Meyer. Restraint is the general custom in Germany; he, therefore, heads his paper, An Oasis in the Desert of German Restraint. Then follow Clinical Cases and Reviews, and a Quarterly Report on the Progress of Psychological Medicine by Dr. Arlidge.

The *Social Science Review* for April contains another chapter by Dr. Richardson touching the Diseases of Overworked Men—Mental Overwork. Next comes a Notice of the Iroquois. A paper on Rough Diamonds brings us amongst the ragged-schools and reformatories and their inmates. Dr. J. F. Reeve says something of the Registration of the Insane. Middle-Class Education, and Denmark in the Past, are treated of. Then follow Excerpts from State Papers, Reviews, and Abstracts of the Sciences.

The Faculty of Medicine of Paris, on the 1st of April, had an interview with the Minister of Instruction, for the purpose of petitioning him to establish a chair of history of medicine and six new special chairs; so that whilst we here are seeking a reduction, the French faculty is seeking an increase of lectures for the student of medicine.

M. Flourens has just published the first volume of a work of which he is editor, entitled *The Literary Chefs-d'Œuvre of Buffon.*

M. Pajot has been nominated to the Midwifery Chair at the Paris Faculty in the place of the late Professor Moreau. His reception in the chair was a complete ovation.

Dr. Rudolph Leuckart, in his recently published work on human entozoa, *Die Menschlichen Parasiten*, reckons the number of species of parasites which infest man at fifty.

Dr. Willemin continues his researches on cutaneous absorption. He concludes, that the absorption of water through the skin in simple baths, or in baths containing mineral substances, is a thing demonstrated. He has shown, that the weight of the body, after remaining thirty to forty minutes in a warm bath, generally remains unchanged; that in a third of the cases it is slightly diminished, but much less than it would have been in the air; and that an absolute increase of the weight is rare, and only very slight. Chemical analysis also shows that the cutaneous exhalation continues. The absorption of salts dissolved in the bath, such as iodide of potassium, is also shown by chemical analysis. The acid urine is generally rendered alkaline by the simple bath; and after an alkaline bath, it generally preserves its acid reaction.

The journal *Ippocratico* tells us that Dr. Olivieri, Professor of Surgery at Rome, has given up to the Association of Mutual Assistance, his house at Rome, for the purpose of its being converted into a hospice for the widows and orphans of his *confrères.* As the journal truly remarks, this act of generosity will have more admirers than followers.

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

For some time past, little has arisen to divert the attention of the medical profession in Liverpool from the ordinary routine of every-day life. Sensation trials have for the time passed into oblivion, and our spring assize has returned without having on its list a single "cause" involving the reputation of a medical brother. There can be no doubt that the more united we become as a body, the less we shall hear of those vexatious annoyances that so many of us have suffered, to our cost—annoyances to which we can alone be subjected when disunion prevails in our ranks. In Birkenhead, however, medical matters have not been so quiet. The unfortunate case that occurred a fortnight ago, and which has already called forth a leading article in your columns, is still the subject of much discussion. The remarks of the coroner, who did not consider the case of sufficient importance to order a *post mortem* examination, bolstered up by the aid of strong invectives from jurymen and others, led the public to believe that a wanton case of inhumanity had been committed, and, *de facto*, a life sacrificed on the altar of pecuniary consideration. Some time has now elapsed, and the subject is being dispassionately discussed, proportionate to its grave importance; and, from what I can gather, I believe the public feel that a profession consisting of a body of men who are at all times ready, both with a generous hand and sympathising heart, to assist their neighbours, irrespective of rank and wealth, has been most grossly maligned. To hold that the services of a medical man are to be unrequited is absurd; and, when an unfortunate instance of poverty associated with sudden illness occurs, the community at large must bear its part in ministering succour, and not throw the entire onus on the shoulders of the medical profession. The matter was brought before the attention of the Medical Society at its last meeting, and resolutions submitted; but as you will, no doubt, be duly informed of the proceedings by the authorised officer, I shall not make further allusion, but at once proceed to mention a few operations and cases of interest that have come under my observation in our hospital wards.

Mr. Long, on Tuesday, March 22nd, had two cases requiring amputation of the thigh—one a boy, and the other a man. The latter case was, to all appearance, most unfavourable. There had been acute disease of the knee-joint, with burrowing abscesses up the thigh, great exhaustion, and hectic fever. Both cases have made a most rapid convalescence, and are now nearly well.

On March 29th, Mr. Bickersteth had an interesting case requiring the removal of a tumour from the side of the face of a child aged 11. The growth was of eight months' duration, occupying, for its base, a space corresponding to the angle and ramus of the jaw, pressing up the ear, and projecting six or eight inches, with a nearly uniform circumference, equal in extent to an ordinary teacup. The apex was covered with dark fungous granulations, and the base firmly fixed into the angle and ascending ramus of the jaw. Considerable hæmorrhage took place during the operation, requiring several ligatures. The nature of the tumour was unmistakeably malignant—medullary cancer, with a small amount of fibrous tissue scattered through it. This tumour appears to have taken its origin in the periosteum, removing it in proportion to its rapid growth, leaving the bone roughened and denuded. The child suffered severely after the operation from nervous prostration, but is now doing well. At the operations lately, Mr. Nash, the house-surgeon, has made use of Dr. Skinner's chloroform-inhaler, and with marked success. I believe it has already been described in our columns. Its simplicity of design, and the thorough admixture of atmospheric air which is allowed to take place during inhalation, are two points greatly in its favour.

On the occasion of my last visit (March 31st) to the Workhouse Hospital, Mr. Fletcher drew my attention to a case he had that day "pegged" for an old dislocation outwards of the tibia. This operation has now been performed on several occasions, both by Mr. Bickersteth and Mr. Fletcher, for ununited fracture; and, as the results have been most satisfactory, it bids fair to be regarded as a recognised surgical operation. This case, however, is the first to my knowledge where the operation has been performed for the injury produced by unreduced dislocation. In this case, the dislocation was of old date, had never been reduced; considerable absorption of the side of the tibia had taken place; there was no bony union, the tibia being freely moveable in all directions, and the limb consequently worse than useless. Mr. Fletcher brought the surfaces that ought to articulate into apposition; and, by means of an Archimedian drill, passed two drill-heads, one upwards and inwards, the other downwards and outwards, so as to penetrate the opposing surfaces of bone, and hold them immoveably in close contact. The first day, the man suffered some pain in the joint; but there were no constitutional symptoms whatever; and, up to the present date, he is progressing favourably, requiring no medicine, and taking his food well.

Mr. Fletcher also pointed out to me one of those distressing cases where there is a total absence of the anterior wall of the bladder. Several plans for alleviation had been unsuccessfully tried, and the unfortunate patient was most anxious to undergo anything that would offer the slightest chance of relief. The operation consisted in passing a seton of silk along the left ureter (both ureters were plainly visible) into the rectum, so as to form a fistulous opening. To effect this, Mr. Fletcher passed a director into the ureter, the point of which could be readily felt in the rectum. Then he passed along the groove of the director a long sharp-pointed needle, threaded with silver wire, to which the seton-thread was attached. When the point of the needle

was felt *per rectum*, the director was withdrawn, and the needle pushed through both ureter and rectum, and brought out through the anus. The two ends of the seton, respectively in the rectum and at the entrance of the ureter, were then tied together by slender wire. The patient was ordered one grain of opium every four hours. Since the operation, there has been no constitutional disturbance whatever. Some blood has passed *per rectum*, but no urine has been observed. As, however, any opinion on the case at present would be premature, I shall watch the case, and give you some further account on some future occasion. Mr. Fletcher mentioned to me that he thought it advisable to wait some little time before attempting similar proceedings with the other ureter.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thurs., April 28, 8.30 P.M.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Bull Hotel, Dartford, on Friday, April 29th, at 3.20 P.M.

Dinner will be provided at 5 o'clock.

Tickets, 6*s*., exclusive of wine.

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, April 12th, 1864.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

The third meeting for the session 1863-64 (seventh) was held at Gravesend on April 1st; J. Armstrong, M.D., President of the Branch, in the chair. There were present seventeen members and visitors.

New Members. Albert Hind, Esq., L.R.C.S.Edin., and Philip Whitcombe, Esq., M.R.C.S., both of Gravesend, were elected (subject to approval at the annual meeting of the Branch). Dr. Wm. Sanders, of Gravesend, was admitted to the district, having been elected member of the Association in June 1863, at the annual meeting of the Branch.

Communications. The following communications were made.

1. Case of Disease of the Liver with Dropsy, succeeded by Brain-Affection. By J. H. Gramshaw, M.D.
2. Case of Laryngo-tracheotomy in an Infant, for the Removal of a Foreign Body. By F. J. Brown, M.D.
3. Mr. Cooper Forster exhibited a Morbid Specimen from a Woman who had Died of Internal Strangulated Hernia.

Vote of Condolence. Mr. Heckstall Smith proposed that the condolence of the members of the West Kent District should be testified to the widow of the late Peter Martin, Esq. This proposition was carried unanimously; and the Secretary was directed to write to Mrs. Martin to that effect.

Dinner. After the usual vote of thanks, the members and visitors adjourned to dinner.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

March 3rd, 1864.

A. Stookes, M.D., Vice-President, in the Chair.

Injection and Stomach Pump. Dr. Skinner shewed a new syphon injection and stomach pump, and explained its use. It had no valves in its construction, and was made of the flexible tubing used for gas-piping. He said it was particularly useful for applying the cold douche to the uterus.

Mr. Higginson said he had described in the *Lancet*, some years ago, a stomach pump without valves. He shewed one he was in the habit of using now.

Disease of the Ankle. Mr. Lowndes shewed a specimen, in the amputation of which acupressure had been employed. The leg was amputated in the middle third. No ligatures were used, but three vessels were secured by needles being passed under them, and wire loops passed over the point and round the handles of these, in the way described by Dr. Simpson. A fourth vessel, that lay near the surface, was secured by a long needle passed from without through the flap, and then out again. At the end of forty-eight hours, all the needles were removed. The skin was in a rather inflamed state at the time of operation, and a good deal of suppuration took place, but the man now, eight days after the operation, was going on very favourably. Mr. Lowndes explained the mode in which the needles are used, and referred to Dr. Simpson's observations on the subject, in the *Medical Times and Gazette*.

Mr. Higginson mentioned an amputation of the thigh in which he had been obliged to employ no less than twenty ligatures. A long process of suppuration went on before they all came away, and the patient's ultimate death he attributed to the long continued irritation kept up by the ligatures. He thought, in addition to the needles now in use, the common napkin pin might be made available in acupressure.

Scirrhous Cancer of the Liver. Dr. Gee shewed a specimen taken from a man aged 30, a carter, of intemperate habits, who had died in the workhouse a fortnight after admission. He suffered a good deal from pain in the side and dyspnœa; there was slight jaundice, and his urine was very high coloured; the amount of fluid in the abdomen was not very great. The liver was not very much enlarged; there were nodules of hard cancer scattered through its structure; there were no cancerous deposits in any other organs of the body.

Ovariotomy. Dr. Grimsdale related a case under his care which had terminated fatally.

Some discussion followed, in which the Chairman, Mr. Hamilton, Mr. Lowndes, Mr. Ellis Jones, Dr. Burrows, and Dr. Grimsdale took part.

March 17th, 1864.

A. Higginson, Esq., Vice-President, in the Chair.

Medical Attendance on Pauper Cases. Dr. Imlach referred to the recent case at Birkenhead, in which the medical men who had been called upon had refused to attend, and said that much annoyance had been felt both in Liverpool and Birkenhead by the profession being called on to attend paupers in this manner. If the laws of England sanction bread riots, then it will be time to force us to go to these cases without any chance of being paid. It is well known that there is a provision for paupers, and we must

either refuse to go to these cases or suffer great loss of time. He thought there should be an understanding with our brethren, and that we should not be blamed for declining to attend.

The CHAIRMAN was glad the matter had been brought forward. It certainly is hard on those who perhaps give their help to charities, or are getting into years, to be obliged to get up at night for unremunerative fees or none at all. He thought it would be well if in various districts a surgeon were appointed, whom the police might be instructed to call up on these emergencies, and to whom a certain fee might be paid through the police. Such an appointment might fill up a gap which is left at present

Dr. BALMAN advocated self-supporting charities. He thought that this case would be fairly met by a self-supporting society, on the plan recommended by Mr. Smith of Southam.

The CHAIRMAN said the self-supporting system was being worked successfully at Derby; at the dispensary there, the patients might select their own medical men.

Mr. BAILEY instanced a case where a surgeon was called up at night with an urgent summons in a bad neighbourhood, and not only got no fee, but also lost his hat.

Dr. IMLACH said no clubs and no self-supporting dispensaries would meet these cases of sudden emergency from labour.

Dr. GARTHSIDE said that some years ago, during an epidemic of fever, great annoyance was caused by these sudden calls; the police were then instructed whom to call in urgent cases.

Mr. HODGSON said the practitioners in the suburbs perhaps suffered more than others. Urgent calls came, and some of them must go. He related instances.

Dr. BALMAN suggested that a committee should be formed, to consider the best mode of relieving medical men from these harassing calls.

Mr. LOWNDES did not agree with much that had been said. If a surgeon lived in a poor neighbourhood, he must expect these calls as part of his regular work, and his usefulness would be much curtailed if he were to refuse to go on emergencies. In the better districts these calls are only exceptional; and although it may be a great annoyance to have to get up, yet if we can really save life in great emergencies, it is our duty to try and do so, and not only our duty but our privilege. It is one of the contingencies of our profession.

Mr. GARTHSIDE said the relieving officer lived in the district; he would always, when called upon, send an urgent order to the district medical officer, who would never decline to attend on an emergency.

Dr. BALMAN promised to bring forward a resolution on the subject at the next meeting.

Effects of Teak-wood. Dr. NOTTINGHAM showed a piece of teak-wood recently sawn; and said that the working of this material produced with some a peculiar train of symptoms: enlargement of the glands of the neck, enlargement of the scrotum, skin eruptions, etc. The sawdust from it has a very strong and peculiar smell. He thought the quantity of silica contained had something to do with these effects.

Cancer of the Breast. Dr. NOTTINGHAM showed a specimen he had removed from a female, aged 35, whose two sisters had also suffered from malignant disease.

Fatty Degeneration of Kidney. Dr. BENNETT showed a specimen.

Anencephalous Child. Dr. NOTTINGHAM related the following case. A first child, a female, at the full time, was born on March 11th, and lived thirty-six hours. The parents are healthy; the father, a German, aged 28; the mother, an Irishwoman, aged 22. With the exception of the head, the child was well developed and of full size, and ruddy. There was nothing remarkable about the breathing or pulse. The head of the child might be compared to that of an infant after *post mortem* examination where the practitioner had hastily stitched up the scalp, forgetting to put back the calvarium, for nature had left off building the skull just about that line where we apply the saw when we begin to take it down; all above this was a mere bag closed at top by a sort of knot, or mass of tissue projecting upwards, and in colour not unlike the comb of the cock, but rather darker. The skin of the scalp did not pass directly into this mass, but stopped close to it, and then dipped down towards the base of the skull, and became altered in its texture, so as to form a kind of conjunctiva for the parts, and was then reflected upwards on the red comb and continued over it, guarding it as safely as if it had been an eyeball. The bag of scalp covering the base of the skull, which could be easily felt and followed under it, was not distended by any considerable quantity of fluid, and it did not appear to have undergone any perforation, laceration, or other change which might have let out fluid contents.

Dr. Nottingham mentioned three cases that occurred in Mr. Harricks's practice, which differed a little from the present case. He then considered the subject of these monsters occurring more frequently in northern than in southern climes, and thought that that idea might be due to there being more observers in these regions. He doubted whether the mere state of fœtal hydrocephalus was equal to the production of the anencephalic condition. The remarkable feature in this case was the child's being born alive, and, what is more, living thirty-six hours. A previous case he had had, and others he referred to occurring in Mr. Rowland's practice, did not show signs of life; and he thought it likely, if all these cases had been carefully and anatomically examined, some interesting differences would have been found in the state of parts at the base of the skull, more especially with regard to the amount of nervous structure contained there. The term anencephalous may not be strictly applicable to all these cases. He concluded by drawing attention to rather a delicate subject respecting the treatment of these little monsters when just alive. He found this child in a cold room, and not sufficiently covered; it was able to suck with considerable strength, but the terribly animal, not to say batrachian aspect, which at first sight these little creatures seem to have, might produce painful impressions, to be followed, perhaps, by evil consequences not to be counterbalanced by the little good to be done by the tenderest care of an infant destined only for ephemeral existence. Medico-legal questions might arise on this subject; and he mentioned one case on record in which the friends of the mother put an end to a little monster's convulsions by smothering it.

Mr. BAILEY mentioned the case of a child, delivered by craniotomy, that lived, and only showed deficient intellect.

Dr. IMLACH had not seen any of these monsters born alive, but Dr. Blower had had a case resembling the one brought forward, in which the child lived twenty-four hours, and showed several signs of consciousness; the parents and the rest of the children were healthy.

Mr. HIGGINSON would have been glad to hear the exact state of the nervous matter in Dr. Nottingham's case. In cases of hydrocephalus, it is not easy to make out the different parts of the brain; but at one

post mortem examination, he had found the parts of the base of the brain beautifully exhibited. He thought these cases of monstrosity might proceed from hydrocephalus in early fœtation.

Dr. NOTTINGHAM regretted he had not been able to obtain a *post mortem* examination in his case.

Mr. HAKES suggested that a deficiency of light might have something to do with the origin of these cases, and instanced the case of tadpoles.

Dr. NOTTINGHAM said that where light is deficient, there are generally deficient food and clothing, etc. In some parts of the north end of the town, the habitations of the poor are bad, but nothing like what was the case when the use of cellars prevailed. He did not know that these monsters were more common there.

Dr. IMLACH mentioned the case of a family which experienced neither want of light nor of any luxury. In four out of five of the children, the skull never became larger than the fist. Their ages ranged from seven months to five years. They were able to suck and to cry, but could never suck from a bottle, or feed with a spoon; the nurse had just to throw a little soft food into the mouth, part of which was swallowed, and part returned. Their teeth decayed almost as soon as they appeared above the gums. They could see, but never became able to eat, and never seemed to have any power even in the tongue. Here was an approach to the anencephalous state. The parents were first cousins.

ROYAL MANCHESTER INSTITUTION: MEDICAL SECTION.

WEDNESDAY, MARCH 2ND, 1864.

D. NOBLE, M.D., in the Chair.

Two new Members were introduced, one elected, and four proposed.

Traumatic Nephritis. Dr. WM. ROBERTS read the account of a case of Traumatic Nephritis, and exhibited in connection therewith the ruptured kidney. The patient, a male, aged 36, had been admitted into the Royal Infirmary, Manchester, in a state of coma, having when intoxicated sustained a fall from a height of seven stories. There was a compound fracture of the skull, along with lacerations and contusions of the legs. In the course of two hours he became conscious, but remained in a half-drunken state. The day following the accident, eight ounces of very bloody urine were withdrawn, being the first since the accident. The third day, one ounce was withdrawn, of a less bloody character. No urine was voided on the fourth day; and the patient was weaker, and evidently sinking. On the fifth day, two ounces and a half of urine were obtained, of a yellowish hue, and containing small chocolate-coloured granular masses floating in it: the specific gravity was 1015. The patient died in the evening of the fifth day, without coma or convulsions, but after increasing delirium, during which he evinced great pain when the leg was touched.

Dr. Roberts proceeded to detail the general and microscopic appearances of the urine procured on the several occasions, and showed careful drawings of the casts, blood-discs, etc. The deposit from the urine of the first day contained plenty well-shaped discrete blood-discs; also brown opaque medium-sized casts, a few of which contained dumb-bell crystals. There was no renal epithelium. The chocolate-coloured granular deposit from the urine of the second day contained, in addition to a few blood-discs and casts, renal epithelium, and epithelium from the pelvis and infundibula of the kidney. The casts were of three varieties; viz., opaque and plain; very dark brown, granular, opaque (such as were exclusively present in the urine of the previous day); and, thirdly, transparent. The renal epithelium existed in great quantity, was mostly free, deeply browned, and from both the cortical and the pyramidal portions of the viscus. There were no pus-corpuscles. The urine withdrawn just before death contained the same elements as in the second specimen; the albumen being much less.

The autopsy was made forty-eight hours after death. The left parietal bone was fractured, with slight depression. No other abnormal condition was found about the contents of the cranium, save an ecchymotic patch opposite and injection of the pia mater in the vicinity of the fractures. There were no external signs of contusion over the loins. Several infundibula of the left kidney contained minute granules of clotted blood. The right kidney was ruptured in two places, each rupture extending from the outer border to the hilum. The ruptures were about an inch apart, varied in depth from one to four lines, and contained firm, wedge-shaped blood-clots. The tunica propria was torn. Two blood-concretions lay loose in the pelvis, and smaller ones in the infundibula of the organ. There was no peritoneal inflammation. Dr. Roberts considered that the patient died from suppression of urine, *plus*, perhaps, some degree of delirium tremens. The absence of actual inflammation of the membranes of the brain or of the peritoneum, was owing to the non-recovery from shock, and consequent want of reaction.

Tumour of Neck. Mr. T. WINDSOR's case of tumour of the neck, supposed to be malignant, was brought before the notice of the members.

Magnesium Light. Dr. O. FLETCHER exhibited a specimen of magnesium, and illustrated by experiment the illuminating power and quality of the metal.

Laryngoscopy, with Practical Demonstrations. Dr. WAHLTUCH read an elaborate paper on the subject of Laryngoscopy. He began by giving an historical sketch, attributing its origin to Benjamin Babington, inventor of the laryngeal mirror. The construction of this mirror was described. Czermak's share in perfecting the science, by adopting artificial light, and his efforts towards furthering the study and use of the instrument, etc., were alluded to. Dr. Wahltuch noticed Hieronymus Fabricius of Padua's work on the Throat, before proceeding to state the acquisitions made, by means of the laryngoscope, to the physiology of the larynx. These are: 1. The triple mechanism of the closure of the larynx; 2. The true vocal cords alone vibrate at the time of expiration, and occasion the voice; 3. The aperture of the glottis is freely open in the quiet state, narrowed by approximation of the arytenoid cartilages during expiration, and dilated during inspiration; 4. The whisper occasioned by narrowing of the glottis and bending of the vocal cords, and, therefore, diminished friction during expiration. Dr. Wahltuch described the construction and mode of application of the laryngoscope, exhibiting it in its several parts and appurtenances. He referred to many of the numerous modifications of the instrument, *e.g.* Türck's, Störk's concentrator, etc. Czermak's autolaryngoscope was shewn, and various methods of illuminating were referred to. Instruments required in the treatment of of laryngeal diseases, and classified as instruments for local treatment, surgical operation, and for application of galvanism, were described and exhibited, *e.g.*: Czermak's glass tube, caustic holder, etc., various polypus forceps, écraseurs, scissors, etc.; Morell Mackenzie's laryngeal galvaniser, etc.

The author proceeded to mention the several classifications of throat-diseases, *e.g.*: Gibb's, based on the anatomy of the parts; Dr. Türck's, on the pathology; and that of Czermak.

Dr. Wahltuch then enumerated some of the most instructive cases, published by Mackenzie, Johnson, Czermak, etc., illustrative of the uses of the various instruments and the pathology of the larynx, mentioning in particular, the diagnosis of aortic aneurism by means of the laryngoscope, as in cases reported by Semeleder, Smyly, and Johnson, etc. Hypertrophy of the vocal cords, in a case of mitral disease, had been noticed by Dr. Wahltuch, in one of his patients. Czermak's photographs of the human larynx were alluded to. Dr. Wahltuch concluded his paper by expressing a sanguine hope that the laryngoscope would some day enjoy a popularity equal to that of the stethoscope, and encouraged medical men to pursue the study of throat-diseases by practising autolaryngeal examination.

After the reading of the paper, Dr. Wahltuch made practical demonstrations on his own throat.

Correspondence.

PROFESSIONAL CHARITY.

LETTER FROM WILLIAM OGLE, M.A., M.D.CANTAB.

SIR,—In your leader on "Professional Charity" and advocacy of the abolition of "Advice gratis," you state that "no one has hitherto been able to deny argumentatively any one of the propositions laid down by us." If this be so, though my memory fails me if you are right, I ask permission to say, *Audi alteram partem.*

I agree with you in such general statements as that we are often imposed upon by the public; that in comparison of our work done, and capital expended, our (money) return is small; that the way in which we lower our fees, and compete with each other for public appointments (paid and unpaid) is very derogatory, and lowers us in the eyes of the public. I fully endorse the principles that the labourer is worthy of his hire, and that the man who withholds what is due is not blessed. I believe this is as true in the case of a number of individuals as of each one in particular—as true when the whole profession is the the labourer as when it is one Birkenhead doctor—as true when society at large withholds what is due as when it is the act of one solitary patient. Nevertheless, I cannot endorse your recommendation to strike for wages, because the neglect of duty on the part of A, will not justify B in the omission of his own duty; and I hold it to be the duty of B as a professional man to give his professional assistance to A without reference to the immediate return. This idea may easily be put in a ridiculous form, but ridicule is not argument. I appeal to the professional instinct of your readers, and offer the following as a reasonable explanation of that which constitutes a prime difference between a profession and a trade.

Professional service differs from bread, clothes, and other such commodities, in this, that its value is not easily determined, and therefore it is practically better to trust to the honour of the parties interested. This is true of all professions, more or less. In the case of medicine, the patient trusts his doctor to give him good advice, and he has no guarantee for this worth mentioning in comparison with the doctor's honour; the doctor, in like manner, trusts that the patient will make the usual acknowledgment, and till recently he had no redress if that was refused. He could recover as a druggist for physic, but not as a professional man for advice. I am one of those who think that in being able now (under the Medical Act) to sue like a baker, etc., we are in a worse position than before; and that the College of Physicians has lowered its status in allowing any, even members, to avail themselves of this questionable privilege. If we could have appealed to a medical court, it had been different. This, however, is not desirable; for though none but professional men can estimate professional services, this would be too much like making a man judge in his own cause. But says the poor doctor, "Half a loaf is better than no bread." To which I reply: Better, perhaps, for you, but worse for the profession; and your motto as a professional man is *Non sibi sed toti.* You must go to the wall, else the public will judge that the half loaf is the proper acknowledgment in future; and you will be set down as a rogue for asking so much, which again will bring down invidious reflections upon your brethren. Instead of comparing ourselves with bakers and grocers, it would surely be more professional to choose another profession, and safer to select, if possible, a more noble one than our own. What would be thought of the overworked, underpaid clergy, if they were to propose to band together and strike for wages! "No more visits to the sick, no more ministerial counsel, unless we are paid for it"—not only church-rates for the maintenance of the fabric, but Peter's pence for the support of the wife and family! I am quite aware that the case is not strictly parallel; the care of the body is not so urgent as that of the soul; but there is a truer analogy between divinity and medicine, and consequently a safer indication of duty to be gathered from the divine than from the baker. I am, therefore, prepared to defend even the present system of advice gratis, at least in preference to such a revolution, or, as it seems to me, such an absence of professional feeling as will allow a man habitually to refuse to give advice unless he is sure of his fee, and to summon those in the county court who employ him and attempt to ignore their obligations.

What, then, is to be done? Are the notorious abuses and "shams" of "advice gratis" to be ignored? Assuredly not. There are several ways of meeting them, without doing violence to our professional instinct. The following fall within my own experience. A. B. is a *young* London physician, who is told by his seniors (alas!) that if he wishes to "get on," he must throw open his house, and give "advice gratis" to all comers. The temptation is strong; his next door neighbour does so, and is said to be "getting on" famously. But a few doors further down there is a general practitioner who is literally starving, so A. B. instructs his servant to say, "My master's fee is a guinea; if he gives 'advice gratis,' no one knows anything about it but himself and the patient. He has no set time for 'free' patients." Again, C. D. is a *young* physician in the country, newly elected to the county hospital; he is told that "every one" gives "advice gratis" at least one day in the week, and it will greatly prejudice him in the eyes of the clergy, etc., if he does not do the same. But he follows the example of his friend A. B., and stops the mouth of calumny by referring all such applicants to the hospital. In other words, each one according to his ability, and *without condemning others,* puts a check upon the abuse of the system in his own practice.

But you will say there ought to be a public protest against the system. I agree with you; but it should be a professional protest, not a mere mercenary one. It should be an exposure of the INEFFICIENCY *of the present system.* The delay in obtaining a letter of recommendation, and in waiting for the appointed day of the week, should be fully stated, and the consequences of it. The crowding of the out-patient room, the impossibility of doing justice to the number in the time which is at one man's disposal. The

social degradation, and the loss of time and valuable strength to which patients have to submit, might also fairly be mentioned, so as to show that the suffix "gratis" is a misnomer. These are all elements of inefficiency, and it is our duty to point them out. I venture to say that the pecuniary loss to us is the smallest part of the mischief; and when I add that by attending to the wants of the patients medical men would inevitably receive an acknowledgment for their services (see letter in our JOURNAL, May 31st, 1862), I think the narrow and self-interested view of advice gratis, which was taken, for instance, by the Metropolitan Counties Branch (see Resolutions proposed by Dr. Gibbon, 1863) is most damaging to our professional reputation. It is the lack of an efficient system of medical aid, adapted to the wants of a large class of society, that is at the root of the matter. Efficient medical aid is not within the reach of day-labourers, mechanics, needlewomen, servants, also many of small shopkeepers, governesses, and even some half-pay officers, and clergy. Individual medical men attempt to supply the need, and they fail, because it is a work of such magnitude as can only be met by cooperation. A combined effort is necessary, an effort which will commend itself to all for its efficiency. And when this effort is made, there will yet be a margin of proper cases for admission into free hospitals, which will, I trust, be served more or less by *honorary* medical officers. There are more ways of acknowledging professional service than the one to which you have given (as I think) such undeserved prominence.

The importance of the question is my apology for the length of my letter.

I am, etc., WILLIAM OGLE.

Derby, April 6th, 1864.

P.S. I trust the controversy may not degenerate into mere personality. The subject is worthy of most serious consideration.

[The postscript of our Correspondent should have been addressed to the Editor of the *Medical Times and Gazette*, to whom he lately offered his thanks for the insertion of a most personally abusive leader in that journal. With regard to his general statements, they seem to us to strengthen in the strongest terms all that we have ever said concerning the evils of gratuitous medical services. EDITOR.]

GRATUITOUS MEDICAL SERVICES.

SIR,—The subject of gratuitous medical services in our JOURNAL has been handled by yourself and your correspondents in a telling manner. It must be confessed that what people have the means of paying for, it is not charity to give them. How often are services asked for from medical men from whom the applicant has no more title to receive them gratuitously, than the medical man has to demand the corresponding services of the applicant gratuitously.

"Blessed is the man that provideth for the sick and needy." In England, is there *need* for systematic gratuitous *medical* services, while the law rightly provides it for all who cannot obtain it at "their own proper cost and charges"? Clergymen are accustomed to receive surplice fees from the poorest of their parishioners; and an instance is known to me of a wealthy rector receiving thirty shillings as the burial fees of a widow who had left a large family, while the doctor who had attended the widow in her last illness declined to receive remuneration, although previously to her illness the doctor had been an entire stranger to her. In this case, it was expected that the medical bill would be not less than £80. To a rich incumbent, whose brother is an M.P., and also to the brother of a peer of the realm, I have myself, more than once, paid the usual half-a-crown for a copy of the register of my baptism, and also of my marriage. Of course, these fees are legitimate demands, although the certificates cause little trouble and no responsibility.

Why should not a fee be allowed for a certificate of the cause of death? To fill it up truthfully requires much knowledge; and the act involves such responsibility, that in many instances afterwards it has brought the medical man into a court of law. Because I was not paid for them, a few years since, I refused to give certificates of the cause of death; and the matter was brought under the consideration of the Board of Guardians, and there a gentleman said that he thought that I was sufficiently paid for the certificates in holding the appointment of union medical officer. Would it have been argued that a clergyman was sufficiently paid surplice-fees because he was the incumbent? Afterwards, to the chairman, I expressed my belief that the matter was one solely between the Registrar-General and myself; adding that if the certificates were worth having they were worth paying for; and that if they were not worth having, why did they ask for them?

We all know that a large medical bill is a heavy burthen to a labouring man or to an artisan; but is that a sufficient reason why these classes should never pay anything at all for medical attendance? Such seems to be the opinion of some gentlemen in my neighbourhood, who have established a dispensary to give to the mass of the people free medical attendance at their own homes and medicine. Each ticket runs six weeks; and for each ticket the surgeon receives only three shillings. Some time ago, eleven out of twelve surgeons of this dispensary signed a paper, temperately and respectfully requesting the subscribers to so far modify the rules that the patients themselves should pay a small sum (three shillings for each case of illness being suggested), or that the attendance for each ticket should be reduced from six weeks to one month. The only surgeon who did not sign this paper, was one who, up to that period, and also on that day, heaped the most bitter invectives and reproaches against the promoters of this institution. He was a man who held the highest social position among medical men. He was a magistrate for the borough, and had the best practice in this neighbourhood. He would not himself attend the meeting of the subscribers (all the other surgeons did so); but deputed one of the subscribers to say that he was quite satisfied with the "paltry payment", against which he had so often and so loudly inveighed. The result of this conduct was that the surgeons present were treated in a way that astounded them all. A county magistrate said that they were animated with a bad spirit; that their application for a little acknowledgment for their services was unworthy of a liberal profession. The treasurer, who was subsequently high sheriff of the county, and was a man distinguished for great benevolence, with his scalp red with passion, told them that if they were not as well satisfied as Mr. —, they had better resign. A very rich clergyman said that the surgeons only gave the patients chalk and water; and that the remuneration must be ample because he had heard no complaints. The surgeons always had "grumbled", and were then complaining.

Who else should complain? The recipients had everything without money and without price. And the subscribers, without discredit, were acting the part of the Good Samaritan with the oil and the twopence of the medical men. These gentlemen, by the power of their wealth, having made their medical men succumb to a condition of things that deprived them of many legitimate gains and imposed upon

them an enormous amount of unrequited toil, it seemed to me that medical men's widows and orphans had claims upon their wealth; therefore, I wrote to a secretary, asking him to forward to some of them the Report of the Medical Benevolent Fund. The two richest men at that meeting have since died, childless; and to the memory of both of them, costly public memorials have been built in our throughfares; but the wills of neither of them made mention of the Medical Benevolent College or the Medical Benevolent Fund.

As an illustration of the way in which medical liberality was estimated, I may mention that a guinea subscription is specially enforced from the surgeons of this institution, as well as gratuitous services; and then, in the subscription-list annually published, the prefix of "Mr." is placed only before the names of shopkeepers and the surgeons, while the youngest lawyer in the neighbourhood is dubbed "Esq."; and as if the medical man deserved still greater contumely, an agent of the treasurer once declared that unless the surgeons themselves personally attended to receive their paltry pittance, the amount of their tickets should not be paid; but this last wretched act of tyranny, it was found, could not be enforced.

I am, etc., F. H. H.

ARMY HOSPITALS AND CIVIL SURGEONS.

Sir,—Mr. Henry Terry of Northampton has addressed a letter to you on the subject of the army medical department; and in that letter he has expressed the opinion that the grievances of the army medical officers have been much exaggerated.

Mr. Terry assumes most erroneously that the question of *diets* is the main grievance, and ventures to judge the validity of the grievances of army surgeons on the slender acquaintance he has with military matters from being employed temporarily as an assistant-surgeon in medical charge of a small detachment.

I can safely assert that the matter of *diets* has *never* been an important grievance, even if it has been urged at all. It is well known and generally admitted, that the present system is very excellent, so far as diets are concerned, when fully carried out, as it seems to be at Northampton; but I may state that, in many stations, medical officers are not allowed the assistance of a trained man of the "Army Hospital Corps"; and things are not always so pleasantly arranged for military surgeons as they appear to have been for Mr. Terry.

The grievances of the medical officers of the army are far more numerous, and of much greater importance, than Mr. Terry imagines. Many of them, which press heavily on the military surgeon, cannot be readily appreciated by a civil surgeon in charge of a small detachment. The grievances of the military surgeons have been variously stated by different individuals, as each has individually suffered. All of them are appreciable by regimental medical officers, and they may briefly be classed under the following heads: recruiting; branding soldiers with the letters "B. C."; want of ordinary leave of absence; want of due consideration when sick; the disregard of regulations *favourable* to medical officers; the rigid observance of such as are in any degree *adverse*: the refusal (in many instances) of commanding officers to recognise the rights of medical officers—in fact, the *uncertainty* of a medical officer's position—that being granted in one station which is denied in another at the caprice of an individual; the withdrawing of privileges once granted; and the refusal to pay medical officers in India in accordance with the warrant of October 1858. These grievances I fancy Mr. Terry is not in a position to contradict.

It is much to be regretted that any member of the profession, situated as Mr. Terry is, should have taken upon himself to endeavour to cast doubt upon the grievances of so large a number of his professional brethren. It is truly said, that "a little knowledge is a dangerous thing". I would recommend the consideration of the old saying, "Unity is strength". I am, etc.,

"Fortis est Veritas."

April 1864.

Sir,—Under this heading, last week, Mr. Henry Terry writes you a letter in praise of the medical department of the army. One important fact he has not stated; that is, what is the remuneration he receives, which so gladdens his heart to praise. I have held a similar position for many years; for which my poverty, not my will, is answerable. The following is a copy of the scale of remuneration, which, I contend, is most miserable.

"When a detachment is without a regimental assistant-surgeon, and is not within the reach of any military medical officer, a private practitioner may be engaged by the commanding officer of the detachment, at the undermentioned rates for each person belonging to the detachment, including any recruiting or other military parties on the same station; viz.: If he supply medicines, 2*d.* per week for each person up to 50, inclusive; and 1½*d.* for each person above 50. If he do not supply medicines, 1½*d.* per week for each person up to 50, inclusive; 1*d.* per week for each person above 50. (Sec. 6, Art. 21, *Medical Regulations.*)" I am, etc.,

A Civil Surgeon.

April 1864.

Bequests. The will of Sir James Robert Grant, M.D., K.H., formerly Inspector-General of Army Hospitals, was proved under £12,000. The will of Admiral Octavius Vernon Harcourt, of Swinton Park, Bedale, Yorkshire, contains bequests, amounting to £36,000. He leaves to the Leeds Infirmary; York County Hospital; Idiot Asylum, Earlswood; Cancer Hospital; St. George's, St. Mary's, Charing Cross, and Middlesex Hospitals, each £1,000.

Public Health. It appears from a careful analysis, extending over a lengthened term of years, that the annual death-rate at all ages and from all causes was as follows in various parts of England and Wales:—London, 2.363 per cent.; the south-eastern counties, 1.955 per cent.; the south-midland counties, 2.044 per cent.; the eastern counties, 2.058 per cent.; the south-western counties, 2.001 per cent.; the west midland counties, 2.237 per cent.; the north midland counties, 2.111 per cent.; the north-western counties, 2.550 per cent.; Yorkshire, 2.309 per cent.; the northern counties, 2.199 per cent.; and Monmouthshire and Wales, 2.126 per cent. The south-eastern counties would thus appear to be the healthiest, and the north-western counties the unhealthiest, in England. The expression "London" includes a population of 2,803,989. The rate of mortality in Lancashire and Cheshire is relatively very high, and the sanitary reforms likely to be secured by the Public Works Act, 1863, are evidently urgently needed. Thus, the death-rate from all causes and at all ages in Lancashire and Cheshire has averaged 2.550 per cent. per annum. Assuming that it could be reduced one-half per cent., 14,678 lives would be saved annually, or 146,780 in ten years, without allowing for the increase of population naturally arising, and taking the census numbers of 1861 as the basis of the calculation.

Medical News.

UNIVERSITY OF CAMBRIDGE. Degrees conferred at a Congregation held on April 7th.

Doctor of Medicine.

Latham, Peter Wallwork, Downing

Bachelor of Medicine.

Balls, Walter, St. Peter's

APOTHECARIES' HALL. On April 7th, the following Licentiates were admitted:—

Beardsall, William George, Worksop, Notts.
Firth, Arthur Roberts, Richmond, Surrey
Rayner, Henry, St. Thomas's Hospital
Siddall, Joseph Bower, St. Thomas's Hospital

At the same Court, the following passed the first examination:—

Gould, Franklin, King's College Hospital
Iliffe, William, St. Bartholomew's Hospital
Malin, George Warcup, Guy's Hospital

As an Assistant:—

Williams, James, Wokingham

APPOINTMENTS.

ALLINGHAM, James, Esq., elected Assistant-Surgeon to St. Mark's Hospital.
BAKER, Slade I., Esq., appointed Surgeon to the Berks County Gaol, at Abingdon.
*CARTER, T. A., M.D., M.R.C.P., appointed Physician to the Leamington Hospital.
COOPER, A., Esq., elected Assistant-Surgeon to St. Mark's Hospital.
HARRISON, G. W., Esq., appointed Assistant House-Surgeon to the Birkenhead Borough Hospital.
*HARRISON, R., Esq., appointed Demonstrator of Anatomy at the Liverpool Royal Infirmary School of Medicine.
KENNEDY, Henry, M.B., appointed Physician to the Cork Street Hospital, Dublin.
LOWE, E., Esq., appointed Surgeon to the County Goal, Worcester.
*NUNNELEY, Thomas, Esq., appointed Surgeon to the General Infirmary, Leeds.
PHILIPPS, A., Esq., appointed Resident Surgeon to the Manchester Workhouse.
*PHILIPSON, G. H., M.B., elected Physician to the Royal Victoria Asylum for the Blind.
SOPER, Robert W., Esq., elected House-Surgeon to the Loughborough Dispensary, Leicestershire.
*SMITH, Samuel, Esq., appointed Consulting-Surgeon to the General Infirmary, Leeds.
*TEALE, T. Pridgen, Esq., appointed Consulting-Surgeon to the General Infirmary, Leeds.
TEALE, T. Pridgen, jun., Esq., appointed Surgeon to the General Infirmary, Leeds.
WHEELHOUSE, C. G., Esq., appointed Surgeon to the General Infirmary, Leeds.
WOODMAN, William R., M.D., appointed Surgeon to the N Division of the Metropolitan Police.

POOR-LAW MEDICAL SERVICE.

MACKAY, William M., Esq., to the Lastingham District of the Pickering Union.
ROBERTSON, George, Esq., to the Thorntondale District of the Pickering Union.
TWIGG, William, M.D., to the Union House and Fever Hospital of the Dungannon Union, co. Tyrone,
WARD, William, M.D., to the Horncastle District and the Workhouse of the Horncastle Union.

INDIAN ARMY.

ADLEY, Assistant-Surgeon W. H., Bengal Army, to be Surgeon.
BEATSON, Surgeon J. F., B.A., M.D., Bengal Army, to be Surgeon-Major.
HATHAWAY, Surgeon C., M.D., Bengal Army, to be Surgeon-Major.
HUTCHINSON, Assist.-Surg. J. A. C., Bengal Army, to be Surgeon.
SCRIVEN, Assistant-Surgeon J. B., Bengal Army, to be Surgeon.
VIVIAN, Assistant-Surgeon E. J., Bengal Army, to be Surgeon.

ROYAL NAVY.

DOBBYN, John S., Esq., Assistant-Surgeon, to the *Colossus*.
HARRISON, Garland W. L., Esq., Assistant-Surgeon, to the *Victory*.
MAY, Joseph, Esq., Assistant-Surgeon, to the *Blenheim*.
PURVES, Robert, Esq., Assistant-Surgeon, to the *Dasher*.
SMART, William R. E., M.D., to be Deputy Inspector-General of Hospitals and Fleets.
STRATTON, Thomas, M.D., Staff-Surgeon, to the *Canopus*.

DEATHS.

BLAKER. On April 10th, at Brighton, aged 74, Sarah A., widow of Harry Blaker, Esq., Surgeon.
BODDY. On April 11th, at Brussels, Harriette Elizabeth, second daughter of William B. Boddy, Esq., Surgeon, of Walworth.
*COLLYNS, Charles P., Esq., at Dulverton, aged 70, on April 7.
ROGAN. On April 6th, at Levan, Greenock, aged 58, Margaret Erskine, widow of Francis Rogan, M.D., of Londonderry.
SMITH. On April 7, at 38, Doughty Street, aged 11 months, Francis A., youngest child of *W. Abbotts Smith, M.D.

THE WEST INDIAN QUARTERLY MAGAZINE, a medical and scientific journal, has ceased to exist.

BRITISH PHARMACOPŒIA. The cheaper edition of the *Pharmacopœia* is now announced as ready.

THE GRESHAM LECTURES on Physic will be delivered by Dr. H. H. Southey, on the 19th, 20th, and 21st inst.

A NEW EYE AND EAR INFIRMARY is in course of erection at Bradford. The cost of it is estimated at £5,500. Dr. Bronner has for six years given his gratuitous services to the institution, which is now being greatly developed, to meet increasing wants.

THE OUTRAGE ON DR. ROWE. James P. Brice and James Scott were brought before Mr. Raffles on the 11th inst., charged with having committed a violent assault upon Mr. Rowe. Mr. Samuell handed in a certificate, certifying that Mr. Rowe was unable to leave his bed, and that he was still in danger, signed by five physicians. Mr. Raffles said at present he could not allow bail, and the prisoners must be again remanded for seven days.

HEALTH OF THE METROPOLIS. In the week that ended last Saturday the deaths in London were 1501. The present return, therefore, shows an excess of 118 deaths. In the first thirteen weeks of the year, the deaths in London were, 22,733. In the same quarter of the years, 1860-63, they may be stated as 19,000. Hence it appears that nearly 4,000 lives were shortened.

MR. CHARLES DICKENS presided on the 12th inst., at the annual dinner of University College Hospital. We should have been glad if he had taken the opportunity of apologising to the profession for the calumnies on "Mad Doctors," which lately appeared in *All the Year Round*. Mr. Dickens would have done well to have repudiated and rebuked publicly the ignorance and injustice exhibited by one of his scribes.

NEW RANK OF ARMY ASSISTANT-SURGEONS. We have received from a reliable authority information as to the intentions of the Army Medical Department. The number of competitors for assistant-surgeoncies has lately fallen very far short of the number of vacancies, and the medical department has therefore been unable to meet the exigencies of the service. We are informed that the Director-General is about to advertise for acting assistant-surgeons, civil practitioners, at double the present pay, and without mess or other regimental expenses, to take charge of the home stations, while the regular assistant-surgeons, and as many full surgeons as can be spared, are to be sent on foreign service. (*Dublin Medical Press.*)

PROSTITUTION IN NEW YORK. The "social evil" flourishes in New York as in no other large city of the world. The miserable creatures who ply their trade have not the slightest legal restraint. When so thoroughly diseased as to be compelled to seek medical relief, they apply to the Alms-House, where they remain until relieved, and then return to their old haunts. Every form of venereal disease may be found among these persons, which they propagate far and wide without hinderance. During the year 1862, 5,818 females of this class were admitted to the Island Hospital. The greatest problem presented to our philanthropic citizens is the restraint and proper control of this great evil. As yet, no one in our community has had the courage to attempt to obtain the necessary legislation. (*American Medical Times.*)

Testimonial to Dr. de Bartolomé. On the 31st ult., the pupils of Dr. de Bartolomé Lecturer on the Practice of Medicine at the Sheffield Institution, presented him (on his retirement from his duties) with a silver claret jug, bearing a suitable inscription. Dr. de Bartolomé had lectured for seventeen years.

Society for the Relief of Widows and Orphans of Medical Men. The annual dinner of this old established charity is fixed for May 28th. A great muster of the friends of the institution is expected, as this will be the first anniversary since the granting of the new Charter, which is expected to have great influence in enlarging the benefits of the Society.

The New Infirmary at Leeds. The foundation stone of another noble edifice in Leeds—the New Infirmary—was laid on Tuesday, by Mr. Kitson. The estimated cost of the building exceeds £100,000. Towards this sum the subscriptions at present contributed amount to upwards of £62,000. There is also applicable to the purpose a further sum of £35,000, arising from the sale of the old Infirmary and grounds, and in addition to this several gentlemen, already munificent contributors, have intimated their intention to subscribe a fifth instalment, practically adding twenty-five per cent. to their original promise. There is, therefore, every reason to hope that the new building will be opened free from debt. The ceremony of laying the first stone was attended by the Mayor and Corporation, the local magistrates, the borough members, and other leading inhabitants, who were afterwards entertained by Mr. Alderman Kitson at a luncheon in the Victoria Hall. (*Leeds Mercury.*)

Epidemiological Society. The annual meeting of this Society was held on the 4th inst. A report was presented by the council, which showed that the state of the Society, both generally and financially, was most favourable; and the following office-bearers were elected for the session 1864-5. *President:* Gavin Milroy, M.D., F.R.C.P. *Vice-Presidents:* His Excellency the Earl of Carlisle, K.G.; the Earl of Shaftesbury, K.G.; the Right Hon. W. Cowper, M.P.; B. G. Babington, M.D., F.R.S.; H. W. Acland, M.D., F.R.S.; A. Bryson, M.D., F.R.S., R.N.; E. Chadwick, Esq., C.B.; W. D. Chowne, M.D., F.R.C.P.; J. Copland, M.D., F.R.S.; W. Farr, M.D., F.R.S.; J. B. Gibson, M.D., C.B.; W. Jenner, M.D.; Sir J. Liddell, M.D., F.R.S., C.B.; Sir J. R. Martin, C.B., F.R.S.; C. Murchison, M.D., F.R.C.P.; A. Nisbett, M.D., R.N.; J. Simon, Esq., F.R.S.; Sir A. Smith, M.D., K.C.B.; T. Watson, M.D., F.R.S. *Foreign and Colonial Secretaries:* W. Lewis, M.D., Belgium and France; H. Weber, M.D., and W. E. Swaine, M.D., Germany and Russia; R. G. Latham, M.D., F.R.S., Sweden, Norway, and Denmark; A. Bryson, M.D., R.N., F.R.S., Portugal and the Brazils; W. Camps, M.D., Egypt and Syria; J. Bird, M.D., East Indies; W. Dickson, M.D., R.N., West Indies and North America. *Treasurer:* W. Camps, M.D. *Secretary for the Navy:* — Mackay, M.D., R.N.; *Secretary for the Army:* ——. *General Secretary:* J. N. Radcliffe, Esq. *Other Members of Council:* C. J. B. Aldis, M.D.; F. G. Burge, Esq.; A. Crawford, M.D.; Colonel Hough; E. Hart, Esq.; E. Haward, M.D.; C. F. J. Lord, Esq.; H. Letheby, M.B.; J. F. Marson, Esq.; C. Morehead, M.D.; W. Odling, M.B., F.R.S.; B. W. Richardson, M.D.; J. B. Sanderson, M.D.; E. C. Seaton, M.D. After the election of office-bearers, Dr. Babington, on retiring from the chair, which he has occupied for thirteen years, delivered an address on the "Origin, Present Position, and Prospects of the Society."

Dr. Bullen and Sir R. Kane. The dénouement of the Bullen-Kane affair is singular. At the triennial visitation held at Cork, on April 12th, present the Lord Chancellor, the Bishop of Killaloe, the President of the College of Physicians, and the President of the College of Surgeons, Mr. Barry, Q.C., counsel. Sir R. Kane produced a letter from Dr. Bullen. Dr. Bullen stated that he was "now satisfied" that Sir R. Kane was perfectly justified in his denial of the statements attributed to him; that the charges which he had made against Sir R. Kane were entirely "unfounded;" and that he "begged to retract them in the most unqualified manner." Finally Dr. Bullen tendered "the most ample apology for any annoyance the transaction may have occasioned Sir R. Kane." In short, the doctor, a professor in the college, admitted he had made false charges against his superior officer, the president, and threw himself on the mercy of the Court of Visitors. The Lord Chancellor simply intimated he would forward Dr. Bullen's letter to the Government, who would deal with the case. People are amazed at all this. They cannot comprehend how it is that such a number of the most serious imputations against distinguished individuals should turn out to have no foundation; or, having no foundation, how they came to be made originally by any man out of a lunatic asylum.

Bethlehem Hospital. On the 9th inst., a special meeting of the Governors of Bethlehem Hospital was held respecting the site of the hospital; Mr. Alderman Copeland said the Commissioners in Lunacy having recommended to Sir G. Grey that the hospital should be removed from its present site to the country, to make room for St. Thomas's Hospital, the Governors were prepared with a great deal of evidence in favour of the present site. Mr. A. M. Jeaffreson (the secretary) read a communication from Mr. Lawrence, surgeon to the hospital, and senior surgeon to St. Bartholomew's Hospital, which stated that the Commissioners in Lunacy sought to obtain the assistance of Sir George Grey in order to enforce an arrangement which was most repugnant to the Governors, forgetting that their power, as far as Bethlehem was concerned, was simply confined to that of visiting. Without any examination on his part, the Home Secretary endorsed the strange proposal for taking down one of the handsomest and best constructed hospitals in London. The present site of Bethlehem was perfectly suited in healthiness either for lunatics or as a general hospital. Instead of being confined, the site of the hospital was remarkably open. He disapproved entirely the recommendations of the Commissioners in Lunacy. The opinion of Dr. Goode was read. He was in favour of the present site from his personal experience of ten years. At present it enjoyed many advantages, and the hospital, instead of being hemmed in by buildings, was peculiarly free and open. If the hospital was removed 10 or 20 miles into the country, how were the patients to be removed to the hospital? The sanitary condition of the neighbourhood was good. The site was healthy, and the position good, and he hoped that the hospital would be maintained in its present condition. Dr. Wood, one of the medical officers of St. Luke's Hospital, and formerly of Bethlehem Hospital, said no good reason had been advanced why the hospital should be removed. Bethlehem was one of the finest buildings in London, and taking the grounds of Bethlehem, with its 11 acres and 200 patients, and Hanwell, with 28 acres, farm of 77 acres, and 1,600 patients, there was considerably more space at Bethlehem per head than at Hanwell. The hospital was singularly and exceptionably healthy. When cholera was raging in London, and people were dying literally at the very doors of the hospital, not a single case happened among the inmates. After some further evidence had been taken, the meeting was adjourned.

ARMY MEDICAL APPOINTMENT. Miss Mary C. Walker, M.D., arrived here last week with orders to report to Dr. Perrin for duty. She has been appointed to Colonel M'Cook's brigade, and has just left for Gordon's Mills, where the brigade is stationed. The young lady is said to thoroughly understand her profession. She is very pretty. (*Chattanooga Gazette.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.— Great Northern, 2 P.M.— London Surgical Home, 2 P.M. — Royal Orthopædic, 2 P.M. — Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8.30 P.M. Mr. Teevan, "On some Injuries to the Skull."

TUESDAY. Statistical.—Pathological.

WEDNESDAY. Meteorological.

THURSDAY. Harveian Society of London, 8 P.M. Dr. Cock, "On Laryngismus Stridulus."—Royal.—Zoological.—Linnæan.—Chemical.

FRIDAY. Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

GARIBALDI AND GRATUITOUS MEDICAL SERVICES.—We are very glad that Mr. Thompson gives us an opportunity of contradicting the report which has been going the round of the papers. The fact is, the profession has so inoculated the public with the notion that medical services are always to be had for the asking, that the public now regards gratuitous medical services as things of course. Mr. Thompson writes:—

"In consequence of an inquiry to that effect, I wrote a private note to a friend in very brief terms, that it would give me great pleasure to be of any service to General Garibaldi on his arrival in this country. I hesitated the less to say this, as I was one of the surgeons originally applied to, to go out to him in September 1862, and was prevented from receiving instructions to do so, solely by absence at a long distance from town for my autumn holiday. On the occasion now referred to, no offer whatever of gratuitous services was made by me; and the bare terms of the note, which was never intended for any eye but that of my correspondent, precluded all possibility of its being 'a graceful letter'. This is the only circumstance I know of which can have occasioned the mention of my name in the paragraph in question, the appearance of which caused me no less astonishment than pain.

"To interfere with incorrect paragraphs in the general press has usually appeared to me undesirable. I have seen so many during the last twelve months, in connection with another matter in which I have been concerned, that I have, under advice of experienced friends, concluded that it was best to adopt the rule of permitting them to remain uncorrected. I am therefore truly obliged to your correspondent for transferring this paragraph to a medical journal, where I am able to answer it; and I entirely agree with the remarks which you have made in relation to the subject."

THE BRITISH PHARMACOPŒIA.—SIR: Under the head of "*Scammoniæ Resina*", in the *British Pharmacopœia*, I see written in English, "Resin of Jalap". I can hardly imagine so glaring an error can have escaped the notice of all the English, Irish, and Scotch Pharmacopœia Commissioners, and therefore write to ask you whether it is really meant that the resin of scammony is the same thing as resin of jalap. I am, etc., J. R.

[We are not learned in matters of pharmacy, and must positively decline to answer questions concerning the aforesaid *Pharmacopœia*. If one tithe of the blunders imputed to the *Pharmacopœia* really exist in it, its authors will assuredly stand in the pillory *en permanence;* that is, until they have amended their ways by the production of another sort of article. EDITOR.]

THE FACULTY OF PHYSICIANS AND SURGEONS.—SIR: I fear that the name of the "Faculty of Physicians and Surgeons" has led many to suppose that its diploma constitutes the holder both a physician and surgeon. Your answer to Delta implies that it is a *medical* qualification. This, however, is a mistake, as the qualification which the faculty confers is purely *surgical*, like the College of Surgeons; so the Registrar of the Faculty stated in a communication I received from him some few years since. The Medical Council also, in their communications to the Poor-Law Board and Public Medical Services, states its diploma to be *surgical*. "The Royal College of Physicians of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow", however, "have made arrangements whereby, after due series of examinations, the student may obtain two licenses, one in medicine and one in surgery."

I have thought it right to make this communication, as it might be of much importance to Delta and others to know that the qualification of L.F.P.S. is *purely surgical*, and that the holders *cannot* recover for medicine and attendance in *purely medical cases*.

April 4th, 1864. I am, etc., JAMES GAGE PARSONS.

DEATHS FROM ANÆSTHETICS.—SIR: Several American and other journals having been of late sent to me, containing deaths from anæsthetics, I think you would assist us much in the collection of cases, and arriving at their cause, by mentioning that two deaths have, within a few days, occurred in New York from inhalation of the last anæsthetic, nitrous oxide; both deaths in healthy adults, from extraction of teeth; though this gas is held strongly in dental literature to be one free from danger. A third death is that of a perfectly healthy man, in a place called Pentridge, in Australia, suddenly, while under chloroform for mere passage of a catheter; only half an ounce of chloroform given. The reporter of the case thinks the man fainted; it was not the usual congestion; this is important, and had much weight with the coroner and jury. The fourth death is that of a gentleman, at Syracuse, in America. Mr. J. B. S., who had been applying the chloroform *externally*, but was found by his wife quite dead. All the cases, as I have so often said, are trivial operations; the subjects healthy vigorous adults; one woman to three men; the chloroform deaths instantaneous; those from nitrous oxide or ether, or the "ether mixtures", now coming into fashion, on the other hand, just as certain, but slow. It is a suggestive fact, lately stated by Dr. Thudichum, that the "amylene" used by Dr. Snow, was found after his death to be not amylene at all; he had been misled by the chemical process and manipulations of various chemists—one other reason for caution in these "ether mixtures", and for Government registration of chemists' shops.

I am, etc., CHARLES KIDD, M.D.

Sackville Street, W., March 25th, 1864.

COMMUNICATIONS have been received from:—Dr. FREDERICK J. BROWN; Mr. R. HARRISON; Dr. T. A. CARTER; THE HONORARY SECRETARY OF THE HARVEIAN SOCIETY; Mr. KIDGELL; Dr. H. MARSHALL; Dr. C. KIDD; Mr. H. D. CARDEN; Mr. JONATHAN HUTCHINSON: Mr. LOWNDES; Mr. BRODHURST; THE REGISTRAR OF THE MEDICAL COUNCIL; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. WILLIAM MARTIN; Mr. TEEVAN; and Mr. T. M. STONE.

BOOKS RECEIVED.

1. The Science and Art of Surgery. By John E. Erichsen. Fourth edition. London: 1864.
2. On the Advantages, etc., of Village Hospitals. By A. Napper. 1864.
3. Notes on the British Pharmacopœia. By A. F. Haselden. London: 1864.
4. The Ophthalmic Review. No. I. London: 1864.
5. On the Phenomena of Hybridity in the Genus Homo. By Dr. P. Broca. Edited by C. C. Blake. Anthropological Society. London: 1864.
6. Some Observations on Medical Education. By Andrew Wood, M.D. Edinburgh: 1864.
7. Lectures on the Elements of Comparative Anatomy. By Thomas H. Huxley, F.R.S. London: 1864.
8. The Principles of Surgery. By Frederick J. Gant. London: 1864.
9. The Seven Sources of Health. By William Strange, M.D. London: 1864.
10. The Classification of Skin-Diseases. By W. Tilbury Fox, M.D. London: 1864.

Gulstonian Lectures

ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO ST. MARY'S HOSPITAL.

[*Continued from page* 412.]

I HAVE lingered long on this theory of a change of type in diseases, and have been led on to discuss it freely, not only because I believe it to be an incorrect theory, but chiefly because it is certain that its rejection would remove the greatest obstacle which now interferes with our taking a fair measure of the value of blood-letting at the present time. If it could be satisfactorily shown that the theory was erroneous, then the profession would be bound to reconsider the whole matter, and would, I am satisfied, once again take the lancet in hand and bleed their patients, not certainly as our forefathers did, without rhyme or reason, and under the blinding influence of false theories, but rationally—to the benefit of the sick, and in accordance with the teachings of modern medical knowledge.

I will now, sir, turn to the second part of my thesis, and endeavour to show that another obstacle to our employment of venesection in diseases is to be ascribed to the fact that we have, generally speaking, adopted erroneous notions concerning the uses and actions of the remedy; that we have ascribed to it virtues which it does not possess; and have, in consequence of this untrue estimate of it, and of its failing to effect what our false expectations had awaited from its use, allowed it to lapse into neglect.

I have, therefore, now to ask you to consider with me whether we may not arrive at a truer estimate of the uses and value of bleeding from a basis of considerations other than those which have hitherto been taken into account, and are founded on the unstable bases of uncontrolled personal experience and of medical statistics. It seems to me that there is a safe and firm ground, whereon we all stand much together in agreement, and from which the matter may be usefully discussed; that there are, in truth, a series of facts fitted to serve our purpose in explaining the uses of venesection in disease, so clear and simple and positive as, when clearly expressed, to press themselves home upon the conviction of all of us. It is from the consideration of plain-speaking facts of this kind that the conclusions here suggested, concerning the influence exercised by venesection over diseases, are derived.

In considering the effects of blood-letting in diseases, it is necessary to bear in mind that a marked line of distinction is to be drawn between the effects produced by the local—*i. e.*, the direct—abstraction of blood from an inflamed part, and the effects produced over such inflamed part by venesection. Systematic writers, as a rule, pay little attention to this very important fact—the mode of abstraction of blood, in respect of its influence over the inflammation, being usually regarded as much a matter of indifference; the main item of consideration with authors being the quantity of blood extracted. Thus, for example, we are told, in pneumonia, that the condition of the patient must decide us as to how the blood should be removed; if the patient be feeble, let the blood be taken by leeches or cupping from the skin in the neighbourhood of the inflamed lung; but if the patient be strong and vigorous, then let the blood be taken from the arm; it being assumed that the effects produced here by the abstraction of blood are alike in both cases, and in both cases have a similar control over the inflammatory process.

But a nearer consideration of the subject infallibly shows us that there is a marked distinction to be drawn between the effects of the direct abstraction of blood from an inflamed part, and the effects exercised over that part by venesection—*i. e.*, by the indirect abstraction of blood. *A priori* reasoning suggests that such should be the case, and experience proves that it is so.

In the one case—the direct abstraction of blood—the blood is drawn directly from the inflamed part, from blood-vessels which are directly in communication with the inflamed part. The abstraction of blood has consequently a direct and immediate influence over the seat of inflammation. It not only draws blood, but it draws inflamed blood—*i. e.*, blood deteriorated under the action of the inflammatory process, altered in quantity and altered in quality, and therefore no longer duly fitted for its purposes—from the part affected. It may, indeed, abstract blood which, in its altered state, acts poisonously, both locally on the inflamed tissues, and generally on the system at large, as it passes into the circulation. The local action of the leeches or the cupping, moreover, may have, and I believe actually exerts by irritation, an influence over the vaso-motor nerves which are distributed to the vessels of the inflamed part. But venesection manifestly exercises no such influence over the inflamed part.

Moreover, the distinction here maintained is confirmed in the most marked manner by the teaching of experience. Experience demonstrates to us, in the case of external, visible inflammations, that the direct abstraction of blood from an inflamed part, during at least the congestive period of the inflammatory process, exercises a benign influence over the progress of the inflammation. Thus, for example, the application of a few leeches around an inflamed ankle-joint or an inflamed conjunctiva almost infallibly reduces the main characteristics of the inflammation—the pain, the heat, the redness, and the swelling; and it does this more effectually and certainly than the abstraction of a pint of blood from the arm would do.

Venesection, on the other hand, exercises no direct and immediate influence over the local inflammatory process. It removes no inflamed or locally altered blood from the body. It can have no direct derivative action; it can exert no nervous influence of that kind referred to by Hunter under the term of contiguous or continuous sympathy, such as may be effected by the local taking of blood. Its influence is transmitted indirectly through the general circulation, and therefore it operates only in a secondary way. Venesection affects the local inflammation just as it affects all other parts of the body, and only as

—*i. e.*, not more powerfully or otherwise than—it affects them; the main influence being the reduced action of the heart's force. The influence resulting from the altered action of the heart, however, is only a part of that same general influence which, through the loss of blood, has been divided and distributed over the whole of the body. By the venesection, the heart's power is diminished; diminished, therefore, is the stream of blood which is forced through all the channels of the circulation into every part of the body. The amount of blood abstracted by venesection is deducted equally from all parts of the body —not more, surely, from the inflamed than from every other part; so that, even when the venesection is very large, the amount of blood withdrawn from the seat of inflammation must be small, not nearly so much as would be drawn by a single leech directly applied to it.

Direct abstraction of blood acts immediately upon the seat of inflammation; its benefits are sure and immediate also; and, as usually practised, its influence over the system generally is scarcely perceptible. Venesection, on the other hand, has no such influence over the local inflammation; but a very powerful influence over the system at large. It acts only through the influence which it exercises indirectly over the inflammation. The good effects of direct abstraction of blood are positive and manifest, and admitted by all; and they are obtained at a small cost to the system at large. The good effects of venesection over the inflamed part are not easily demonstrated; they are disputed, and are more or less costly.

I have insisted on this distinction between the effects of direct abstraction of blood and of venesection, because it is for the most part overlooked in practice, and because it seems to me to afford a clue to an explanation of the good effects actually produced by venesection in inflammations; and I have also attempted to remove the idea, so generally entertained, that venesection is felt and resented in some especial manner by the part inflamed; that it affects that part differently from what it does the other parts of the body. And the conclusions at which I have here arrived are, I believe, the plain every-day lessons demonstrated to us by direct observation—I mean, from what has been observed of the effects of venesection, and of the direct abstraction of blood, in the case of *external* inflammations. It is a fact well worthy of note here, that venesection has long since been, both by physicians and surgeons, completely discarded, not only practically, but theoretically, in the treatment of all external inflammations—*i. e.*, in all those inflammations of whose course and progress the eye can take cognisance. And equally is it a fact that we have never either abandoned in practice or denounced in theory the direct abstraction of blood from external inflammations. I think we may accept it as certain, that surgeons abandoned venesection in external inflammations because, under the enlightenment of modern medicine, they failed to see its utility. I am not aware that any surgical authority —and I need not say that surgeons were once as free bleeders as physicians—has ever called in the change-of-type theory to account for his change of practice in the matter of external inflammations. Physicians also have renounced all pretension to venesection in a cure of *external* inflammations; and I do not recollect that any physician has put on record that he abandoned the practice because he found his patients would not bear the loss of blood as they once did, or were said to have done. I think you will rather admit that, under the lessons of modern pathology, we have learnt that venesection never could have been a proper remedy for the inflammations which we meet with on the surface of the body; and that we, therefore, abandoned the practice, and because, so instructed, we were no longer able to note the utility of the practice. Venesection in external inflammations, be it noted, was given up before bleeding in internal inflammations. And is it not obvious that we could far better note the results of the operation in the one case than in the other? The change-of-type theory of disease has only been called in by physicians, and by them only, as explanatory of the abandonment of bleeding in internal inflammations.

From a consideration of the foregoing particulars, I am led to inquire, What, then, are the real uses of venesection in diseases? What good ends does it effect? And surely a remedy which, through evil report and through good report, has steadily held its own in the catalogue of curative agencies from the days of Hippocrates to our own, can hardly all at once have ceased to be of service to humanity. Is it possible for us to believe that all the great minds who, through the long ages of past medicine, have resorted to this remedy, have been using it under a complete delusion? The very fact of the antiquity of the remedy, of its universality, and of its persistence during all times as a cure, is strong *à priori* evidence of its possessing some value and excellence as such.

But, in truth, no living physician, I believe, denies its value as a remedy. Leading physicians of the highest authority amongst us in modern days have said of it, "that of all remedies in acute inflammation, the only one on which absolute reliance can be placed is blood-letting;" and again: "The great remedy in acute and dangerous inflammation is blood-letting." This, then, admittedly most excellent of remedies, if rejected, is rejected not through any recently discovered fault in the remedy itself, but on other grounds. It is an excellent remedy, says one party; but you cannot now make use of it, because the human constitution is at the moment in one of its periodical phases of asthenia. Wait a little till the sthenic tide again rolls in, and then your remedy will once more do great service in the cure of diseases. Others say venesection is an excellent remedy, *hic et ubique*, at this moment; that it ever has been and ever will be an excellent remedy, only men have abused instead of using it, and therefore has it fallen into so great discredit. Define its true uses, and indicate the limits of its right application, and then again will venesection find its position, and this time its rightful position, in therapeutics. Such is my own view; and the attempt I am now making is to point out, as I conceive, the way by which we may attain to a distinct or better understanding of its real use and of its right application.

Let me, therefore, with this intention, ask you now to apply the remarks which I made concerning the effects of venesection, and of the direct abstraction of blood, over external inflammations, to the case of internal inflammations; and then to consider the conclusions which result from such comparison.

You must, I think, admit that whatever be true of the effects of venesection, and of the direct abstraction of blood, upon an external inflamed part, must be

equally true of its effects over internal inflammations; and for the reason, that the essential characteristics of inflammation are everywhere alike in all parts of the body. If, for example, venesection have no directly beneficial influence in the cure of an inflamed ankle-joint, neither, we may fairly argue, can it have any directly beneficial influence over an inflamed lung. And so, again, if the *direct* abstraction of blood is beneficial in the case of external inflammations, equally beneficial should it be in the case of internal inflammations—that is, whenever it can be practised.

Now, this *à priori* reasoning of what should happen in the case of internal inflammations is, I believe, thoroughly corroborated by what we learn as the results of our practical experience in the matter. This I will now endeavour to show you. And, perhaps, I may make the matter clearer if I at once state the conclusion to which, as I see the thing, both reason and practical experience inevitably lead us. It is this: that venesection has no directly beneficial influence over inflammations, either external or internal; that venesection is useless in the cure of all external inflammations; and that its beneficial effects are distinctly marked in those cases of internal inflammation only in which the play of the organs of respiration or circulation is seriously impeded; and that, in such cases, its beneficial effects are not to be ascribed to any direct influence exercised by it over the local inflammatory process, but to its power in relieving obstructions to the play of the respiratory and circulatory organs. In other words, the bleeding operates, not primarily and directly on the inflammation, but secondarily—*i. e.*, upon the consequences which arise out of, are incidental to, and, in fact, the results of, the inflammation.

I arrive at this conclusion for the following reasons. In the first place, we *see* that venesection has no marked beneficial effect over external inflammations; and we know also that venesection can neither remove the cause of a local inflammation, nor remove any of the products of the inflammation. And it is a significant fact, that to this day no one has ever been able to tell us in clear and satisfactory language what that local beneficial effect is which is said to be produced by the bleeding, or in what way the hypothetical good is effected by the bleeding.

Moreover, it has ever been admitted that the beneficial effects predicated of bleeding are most marked in those diseases in which there is obstruction to the free play of the heart or lungs, and in proportion to the degree of the obstruction; and it is a fact that, at the present day, bleeding is never resorted to, except in those cases in which such obstructions exist. Bleeding also has ever been most highly lauded in that inflammation—viz., pneumonia—in which the obstruction and its consequences come on most rapidly and are most marked. And, again, when bleeding gives relief, the relief is immediate, comes while the blood is still flowing, and is just of that character which results from removal of obstruction to the pulmonary or cardiac functions. The relief is just that which is given by bleeding in cases of chronic valvular disease of the heart, or in local injuries of the chest, where no inflammation is present. And the relief is given in pneumonia, even though the state of the inflamed portion of the lung remain absolutely unchanged; as, for instance, when it may be in a state of consolidation. And it may be added, that no one has ever proposed to resort to bleeding in pneumonia in cases where the respiration and circulation are not obstructed. Such cases, it is said, do not require bleeding; though it is hard to understand why they do not, if the hypothesis, that bleeding has a direct influence over the progress of the inflammatory process, be true; for the destruction of a small portion of a lung may be as fatal as the destruction of a whole lung. And it may, I think, be very fairly suggested, that the relief given is just the very same as probably would be given by bleeding in that state which is apt to come on in some persons after violent running, and from which probably all of us have one day or other suffered acutely; I mean what is called "stitch in the side". I think it is more than probable that the pain we often ascribe to pleuritic inflammation in cases of pneumonia is rather the local nervous expression of the obstructed play of heart and lungs, of the character of the stitch alluded to, of the pain of angina; for it is a fact, that wherever be situated or discovered the signs of the pleurisy, the pain referred to is almost invariably localised at the lower part of the side of the chest.

These are the reasons which force us, I think, to the conclusion that, in those cases of pneumonia in which bleeding is found of so much service, the good results mainly from the freedom thereby given to the play of the obstructed thoracic organs. There is no single argument, of a clear and satisfactory kind, which can be adduced in favour of the idea that the relief has come from any directly beneficial influence exerted over the inflammatory process.

And it is, I think, a very suggestive fact, that at this time of day, at all events, in this age of scientific medicine, there is neither thought nor question of bleeding, except in those cases in which the play of the lungs or the heart is impeded. Thus, for example, we are recommended to bleed in pneumonia—supposing, of course, that the phase of disease is favourable and sthenic; and in heart-affections, and peritonitis, and certain head-affections; and here, I think, ends the catalogue of disorders in which we are advised that bleeding may be practised. But, in all these affections, the respiratory and cardiac functions are more or less hindered; and it is just in proportion to the degree of their hindrance that we measure the need of, and mark the benefits derived from, the bleeding. And it is in pneumonia, above all other diseases, in which the benefits of bleeding have been preeminently noted; and it is in this inflammation, in a preeminent manner, that we find the play of the cardiac and respiratory organs impeded.

Let me not be misunderstood, however. I am not affirming that bleeding is of no service except in the class of cases referred to. You will remember that I am here engaged with the consideration of the effects of bleeding over inflammations, and am showing that it is only of service in those inflammations in which the action of the heart or the lungs is compromised. I am not denying that bleeding may, in some exceeding rare cases, be of service under other conditions.

[*To be continued.*]

Solar Radiation. Father A. Secchi has made a series of experiments on the intensity of the solar radiation in different seasons. They fully bear out the observations of Professor Tyndall as to the power of the vapour of water to intercept the sun's rays.

Clinical Lecture

ON

RARE FORMS OF DISEASE CONSEQUENT ON CONSTITUTIONAL SYPHILIS.

Delivered at the London Hospital.

BY

JONATHAN HUTCHINSON, F.R.C.S.,

SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY AT THE MEDICAL SCHOOL.

GENTLEMEN,—I purpose to-day to bring before you three patients, all of whom present very unusual conditions of disease, consequent, remotely, upon syphilitic taint. In one man, the eyeball is thrust forwards from its socket, and its motions are much impeded by some growth or deposit in the tissues behind it. The diagnosis rests between cancer and syphilis; and I need not enlarge upon its great importance to the patient. In the second, we have a man blind, not of one eye, but of the vertical half of each eye, a condition which is much more inconvenient than the entire loss of either one alone. He is totally unable to perceive objects on his right side. This symptom —hemiopia, as it is technically called—is an exceedingly rare one, and is of equal interest in its physiological and in its clinical aspects. In the present instance, I think I shall be able to convince you that it is due to syphilitic disease of one optic tract—that is, behind the commissure. Our third patient is a woman undoubtedly the subject of syphilis, and in whom there are indications of central disease of the nervous system.

In each instance, you will see the patient for yourselves; and I shall state in detail my reasons for attributing the symptoms present to syphilis.

CASE I. The first patient whom we shall examine is Robert S., a labourer, aged 32, who was sent to me by a surgeon at Blackwall, on account of prominence of the left eyeball. I find that he was my patient ten months ago at the Ophthalmic Hospital on account of a similar state; and he assures me that on that occasion he got quite well again, and that his eyeball receded.

You will observe that he is a sallow, cachectic man; his breath fœtid; and his gums in bad condition, as if he had taken much mercury. His left eye is projected forwards very considerably, being fully half an inch from the level of the other. It comes straight forwards, and is not pushed either upwards or downwards. There is no redness or visible swelling of any adjacent part. The upper lid droops, so as nearly to cover the whole front of the eye; but, by a strong effort, he can slowly lift it. The eye is directed outwards, giving him a strong divergent squint and consequent double vision. The drooping eyelid and the squint outwards both suggest paralysis of the third nerve. Let us see how the other branches of this nerve are affected. On being told to look to the right —*i. e.*, to use his internal rectus—he does so slowly, and not to more than half the normal extent; and the same applies to looking either upwards or downwards. As in the case of lifting the lid, he can move the eye in these directions incompletely, and only by a strong effort; yet the muscles are clearly not wholly paralysed. How as to the sphincter of his pupil? The pupil of the prominent eye is the same size as that of the other, and moves very fairly on exposure to light. He can see fairly with the displaced eye; sufficiently to read large type. He avers that he can see much better at some times than at others; and he has, of course, much difficulty from not being able to direct his eye.

If we attempt to examine the orbit deeply with the finger, we shall find that the eye is not at all fixed, and that the tissues about it are quite soft. No tumour can be felt at any part; but, on pressing deeply above the globe, an indistinct swelling is perceived, and he at once complains of tenderness.

Our diagnosis is, Syphilitic Periostitis of the Orbit. Effusion of lymph, and possibly of pus, has taken place deeply in the apex of the orbit, surrounding the optic nerve, pushing the globe forwards and injuriously compressing its motor nerves. I ought to have previously mentioned that, although his external rectus is more than equal to the internal one, and, in consequence, the eye looks outwards, yet even this muscle does not act with normal speed and power; and we may, therefore, infer that the sixth nerve also is pressed upon. About the fourth nerve, it is much more difficult to decide.

The reasons for thinking the disease syphilitic are several. The man is the subject of syphilitic cachexia. He owns to having had, fifteen years ago, primary sores, followed by constitutional symptoms, for which he took mercury repeatedly to salivation. He has a large hole through his soft palate, evidently of syphilitic origin. He does not appear to have had any symptoms which he considered venereal since the first ones. He has been married for some years; but his wife has had no family. On his scalp are several patches, where the bone is tender and its periosteum thickened; and he complains of "rheumatic pain" in these parts at night. Let us grant, however, that there are no nodes elsewhere, nor any evidence of active syphilis, if we except the disease in his orbit.

It is possible that, instead of syphilitic deposit, there may be a new growth—soft cancer, for example —in the apex of the orbit. The effects of the two, as regards prominence of globe and paralysis of muscles, might be closely similar. It is not very uncommon for cancer to begin in the cellular tissue of the orbit. Against the supposition of its presence in this instance, we have, however, the man's statement that his eye was thrust forwards ten months ago, and receded under treatment; a fact strongly in support of the syphilitic hypothesis. The kind of cachexia is more like that of syphilis than of cancer; but we must be on our guard, for it is very possible that cancer may occur in a syphilitic patient.

We are using full doses of iodide of potassium, eight grains three times a day; and you will have an opportunity of seeing whether the results obtained verify the diagnosis.

As to the imperfection of sight from which the eye suffers, that, of course, is easily explained by the stretching of the optic nerve; and we can also easily conjecture how it is that he sometimes sees fairly and at others not at all. The nerve being on the stretch, and being also surrounded by a more or less fluid medium, it is easy to suppose that, when the muscles act, they may so compress the deposit as to cause pressure on the nerve, and stop the circulation in the arteria centralis.

Let me ask you to keep in mind that it is *fifteen years since this man had primary syphilis;* and that

during the last fourteen he has considered himself quite well.*

In the next case which we shall examine, the interval of latency (*i.e.*, that between the secondary outbreak and his present tertiary symptoms) has been no less than thirty years.

Case II. *Well-marked Hemiopia in a Robust Man; Nodes on the Skull, and Eruption on the Forehead; History of Syphilis Thirty-two Years ago.* Thomas H., aged 55, a big, muscular labourer, now the keeper of a beer-house at Woolwich, has been accustomed to drink and smoke heavily, and has had many blows on his head. He has always had good health until the last year or two; "has been failing about his head like." He explains the latter phrase to mean that he has often felt "a giddiness and confusion in his head, stiff in the back of his neck, with lumps on the skull, and much pain." The pain has been usually bad at nights; much worse than during the day. These symptoms have been present only for the last eight to twelve months. He showed me "a lump on his skull", an undoubted node of considerable size; and during the last year, he had, he said, had many such, which would come and then go away again. Over his left brow, was a patch of serpiginous rash, of very suspicious appearance.

History of Syphilis. At the age of 18, he had a "black chancre with buboes". The latter did not break, but "passed off in blotches all over him." He was profusely salivated, and got well. He thinks it hung about him a full year before he was free of it; and he was treated by many surgeons. He married at the age of 23; and his wife lived until about a year ago, but never conceived. He suffered from "clap" about two years ago; but it was soon well, and he had no sores. He gives a full and perfectly candid account of these events; and I think it is clear that he has not suffered from true syphilis since the attack above mentioned. He appears, indeed, with the exception of an occasional sore on the tongue, to have been quite free from constitutional symptoms until lately. About six months ago, he was under care on account of "a great lump on his breast bone", which went away under treatment. He has lost flesh latterly, but is still a large muscular man. His memory has not failed materially; but he thinks that his temper has been irritable.

This man came to me at the Ophthalmic Hospital, complaining that he could not see on his right side. About three months ago, after having felt giddy, he found that he could not see well with the right eye. I found that his condition was that of true vertical hemiopia. I made him look at a candle about six feet in front of him. A second candle, held to the right of the first, could not be seen in the least until I carried it behind and across the first to the left of it, when it became visible at once. All to the right of the first candle was, he said, absolute darkness; and, after careful experiment, there seemed no reason to doubt his statement. He said that he could not go out in the street alone on account of his being unable to see to the right. To the left, he could see well—as well as ever. He can see fairly with either eye to the left; but not quite so well with the right as with the left eye. He has had no pain in the eyes. Before the right he has had a black cloud floating; sometimes it would be coloured blue or different colours. This he has noticed for six months. Not being able to read, his accuracy of sight could not be tested with much nicety; but there was no doubt that he could see large print very fairly. At a distance of ten feet, he can make out letters of No. 20 with either eye, and nearly as well with the right as with the left.

Ophthalmoscope. No morbid condition is to be detected in either eye. The media are clear; the blood supply is good. There are no apoplexies.

To explain the symptom of one-sided blindness presented in this case, we must have recourse to the anatomical fact, that the fibres of the optic tracts decussate at the commissure in such a manner, that one-half of each eye is supplied by each tract. Thus syphilitic deposit in one tract would cause loss of perception of impressions received by the outer half of one retina and the inner half of the other. This is exactly what our patient suffers from; and as he presents no general symptoms of cerebral disease, it is in a high degree probable that the diagnosis suggested by anatomy is the correct one.

Case III. Our third patient is Mrs. P., aged 37, a very cachectic woman, who applied on account of loss of power in her arms, more especially in the left arm. On her right forehead, is an ulcerated node; both her pupils are partially occluded, and very irregular, from the results of iritis.

Her statement is that she had enjoyed good health until two years ago, when she had, at the same time, inflammation of both eyes and a rash. A discharge also occurred; but she is not aware that she had any sores. More than one surgeon who has seen her has put questions as to venereal disease. She is married; and denies that she ever had reason to suspect the disease in question.

Her left arm is very weak, so that she cannot dress herself or pick up objects. She can move the fingers well, and feel perfectly; but the weakness is chiefly in the arm and shoulder. Her deltoid and infra- and supra-spinalis muscles are atrophied, so that they present a very marked contrast with those of the other limbs. She has no loss of sensation in the overlying skin. There is much tenderness, and some slight periosteal enlargement in the left humerus above the insertion of the deltoid.

Her right upper arm is in better condition than her left; the muscles are not materially atrophied; but she complains that the right hand is very useless, somewhat numb, and liable to "pins and needles." She considers that her arms have been more or less affected for two years.

She says she does not sleep at all on account of severe pain in the top of the head, temple, and left arm. There is nothing amiss with the legs. She has great irritability of the bladder, almost amounting to incontinence of urine. She considers that the right side of her scalp is numb, and the right forehead and cheek also. The right temporal muscle is not nearly so large as the opposite one.

Probably she is wrong in the date assigned to the commencement of her ailments, and that a much longer period has elapsed since the primary disease. She has three healthy children; the youngest is 14 years old.

She was salivated when she had iritis; but she does not think that she has taken much mercury since.

In this case we shall prescribe iodide of potassium, and with great confidence that our patient will be benefited.

The knowledge of the fact that the symptoms of central disease of the nervous system, when coming on gradually and without other obvious cause, are frequently connected with syphilis, is highly important, and will often enable us to relieve patients

* This man remained under treatment about six weeks, taking the iodide of potassium all the time. He greatly improved in health, and his eye receded to its former level. He was strongly urged to attend as an out-patient, and to continue the treatment some months longer.

otherwise incurable. I may venture the hint further, that in cases of this kind in which you cannot arrive at a positive diagnosis, it is a very justifiable practice to try the effects of an efficient course of iodide of potassium. It rarely does harm, and may chance to do much good. It is not by any means always that we can arrive at a satisfactory conclusion as to the cause of our patient's malady, whereas we must always try to do something for his benefit.

Symptoms of disease of the nervous system may be produced by syphilis in two different modes. Either syphilitic inflammation of the nerve-structure itself may occur; or the nerve may be involved secondarily by disease beginning in the periosteum or bone adjacent to it. In both of these, either a nervous centre or a nerve trunk may chance to be the part involved. Cases of syphilitic inflammation of nerve-structure itself are very much more rare than are those in which nerves are irritated or pressed upon by syphilitic effusions from adjacent structures. That they do sometimes happen, however, there is not the least doubt. Large masses of syphilitic induration have been found in the brain itself, and on the trunks of nerves swellings constituting syphilitic neuromata are occasionally seen. Let it be noted that these are amongst the latest of the tertiary symptoms of this disease. They hardly ever occur within the first two years of the disease, and more frequently after a much longer period. A similar remark applies to cases in which the nervous structures are injured by periostitis of adjacent bones. All the various forms of node are tertiary symptoms, and usually late in their occurrence.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. Waters, M.D.,
Physician to the Hospital.

[*Continued from page 607 of vol. II, for 1862.*]

Case XXIII. *Pericarditis: Recovery.* Thomas D., a seaman, aged 37, was admitted into the hospital on December 1st, 1862. He was a stout muscular man. He said he had suffered from rheumatic fever twelve years before the date of his admission, but had had no subsequent illness. Six days before he was brought to the hospital, he was seized with a sharp pain in the epigastrium, with dyspnœa and a sensation of constriction across the chest.

When seen on December 2nd, he complained of pain, increased on pressure, in the epigastric region, of a jumping sensation about the heart, and of pain in the limbs. There was no tenderness over the heart, nor any increased dulness; the cardiac sounds were free from murmur, but faint. The pulse was 94, and regular; there was an anxious expression of countenance. He was ordered some Dover's powder at bed-time, an ether mixture to be taken during the day, and for food, beef-tea.

On December 3rd, the pulse was 88, and dicrotic in the right arm. The patient had been delirious during the night, and the pain and anxious expression remained. Friction-sound was audible at the lower part of the right pleura in front. There was no friction-sound over the heart. He was ordered a grain of opium every six hours, and a linseed-meal poultice to the chest.

On December 4th, the pulse was 84. He had passed a better night, and had perspired a good deal. Friction-sound was audible in the right pleura and in the pericardium, both at the base and apex of the heart. He was ordered twenty grains of bicarbonate of potash every six hours, and to continue the opium.

On December 5th, the pulse was 112, feeble and very irregular. He had slept well during the night; but about 5 A.M. had had a severe attack of pain and dyspnœa. He was perspiring profusely. The right hand was swollen and painful. Friction-sound was audible all over the heart. He was ordered an ounce of port wine every four hours, and the following draught every three hours: Potassæ bicarbon. gr. xx; tincturæ opii ♏xv; spiritûs ætheris sulp. comp. ♏xv; aquæ ℥j.

On December 6th, the pulse had fallen to 96, and was regular. He had slept well. There was less anxiety of countenance, and the appetite was better. Friction-sound was audible over the middle and base of the heart. There was no increased dulness.

On December 7th, the pulse was 80, and pain was complained of in all the joints. Friction-sound was still heard in the pericardium and right pleura. He was ordered to take the draught every four hours; and on the 8th, it was given every six hours. The wine was continued.

On December 9th, the friction-sound was less marked and more circumscribed. The urine was neutral; the pulse 80. He was ordered a roast slice.

On December 11th, the friction-sound could not be heard. He continued the potash and laudanum up to the 16th, when the latter was omitted. From this date, with the exception of a slight return of pain in the limbs, he progressed satisfactorily to recovery. The wine was stopped on the 22nd, and the potash on the 27th. He subsequently took quinine; and was discharged well on January 27th, 1863.

Case XXIV. *Pericarditis, with Extensive Effusion: Recovery.* James W., a bar-tender, aged 23, was admitted into the hospital on February 24th, 1863. He had been ill for three weeks before admission, and had been confined to his bed for one week. His symptoms had been pain in the chest and dyspnœa. He had been attended by a surgeon, and was under the influence of mercury.

On admission, he complained of pain in the chest, hands, and feet. He said he had been much purged. The pulse was 120, very feeble, but regular; the skin was hot, and there was profuse perspiration; the tongue was dry, brown, and furred. There was an anxious expression of countenance, and pain on pressure over the heart. A loud friction-sound was extensively heard in the cardiac region. He was ordered six ounces of port wine, a linseed-meal poultice to the chest, and the following mixture.

℞ Potassæ bicarb. ʒiij; potassæ acetatis ʒij; tincturæ opii, ♏lxxx; aquæ ad ℥viij. One ounce to be taken every four hours.

On the 25th, he had not slept, and had been purged several times. The pulse was 124. He had had opium and brandy to check the diarrhœa. He was ordered to take ten minims of laudanum every hour; and to continue the alkaline mixture without the acetate of potash. He was purged six times during the afternoon; and in the evening, was very prostrate. He was ordered an ounce of brandy every three hours, in addition to the wine, beef-tea, etc. The alkaline

mixture was stopped, and an astringent one substituted.

On the 26th, the diarrhœa continued; the friction-sound over the heart was less extensive, but still well marked; the pulse had risen to 132. He was ordered half an ounce of brandy with arrowroot every hour. He took freely of nourishment. In the evening, he had had some sleep, and appeared somewhat better. A blister was applied over the heart.

On the 27th, the bowels had acted nine times; he had taken twenty minims of laudanum with chalk mixture after each motion; he had also had eight ounces of port wine, brandy and arrowroot every hour, and two pints of strong beef-tea. The pulse had fallen to 120. The blister had risen; and he said he felt easier about the chest. There was increased dulness in the cardiac region; but no friction-sound was audible. He was ordered a grain and a half of opium at bedtime, and to continue the astringent mixture with ten minims of laudanum only to each dose.

On the 28th, the pulse was 118; the bowels had acted five times. He had taken eight ounces of brandy and six of port wine in the twenty-four hours.

On March 1st, he had passed a good night. The heart was felt beating in the second left intercostal space; the cardiac dulness had increased. Friction-sound was heard on pressure, not otherwise. Another blister was ordered. During the night, he became somewhat delirious; and on the following day, the diarrhœa was increased. A grain of opium was ordered every six hours, and an opiate enema after each motion, instead of the astringent mixture.

On the 3rd, there had been some delirium during the night. The bowels were more quiet, and he appeared much better. The tongue was becoming moist; the skin was cooler; and the pulse had dropped to 102.

On the 4th, the pulse was 100.

On the 5th, it had fallen to 92. He had had only two motions. There was less dulness over the heart; and friction-sound was heard on pressure. He was taking two grains of opium at night, ten ounces of port wine and six of brandy daily, beef-tea, etc.

On the 7th, the bowels were quiet; the pulse was 80; and the tongue was cleaner. The heart-sounds were clear at the base. No friction-sound was audible.

On the 9th, he began to take quinine; and the stimulants were diminished to eight ounces of wine and three of brandy daily, with chop, etc.

He progressed rapidly from this date. On the 18th, the brandy was stopped, and the quinine increased in dose. On the 21st, there was no increased dulness over the heart. No friction-sound was audible. The heart's action, and the situation of its beat, were normal; and the sounds were free from murmur.

He was discharged well on the 24th.

Remarks. The foregoing case presents some features of peculiar interest. The patient had been confined to his bed for a week before admission into the hospital; and we may assume, perhaps, that the pericardial inflammation had existed for that period. He had been put under the influence of mercury; but no beneficial effects had been produced on the disease. The remedy, instead of controlling the inflammation, had given rise to severe diarrhœa, which had produced a condition of extreme exhaustion; and, although opium was largely given after admission, it was several days before the action of the bowels was checked; during that time the patient's state was very critical.

The case serves to show the dangerous symptoms that may be produced by mercury, when its action on the bowels is not controlled, and the value of stimulants in certain pathological conditions, although one of the most important organs of the body is the seat of extensive acute inflammation.

[*To be continued.*]

Original Communications.

ON SANTONINE:

WITH ESPECIAL REFERENCE TO ITS USE IN THE ROUND AND THREAD-WORM.

By William Anderson, M.D., Resident Physician to the Birmingham General Hospital.

The introduction of "santoninum" into the *British Pharmacopœia* was no more than was expected by those practitioners who have for several years been convinced of its efficiency, and especially of its superiority to all known anthelmintics in the treatment of the round worm.

Though known in America and upon the continent, it has been little used in this country, and is not mentioned in some of the more recent works upon the practice of physic. Dr. Fleming, of Queen's College, Birmingham, describes it to me, after an experience of more than five years, as the best of known remedies for the round worm and ascarides; and pronounces it, as the result of his observation, to be decidedly superior to spigelia, of which he has made many trials, and which has been so highly praised by our American brethren.

A correct knowledge of its action and mode of administration must be very important to those living and practising in districts where these worms abound and give rise, as they often do, to symptoms of the most formidable and alarming nature—epileptiform seizures, intense headache, hypochondriasis, and dyspepsia, in their most aggravated forms.

The question has been raised, whether or not the presence of these worms in the intestinal canal is injurious to the economy; but when I mention that last year a case of perforation of the intestine accompanied by fatal hæmorrhage occurred in this hospital, and that many of the cases here are attended with such symptoms as to make the patient's life miserable, and greatly to deteriorate the health, if not lay the seeds of incurable disease, I think that this position will be no longer tenable. Moreover, the remedy is so simple, and tasteless, if not pleasant, as prescribed, and productive of no disturbance whatever, that I am inclined to think that any one who had a well-founded suspicion that his patient was suffering from lumbrici, would be only too glad to avail himself of this easy method of curing what might at any time prove a fatal, and is at all times a loathsome, malady.

The lad mentioned above where perforation took place in the duodenum, had nine lumbrici in his intestines; and patients have presented themselves suffering from the symptoms of the disease, who have passed upwards of a dozen after a few doses of the remedy. One man, after taking five grains of santonine three times a day, passed three worms the morning after taking the medicine, two the same night, and one the morning following—six in all—and was very soon in perfect health, although before he was miserable from headache, sickness, and nervous debility. Many such cases could be quoted where immediate relief has been obtained and no disturbance caused, and it is only in cases where large doses have been used that the drug has caused vomiting, purging, or prostration; the tendency to purging

with moderate doses being never observed in my experience, the bowels being, on the contrary, generally somewhat constipated after the medicine, and requiring gentle purgatives, as castor oil. Several times patients have complained of seeing things green and yellow after the use of santonine; and have been not a little alarmed lest this state of things should continue permanent; but I have never met with a case where they complained of seeing objects red, as is stated by some.

The urine is always coloured of a yellowish-green hue; and I was surprised to find that, on the addition of a few drops of liquor potassæ it is instantly changed to the brightest red colour—a very pretty reaction, which any one can verify with ease for himself.

The dose for adults is from two to six grains, and for children from half a grain to a grain. Dr. Fleming recommends the following formula, which I have found very convenient and vastly superior to any other; although I have been in the habit of giving it three times a day instead of at bedtime, and have not noticed any injurious, but, on the contrary, beneficial—that is, more certain and speedy—effects from so doing.

℞ Santonini gr. ij ad gr. vj; sacchari lactis gr. v.

The patient, having fasted since midday, takes this powder at bedtime, suspended in a tablespoonful of cream; next morning, a dose of castor oil; and this process may be repeated several nights, or until the worms are discharged.

But what I am particularly anxious to direct attention to is the *rationale* of the action of the drug, inasmuch as I regard it, from the peculiarity of its behaviour and relation to the intestinal juices, as a *specific for lumbrici only*; though no doubt useful, both as given by the mouth and by injection (dissolved in a weak alkali), for ascarides.

The salient points to be kept in remembrance, with a view to understanding the theory of its action, are as follows.

1. Santonine is not soluble in water, nor in weak acids like the gastric juice.

2. In all likelihood, it passes through the stomach unchanged, until it meets the alkaline juices of the duodenum, in which it is freely soluble.

3. If properly administered, as with sugar of milk, and suspended in cream, the drug is not rendered soluble, and hence not active as a worm poison until brought into actual contact with its victims in the small intestines.

4. If it were administered already dissolved in an alkaline menstruum, we should incur the risk of its absorption in the stomach before reaching the parasite.

Case I. H. S., aged 22 years, suffered for two months before coming under treatment as an out-patient, from "dimness in the eyes, low feelings, numbness and mythering in the head", and a choking feeling in the throat, so severe that at times he "thought he should have died." He also complained, on being questioned, of very low spirits and inability to follow his work, that of a nailer. About a fortnight afterwards, he had a fit, undoubtedly, from the description of his friends, epileptiform; and he applied for medical advice, and got six powders, which, however, left him still worse than before. He was confined to bed and miserable; and was induced to come here six weeks after the occurrence of the fit. He was ordered santonine and sugar of milk, of each five grains, three times a day. The result was the removal, to the patient's astonishment, of seven lumbrici, one alive, the morning after taking the powders. A dose of castor oil removed two alive the following morning; three dead the next morniug; and one, also dead, the following night. He says he felt rather lightheaded soon after commencing to take the powders; that he saw things green and yellow at intervals (never red); and that his urine was "yellow like gold."

Case II. T. S., aged 6 years, admitted on April 25th as an in-patient, had suffered from violent epileptic attacks for several months. I regret that I do not possess accurate notes up to the termination of this child's case, as she left this hospital for London. Though only six years of age, and a pale, anæmic child, she passed no fewer than eighteen lumbrici during the first six weeks of her stay in the hospital; and sixteen of these eighteen were passed after taking santonine, none having been passed after the use of the male-fern, which was given on the suspicion of tænia being present, and only two being removed after turpentine with castor oil.

This case is also interesting from the fact that she was able to take the very large dose of six grains of santonine three times a day; and for one day she took ten grains three times a day, without any other effect than sickness and faintness.

The epileptic attacks continued almost as frequent as before at the time of her dismissal; but, in my opinion, it is by no means improbable that, from the long continued presence of such an irritation as must have been caused by the presence of so many of these immense worms in this little creature, the epileptic habit (if I may so express myself) may have been established. Other remedies, zinc and atropia, had no effect upon the epilepsy.

Case III. S. J., aged 30 years, married, admitted as an out-patient on December 3rd, 1863, had suffered for three months from pain in the stomach and right side, and from "a choking and rising in the throat and complete loss of appetite"; and having vomited a lumbricoid worm, she applied to a medical man, who prescribed some powders for the worms; but she passed no more worms, and was not at all relieved. She came here on December 3rd, and was ordered five grains of santonine with sugar of milk three times a day, which large dose she continued to take for a fortnight. During these fourteen days, she passed eight or nine lumbrici all dead, and is now in perfect health and free from pain of any kind.

She states that on the first and second days after taking the powders, she almost lost her eyesight and "saw things of all colours", and turned giddy, and was obliged to confine herself to bed, as she felt weak and unable to go about. The bowels were constipated, and she took castor oil. The urine was of a citron yellow, and became of a beautiful crimson colour on the addition of liquor potassæ.

Many cases similar to the above could be quoted; and cases to show the superiority of this drug over the powder of the artemisia santonica, which I have given to children in the dose of twelve grains night and morning, with very little comparative benefit. In these cases, the urine was only tinged of the slightest pink on the addition of liquor potassæ; and the patients never complained of any effect upon their eyesight.

The greenish-yellow colour of the urine and the deepness of the red colour on the addition of an alkali (for ammonia, soda, and lime give the reaction as well as potash) bear a direct relation to the strength of the dose.

Dr. E. Rose of Berlin took fifteen grains without injury, and found that twice that quantity was sufficient to poison a rabbit by convulsions and ascending paralysis. (*Archiv f. Path. Anat.*) I have taken small and large doses of the drug without any bad effect; and along with my friends Messrs. Elkington and Birt, have detected a perceptible red tinge in the

urine a very few minutes after taking a dose, showing that this is a substance very easily absorbed. Indeed as it shows its presence in the urine so quickly, it seems reasonable to conclude that some of it, or some constituent of it, must be absorbed even in the stomach, although it is pretty clear that the active part of it is dissolved in the alkali of the duodenum.

If given in the form of solution as santonate of soda, probably more would be absorbed, and the serum of the blood and the urine more intensely coloured; for it has been found partially unacted on in all parts of the intestinal canal, and in the fæces themselves when given alone; but it would not be nearly so efficient when dissolved as a worm poison.

I believe that just as certainly as practitioners will find this drug a *specific and sure poison for lumbrici*, so certainly will they be disappointed if they use it indiscriminately as an anthelmintic in cases, for instance, of tænia, where I have satisfied myself it is decidedly inferior to the male-fern and to kamela. It is, however, as stated above, of service in the thread worm, especially as a weak alkaline injection; in such cases, however, I think I have found as good results from enemata of infusion of quassia (four times the usual strength) with common salt. It is so difficult to get out-patients to manage such matters to one's satisfaction, that I have not yet been able positively to ascertain how far it acts as a direct poison to these very troublesome parasites. It remains a great desideratum to find some anthelmintic which would act for these worms according to the plan of action of santonine for the lumbrici—that is, that would remain comparatively inert just till it met with its victim in its peculiar habitat. To give medicines by the mouth which are acted upon, and consequently act upon the patient during the whole time of their passage through the intestinal tract, for parasites infesting the other end of that tract, is certainly a very roundabout proceeding.

I was induced to try the following experiments upon rabbits, with a view, if possible, to elucidating the physiological action more clearly, and I regret that want of time prevents me at present from following up the very interesting results I obtained as a commencement.

At 5.15 P.M. the duodenum of a rabbit having been ligatured, fifteen grains of santonine were administered. At 6.20 the urine was tested, and gave the characteristic reaction. At 7.40, the rabbit having quite recovered, a scruple of santonine was administered, and at 9.25 the urine was very strongly coloured, and the rabbit gave no symptoms of any disturbance whatever. At 9.45 the ligature was removed, a blood-vessel being accidentally divided and a good deal of shock experienced, from which the creature was only recovered by stimulants, and died some hours afterwards during the same night.

Unfortunately, as is usually the case with rabbits, the stomach was not empty at the time of the operation, and a considerable quantity of food remained, in which a large quantity of the drug was found unacted upon.

A second rabbit had a dose of a scruple, followed at the interval of half an hour by half a drachm, without any injurious, or indeed any visible effect whatever. The next day, the animal appearing in perfect health, was given the large dose of one drachm, still without any apparent effect, and this was followed by a dose of half a drachm in an hour and a half. To my astonishment, these large doses produced still no effect, beyond perhaps a little dulness, which soon passed off when the animal was roused.

Being tired with feeding the animal with the powders, I injected a drachm in suspension again without result, and I regret to say that an accident destroyed the life of the creature immediately after I had injected a second similar dose, an hour afterwards.

It would appear, then, from both of these experiments, that it requires a much larger dose than thirty grains to poison a rabbit, as stated by Dr. Rose of Berlin, and quoted by others. Secondly, that some of the constituents of the drug are absorbed in the stomach as the colouring matter appeared in the urine, although the pyloric orifice of the stomach was tightly ligatured.

Had time permitted, I wished to try how large a dose it required to prove fatal in the rabbit both in the stomach alone, and when allowed to go through the whole intestinal tract; and as santonine when given in powder has been found unacted upon in the excreta, whether when given in solution it was more active as a poison. These points I hope yet to be able to determine.

We may now expect that, as it has appeared in the *British Pharmacopœia*, more experiments will be made as to its mode of action. I think no one who fairly tries it will refuse to allow it to stand *facile princeps* as an anthelmintic for the round worm, and I hope many will be induced to try it also in other diseases for which it has been recommended; as, for instance, in the uric acid diathesis (in which I have found it of decided benefit), some cases of amaurosis, etc., as it may confidently be hoped that a remedy which exercises such an important influence upon the circulatory and nervous systems, and conseqently upon general nutrition, may prove of great therapeutical value.

[*To be continued.*]

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

LARYNGO-TRACHEOTOMY IN AN INFANT FOR THE REMOVAL OF A FOREIGN BODY.

By FREDERICK J. BROWN, M.D., F.R.C.S., Consulting-Surgeon to St. Bartholomew's Hospital at Rochester.

[*Read April 1st*, 1864.]

MARY ANN P., aged 6½ months, residing at Chatham, was seen by me in consultation with another practitioner on May 11th, 1863.

She met with an accident on May 1st. A piece of walnut equal in size to a domestic fly (weighing two grains when dried), was put into the mouth of the infant by another child, and it was carried into the wind-pipe by a sudden inspiration. There was urgent distress at the time, and a recurrence of laryngeal spasm many times daily, subsequently. The object moved freely up and down the trachea, and occasionally impinged against the rima glottidis.

I performed laryngo-tracheotomy at noon, putting the child slightly under the influence of chloroform. I introduced a pair of forceps into the trachea to search for the object. I believe that the trachea became occluded either by the foreign body or by blood, for the child ceased to breathe for one minute.

I handed the infant to its mother to be nursed and suckled, and in three hours' time returned and adopted a method that ought to have been practised at first; viz., I passed ligatures into the fascia on each side of the opening into the wind-pipe, and thus separated the edges. The foreign body was immediately expelled by an expiration. The child speedily recovered.

Progress of Medical Science.

MEDICINE.

Syphilitic Lesions of Internal Viscera. The affections of internal organs arising from syphilis, have during the last few years been receiving considerable attention from pathologists in this country and on the continent. M. Lancereaux, *chef de clinique* in the Paris Faculty of Medicine, has lately published the results of some researches on the subject in which he has been engaged since 1858.

The lesions, he says, produced in the viscera by syphilis present in general sufficiently well defined characters to allow of their cause being specified. They may be grouped under the following forms: 1. Interstitial inflammation: 2. Gummata or Tumours: 3. Cicatrices.

These organs, such as the liver and testis, which abound in parenchyma, are most liable to the first named of these forms. New elements (nuclei, cells, and fibres of connective tissue, are developed in the meshes of the organ, producing enlargement and ultimately contraction and atrophy. When this takes place, the surface of the above named glands presents furrows and depressions of greater or less depth, giving a characteristic appearance to the organ. In the liver, we find lobular cirrhosis, *i.e., cirrhose à gros grains*, as M. Lancereaux calls it—a state very different from the granular induration of drunkards, or *cirrhose à petits grains*. The inflammatory form is less distinct in the other viscera, as the brain, kidneys, lungs, and heart; and is also more difficult of recognition—that is, when one organ alone is apparently affected. In these organs, it manifests the characters of cerebral induration or softening, of interstitial nephritis, or of chronic pneumonia or carditis.

The second form of visceral syphilis is characterised by the presence of tumours varying in size from a pea to a haricot bean, and generally termed *gummata* or gummatous tumours. They may be firm or soft in consistence, and of a grey, whitish, or yellowish colour according to their age and to the relative proportions of their histological elements. They are ordinarily surrounded by a dense greyish vascular fibrous tissue, very resistant to the finger; this forms a kind of cyst from which they may sometimes be enucleated, and its presence is often a sufficient guide in distinguishing these tumours from tubercle, cancer, and most other non-syphilitic new formations. Gummata in their early stage are constituted of the embryonic elements of connective tissue. Having arrived at a more or less complete degree of development, they undergo a retrograde or fatty change. They may be spontaneously absorbed. This termination is doubtless favourable; but traces of the presence of the tumours may be left in the form of cystoid membranes (in the brain), fibrous bands, or cicatrices (in the liver). In some cases, the tumours undergo calcareous transformation.

Syphilitic gummata are readily distinguished from cancer, and from fibrous or fibro-plastic tumours, by the small amount or absence of vascularity, and by their situation; but they are very easily confounded with tuberculous or scrofulous deposits, vascular atheromata, and deposits arising from glanders or farcy. Their nature, however, may be determined by a consideration of the characters already described, and by a careful examination of all the organs and of the liver in particular.

The formation of cicatrices is in reality only one of the modes of termination of the preceding forms of syphilitic lesion. It is characterised by the presence, on the surface of organs, of one or more furrows; of more or less deep depressions; and by fibrous bands in the interior. Of these lesions, the first—furrows and depressions—are distinguished from the atrophy consecutive on obliteration of the vessels, by the presence of a fibrous cyst at the depressed part, and by their having no relation, as regards situation, to the distribution of the vessels. From cicatrices left after wounds, they are distinguished by the absence of the colouring matter of the blood. The fibrous bands in the interior of organs are distinguished from absorbed and cicatrised purulent deposits by their numbers, as well as by the absence of purulent *detritus* in the neighbourhood.

In the vascular glands hypertrophy sometimes occurs, with or without alteration of the elements of the organ. In 24 cases, M. Lancereaux found hypertrophy of the spleen in 10 cases; of the mesenteric glands in 10; of the thyroid body in 4; and of the suprarenal capsules in 2. In some cases, he has found hypertrophy of the follicles at the base of the tongue and of the pharynx and tonsils. This lesion of the glands is generally accompanied by modifications in the blood and by cachexia.

Fatty, amyloid, lardaceous, or waxy degeneration of organs, especially of the liver or kidneys, were found in several cases; but M. Lancereaux is not disposed to regard them, like the lesions already described, as the direct results of the syphilitic infection. From his examination of individual organs, M. Lancereaux has arrived at the following results. In the liver, he found interstitial hepatitis or cirrhosis, in 3 cases; gummata without cicatrices, in 1; cicatrices without tumours, in 7; cicatrices of the surface of the liver with gummata in the substance of the organs, in 9. In most of the cases, the liver had also become adherent to the diaphragm or to the neighbouring viscera; but perihepatitis was never found independently of the other appearances described.

In the kidneys, among 24 cases, there was interstitial nephritis in 3 instances; interstitial nephritis with waxy degeneration in 2; small tumours disseminated through the renal parenchyma in 1; cicatrices on the surface, with atrophy, in 2.

The testes were affected in three cases. In one, there were gummatous masses in both testicles, producing enlargement; the proper glandular tissue had entirely disappeared. In another, there were gummatous deposits in one testicle, and interstitial orchitis in the other; and in the third there was periorchitis. In some other cases, atrophy of the testicles appeared to be the result of syphilis. Similar changes were also found by M. Lancereaux in the ovaries.

In the brain, old gummatous tumours, having partly undergone fatty transformation, were found in two cases. In one case, a cyst-like membrane, with numerous partitions, occupied the greater part of the right anterior lobe. Cicatrices on the surface of one of the convolutions, and a cicatricial fibrous band between the grey and white substances, were present in one case. In one instance, there was amyloid degeneration of the pia mater and softening of the pons Varolii.

The lungs presented, in 2 cases, chronic pneumonia, and deep cavities with smooth regular walls; gummatous deposits in 3 cases; and superficial cicatrices in one. There were narrowing and dilatation of the bronchi in two instances; cicatrices and ulcerations of the pharynx (qu. larynx?) in several; and ulceration of the bronchi, in one case.

The heart presented, in 2 cases, gummatous tumours disseminated among a fibrous tissue, together with alteration or disappearance of most of the mus-

cular structure of the organ. In one case, there was simple myocarditis; and in two, lardaceous degeneration. In several instances, rapid or sudden death has arisen from the cardiac lesion.

The functional disturbances produced by syphilitic lesions of internal organs have no specific character. Each organ manifests its lesion by disturbance of its proper functions; and hence the symptoms proper to these affections vary not only with the organ affected, but with the seat and extent of the morbid change. The elements of diagnosis must, therefore, be sought for in the presence or previous existence of the internal manifestations of syphilis, and in the antecedents of the patient. It is well, in any case, to take into consideration age and other etiological circumstances; to examine most carefully the liver, which is most frequently affected; and to note the state of the kidneys, the presence of syphilitic disease in which often produces albumen in the urine. The simultaneous disease of several viscera is worthy of attentive consideration; but the special foundation for diagnosis is, together with the period (tertiary) at which the symptoms appear, and the peculiar progress of the numerous manifestations of visceral syphilis by special cachexia by which these are almost always accompanied.

In general, the prognosis of syphilitic disease of the viscera is to be regarded as serious, in proportion to the importance of the organ or organs affected.

Specific treatment, consisting of mercury and iodide of potassium, has often been found by M. Lancereaux, when used in proper circumstances, to rapidly remove serious symptoms, even when threatening a rapidly fatal termination. This treatment is useful for syphilitic inflammations and tumours, but has no effect on cicatrices. It must not be forgotten, that the prolonged use of these remedial agents is demanded. In this way, we may best obviate the tendency to a recurrence of the disease. (*Gaz. des Hôpitaux*, 17 Mars, 1864.)

Nitrate of Silver in Dysentery. M. Caradec relates in the *L'Union Médicale* six cases of dysentery treated in the following manner. After giving, when the patient is seen in the early stage of the disease, a purgative of sulphate of magnesia or castor oil, M. Caradec orders an enema of nitrate of silver night and morning, preceded by a copious enema of marshmallows or linseed. The quantity of nitrate of silver varies, according to the circumstances of the case, from three-fourths of a grain to a half for children, to four or five grains for adults, in about four ounces of water. A few drops of laudanum are added to each enema. The injections are continued at the same strength until there is a marked change in the evacuations, and at a lower strength until all discharge of mucus and blood, and all diarrhœa, have ceased. In cases where the disease has been seated too high to be reached by enema, M. Caradec has given the nitrate of silver internally, in doses not exceeding one-sixth of a grain three times a day. (*Bull. Génér. de Ther.* 15 Mars, 1864.)

Syphilitic Disease of the Brain: Recovery. A woman, aged 30, was lately admitted into the Lariboisière Hospital, under M. Duplay, with a well marked pustular syphilitic eruption on the arms. During several weeks, she complained of very severe occipital headache; she had obstinate vomiting, in consequence of which, the iodide of potassium which had been administered to her produced no effect. The patient now began to grow feeble; she stumbled, walking became more and more difficult, and at last she was confined to bed. While lying down, she had perfect voluntary power over both the lower and the upper limbs; there was therefore no ordinary paralysis, nor wasting palsy, but great muscular weakness. She had also double convergent squint, complicated with diplopia. The intellect and sensation, and the principal functions, remained intact. She had no fever, nor cough; nutrition was interfered with by the vomiting. M. Duplay diagnosed a syphilitic affection of the cerebellum. Mercurial treatment was employed; and in a week there was marked improvement. The pain in the head was less; the vomiting had ceased. The patient recovered her strength, and was soon able to sit up in bed, and to stand; the squint also disappeared. At the end of six weeks, she was dismissed cured; and, when seen some time afterwards, remained well.

Several similar instances are recorded in a work by MM. Le Gros and Lancereaux. (*Gaz. des Hôpitaux*, 5 Mars, 1864).

Purpura Hæmorrhagica: Intermittent Symptoms: Successful Treatment by Iron and Quinine. Dr. Nyssens of Maeseyck relates the case of a girl aged 13, to whom he was called, and whom he found suffering from purpura hæmorrhagica. At first he prescribed perchloride of iron; but, in dressing the patient for two or three days, he observed that the symptoms—bleeding from the gums and nose, etc.—were not relieved, and were aggravated in alternate days, and that the patient also presented rigors like those of intermittent fever. He therefore gave quinine in addition to the iron. The effect in relieving the symptoms was at once obvious; and under the continued use of iron and cinchona, with nutritious diet, the patient perfectly recovered. (*Gaz. des Hôpitaux*, 3 Mars, 1864.)

Trichinal Infection. While removing a cancroid growth from the neck of a patient arrived from the country, Dr. Langenbeck remarked that the platysma presented an unusual appearance. Microscopic examination showed that it contained an immense number of dead trichinæ, contained in calcified capsules. Inquiry was made as to the circumstances under which the immigration had probably occurred, and the following was the result. In 1845, a commission composed of eight persons went to a town in the district of Lausitz to inspect the schools. A collation composed of ham, sausages, cheese, roast veal, and white wine having been served to the commission, only seven members partook of it; the eighth was absent at the time, and only took a glass of red wine at the dessert. Three or four days afterwards, the seven who had partaken of refreshment were seized with intense diarrhœa, pain in the neck, and œdema of the face and extremities. In four the attack proved fatal; and in the three others, including the individual on whom M. Langenbeck had operated, only recovered after a tedious illness. (*Edin. Med. Jour.*)

The Tongue in Malaria. Dr. Bidwell draws attention to a condition of the tongue, indicative of the operation of malarious poison. Its under surface appears to have trespassed upon the upper, the papillæ of the latter being supplanted by the transverse rugæ of the former. The sides are thickened and rounded, the normal well-defined edge being obliterated, and the line of demarcation moved to nearer the mesial line. This appearance of the sides may be associated with any and every possible appearance of the remaining papillary surface, just as the malarious disease itself may be attended by any and every variety of morbid condition of the system. Through all this variety it is perfectly distinct, and when once learnt by actual inspection is unmistakable. Wherever Dr. Bidwell finds this malarious tongue, he gives quinine freely.

On the other hand, when soldiers come to him complaining of "chills," whose tongues do not present this appearance, they are unhesitatingly returned to duty. The remark that this appearance is an unfailing indication of the quinine treatment, is not to be understood as implying that such treatment is to be continued until the symptom disappears. That is not necessary or advisable. Relief and amendment do not wait for its disappearance, but even come some days in advance of it. (*Boston Medical Journal.*)

Reviews and Notices.

On Paralysis, Neuralgia, and other Affections of the Nervous System; and their Successful Treatment by Galvanisation and Faradisation. By Julius Althaus, M.D., Member of the Royal College of Physicians, London, etc. Third Edition. Pp. 236. London: 1864.

Dr. Althaus has several times appeared before the profession as an exponent of the practical value in medicine of the researches made by modern observers on electricity and galvanism, especially with regard to their influence on the animal body. And, in all his writings, he has shewn himself worthy of attention and of confidence, not only by the careful manner in which he has studied his subject both theoretically and practically, but also by the judicious and discriminating manner in which he points out the circumstances under which the agencies of which he speaks are applicable. His works are, in a word, admirable examples of the application of science to the practice of medicine.

The work before us has reached a third edition; and therefore, we conclude, is already well known to many of our readers. The author states, in his preface, that he has carefully revised the book, and has made numerous additions, both scientific and practical.

To all who are desirous of obtaining complete, and at the same time honest, information as to the value of galvanisation and Faradisation in affections of the nervous system, we cordially recommend a study of Dr. Althaus's book. Those desirous of more ample instruction, will find what they desire in his *Treatise on Medical Electricity.*

Topics of the Day: Medical, Social, and Scientific. By James Ansley Hingeston, Regist. Pract.; etc. Pp. 400. London: 1863.

Mr. Hingeston here gives a volume on subjects numerous and various which have engaged his attention.

He divides the book into three parts. In the first part, the following are the topics treated of: Atmospheric Phenomena in Relation to the Prevalence of Asiatic Cholera; the Atmosphere in Relation to Health; and the History and Practice of Vaccination. The second part contains essays on Hypochondriasis; Ethnological Psychology; the Human Brain; Duality of Mind; Deformity of Infantile Crania; the Deformed and their Mental Characteristics; Cleopatra's Death; and Horace's Death. In the third part, the author treats of the Wear and Tear of Medical Life; Three Thousand a Year—a Soliloquy; A Homœopathic Triumph; The War of 1854; The Peace of 1856; The Indian Rebellion in its Moral and Psychological Aspects; Orientalism; Ancient and Modern Civilisation; and Change of Scene.

This list will sufficiently indicate the variety to be found in the book; the preparation of which has doubtless lightened the toils of practice to the author, while its perusal will afford both mental recreation and instruction to the practitioner who may read it.

A Manual of Diet and Regimen for Physician and Patient. By Horace Dobell, M.D., M.R.C.P., etc. Pp. 36. London: 1864.

This little volume contains thirty-nine rules for promoting the health of adults living in the United Kingdom. In addition, the author gives tables of what he considers the essentials of a normal diet. "The manual" (he says) "has been constructed to supply a want felt by most medical men engaged in the practice of their profession." The rules are unexceptionable; but, as Dr. Dobell no doubt well knows, the difficulty is to get people to follow nature's and science's regulations in the hotbed of this artificial world, in which men are forced to live. In the matter of many of the prime necessaries of life—food and ventilation, for example—all society, even the most educated, is daily deeply sinning. May some of these sinners read Dr. Dobell's book, become wiser, and increase their days by living more after the laws of hygiene and common sense.

On Diabetes and its Successful Treatment. By John M. Camplin, M.D., F.L.S. Third Edition. By J. G. Glover, M.D. Pp. 104. London: 1864.

This is a posthumous edition of Dr. Camplin's little volume. He had, we read, completed the alterations and additions in it just before his death. The book is a reprint from the thirty-eighth volume of the *Medico-Chirurgical Transactions.* In this third edition, the author has had nothing to add to the principles of treatment laid down by him in his previous papers. "He has, however, revised the details both of diet and medicine, and rendered them more complete."

Notes on the British Pharmacopœia; shewing the Additions, Omissions, Change of Nomenclature, and Alteration in the Various Compound Preparations; with Doses of those Medicines which are comparatively new. By Adolphus F. Haselden, Pharmaceutical Chemist, etc. Pp. 82. London: 1864.

The press, we need hardly say, is teeming with commentaries and explanations of the *British Pharmacopœia.* This is another little volume added to its predecessors. The object of Mr. Haselden's attempt is, as he tells us, "to point out the additions, omissions, and change of name, which have occurred as regards the *British Pharmacopœia* when compared with the last *Pharmacopœias* of London, Edinburgh, and Dublin." Our readers will no doubt learn from this not very neatly prepared sentence the nature of the work.

Dr. Fleming has presented the Army Medical Library at Aldershot with 139 volumes.

British Medical Journal.

SATURDAY, APRIL 23RD, 1864.

THE MEDICAL COUNCIL AND MEDICAL EDUCATION.

A REFERENCE to the courses of lectures given in the London schools, the details of which will be found in our last number, cannot fail to convince the most sceptical that teachers themselves are all at sixes and sevens as regards both the subjects which should be taught, and the number of lectures which a given course should comprise. If Descriptive Anatomy can be taught sufficiently by lectures on four days a week at Guy's and some other schools, why should the student be required to attend lectures on this subject six days in the week at the London Hospital and University College? If enough knowledge of Physiological Anatomy can be acquired in two days of each week by a student at St. George's, why should attendance on five days be required of students at Charing Cross Hospital and elsewhere? If one day a week suffices to teach Comparative Anatomy at the London Hospital, why devote five days a week to this subject at University College? If lectures on Histological Anatomy are necessary, why are they given at three only of the eleven London schools? Chemistry is taught on three days a week at the Westminster School; why are four lectures on Chemistry given at King's College, and five at University College, in each week? If Practical Chemistry can be learnt by attendance in the laboratory on one day a week at St. Mary's, and on two days a week at the Westminster Hospital, why need the student at St. George's and at King's College attend on six days a week?

Such are a few of the anomalies of the present system; sufficient, however, to perplex and puzzle both parents and students. Botany, Materia Medica, Forensic Medicine, and Midwifery, are severally taught on three, four, and five days a week: Medicine on three, four, and five; but for the most part on three days a week. "Order is Heaven's first law"; but we shall seek in vain for any evidence of either order or system in the arrangements here recorded. No doubt we shall be told that all this apparent confusion is, in reality, a beautiful adaptation of circumstances to suit the ever-varying intellectual capacities of individual students; but such reasoning, we trust, will be regarded by the Medical Council as a species of metaphysical subtlety incomprehensible to the ordinary run of intelligence.

We fancy we can discern one great general error underlaying the whole system of the schools; and we think the Medical Council would be performing a legitimate part of their functions in giving their attention to this subject.

Those who have settled the courses of lectures (in the London schools, at all events), seem to have proceeded on the false and vain idea that medical education consists in the main in the teaching of the lecturer, and not in the acquisition of knowledge by study on the part of the student. They appear to have argued that the great point in the whole scheme is to give lecturers opportunity for lecturing; as if, in fact, students were made for lecturers, and not lecturers for students. The student is treated as a passive hearer; not as an active learner. The main fact seems to have escaped consideration; viz., that no amount of mere teaching can really educate for the medical or any other profession; that teaching is almost useless unless the taught be learners as well as listeners.

Our present system has tended in a very great degree to the discouraging rather than the fostering of learning on the part of students, who, in our lecture system, are treated more like boys than they were even when at school. At school, the boy was not taught his lesson; he had to learn it. He was made to exercise his faculties in working out his lesson, and attaining knowledge; but now-a-days, teaching has superseded learning, and education now consists in treating subjects of science, requiring close and thoughtful study as well as diligent observation, as adapted only for tedious discourse; in fact, it has become the art of displaying without imparting knowledge. Philosophy in sport, instead of Science in earnest.

What has been the result of this so-called system of education? Have students become earnest thinkers, attentive learners, diligent observers? Are they not too often listless, half-somnolent lecture-room attendants? Has not the practice of cramming greatly increased? Do not manuals abound—those charming little waistcoat-pocket volumes comprising whole sciences in a nutshell, the *reductio ad absurdum* of our present lecturing system? Lecturers, in truth, believed they had discovered what all the world else has been so long on the look out for, and in vain; viz., a royal road to knowledge; but, happily, we have at last begun to discover that there is something "rotten in the state." No doubt the original error which presided over the birth of some of our London schools has in part produced the present false system. We all know that more than one school has been hot-bedded into existence, not because it was wanted, or that students were short of lecturers; but because would-be lecturers were ambitious of having students. And we know that even chairs have been created solely for the accommodation of the lecturer. Out of one evil sprang another. The superabundance of lecturing power produced competition; this took the shape either of low prices,

or of an increase in the number of subjects taught—to the great misfortune of the student, and to the detriment of sound medical knowledge. At this crisis, our presiding genius, the Medical Council, happily steps in to save the student, and to teach his lecturers wisdom.

We have already, in our last number, suggested generally what we conceive to be the duties of the Medical Council in regard to professional education; it is unnecessary, therefore, to repeat it here. If something be not done to reform the present state of things, we shall probably find ourselves one day in a state of revolution. Some men are already beginning to ask—and certainly not without a show of reason—whether it would not be better to do away with the entire system of compulsory attendance on lectures, and leave the student to gain his knowledge how and where he best may, making the passing of a very stringent examination the sole evidence of his fitness for a qualification to practise. It is suggested that freedom in education may prove perchance as good a thing for the profession as freedom in trade has been for the country. Why, it has been asked, should a monopoly of teaching be guaranteed to any particular schools or set of men? Why should not any one who feels a vocation for the business become a trainer of medical youth? Look at your system, such reasoners say, and see the sort of fruit which it has borne. Many a lecture-room of your recognised teachers is deserted by the students, who yet flock to the classes of those natural born instructors, commonly called grinders, and willingly pay extra fees to be prepared for their examinations. These grinders are, as you well know, not to be ignored; they are numerous enough in London to make all recognised teachers scandalised. Why should they exist, and some of them make large incomes by lecturing, if your registered system were perfect? Moreover, if it be a fact, and you will scarcely venture to deny it, that a very large number of students are every year not only prepared for, but actually are enabled to pass their examinations solely through the instruction received from the grinder, what have you to say in defence of the system of recognised examinations which acknowledges the effectiveness of such grinding? You say that grinding is a deplorable thing; and yet you must admit that your system of examination is one which enables the man who has been so deplorably educated to pass through it. Herein do you not condemn either your official plan of education, or your official system of examination? Why do you not throw open the whole system of medical education, and make your examination the real and sole test of sound knowledge? Would it not be better for the country that it should be supplied with medical men who have been subjected to a very much more stringent test of their medical capacity, than any which is at present applied to them by your examining boards? Would it not be better, instead of relying in part upon the fact that the candidate has gone through certain prescribed courses of study, that you should ignore all his antecedents—take no thought of how or where he got his knowledge—and submit him to a test which would prove absolutely that he is fully competent to enter on the duties of practice. Would not this be better than requiring the candidate for a qualification to practise to pass a less stringent examination on the strength of the fact that he had, nominally or otherwise, gone through a regularly recognised and prescribed course of study.

Such is the sort of arguments which the revolutionary party is ready to pour forth; and we signalise them here in order to arouse the Medical Council to the urgency of the business on its hands. The Council has before it assuredly a great, a serious, and a most difficult task. If it fail in its performance, it fails in its duty, fails in the special business for which it was especially constituted, and for which the profession pays it so dearly. If the feeble voice of a *non possumus* should issue from its conclave, it is clear to us that it confesses either to a lack of power to execute, or to a lack of moral courage to perform its work. If its powers be really defective, then its duty is to get them enlarged; if it fail to act through weakness of purpose, why then— But such a calamitous conclusion we must not, for a moment, anticipate.

GARIBALDI AND HIS MEDICAL ADVISERS.

The present reported state of Garibaldi's leg and general health proves clearly enough that it was not for medical advice he visited England. The plain fact that his leg had recovered as well as a leg could have done under the circumstances of its injury, and that the wound had completely healed, must have satisfied his attendants and himself, before he left Italy, that his future remedy lay in the hands of time and nature, and that there was nothing for art or science to do further in the matter. His visit to this country we may safely affirm, had some much more powerful motive than this merely personal one. Garibaldi has not shown himself the man to be over-mindful of his own personal comforts. His journey to England manifestly had a political object in view. He came with the hopes of finding a remedy or some help, not for his own limb, but for the cure of the ulcers festering on the great leg of Italy, at Rome and at Venice. Mr. Partridge's letter in the *Times* gives a full account of his bodily condition.

"I saw General Garibaldi," writes Mr. Partridge on the 14th inst., "and am able to state that his visit to this country is quite unconnected with any seeking or necessity for medical or surgical opinion or treatment; this statement is due also to the able Italian surgeons to whose unremitting care and skill (aided

by his own excellent constitution and abstemious, active habits) the General is indebted for his successful cure. General Garibaldi's health, which had been somewhat impaired by the long confinement of his wound, so as to render a change of air and scene desirable, is now quite restored, and he looks and declares himself to be in excellent condition. The limp, and use of a stick in walking, are owing to a remaining stiffness of the ankle-joint and of the sheaths of the surrounding tendons; but, as the articulation retains some degree of movement, and the foot is in good position—at right angles with the leg—it is not improbable that with time, care, and moderate exercise, the joint will become, so to speak, more supple: and that eventually, though a certain degree of lameness must always exist, a useful and active limb will be obtained. With regard to the present condition of the leg and foot, there is no swelling nor inflammation of either; the wound has quite healed, is free from discharge; and though the scar is a little tender, and requires the protection of a slip of plaster, there is no present sign of abscess, nor of the existence of more particles of dead bone to come away. The foot, indeed, is turned a little inwards, but it has been so ever since the injury; and this is owing to the loss of support to the foot derived from the inner ankle, the bone of which was broken by the shot, and was afterwards cast off or exfoliated. The General is able to bear the whole weight of his body upon the injured limb, which is quite free from pain, except after over-exertion in standing or walking. The medical and surgical history of the General's case is fully detailed in the pamphlets of Drs. Ripari and Basile, copies of which I have presented to the libraries of the College of Surgeons and of the Medical and Chirurgical Society."

But English surgery is not happy in its dealings with Garibaldi. Last week we were told authoritatively that Garibaldi was in capital condition of foot and body. In Monday's *Times* appears Mr. Partridge's letter, informing us that the General was in as perfect health as could be expected; but, in the second edition of the *Telegraph* of the same day, before the ink of Mr. Partridge's letter was dry in the *Times*, Mr. Fergusson announces that Garibaldi must give up all this gallivanting about the country, or he will not answer for his health; and then, on the evening of the next day, Dr. Basile, "*Chirurgo del Generale Garibaldi*," writes a flat contradiction to Mr. Fergusson's letter; and affirms that the General can go through his programme of progresses with ease and safety, *tuto et jucundè*; "his health is perfectly satisfactory, and his wound, some four or five months cicatrised, no longer requires surgical care."

Naturally, people turn to other quarters for an explanation of these inconsistencies. Garibaldi's visit to England was purely a political visit, it is said; it was initiated in politics; it has been carried on politically; and apparently its end has a political aspect. People find it hard to believe that a man with an iron constitution, who has roughed it with impunity through many a severe campaign, should sink under the burthens of a score of silken *fêtes*—should "die of a rose in aromatic pain."

However, Mr. Fergusson now assures us that Garibaldi's once iron frame cannot bear the excitement and fatigue of this lionising. But then, again, we have, *per contra*, Mr. Partridge, who vouches for Garibaldi's health, and Garibaldi's own doctor Basile, who declares "that the General is able to undergo the journey which he proposed to undertake without danger."

It is not for us to reconcile such contrary opinions. We can only chronicle them, and say that we think them very much to be regretted, and that they might and should have been avoided. Mr. Fergusson, after his opinion is published, suggests a medical consultation on the case. We must venture to say that, in our opinion, he would have done far better, had he called the consultation before his opinion was published, and more especially as the question was manifestly, in the main, of a medical nature. Indeed, it seems to us very strange that any official notice of the health of Garibaldi should have been issued without previous consultation with Dr. Basile; or, at all events, that Dr. Basile's existence should have apparently been completely ignored in the matter. Professional etiquette, we consider, would have demanded that a consultation, at all events with Dr. Basile, should have preceded any such semi-official announcements. The fact of Dr. Basile being an Italian does not justify any departure from the ordinary rules of professional etiquette; and surely no English surgeon would have felt justified in issuing such a report without previous consultation with any English physician with whom he was in attendance in the case. We conclude that the ordinary rules of professional etiquette have been departed from by Mr. Fergusson in this case, from the fact of the publication by Dr. Basile of the letter above referred to, which we here give.

"Sir,—I have seen the letter of Dr. Ferguson to the *Times* of to-day concerning General Garibaldi's health, in which he states that it would be unsafe for his health to fulfil the engagements he has undertaken to visit certain provincial towns. I feel bound, as the physician in regular attendance upon the General, to affirm that his health is perfectly satisfactory, and that his wound, since four or five months cicatrised, no longer requires surgical care. I make this statement with greater confidence, inasmuch as it was confirmed on the occasion of his first consultation by Dr. Ferguson himself, and still more recently by Dr. Partridge.

"I am firmly convinced that the General is able to undergo the journey without danger which he proposed to undertake. Dr. G. Basile,

"*Chirurgo del Generale Garibaldi.*

"Tuesday Morning."

If Dr. Basile, indeed, were consulted by Mr. Fergusson, and differed from him in opinion at the consultation, why were not other physicians or surgeons called in, in such an important case, to decide the point differed on? We feel bound to make these remarks; for we can scarcely think that our profession has been put in a good position before the world in this matter. We might even go further, and say that, if strict and high etiquette had been observed

in this affair, Mr. Partridge should, in the first instance, have met Mr. Fergusson in consultation. Mr. Fergusson spoke, in his first letter, of the skill, etc., of Garibaldi's Italian medical adviser; why, then, should he ignore his existence in consultation? We may add, that we know on good authority, from one who has shaken Garibaldi's hand, and felt his pulse, and closely watched his *facies*, subsequently to all this correspondence, that the General is, to all appearance, hale, hearty, and well. That Garibaldi does not trust wholly to the advice given, is clear from the fact that he is still hesitating as to his departure. But whatever resolve he takes; whether he seeks further advice, and obtains consent therefrom to prosecute his journey through the country; or whether he leaves the country at once—still, in our opinion, our profession has not been happily illustrated in connexion with him. At the present moment, it is certain that a large and general feeling prevails throughout the country, that Garibaldi's proposed departure has more of a political than of a medical necessity. A solemn medical consultation would have prevented all such suspicions and surmises on his case.

Miss Garrett, the lady medical student who, as our readers may remember, was some time since refused admission to examination at the Universities of London and of Edinburgh, has obtained admission to examination at Apothecaries' Hall. Miss Garrett has, indeed, passed her preliminary and her first professional examination at the Hall; and intends, we suppose, in due time, to present herself for her final examination. But, some of our readers will ask, how can the Apothecaries admit the lady to examination? A five-years' apprenticeship is absolutely requisite of candidates; and surely Miss Garrett cannot have gone through this necessary preliminary. Again, by the terms of the Apothecaries' Act, it might be doubted whether a female is admissible to examination. No person or persons, it says, shall be admitted to examination, unless *he* or *they* have, etc. If Miss Garrett come in at all, she must come in under the *they;* but in such a reading of the Act, Mr. Lynx-eye, the lawyer, would probably pick a hole. Miss Garrett has also made application for admission to examination at the College of Physicians. Whether the Fellows will be gallant enough to admit her, remains to be seen; also, it remains to be seen whether they have the power to do so. The Charter says that *nemo admissus sit;* which, however, may, perhaps, by a little legal subtilty, be made to embrace the feminine gender. But then, again, it says that the College shall have power over *omnium hominum* of the Faculty of Physic; and it is difficult to believe that the idea of woman was intended to be embraced in the word *hominum*, whatever may be the strict etymological value of the word. The statutes, again, which recite the privileges of the College say, that the commonalty is to choose yearly a president, "to oversee, rule, and govern the said fellowship and commonalty, and all *men* of the said faculty." Now, if men mean the male sex, then it would seem, if Miss Garrett were admitted a member, the president would have no jurisdiction over her, she being a woman. But this could never have been contemplated. Altogether, the incident is a curious one; and will, probably, afford subject for subtle argument amongst the Fellows of the College, and perhaps amongst the men of law. The College, to solve the question, has laid the case before its men of law, to ascertain—1. Whether by its Charter it can admit females to examination; and 2. Whether, if it have such power, it can refuse to exercise it. When the legal opinion has been obtained, then the College will discuss the general merits of the doctors-in-petticoats question.

We may, with justice, alter the proverb occasionally, and say, "*Qui accuse, s'accuse.*" An instance of this occurred the other day at the College of Physicians. The excellent President was taken somewhat to task for having spoken, as it was alleged, disparagingly of the *British Pharmacopœia*. Dr. Farre undertook the defence of the badly-famed volume, and took exception to the President's ruling in the case. But the profession (as a body) has fully endorsed the President's views; and the public at large are greatly indebted to him for boldly giving from his seat a word of caution to doctors and druggists, not to meddle with a description of weapons of whose qualities they had not made themselves master. Dr. Farre's defence of the *British Pharmacopœia* was, in reality, not exactly a defence, but rather a bill of indictment drawn up against it. The fact is, that the old proverb of "too many cooks spoiling broth" is fully exemplified in the work. The volume is wanting in the true elements of success—in uniformity, simplicity, and oneness. We may fairly surmise that a regular triangular duel has been fought over it between the parties concerned in its production, and living in London, Edinburgh, and Dublin; and that the fighting was compromised by a general agreement that each belligerent should have, to a given extent, his own way. Hence, this uniformity of the *British Pharmacopœia* resembles that of the *United Kingdom* when the union was first declared—being much more nominal than real. Horace knew what was right in many ways; and that golden rule of his,

"Denique sit quodvis simplex duntaxat et unum,"

was not, we suppose, kept in mind by the *Pharmacopœia* Committee; and hence its failure.

How comes it that gentlemen who have passed their examinations at our Colleges of Surgeons are so often found unfit to perform the duties of army surgeons

Surely a man ought to be as well educated for the performance of his duties in civil as he is in military life. There must be something defective in the system of examinations which brings about such a result. We understand that, at the last examination of candidates for the army, there were fourteen gentlemen subjected to examination, and that of these only six passed; and that not one of them was admitted into the first class. This, it must be remembered, occurs at a time when medical men are very much wanted in the army, and, therefore, when, as it might be supposed, the examinations would not be pressed to any excessive extent. The fact is worthy the attention of the Medical Council at this moment.

At the present moment, the following extract from Palmer's *Life of John Hunter* may be read with interest. It shows in a striking manner the "developmental" state of modern medical education.

"It was customary for the lecturers of that day (1745) to treat in one course on a number of subjects, sufficient to furnish matter for three or four distinct courses according to our present system (1835); and the meagre amount of information afforded to their hearers may be judged of by the following facts, mentioned by Mr. Chevallier in his Hunterian Oration. Mr. Bromfield, who was surgeon to St. George's, and a lecturer of considerable note, comprised anatomy and surgery in a course of thirty-six lectures. Dr. Nicholls, at whose school (in Edinburgh?) William Hunter studied, professed to teach anatomy, physiology, and the general principles of pathology and midwifery, in thirty-nine; and Mr. Nourse, of St. Bartholomew's, embraced *totam rem anatomicam* in twenty-three lectures."

An inquest was held last week on Mr. John Lingard, a tradesman in Liverpool, who had died from taking five grains of strychnine instead of the same quantity of James's powder, which had been prescribed for him. From the evidence given, it appeared that the druggists at whose establishment the prescription was made up kept both the above named articles, with others, poisonous and non-poisonous, on the same shelf; several of them—the strychnine and James's powder especially—being in similar bottles. The assistant who dispensed the prescription took down the bottle of strychnine, which was near the James's powder bottle, and consequently put up a dose of the wrong material. The jury returned a verdict that the deceased came to his death "by the culpable neglect of Richard Poole" (the assistant) "in making up the medicine"—this being equivalent to a verdict of manslaughter. The jury also recommended that the druggists—Messrs. Clay and Abrahams—"should exercise greater precaution in the arrangement of the bottles".

An advertisement which appears in this day's JOURNAL states that arrangements have been made at the Royal London Ophthalmic Hospital, to give a series of demonstrations of the use of the ophthalmoscope. The first course is to commence on Thursday, May 12th, at half-past 7 P.M., and is to be continued weekly at the same day and hour, under the superintendence of Mr. Wordsworth, Mr. Hulke, and Mr. Hutchinson. We have much pleasure in bringing this announcement under the notice of our readers, as we are confident that, under such able teachers as the surgeons of the Ophthalmic Hospital, and with the ample means afforded by the institution, those who avail themselves of the opportunity now afforded them of obtaining knowledge in ophthalmoscopic matters, will not fail to receive most correct and complete instruction.

THE *Wien. Med. Woch.* states that, up to April 1st, 725 sick and wounded of the Austrian army had been sent home from Denmark. Catarrhs and inflammatory diseases were decreasing, but ague on the increase. Three hundred and seventeen wounded, of whom ninety-one were Danes, were still in hospital. The nursing of the sick was performed by 140 nuns, sisters, and charitable brothers.

The following gentlemen have been elected corresponding members of the Society of Physicians of Vienna: Dr. W. A. F. Browne, Dr. W. Farr, Dr. Lockhart Robertson, Dr. D. Skae, Dr. Sieveking, Dr. Conolly, and Mr. Toynbee.

Professor Budge has arrived at some interesting conclusions concerning the influence of the nervous system over the movements of the bladder. He finds a distinct connexion between the peduncles of the brain, the restiform body, the medulla oblongata, and the anterior columns of the spinal marrow, down to the end of the cord.

THE LATE CHARLES PALK COLLYNS, Esq.

DIED at Dulverton, on the 7th instant, aged 70, Charles Palk Collyns, Esq., Surgeon. Mr. Collyns was one of the oldest members of the Association; and in him the West Somerset Branch have not only sustained the loss of their President for the time being, but also of one to whom they were accustomed to look up for counsel and advice, feeling certain of his ready assistance and firm support in upholding the rights of the profession and promoting the welfare of its members. For half a century he practised at Dulverton; and so entirely was he identified with the place, that it will be very long ere his friends will realise the fact of his removal. He was beloved by both rich and poor; and with untiring energy he laboured night and day in their interests and for their benefit. As a keen sportsman, he had few equals; and his popular work on the *Red Deer of Devon* shows how close an observer he could be, and how much the members of the Devon Stag Hunt are indebted to him for the preservation of the wild deer, and for the maintenance and efficiency of the hunt.

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

Of the cases of excision of the knee-joint, which I mentioned in my last letter, two are likely—I may say certain—to make a capital recovery. Their progress has been uninterruptedly good. The case operated upon by Dr. Watson died of pyæmia.

Ovariotomy seems to be gaining ground in the estimation of the profession here. Dr. Thomas Keith, who had already had many very successful cases, has added two to their number; and Professor Simpson has likewise, I believe, twice performed the operation within the last few weeks. All our surgeons are now convinced of the justifiable character of the operation; and we may before long expect to hear of many cases operated upon in our Infirmary.

I omitted to mention in my last letter the occurrence of an epidemic of puerperal fever in the Maternity Hospital here. Of thirty patients who were in the institution at the time when the disease broke out, twelve fell victims to it. If I am correctly informed, a similar epidemic occurred about two years ago. This is not to be wondered at; for I may, without fear of contradiction, affirm that our Maternity Hospital is one of the dirtiest, ugliest, and worst ventilated hospitals in Europe. It has, I am sure, been a cause of wonder to many, that such a state of matters should be suffered to exist. How useful such an institution would be, were it properly managed, is certain; of its uselessness, under the present *régime*, in aiding the student in his obstetric studies, all are thoroughly convinced.

The subject of hospital mortality, and its causes, is highly interesting; and it would be well, were the medical staff of any hospital where such an epidemic breaks out, to think it incumbent upon them to make a complete and careful investigation into its causes, and to place the results before the profession. We should, in this way, gain an immense amount of knowledge as to the causes which lead to hospital mortality, and be able to diminish it to a surprising extent. Such an investigation has certainly not been made in the Maternity Hospital; indeed, the fact of there having been an epidemic was hushed up as much as possible.

On inquiring into the probable causes, we find that there probably have been many which have operated towards the promotion of the dire result. The wards of the hospital are usually over-crowded and ill-ventilated, and appear to be dirtily kept. Before the epidemic broke out, the hospital had been freshly painted; and, instead of admitting a smaller number of patients into the house whilst the painters were at work, the absurdity was committed of crowding still more some of the over-crowded wards. Besides this, we understand that the drainage of the hospital was in a most horrible state; and the stench arising from this cause must have co-operated powerfully to the production of the disease. To these two probable causes, some would add a third. The house-surgeon of the hospital has, it appears, been engaged in the surgical wards of the Royal Infirmary during the time of his tenure of office; and as pyæmia has prevailed to a certain extent in that institution, it is supposed that he may have conveyed it to the Maternity.

It appears to me, that when such very obvious causes for the disease, as over-crowding, bad ventilation, and bad drainage, exist in a maternity hospital, no astonishment should be created by any number of epidemics of puerperal fever. We really hope that something will be done to remedy this state of matters. If it exist, we cannot help thinking that it is very greatly the fault of the managing body. I am quite certain that, were a stir to be made in the matter, subscriptions would be given as freely to aid the suffering women, as they were graciously tendered when the want of a children's hospital was shown to exist. Were so influential a man as our distinguished professor of obstetrics to make a move in the matter, we venture to think the ladies of Edinburgh would freely come to the help, and co-operate towards the attainment of so desirable an object as the establishment of a good maternity hospital.

The Royal Medical Society held its annual dinner on Tuesday last in the Edinburgh Hotel; where, besides all the office-bearers and many of the ordinary and extraordinary members of the society, a great number of guests were present. Amongst the guests were several of the professors of the University, many of the extra-academical lecturers, the Presidents of the Colleges of Physicians and Surgeons, the medical officers of the garrison, etc. Dr. David Simpson, the senior President of the Society, occupied the chair; and the other Presidents of the Society, Dr. Rutherford, Dr. Montgomery Bell, and Mr. Annandale, acted as croupiers. The speeches of the Presidents, and of many of the members, were admirable. I should, indeed, have wished to have given an abstract of the speeches, especially of Dr. Simpson's; but space and time alike prevent my doing so.

On Wednesday last, Mr. Spence amputated at the shoulder-joint in a case of subclavian aneurism. I shall refer to this case on a future occasion.

Replacement of Species. Dr. Hooker has made some interesting remarks "On the Replacement of Species in the Colonies and Elsewhere." As examples, he brings forward the *Cardoon* in the Argentine provinces, the *Anacharis* in the rivers of England, and some very remarkable cases of importation of weeds to Australia and New Zealand. In New Zealand the cow grass is rapidly spreading all along the sides of the main lines of roads; the dock is to be found in every river-bed, the sow-thistle is spread all over the country, and water-cresses threaten to choke up the rivers. A saying of the native Maories is that "as the white man's rat has driven away the native, so will the European fly do; and as the clover kills the fern, so will the Maories disappear before the white man." Many other instances of replacement are given.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Thurs., April 28, 8.30 P.M.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The next meeting will be held at the Bull Hotel, Dartford, on Friday, April 29th, at 3.20 P.M.
Dinner will be provided at 5 o'clock.
Tickets, 6s., exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, April 12th, 1864.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 22ND, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON A NEW METHOD OF PROCURING THE CONSOLIDATION OF FIBRINE IN CERTAIN INCURABLE ANEURISMS. BY CHARLES H. MOORE, F.R.C.S., WITH THE REPORT OF A CASE IN WHICH AN ANEURISM OF THE ASCENDING AORTA WAS TREATED BY THE INSERTION OF WIRE. BY CHARLES MURCHISON, M.D., F.R.C.P.

In this joint paper the theory of the operation was first described by Mr. MOORE, who was alone responsible for the surgical remarks. Dr. MURCHISON furnished the report of the case, with medical comments upon it.

In February 1863, Mr. Moore had been led to review the conditions of such aneurisms as could not be surgically treated through the artery, and had devised a method of producing consolidation of them in accordance with the mode of their natural cure.

The principles involved in this method were the following:—1. Large aneurisms can only be benefited by the deposition of fibrine within them; 2. The natural means of obtaining fibrine from the blood are inadequate, because it can only settle in layers on the wall; 3. In the central part of an aneurism there is a large quantity of blood with fibrine ready to collect on any apt material; 4. Fibrine may be elicited from arterial blood by exposing a foreign body in it. Two cases were quoted in which this had occurred; one, in which gangrene of the leg had resulted from plugging of the arteries by fibrine detached from a needle in the left ventricle; the other, that of a sailor, who died three days after being shot, and in the interior of whose ascending aorta was a bullet imbedded in fibrine.

The foreign body which, according to our present knowledge, would produce least irritation was wire. If a large quantity were coiled in an aneurism, it would attract fibrine, as the twigs do in whipping freshly drawn blood, support the mass which it entangled, and lead to the cavity of the aneurism being eventually filled. The wire might be passed in through a small cannula, with care not to leave the free end in the minute wound, and not to direct a coil into the orifice of the artery.

Only a sacculated aneurism could be so treated, not one which had two orifices, since fragments of fibrine would be broken off by the force of the current. Brasdor's operation might be previously required in some parts. This danger might be incurred in a sacculated aneurism also, if wire enough were not introduced, because of the large intervals which would be left between the few coils of wire. The wire would remain in the solidified aneurism, and be harmless.

Mr. Moore then described the operation by which the foregoing proposal might be carried out.

CASE. *Saccular Aneurism of the Ascending Aorta projecting through the Anterior Wall of the Left Side of the Chest.* Daniel D., aged 27, became a patient at the Middlesex Hospital, under Dr. Murchison, on November 10th, 1863. Eight years before, he suffered from palpitations and dyspnœa, and after some months he had hæmoptysis. The hæmoptysis recurred at intervals, and in November 1862 he first noticed a pulsating swelling to the left of the sternum. This increased rapidly, and the patient now became subject to severe attacks of angina pectoris. When he first came under observation, the tumour was situated in the angle formed by the left clavicle and the left margin of the sternum; it measured ten inches in circumference at its base, and projected about two inches from the wall of the chest; its surface was rounded, and tolerably uniform, except at the upper part, where there was a tendency to point. Over the whole surface of the tumour distinct pulsation could be felt, each beat corresponding to the impulse of the heart. Nothing resembling an aneurismal bellows-murmur could be heard; but both cardiac sounds, and particularly the second, were louder over the tumour than at the base of the heart. There was dulness on percussion to the right of the tumour over a space measuring two inches transversely, and three inches from above downwards. The apex of the heart could be felt beating between the fifth and sixth ribs. The cardiac dulness was slightly increased, but the sounds heard on auscultation were normal. There was no inequality of the arterial pulse on the two sides of the body. The voice was normal. The patient had an occasional cough, and expectorated a viscid muco-purulent matter, but there was nothing peculiar in the character of the cough. Over the whole of the left side of the chest there was comparative dulness on percussion, with coarse, at some places tubular, breathing, and subcrepitant râle. On the right side of the chest the percussion was clear and the breathing puerile. The appetite and digestion were good, and the bowels regular. There was no dysphagia, and no pain or tenderness at any part of the spine. The pupils were of normal and equal size. On November 20th, and again on December 28th, the urine was ascertained to be free from albumen.

After the patient was admitted into the hospital, on November 20th, the attacks of angina almost entirely ceased. The pulse varied from 104 to 116 when the patient sat up, but would fall to below 100 when he lay down. The size of the tumour continued to increase, until, on the morning of January 7th, 1864, it measured 16¾ inches at its base, and projected 2¾ inches from the wall of the chest. The tendency to point at its upper part became more decided, and the integuments at this part were much attenuated, and assumed a dusky-red discoloration, while occasionally they were the seat of pricking pains, and were slightly tender. These changes were most marked during the last week of December and the first week of January. The patient's general health notwithstanding did not suffer. He ate and drank well; he got up daily, and walked about the ward. On the evening of January 6th, he played a game of draughts with another patient, and on the following morning he was up and walking about as usual.

Early in January it became obvious that the bursting of the aneurism through the integuments could not be long delayed. It was accordingly resolved to recommend to the patient Mr. Moore's proposed operation. During December this operation had been carefully considered, but it was then deemed unadvisable to have recourse to it. It was now explained to the patient that the procedure in question offered some chance of prolonging his life, although in itself it was not free from danger. The patient at once assented, and the operation was performed on January 7th, at half-past one P.M.

The operation consisted in the introduction of a quantity of fine iron wire into the aneurism, with the object of inducing coagulation. A small pointed cannula was inserted into the tumour, and the wire was passed in through this without difficulty. The operation occupied one hour, and the quantity of wire introduced was twenty-six yards. It gave rise to no pain or inconvenience except a slight and transient feeling of faintness. The quantity of blood lost did not exceed half a fluid ounce.

The immediate effects of the operation were a reduction of the pulse from 116 to 92, an almost complete cessation of the pulsation in the tumour, and a diminution in its size. Immediately before the operation, the circumference of its base was 16¾ inches; at the close of the operation it was 16 inches. These changes began to be noticed soon after the commencement of the operation, and became more marked as it was proceeded with. At a quarter past eleven P.M. the patient was asleep, and his pulse was only 78. He slept comfortably during the night, and had no bad symptom until the following morning.

On January 8th, at nine A.M., the patient was seized with a fit of rigors lasting three quarters of an hour, and followed by great pain in the back of the neck and some pain in the tumour. At one P.M. the pulse had risen to 144, and was full and bounding. The action of the heart was tumultuous, and all the arteries of the body could be felt throbbing with considerable force, but there was no difference in the force or volume of the beat on the two sides of the body. The patient complained of great pain in the tumour when he moved. The tumour was already somewhat larger than before the operation, and the dusky discoloration was of a deeper tint. There was intense thirst and great restlessness; the skin was dry and very hot; and the respirations were 40. At twenty minutes past one P.M. the patient was bled to eighteen ounces, and at half-past three P.M. twelve ounces more of blood were abstracted. After the second bleeding, twenty minims of Battley's sedative solution were administered.

From these measures the patient derived temporary relief, but he had a restless night, and at half-past six A.M. of the following morning (January 9th) he had a seeond attack of rigors. At one P.M. he had a third attack. At half-past one he was in great distress, owing to a pain in the tumour and at the back of the neck. The tumour was extremely tense and decidedly tender, particularly at its upper part. Its circumference at the base measured 1¾ inches more than before the operation. Distinct pulsation could be felt again at its upper part. The pulse was 136 and soft; the action of the heart was less tumultuous, and there was no abnormal cardiac sound. Large and repeated doses of opium and digitalis were now commenced. At half-past ten P.M. the pulse had fallen to 126, but the patient complained of being afraid to cough on account of a severe jerking pain in the tumour, which the effort to do so always induced.

On January 10th, at ten A.M., the patient had taken seventy-three minims of tincture of digitalis, and the equivalent of almost ten grains of opium, during the preceding twenty-one hours, and the result was, that he was in less pain, the pulse had fallen to 104, and the tumour was slightly reduced in size, its circumference being half an inch less than on the preceding day. At half-past seven P.M., however, he was seized with a severe burning pain in the tumour, and a feeling of tightness as if it were going to burst. The tumour was larger and more tense than ever; the pulse rose to 132; the heart's action was again more impulsive, and there was intense thirst. To-day it was noted for the first time that the pulses in the right temporal and radial arteries were slightly fuller than in the corresponding vessels on the left side.

Opium in large and repeated doses, along with digitalis, was persisted with. In the course of two days and a half (commencing January 9th), as much as the equivalent of twenty-seven grains of opium was administered. The treatment, however, failed to give relief. The tumour increased rapidly in size, and on the 11th, distinct pulsation could be felt at several parts of its surface. The radial pulse was 128, small and compressible, and still fuller on the right side. The beat of the right anterior tibial artery was also decidedly fuller and stronger than that of the left. The cardiac impulse was extremely feeble. The respirations were performed chiefly by the diaphragm and the muscles on the right side of the chest; the left side of the chest was almost motionless. The whole of the left side of the chest in front, unoccupied by the tumour, was dull on percussion, and no respiratory sound could be heard on this side, except immediately below the clavicle. Brandy and other stimulants were now given, but without any decided result.

On the morning of the 12th the patient was evidently sinking. The pulse was about 136, but was so weak as to be counted with difficulty. The circumference of the tumour at its base was now 3½ inches more than before the operation, and the urine passed during the night was found to be loaded with albumen. At eleven A.M., four days and twenty hours and a half after the operation, the man died.

An autopsy was performed a few hours after death. The walls of the external tumour were formed by the integuments and fibres of the pectoral muscle, infiltrated with serum. They were nowhere less than a quarter of an inch in thickness. The skin covering a great part of the tumour presented a deep livid hue. The interior of the tumour was filled, for the most part, with a fibrinous coagulum, enveloping and imbedded in the coils of wire, and firmly adherent to the surrounding walls. The rest of the cavity contained fluid black blood. The interior of the outer tumour was nowhere lined with a prolongation of the arterial coats; but it communicated with the proper aneurismal sac within the chest by two large openings in the first and second left intercostal spaces, the intervening rib being bare and eroded, and at one place broken through. The aneurismal tumour within the chest was about the size of a man's fist. It lay immediately behind the sternum; it encroached slightly upon the upper lobe of the left lung, and inferiorly it rested upon the right auricle. It was partially filled with a fibrinous coagulum, which was continuous with that in the outer tumour, and was adherent at one part over a space measuring about one-third of an inch in diameter. It communicated by a circular opening, scarcely so large as a sixpence, with the ascending aorta. Through this opening a clot projected from the aneurism into the vessel, and extended downwards into the heart, and upwards into the arch. The greater part of this clot was evidently of *post mortem* date; but part of it, close to the opening, was pale, firm, and laminated. There was considerable atheroma of the coats of the thoracic aort

ıe pericardium contained about eight ounces of rbid serum, and its opposed surfaces were coated th a thin layer of recent lymph. The upper part of e parietal pericardium presented a patch of livid scoloration, of about the size of a florin; and at the ntre of this patch the cavity of the pericardium ıs merely separated from that of the aneurism by a licate membrane. It was at this part of the aneuım that the coagulum was adherent. The heart ıs slightly hypertrophied. Its valves and muscular ssue, and likewise the coronary arteries, were althy. The left lung was everywhere firmly adrent, and its pleura much thickened. On section, merous cavities were observed, evidently resulting ım dilatations of the bronchial tubes. In the interning spaces a firm fibrous tissue took the place of e normal vesicular structure. The right lung was the most part healthy. Both kidneys contained ıumber of circumscribed abscesses, varying in size to that of a small pea. A cluster of six of these ıall abscesses was found at the apex of the left kidy. In the cortical substance of both kidneys a mber of patches of yellowish deposit, of a large e, but less defined outline, were also observed. On croscopical examination, this appearance appeared be due to the presence of a granular exudation desited between the uriniferous tubes. The liver was ge and fatty. The other parts of the body could t be examined.

After recording the history and *post mortem* appearces of the case, Dr. Murchison enumerated some the more important features of clinical interest, lependent of the operation, which it presented.

In his concluding remarks, Mr. Moore referred first the circumstances of the operation, and to its early ects, which were highly satisfactory. So much fine appeared to have collected at the end of an hour ıt the pulsation of the tumour and its sharp second oke were no longer perceptible; the aneurism had ıch diminished in size; the pulse, which notwithıding medicines, had beat 112 for weeks previsly, and was 120 before the operation, had fallen to and at night was about 80. This unlooked for undance of the fibrine, accumulated not by any inmmatory, but by a mechanical process, was an unecedented circumstance. Its effects could not be etold. It appeared to have caused local inflammaı and the rigors, with great acceleration of the pulse. aneurism could long resist such a pulse. Death d probably resulted from acute pericarditis, which s induced, not by continuity with the inflammation tside the chest, since neither the inner aneurism r the pleuræ were inflamed, but incidentally by the minent bursting of the intra-thoracic aneurism into pericardium. No fragments of the clot of fibrine, ge enough to be detected by the naked eye, had ın detached, but microscopic portions were supsed to have existed in the kidneys. Neither the nor the recent disease of the kidneys had actually ıused death, which was due to the changes about chest, and was, through the pericarditis, an indit and not inevitable consequence of the operation. coil of wire had passed through the opening of aneurism.

Three facts appeared to Mr. Moore to justify a reition of the operation, or of some modification of —1. The separation of fibrine upon the foreign ly, and its rapid deposition. 2. The exemption of inner aneurism from inflammation, probably to be ounted for by its possessing a lining membrane, ich the outer cavity had not. 3. The firm adhen of the clot to the wall.

Not having yet thought of a more suitable foreign ly than wire, he had but two modifications of the ration to suggest: 1. The introduction of a smaller quantity. The objections to this had already been pointed out. 2. The use of slender needles as temporary means of procuring the consolidation of the fibrine. The safety of this must depend on the number of needles which might be inserted, the gentleness with which they should be withdrawn, and the period at which fibrine so procured should acquire a sufficiently firm attachment to the wall of the aneurism to allow of the artificial support of the needles being dispensed with.

Correspondence.

REGISTRATION AND THE MEDICAL COUNCIL.

Sir,—In a leading article of your Journal of last Saturday, entitled "Our Medical Act and Medical Council", attention is drawn, amongst other duties of the Council, to the publication of the *Register;* and you graphically describe the registration of the profession as "the milch cow, which has enabled the Council to live and operate." It is on this question that I desire to offer a few observations as to the registration of medical students.

The Medical Council, in its "Recommendations in Reference to General and Professional Education", requires—

1. That after October 1st, 1861, all medical students be registered.

2. That no student beginning professional study after September 1861, be registered, who has not passed an arts examination.

3. That the several bodies in Schedule (A) of the Medical Act, either jointly or severally, open a Register for students commencing their studies in medicine, in the form annexed.

Schedule—Register of Medical Students.

No.	Name.	Date of Registration.	Place of Study.	Arts Examination & Date.

4. That the said Register be opened on the first day of each session or term, and remain open for fifteen days; and that, within seven days of its close, the officer in charge transmit a duly authenticated copy thereof to the registrar of the Branch Council of that division of the United Kingdom to which the body or bodies belong.

5. That the Registrar of the Branch Council lay the copy of the said Register before the Branch Council, in order that the Branch Council may take whatever steps may seem necessary to secure its accuracy.

Now, what is the object of this system of registration of students? and, practically, what are its results? From the form of Register to be kept by the several corporations, it seems to be a scheme for enabling the Medical Council, without any trouble to its own officers, to ascertain the number of students who enter annually on the study of the profession, the place of study, and other particulars.

Now, considering the large sum already paid by the profession (some £50,000) for registration, and the annual tax of £4,000, which you inform us is paid for the same purpose, is it too much to expect that, if the Council require a Register of students, it should do the work itself, and not call upon the corporations to keep such a Register, and transmit "a duly authenticated copy" for its sole use and benefit? I do not profess any knowledge of the meaning of the Medical Act; but I cannot find any clause which authorises the Council to put duties upon others

which they ought to perform for themselves. But has this plan of registration any useful result?

The corporations have long been in the habit of registering students, but with different objects; and have, therefore, adopted a different plan. At the College of Surgeons, every student is required to register at the commencement and termination of each winter session; at the Society of Apothecaries, at the commencement and end of each summer, as well as winter session. At the College of Physicians, students are required to register only at the commencement of professional study. Why the regulations of the two former corporations are in force, it is difficult to explain, as the registration merely evidences the payment of a fee for the privilege of attending certain courses of lectures. It is no proof whatever of such lectures having been really attended.

The truth is, that the form of registration recommended by the Medical Council entails on the several corporations additional expense and trouble, without remedying the existing defects of the system. And how do the recommendations of the Council affect the students themselves? Under the present plan, as is well known, students register with either one or with several of the corporate bodies; consequently, it is impossible to ascertain the number of students who enter the profession in any one year, unless, which is very improbable, the "duly authenticated copies" are compared and checked, so that any student's name appearing in more than one list may be eliminated, and not reckoned as several individuals.

Would it not be better that the Council should, in such manner as it may think most advisable, require every student to register at the commencement of professional study? The Council would then not only obtain a knowledge of the fulfilment of those requirements which it deems reasonable and proper, but it would possess the means of checking any opposition to its regulations by refusing to register those students who had not complied with its recommendations. I humbly offer these suggestions for the consideration of the Council at its next meeting, and append a form for registration which appears to comprise the information which the Council should require.

No.	Name.	Age.	Arts Exam. and Date.	Place of Study.	Date of Regist.

In this way, the Council would learn the actual number of students commencing study each year. It would, if a copy of the baptismal register is required, be certified once for all that the age before which a qualification should not be granted has been completed; it would be certified that a proper arts examination had been undergone, and that before commencing professional study; and it would have a guarantee, or at any rate a means of ascertaining, that a *bonâ fide* entrance to a school or place of study had been effected. The date of registration would give the means of ascertaining that the required period of time had been fulfilled, by comparing that date with the date of any qualification to practise subsequently produced for registration. The corporations might or might not continue their own plans of registration, as they may severally consider advisable; but it is to be hoped that they would modify, if not altogether abandon, their present plan, which requires students, without any apparent useful purpose fulfilled, to lose no little time in each session in registering their names with the different corporations.

I am, etc.,

HOSPITAL PHYSICIAN AND LECTURER.

London, April 14th, 1864.

THE SOCIETY OF APOTHECARIES AND THE MEDICAL COUNCIL.

LETTER FROM ALFRED M. RANDALL, ESQ.

SIR,—The attention of the Court of Examiners of the Society of Apothecaries has been drawn to the following passage in an article published in the BRITISH MEDICAL JOURNAL of last week.

"These recommendations, the Council has already formally issued; but the recommendations, we regret to say, have been hitherto not generally adopted by the examining bodies; and although the College of Surgeons and the Society of Apothecaries may see reason to differ in opinion from the majority of the Medical Council as to these recommendations, we feel certain that no one will approve of the continued opposition offered by those bodies to the carrying into effect recommendations which a majority of the Medical Council has deliberately approved. This opposition is the more painful, when contrasted with the readiness with which other corporations have brought their regulations into the strictest conformity with the recommendations of the Council."

I am requested by the Court of Examiners to state that they have brought their regulations into the strictest conformity with the recommendations of the Medical Council, and that they have had the less difficulty in doing so, as most of the regulations of the Council had been anticipated by the regulations already issued by the Court of Examiners in reference to the education of candidates, before the passing of the Medical Act of 1858. I am, etc.,

ALFRED M. RANDALL,
Secretary to the Court of Examiners.

Apothecaries' Hall, April 19, 1864.

[We will give the grounds upon which we made the statement, that the Society of Apothecaries was not in conformity with the recommendations of the Medical Council; and will leave the profession to decide as to whether or not our statement was correct. The Medical Council recommend four years of professional study; and this professional study is to commence from the first attendance at a medical school. But *the Society of Apothecaries requires only three years of such professional study.* According to the Hall's regulations published in October 1863, "Every candidate whose attendance on lectures shall commence after October 1st, 1863, must attend the following lectures during not less than *three* winter and *three* summer sessions." Again, the second examination may be gone into "at the end of the *third* summer session (the five years of pupilage being completed)." (See *Medical Directory*, 1864.) Here, then, is, as we read it, a plain and distinct evasion of the recommendations of the Medical Council—the substitution, in fact, of *three* years for *four* years of professional study. Previously to October 1863, the Society, it is true, was in accordance with the recommendations of the Medical Council. Reference to the regulations issued by the Society of Apothecaries in 1862 will show that the Society then demanded "lectures and medical practice during not less than *four* winter and *four* summer sessions." And, again, that the second examination should take place "after the *fourth* summer session." All this was in strict accordance with the Medical Council's recommendations. But, as we have seen, in October last, after the meeting of the Medical Council in June, it issued regulations, under which it reduces to *three* the years of professional study. The Society of Apothecaries has, therefore, if we can read English, disobeyed the recommendations of the Medical Council in accepting *three* years of professional study (as defined by the Medical

uncil) instead of *four* years. We, therefore, must aintain our position; viz., that the regulations of e Society of Apothecaries are not in conformity th the recommendations of the Medical Council. DITOR.]

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a neral meeting of the Fellows, held on Monday, pril 18th, 1864—

Clement, Augustus Ward, 78, Upper Berkeley Street merly an extra-Licentiate of the College, was duly mitted a member.

At the same meeting, the following gentlemen, ving undergone the necessary examination, and tisfied the College of their proficiency in the ence and practice of medicine, surgery, and mid-fery, were duly admitted to practise physic as centiates of the College :—

Bertin, Henri Victor, 26, Alpha Road, Regent's Park
Blanchet, Jean Baptiste, M.D.McGill College, Montreal, Quebec, Canada
Currie, John Legge, 42a, Charter House Square
Hooker, Edward Miles Coverdale, Hadlow, Tunbridge
Hunt, Henry John, 16, Portugal Street, Lincoln's Inn Fields
Nash, Andrew, Jameison, Victoria, Australia
Perks, Charles, Lichfield
Pyle, George Edward, Middlesex Hospital
Waugh, Alexander, Corsley, Warminster
Whipple, Connell, Plymouth
Wilson, William Samuel, 34, Hereford Road North, Bayswater
Wolferstan, Sedley, Plymouth

The following gentlemen were reported by the aminers to have passed the first part of the pro-ssional examination for the Licence :—

Barrett, Howard, St. George's Hospital
Court, Josiah, Guy's Hospital
De Tatham, Hamilton, St. Mary's Hospital
Fennings, Allen, Charing Cross Hospital
Griffiths, Richard S. P., St. Mary's Hospital
Gould, Franklin, King's College
Humphreys, Frederick William, Guy's Hospital
Iliffe, William, St. Bartholomew's Hospital
Kenyon, George Arthur, St. George's Hospital
Lattey, Walter, St. George's Hospital
Ransford, Gifford, St. George's Hospital
Wilford, John George Frederick, Guy's Hospital
Wilson, William S., Westminster Hospital

APOTHECARIES' HALL. On April 14th, the follow-g Licentiates were admitted :—

Lamb, George, Hull
Lush, William George Vawdrey, Wilton, near Salisbury
M'Mahon, James Thomas, Rochester Terrace, Camden Town
Rowan, Andrew, Station Terrace, Hull
Shaw, Thomas Claye, Stockport

At the same Court, the following passed the first amination :—

Lloyd, Thomas Franklin, Guy's Hospital

APPOINTMENTS.

RMY.

RNETT, Assistant-Surgeon O., 6th Dragoons, to be Staff-Assistant-Surgeon, *vice* W. H. Corbett, M.D.
GAN, Staff-Surgeon F., to be Surgeon 2nd Foot, *vice* E. G. Noott.
RBETT, Staff-Assistant-Surgeon W. H., M.D., to be Assistant-Surgeon 6th Dragoons, *vice* O. Barnett.
NTGOMERY, Staff-Surgeon A. G., to be Surgeon 46th Foot, *vice* E. Touch, M.D.
ADE, Staff-Surgeon H. T., half-pay, to be Staff-Surgeon, *vice* Staff-Surgeon-Major G. T. Galbraith, M.D.
ADE, Assistant-Surgeon J. B. C., Rifle Brigade, to be Staff-Surgeon, *vice* F. Cogan.
UCH, Surgeon E., M.D., 46th Foot, to be Staff-Surgeon, *vice* A. G. Montgomery.

YAL NAVY.

NN, Edward, M.D., Assistant-Surgeon, to the *Wye*.
GAN, Henry, M.D., Assistant-Surg. (additional), to the *Victory*.
RCY, Frederick, Esq., Assistant-Surgeon (additional), to the *Royal Adelaide*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers) :—

LYON, D. M., Esq., to be Honorary Assistant-Surgeon 2nd Lancashire Engineer Volunteers.

DEATHS.

DUCAT, C., M.D., late H.E.I.C. Medical Service, at Hastings, on April 18.
MASSEY. On April 13th, at Camberwell, Adela, infant daughter of Albert Massey, M.D.
MINTER, Michael, M.D., at Mount Moriac, Geelong, Australia, aged 57, on January 31.
PERFECT, Thomas W. C., Esq., Surgeon, at Hammersmith, aged 87, on February 13.
ROBERTSON. On April 14th, at Clifton, aged 70, Anne, wife of *Archibald Robertson, M.D., F.R.S.
SODEN. On April 12th, at Bath, aged 3, Robert, youngest son of *John Soden, Esq.
THATCHER. On April 19th, at Edinburgh, Susan M. L., widow of John V. Thatcher, M.D.

BEQUEST. By will, Eneas Mackintosh, Esq., of Montagu Square, has left a legacy to the Middlesex Hospital of £1,000.

THE CHAIR OF CHEMISTRY AT BERLIN, vacant through the death of Professor Rose, has been offered to Professor Kopp of Giessen.

QUEEN'S COLLEGE, CORK. Dr. Bullen has sent in his resignation as Professor of the Cork College. Only four students attended his lecture on the 14th. The determination of the pupils not to enter his lecture-room hastened his resignation.

THE INDIAN MEDICAL DEPARTMENT. Last week, Mr. Bazley asked the Secretary of State for India how many candidates for employment in the Medical Department for India were presented, and how many were the vacancies at the time of the competitive examination in January last, and again how many at the recent examination. Sir C. Wood was understood to state in reply, that for two or three years there had been no examination of candidates for the Indian medical service.

THE DANO-GERMAN WAR.—The health of the Prussian army in Denmark is not so good as it was. I understand that there are now 10 per cent. of sick, many of them, however, from maladies of no dangerous character. There have been cases of typhus, but it has certainly not assumed an epidemic character. The arrangements made for the sick by the Prussian medical staff appear to be of a judicious nature The hospitals are numerous, and many of them established in retired rural situations. The sick, when too many for the Schleswig hospitals, are sent down to Hamburg. (*Daily Telegraph.*)

GRATUITOUS MEDICAL SERVICES. The *British Medical Journal* alone has energetically fought this battle in the cause of the profession against the pseudo-Pecksniffian charity of its London contemporaries. The postulate on which the *Medical Times* grounds its arguments seems to be that medical men are morally bound to give their work to the poor for nothing, and when such an opinion is held by a medical periodical we cannot wonder that it is the prevalent idea with the public. Let us not bolster up our own self-sufficiency, as the *Medical Times and Gazette* would have us, by giving ourselves credit for genuine charity when we can only boast of the Brummagen article. The *Medical Times* knows as well as we do that hospital charity in London, even more than elsewhere, is nothing but a means of arriving at notoriety, and that those who are independent of such means trouble themselves very little with gratis patients. The whole system is one of competition, a result of the same cause which is speedily dragging down the profession as low as underselling can bring it, the progress of which is to be resisted by every means in the power of the journalist. (*Dub. Med. Press.*)

Medical Prosecution. Edmund Tucker Jenkins, of 159, Lever Street, St. Luke's, and also of the New North Road, was charged lately at Worship Street with having unlawfully and falsely pretended to be and used the title of a physician, doctor of medicine, and surgeon, by which he had rendered himself liable to a penalty of £20. The defendant pleaded guilty, but his defence was that he had studied at King's College Hospital, had gone out as surgeon in a ship to New York, had received a certificate as to his conduct from the passengers, had acted as assistant to his father and another surgeon, and proved himself fully capable of practising in the profession, though not licensed or registered. He hoped, under these circumstances, and also because he was at the present time suffering from the death of his father, that the fine might be reduced. Mr. Leigh sentenced him to a fine of £5.

Why the Indian Medical Service is not Popular.—The *Bombay Government Gazette* announces that "Surgeon-Major Vaughan is permitted to retire from the service on the pension of £250 per annum." Dr. Vaughan has just completed twenty-two years of services in India; he has been actively employed ever since he came to the country, and has always had the reputation of being able to do and doing as good work as any man in the service. In the Central India campaign, more especially, when he was staff-surgeon to Sir Hugh Rose, he gained so much distinction, not only as a doctor, but as a soldier, that he was recommended by the general for a C.B.-ship, and, although he was refused that coveted decoration, there are few men of all who served through that campaign who will contest his right to it. Well, this distinguished surgeon, when he returns to England, after a service so protracted and so honourable, is allowed a pension of £250 a year—no more than the Government lately granted to young men of the Indian Navy who had been at sea some ten or twelve years when that service was abolished. It may be added that there are only eight men in the Bombay medical service, without reckoning the doctors attached to the Grant College, who are in receipt of incomes of so much as 1,000 rupees (about £100) a year. Can it be wondered at that, with such prospects before them, English medical men are unwilling to enter the medical service; the ranks of which will, consequently, henceforth be filled up with imperfectly trained surgeons from Ireland and Scotland? (*Bombay Medical Gazette.*)

Royal College of Surgeons. The Council has just awarded the Jacksonian Prize to Dr. Morell Mackenzie of George Street, Hanover Square, for his essay on "The Pathology and Treatment of Diseases of the Larynx." There was no competitor for the prize on the Normal and Pathological Anatomy of the various Synovial Bursæ connected with the muscles and tendons of the upper extremity. There are three subjects for prizes for the present year, viz: "Club Foot; its Causes, Pathology, and Treatment"; "The Diseases of the Ankle-Joint, and of the Joints and Bones of the Tarsus, requiring Surgical Treatment; and stating the Treatment, including Operative, most suitable in each case, with the results thereof"; and "The Malformation, Diseases, and Injuries of the Fingers and Toes, with their Surgical Treatment. The Dissertation to be illustrated by Preparations and Drawings." The following is the subject for the Collegial Triennial Prize to be sent in on or before Christmas day next. "The Structural Anatomy and Physiology of the Lymphatic Vessels and Glands (the Anatomical Distribution not being required); the communications (if any) between the Lymphatics and the Bloodvessels to be demonstrated; and the influence (if any) which the Lymphatic Vessels or Glands exercise on the fluid they transmit, to be elucidated. The Dissertation to be illustrated by Preparations and Drawings."

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8.30 P.M. Clinical Discussion.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Morell Mackenzie, "On the First Laryngoscope as invented by Dr. Benjamin Babington in 1829"; Mr. Thomas Bryant, "On Stone in the Bladder of a Female—Urethral Dilatation."—Zoological.—Ethnological.

Wednesday. Geological.

Thursday. Royal Society.

Friday. Royal Institution.—Zoological (Anniversary).

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Alpha.—We have already said, that we must, for the present at any events, decline any further discussions on the subject of iridectomy. The differences pointed out by our correspondent between Gräfe's present and past views of iridectomy have already been alluded to by a writer in the Journal.

Bethlehem Hospital.—A correspondent writes:—"The meagre one-sided report in the *Times*, concerning the removal of Bethlehem Hospital, says nothing of Lord Shaftesbury, Dr. Conolly, Mr. Gaskell, or Dr. Webster's remarks. All these gentlemen, however, are strenuous advocates for removal. Mr. Martin, the Inspector, seemed to be also favourable, judging from the inquiries he instituted. The officials only are adverse to emigration. The Government, Lunacy Commissioners, and medical men generally, are favourable to moving the hospital into the country. Indeed, it is a fact that, throughout Europe, the principle of constructing asylums away from towns is universally admitted, and now most actively carried into operation."

I am, etc., A Governor.

Poor-Law Medical Reform Association.—Mr. Griffin, Wellmouth, requests us to inform the Poor-Law Medical Officers that in *Knight's Official Advertiser* of the 15th instant, it is stated: "The Select Committee on Poor Relief (England) continued to meet on Tuesdays and Fridays until the Easter recess, and have now resumed their sittings. The members alone are present when the Committee are considering their report; and the resolutions agreed to will not be made known until they are formally reported to the House. In all probability, the report will be issued early next month."

Since April 1st, Mr. Griffin has received the following subscriptions in aid of the funds of the Association:—F. F. Jay, Depwade, 5s.; F. Davies, Pershore, 10s.; R. H. Whiteman, Wandsworth, 5s.; P. H. Banks, Bedford, 5s.; J. L. Thomas, Carmarthen, 2s. 6d.; Stainthorpe, Hexham, 5s.; H. Terry, jun., Hardingstone, 5s.; Percival, Hardingstone, 5s.; N. W. Spicer, Chard, £1:1; S. Moreton, Great Boughton, 10s.; J. Clarke, Barnstaple, 5s.

Gulstonian Lectures

ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO ST. MARY'S HOSPITAL.

[*Continued from page* 439.]

With regard to the effects of the local abstraction of blood in internal inflammations, I believe the very same facts hold good as in the case of external inflammations. I think that the experience of every physician will lead him to the conclusion that leeches and cupping are not found so invariably beneficial in internal as they are in external inflammations; and that, in fact, they not unfrequently fail to give the relief expected of them. May we not fairly seek for an explanation of this in the anatomical relation of the part inflamed to the surface of the skin whence the blood is taken? Thus, for example, leeches and cupping, applied over the thorax in pneumonia, sometimes do, and sometimes do not, give relief. When relief is given through loss of blood, may we not fairly conclude that in such cases the leeches have drawn blood directly from the inflamed pleura, which so very frequently accompanies pneumonia? Just so, again, in pericarditis, I would suggest that the removal of the pain, etc., by leeches or cupping, results from the direct abstraction of blood from the inflamed pleura; local pleurisy (as we know) being an almost invariable associate of severe pericarditis. I might add, also, what I have never seen noticed in this sense, that a branch of the internal mammary artery, which supplies the skin and intercostal arteries over the præcordial region, is distributed to the pericardium, forming a direct vascular connexion between the skin and the pericardium.

Leeches, again, give relief in peritonitis; and, I believe, for a precisely similar reason. In all these cases, there is a direct capillary communication between the skin from whence the blood is drawn and the parietal layers of the serous membranes spoken of. Leeches, again, applied over the liver, often give ease to pain felt there; and what is a more common *post mortem* sign in old liver-affections than adhesions between the anterior surface of the liver and the parietal layer of the peritoneum—clearly indicating that this parietal layer had once been inflamed?

Practitioners generally have some indistinct idea that, when they apply leeches or cupping over the seat of an inflamed lung, the abstraction of blood has some specific or peculiar influence, other than what it would have if the blood had been taken from any other part of the body. We seem generally to forget that, in such case, although our leeches may be near to the seat of the lung-inflammation, the abstraction of the blood can only operate upon it just as venesection would—viz., through the general circulation; so that, in truth, the blood might just as well have been taken from the thigh or the back of the neck, so far as the mere abstraction of blood is concerned in its operating upon the inflamed lung. But we can readily understand that the leeches may give relief in such case, when they draw blood from an inflamed parietal pleura, accidentally accompanying the pneumonia. What is the relief given in such cases? Surely, in the main, it is the removal or diminution of local pain. And what more reasonable, than that the pain of pleurisy should reside in the inflamed parietal layer of the membrane? and that the direct abstraction of blood from the skin over the part should remove the pain, just as we observe it to do in the case of the inflammations, as already spoken of?

Let me give another example in this kind. We have generally a very firm belief that the abstraction of blood, through leeches or by cupping applied over the loins, is of great service in certain kidney-affections; but I think a careful examination of all the facts touching the matter throws great doubts on the opinion.

In the first place, it is manifest that no drop of the blood which is taken comes from the kidney; the blood is removed from the mass of the blood in the system, and its removal can only operate on the kidneys indirectly—*i.e.*, through the general system. In fact, as far as the mere abstraction of blood is concerned, the kidneys cannot be affected otherwise than if the blood had been taken from the arm or the nape of the neck. I must, indeed, confess surprise that this practice of local blood-letting in cases of this kind has not been more severely questioned, merely out of anatomical considerations. I shall, of course, be told that experience here excludes any necessity for theoretical arguing; and that the benefits derived from the practice are too manifest to be doubted. But to this experience I must suggest a demurrer. I must beg those who insist upon the advantages of drawing blood by cupping and leeching from the loins in certain kidney-affections, to remember—1. That patients who are thus treated are also invariably subjected at the same time to the most powerful of all remedies in such cases—viz., rest, the warmth of bed, baths, equable temperature, and so forth; and 2. That it is a fact also of experience, that the lumbar pain and other bad symptoms attending these kidney affections, will disappear under the influence of the treatment referred to, and without either cupping or leeching.

Time forbids me pursuing further this most interesting subject; but I would earnestly ask my auditors to test by serious consideration the propositions here laid down, and not hastily to consign them to oblivion, as unworthy the attention of practical men.

The general propositions, summed up, are these: That in all those cases of internal inflammations in which there is a direct capillary connection between the skin and the internal part inflamed, the local abstraction of blood is of manifest service, just as we see it to be in external inflammations; but that, in all those inflammations in which there is no such capillary communication, the benefits of the local abstraction of blood are neither clear nor positively ascertained. In saying this, however, I do not deny that leeching and cupping may have some influence over internal inflammations, other than that which is supposed to result from the abstraction of blood. The discoveries of Claude Bernard, and the experiments of Brown-Séquard and others, have opened to us an entirely new field of pathological

observation in the matter of inflammation—a field which is as yet almost untouched. The main—the prominent—fact in inflammation is the enlargement of the blood-vessels of the part inflamed; that is to say in other words, an increased amount of blood supplied to the part. And the experiments referred to have shown that the vessels of a part may be influenced, as regards their contraction and dilatation, through their vaso-motor nerves. If the mere dipping of one hand in water will so alter the calibre of the vessels of the other hand as to change its temperature, why may it not be argued, that the application of leeches, etc., to the thorax sets up a reflex action, not by abstracting blood, but by the local irritation which they produce, and such a reflex action as shall influence through the vaso-motor nerves the vessels of the inflamed lung—for instance, produce a contraction of them, it may be, and so tend to reduce the supply of blood through them and to the inflamed part, to its natural amount? If there be not some such action as this exerted over the vessels of the lungs by irritation of the skin, how are we to account for the beneficial effects of plaisters, blisters, etc., applied to the thorax in bronchitis and chronic affection of the lungs? Dr. Brown-Séquard has shown that external irritation will produce, through reflex actions, contraction of distant capillaries within the body; and Claude Bernard has demonstrated, that redness and swelling and heat—*i.e.*, enlargement of capillaries—may be produced by injury of the sympathetic nerve. By division of the splanchnic nerves, he has, we are assured, produced pleurisies and other visceral inflammations.

With such facts before us, I think it may be very fairly suggested, that any good effected by leeches, etc., and local irritation of the skin, over those internal inflammations—in which there is no capillary communication between the skin and the inflamed part—may be ascribed to the excitement of a reflex action over the vaso-motor nerves of the part, producing contraction of the inflamed capillaries. An agent, said Hunter, having the power to contract the vessels, would probably be a specific in inflammation.

It is not my intention to enter into the interminable tale of inflammation; but I must observe, that no distinct and comprehensible explanation of the *modus operandi* of bleeding in inflammation, in accordance with our modern pathology, has yet found its way into general acceptation. In the minds of most of us, I believe, the idea attaching to the old phlogistic theory of inflammation is that which generally prevails—the idea, viz., that the focus of inflammation is a fire; and that, by cutting off the supply of blood, we reduce the fuel, and consequently the conflagration.

But we err, I venture to think, through not having modified our views in accordance with the teachings of modern physiology. Physiology and pathology have assuredly not yet bared to us the arcana of an inflammatory process—the *fons et origo mali;* but surely the experiments alluded to have given us some additional information, and that kind of information—the best of all—from which the man of practice may glean a hint while engaged at the bedside of his patient. We have learnt, for example, that lesion of certain nerves which supply the blood-vessels destroys their contractility, and so allows their undue dilatation under the influence of the heart's pressure, and consequently an undue amount of blood to flow through them; and that thus, by nervous lesion alone, all the main characteristics of inflammation may be produced—viz., heat, redness, and swelling. And, again, we know that excitation of certain nerves will produce contraction of those blood-vessels—the very opposite condition. Hence, then (as we know not what the element is which occasions the nervous lesion in inflammation), we may reasonably consider that this nervous lesion is, practically, the anatomical starting-point of inflammation. Also do we know that an increased action is going on at the part inflamed—not a natural formation of healthy structures, but an excessive production of crude and imperfectly elaborated material; and fairly may we conclude that this excess of action depends upon the excessive supply of blood. The object of the practitioner, then, is to reduce this excessive production of ill-formed materials; to direct the inflammatory process through its natural course (if I may use the term), so that the parts shall be left in their original state of entirety when the inflammatory action has ceased; and reasonably enough he concludes that, by regulating the supply of blood, he can in some degree regulate the inflammatory action. And here it is, in teaching us how to attain this object, that physiology has given us new knowledge. If we cannot remove the original exciting element of the inflammation—the cause, we suppose, of local nervous lesion—still we may direct our art to the removal of the next link in the chain of the diseased process; viz., the relaxation of the blood-vessels—the result of the nervous lesion, and the main and most efficient element in the inflammatory process; using those methods of cure for the purpose which will tend to the increase of the contractility of the blood-vessels. For example, cold is a well known remedy in inflammation; and cold is an excitor of the vaso-motor nerves, and thus is it of service in external inflammations. Now, the excellent effects of the local abstraction of blood, as I have said, may be in part accounted for in a similar way. Besides relieving tension, the leeches and the cupping, by the irritation which they occasion, may also excite contraction of the partially paralysed blood-vessels of the part inflamed. But there is no proof that venesection does anything of the kind. By diminishing the contractile force of the heart, it temporarily diminishes the supply of blood to the inflamed part, as it does to all other parts of the body; but there is no proof that it, in any other way, influences the inflammatory action—tends to its cure—*i. e.*, tends to the contraction of the blood-vessels. The blood-vessels are emptied; but their loss of contractility is not repaired. A striking illustration of this is given by M. Marey from Gerdy's method of treating phlegmonous inflammations by raising the inflamed limb. "Frequently," says he, "have we seen the limb, when brought down to the horizontal, rapidly resume an exaggerated size, and its coloration intensified, and its heat increased, in consequence of the atonic relaxation of its vessels." (Marey, 321.) Position here, like venesection, had merely assisted in preventing the temporary flow of blood to the part; it had, like venesection, done nothing towards improving the tonicity of the blood-vessels. As Hunter truly said: "Neither bleeding, sickness, nor purging can possibly lessen the original inflammatory disposition; by lessening the power of action of any disposition, you only lessen or protract the effects."

We read, it is true, of the cutting short of inflammations by venesection; but I apprehend that no one can produce an authentic example of the fact. In the flourishing days of blood-letting, men were bled till the congested eye became pale, and the rheumatic joints and erysipelatous limbs lost their vivid red colour; but I believe that the most heroic (as the term was) bleeder never pretended that he had thereby at once removed the inflammation.

The action of venesection over the vessels of the inflamed part is totally different from that of the local abstraction of blood. True, a temporary emptying of the partially paralysed vessels is produced, or rather the blood disappears from these vessels; but this emptying of the vessels results solely from the lessened force of the heart's action, and from the diminished quantity of blood which is consequently projected into them. No contraction results from any excitation of the vaso-motor nerves; there is, in fact, no increase or induction of the healthy and natural contractility of the vessels, such as is effected by cold, or may be effected by leeches, etc., but merely a less distension of them. And the action is merely temporary, lasting only until the heart has regained force enough once again to distend those morbidly dilatable blood-vessels. But by the local abstraction of blood, not only is blood, and depraved blood, drawn from the part inflamed, but also, in all probability, the action of the vaso-motor nerves is excited, and a healthy contraction of the blood-vessels thereby occasioned. Was not this, indeed, the effect which Hunter's wonderful sagacity anticipated when he tells us: "Bleeding in the part inflamed, I can conceive, does more than empty the vessels mechanically; it acts by continued sympathy." To remove the blood from the distended vessels of an inflamed part, large bleedings, as a rule, are requisite—such bleedings as have an effect upon the system—make the man faint; and, to maintain the vessels in such a state, the bleeding must be again and again resorted to. Moreover, we must keep in view the fact that the inflammatory process has a local excitant; and that the distension of the blood-vessels (for the relief of which, be it remembered, the bleeding is especially employed) is due to some morbid influence exerted at the part, and is still present and operating there. And, therefore, again to use the very words of Hunter, "the lessening of the quantity of blood, considered mechanically, can never remove a cause which neither took its rise from, nor is supported by it."

From all this, it would appear, that we cannot by bleeding remove either the cause of the inflammation, or the inflammation itself; and that to attain the object desired by venesection, the removal of blood from the inflamed parts, large and repeated bleedings are necessary; such as may tell injuriously upon the constitution of the patient, and so, indirectly, upon the cure of the inflammatory process. And, moreover, that, when we have removed this blood by venesection and have emptied the vessels of the part, we have done nothing towards the cure of the inflammation, as we have done nothing towards producing a healthy contraction or tonicity of the blood-vessels. Modern physiology, to use the words of M. Marey, "indicates that, in the treatment of inflammation, we must follow a new path. Instead of combatting local inflammations by blood-lettings which exhaust the whole system, it points out to us that we should ever, as far as possible, resort to local remedies."*

No one pretends that bleeding is of service when it weakens the constitution of the patient; on the contrary, wise physicians have always warned the profession against such abuse of the remedy. In truth, I might say that we of this generation admit bleeding to be of service in inflammations, then only, when it produces no harm upon the constitution; or, in other words, that our masters permit us to practise venesection to the extent in which it can do no harm. Now, if (as I think no one will dispute) a man in health may lose sixteen or twenty ounces of blood, and be no whit the worse for it, how can we reasonably, except on the very best of evidence, admit that a similar loss of blood is of infinite service as a cure in inflammations? And wherein can we find a more demonstrative proof of the uselessness of venesection as a cure for inflammations, than the positive fact that we of this day cure them without resorting to it? Men have, in all ages, warned us against the dangers of venesection, as well as told us of its virtues; but we of this advanced generation speak much of its injurious effects, and but little of its beneficial uses.

Surely all these considerations narrow into very small limits the value of venesection as a cure for inflammation, and throw the greatest suspicion on the praises which have been showered on the remedy as such. From whatever side we consider the subject, historically, practically, or physiologically, we still find the proof of the proposition, that venesection is, as a cure of inflammation, most defective.

But, on the other hand, when we come to regard bleeding as a remedy, not of the inflammation, but of certain secondary consequences which incidentally arise out of certain inflammation, and of certain diseases not inflammatory—then all the clouds of difficulties which obscure the subject vanish, and the clear light breaks in upon us. We then see how it is that the wise men of past days have ever lauded and resorted to the remedy; we then find, physiologically, an explanation of its mode of action; and practically can positively note its uses. And, I may add, we are then driven by the force of demonstration to the conclusion (which it is my object here to enforce), that bleeding must at all times have been an excellent remedy; that it is so now; and that its general disuse is greatly to be deplored—history, physiology, and practice, all coming in and reading us lessons corroborative of the conclusion.

[*To be continued.*]

* M. Marey speaks of following a *new* path. He forgets that John Hunter had already long ago described this path. "When bleeding is necessary," he says, "it should be as near the part as possible, in order that it may have the greatest effect on the part with the least damage to the constitution." And again: "In all cases where it can be put in practice, bleeding in or near the part will answer better than taking the blood from the general habit, for certainly less may be removed in this way, so as to have an equal effect upon the part inflamed. Bleeding in the part inflamed, I can conceive, does more than empty the vessels mechanically; it acts by continued sympathy."

PHOSPHATE IN MEDICINAL DECOCTIONS AND INFUSIONS. Some researches made by M. Terreil show that plants contain the phosphates in a soluble state; and he concludes that vegetable infusions and decoctions owe a portion of the action they exert on the economy to the phosphoric acid and phosphates they contain, the phosphate of lime of the bones proceeding from the soluble phosphates. (*Phar. Journal.*)

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture II.

On some Points having Reference to the Differential Diagnosis of Fibrous Tumours of the Uterus.

Mr. President and Gentlemen,—It is not my intention, in this lecture, to enter into a detailed account of all the symptoms of fibroid disease of the uterus, or of the differential diagnosis between it and every other disease with which it may be confounded. It would be, I imagine, as much a loss of your time as it would be objectionable in me, to endeavour to elucidate points upon which you are as well informed as I can be. In an assembly like the present, and at a time when abdominal operations are so rife amongst us, and have proved so successful as a means of relieving disease previously deemed incurable, it is well to aim at the development of surer means of diagnosis; and this I believe to be all-important in the present state of medical experience. Already the published annals of ovariotomy tell strange tales. Not only have pregnant women been operated upon for ovarian disease, but Mr. John Clay has given us an aggregate list of thirteen cases of attempted ovariotomy, where extraovarian tumours were removed. Of these, eleven cases were uterine growths. Mr. Clay has given us, in addition, twenty-three cases where ovariotomy was attempted, and abandoned in consequence of the disease being extraovarian. Of these last, twelve were examples of uterine disease. (Kiwisch on *Diseases of the Ovaries*, translated by John Clay.) Altogether, as I hope to show in the sequel, the operation of gastrotomy for fibroid disease of the uterus has been performed, incompletely in fifteen cases, and completely in some thirty-four cases; yet, with but very few exceptions, ovarian disease has been diagnosed during life. Let me not, however, be understood as arrogating to myself better powers of diagnosis than others. I make no doubt that the larger number of these errors in diagnosis were made at a former period, when knowledge and experience were less general. I also believe that, even now-a-days, accurate diagnosis in some cases is impossible. Still we are in a position at present to be more exact than we were; and this chiefly from the greater number of facts now extant, and the very mistakes previously made; also because we now possess certain instruments which materially assist our powers of diagnosis. Some of these, if I mistake not, will be shown in this room to-night for the first time.

The frequenters of the Samaritan Hospital last year may remember a remarkable case in one of Dr. Savage's beds, which made some noise about that time. This patient had gone the rounds of several of the London hospitals. The eminent accoucheur to one, after two careful examinations, said it was indubitably pregnancy. Another, similarly circumstanced in another metropolitan hospital, said it was ovarian disease; a third, that it was extrauterine pregnancy; a fourth, that it was a fibroid. An eminent French surgeon, then in England, stated in the most positive terms that it was a fibroid, although unconnected with the uterus. The majority amongst us, however, were of opinion that it was ovarian disease. An exploratory incision verified this diagnosis. Ovariotomy was performed by Mr. Wells, and the case did well.

This example illustrates well the difficulty now-a-days of dianosis even.

I think the subject of the differential diagnosis of fibrous tumours of the uterus may be advantageously considered under the three following heads.

I. The mode or positions for examination, and previous history of an affected patient.

II. The particular notation of special symptoms, and the testing of their relative value.

III. Particular reference to the differential diagnosis between pregnancy and ovarian disease, the two most common conditions likely to be mistaken for fibroid disease of the uterus.

I. The two points of great importance in the examination and diagnosis of these cases, upon which I wish first to dwell, are: 1. The position in which the patient is placed for examination; 2. The importance of obtaining the particulars of the previous and early history, which throw immense light on cases which otherwise, by mere present examination, it would be quite impossible to make out.

1. As to position for examination, I am satisfied that, in obscure cases, to give true results it must greatly vary. The position on either side, on the back, or even on all fours with the nates raised, and that usually adopted in *ballottement* (the patient standing on a chair and leaning over you), are each necessary in individual cases; and this is at once obvious, if we look to the extraordinary mistakes made. In fibrous tumours this position is especially useful, because patients affected with them, even in flooding cases, are often unusually fat and corpulent; so that palpation externally affords but indifferent help in measuring extent or dimensions; even fluctuation does little, unless it be assisted by the erect position and the finger in the vagina. The weight, then, of the affected organ, allows it to fall and play upon the finger within the vagina; whilst the point from which (if pressure be exerted above on the abdominal parietes) it is felt in the vagina, indicates the height to which the tumour extends within the abdomen, and also the connexion with the uterus by contiguity of surface.

By change of position alone, we can often diagnose the connection or disconnection of the uterus with an abdominal tumour.

I had this fact very forcibly brought to my own mind in a case of ovarian disease. The diagnosis here was very difficult. The uterus was closely connected with a large tumour in the left iliac fossa. In most positions, the movement of the one affected the other, although considerable free movement was possible in the iliac tumour. Was it a pediculated fibroid attached to the uterus, or an ovarian growth? It turned out to be the latter. When the patient was made to lie down inclined to her left side, and when the sound passed within the uterus was depressed at its handle-end, so as to push the uterus away from the left side towards the right side, *then*

the iliac tumour could be felt to be altogether free from the uterus. The diagnosis, therefore, made was ovarian disease with a short pedicle; and so it proved to be on operation.

Again, the *sound* can be passed in one position, and not in another. The changed position allows the weight of the diseased organ to bear in a different direction; and thus the existence of adhesions or enlargements in particular directions is made out. The os uteri also may only be felt sometimes in one of the positions when the uterus is much displaced by the tumour.

Upon the subject of adhesions, more mistakes are perhaps made than upon any other, more especially if they be pelvic, and when the patient is examined in the recumbent or erect position. The test generally given is a full inspiration; when, if the abdominal parietes move freely over the tumour, adhesions are said not to exist; and *vice versâ*. Unfortunately, however, in fat subjects especially, either this movement is not perceptible, or the skin moves over the muscles; and so we are deceived. Also, if the tumour dip low within the pelvis, it may be difficult to raise it in the ordinary position; and so adhesions may be inferred to exist on one or other side of the pelvis; yet the operation will prove that there were none. The adhesions may be present superiorly higher up in the abdomen. Had the patient been placed on all fours, and slightly on one side, the tumour would probably have moved a little from the pelvis, and the non-existence of adhesions there would have been made out. The stethoscope also, or hand, may make out a *friction*-sound. But this is no evidence of adhesion, only of dryness of the peritoneal covering; and it may disappear next day.

And here I think I had better say a few words upon the use, not of one only, but of at least two sounds, used in two of the pelvic passages at the same time; I mean the bladder, and uterine cavity, and rectum. By their combined action, the position of the fibroid enlargement and its situation can generally be very accurately made out. External abdominal manipulation does a good deal, but it is insufficient. Suppose there be little or no menorrhagia, so that the tumour is most probably a surface or an intraparietal tumour, the finger and sound afford a ready means of exploration *per vaginam*. If it be situated in the posterior wall, the double *touche* will often clear up the case: better still, one finger in the rectum or vagina, with the uterine sound in the cavity. The space in the case between the extremity of the sound will be greatest at this point. So, if it be in the anterior wall, the use of two sounds—one in the bladder, and the other in the uterine cavity and the space included between them—will determine it. In either case, a small fibrous tumour, without this precaution, may be mistaken for retroversion or anteversion. Dr. Atlee mentions several cases of error in this particular. I have seen the same difficulty occur where, besides retroversion, the uterus was congested and large—not an uncommon condition. Where the tumour is high up above the true pelvis, without two sounds I do not think it possible to say whether a given tumour is in the anterior or in the posterior wall. Except in the exceptional case where we have to do with a thin woman, with thin abdominal parietes and an atrophied anterior wall of the uterus, so that the one sound *in utero* can be felt externally by palpation over the abdomen, I do not think it could be made out otherwise; for the finger is not long enough; and I know positively that an eminent practitioner actually cut through the uterus into the peritoneal cavity, from not having previously satisfied himself, by the use of two sounds, of the thickness of the uterine parietes, or exactly made out the position of the fibroid.

If the tumour be in the lateral wall, even here, I believe, and especially if on the left side (owing to the sigmoid flexure of the colon), the ordinary digital examination *per vaginam* may be assisted by two sounds; one placed in the uterine cavity; the other in the rectum or bladder, and pushed up or down laterally. The direction of the uterine sound, generally inclined to the side opposite to which the tumour exists, is important. It is well, in all such cases, carefully to empty the bladder before manipulation. I have seen a tumour, solid in its contents, in a thin person, because the bladder was pushed against the abdomen, yet convey the feeling of fluctuation, and be mistaken for an ovarian cyst, by the neglect of this simple precaution.

I have dwelt upon the use of a sound in the rectum in some of these cases. I think that, indeed, in some cases it is indispensable, if we wish to make a correct diagnosis. The finger will not always suffice, more especially if the tumour be large and high up.

There is a most interesting case detailed by Dr. Waller, which bears upon this point (*Medical Gazette* for April 1853). The case occurred in the practice of Mr. Evans of Blackfriars Road. He diagnosed a large exostosis, of stony hardness, occupying the promontory of the sacrum; so that the antero-posterior diameter of the upper pelvis was reduced to an inch and three-eighths. The lateral diameter was also encroached upon. From its hardness, immobility, and apparent connexion with the sacrum, from which it could not be separated, he also concluded it was an exostosis. The Cæsarean section was performed. The patient, unfortunately, died. At the *post mortem* examination, the case proved to be one of fibrous tumour of the uterus, of the hysteromatous variety.

But the use of two ordinary sounds has some disadvantages. The distance between them, when out of sight, cannot be always accurately measured when an attempt is made to replace them for purposes of measurement, out of the body, in the position they occupied within it. The cavities may be of different lengths, and so preclude measurement altogether. To remedy these inconveniences, I have constructed the instrument I now show you, and which I have called the *pelvimeter*. It consists of two sounds, but of unusual length. On one of these there is a moveable pin, which, by means of a screw, can be made to move up and down, or fixed at any point. This sound is graduated upon its inner side by the ordinary inch degrees, which are marked 1, 2, 3, 4, etc. The other sound has along its middle two-thirds a slit, within which the end of the pin before alluded to may be moved to and fro. At the lower end of this is a screw, to which is attached a transverse bar, also graduated in inches and eighths of inches; but, to avoid confusion, they are marked by letters. The sounds, the upper parts of which are very soft, being placed in any two cavities, and bent in any manner required, are then locked, and the position noted and marked by the transverse bar; and when the two parts of the instruments are removed separately,

and readjusted, out of the body, as they were within it, the exact distance of the extreme ends can at once be measured. But, in practice, we sometimes meet with difficulties. Supposing the bladder do not reach as high as the uterine cavity, or *vice versâ*, then the thickness of the anterior wall must be determined another way. We must put one blade within the bladder, and the other on the outside of the abdominal parietes. Thus the thickness of the abdominal walls may be determined. Then, the second time, if one blade be placed within the uterine cavity, and the other upon the abdominal parietes, the distance between these two points, *minus* the known thickness of the walls, is the thickness of the anterior wall. So also, upon the same principle, with one blade within the rectum and one upon the spine first, and then, secondly, one on the spine and the other within the uterine cavity, the difference made out will determine the thickness of the posterior wall. Sometimes the folds of the rectum render the passage of the rectal sound difficult. In this case, the passage of a largish gutta-percha or caoutchouc tubing, properly prepared, may precede that of the sound; and the sound needs only to be passed within the tube. It is especially in cases where the tumour is high up, or extends above the true pelvis, that this instrument will be found so necessary, if we wish to make a correct diagnosis. In its absence, I have seen a tumour in the anterior wall taken for one in the posterior wall, the examiner being deceived by the position of the os, which was near the pubis.

2. The second point upon which I wish to dwell is the necessity, in these cases, of a very close and cross-questioning examination into the particulars of the previous history. Important as this is in most cases, it is exceedingly so in uterine fibroids. I believe that many errors of diagnosis may be referred to imperfect inquiries in this respect; parties examining such cases taking, as it were, the cue too readily from the idea of the patient, or mere external and internal manipulation. Thus the ideas of presence or absence of pregnancy are sometimes so strongly set up by the patient, who perhaps has had several children before, that the physician is often taken off his guard. I have known several women who actually asserted that they have felt the movements of the child in cases of simple fibrous tumour. For, although at first sight the difference between such cases appears very simple, we shall find in the sequel that it is not always so. Then there are many cases in which an ordinary examination will not suffice to make out the distinction between cellulitis or hæmatocele and fibrous tumour. I have seen the former two affections frequently confounded; and have myself been quite at a loss to say, even after very close examination, whether such tumours were fibrous or not. Suppose, in fact, a large tumour *in utero*, and chiefly pelvic, impacted within the pelvis. You find the uterus fixed. You come against a large tumour. You can detect no fluctuation; all you can ascertain is, that it involves the uterus. Fibrous tumours, you will say, are not generally fixed; and the cellulitis is generally more extended on one side than on the others. Granted. But the latter is not always the case; and, in fibrous tumours, the uterus may, either from its size or from some adhesions, lead to a conjoined fixation of the uterus. Here, therefore, is one advantage of knowing the early history. The suddenness of the symptoms in hæmatocele, the marked inflammatory symptoms in cellulitis, and the tense fixation of the uterus, which is generally much less marked in fibrous tumour, will assist the diagnosis, more especially if conjoined with menorrhagia.

But there is another way in which we can usually distinguish between cellular abscess and hæmatocele and fibrous tumour, more especially if the latter be not impacted *in utero*. The instrument which I now show you, and which, for want of a better name, I would speak of as the uterine *kinometer* (*kineō*, I move), will enable us to measure the amount of uterine movement very accurately. It is, in fact, a speculum, closed at the vaginal end by a caoutchouc membrane. The distal end terminates in a glass tube bent at a right angle, in a part of which there is a tap. The whole is filled with coloured water. In one which Mr. Coxeter has made for me, there is at the distal end, instead of a glass tube, a watch plate duly graduated, upon which a needle in connexion with the water moves. The vaginal end being pressed upon in the first case, the coloured water rises in the tube; in the second, the needle moves. When used, however, in the vagina, the tap in the first case, a screw in the second, is closed; so that the fluid is not forced outwards. Both are opened after the introduction of the instrument. We then notice two movements—one synchronous with the pulse, a *pulsatory* movement; the other with the respiration, a *respiratory* movement. If a healthy person be made to hold her breath, at each pulse you will observe the fluid rise and fall in the tube. The rise in this case is slight. If, however, you desire her to make a long inspiration, the fluid rises in the tube considerably, and as completely goes down with the expiration. The uterus, in fact, comes down with the diaphragm, like the ordinary viscera; and so the extent to which the water rises in the tube, or the needle moves round, is the index of the mobility of the uterus, which can often be more forcibly pushed down by the hand. In hæmatocele and cellulitis, the respiratory movement is mostly absent altogether, and the pulsatory alone remains.

In fibrous tumours, both are generally obvious, unless the growths be situated so high up that the instrument cannot reach them, or firmly impacted—a comparatively rare complication.

[*To be continued.*]

Hydrophobia. J. Leshman, a joiner, of Liverpool, was admitted into the Southern Hospital on the 19th inst., suffering from hydrophobia. It appears that he was bitten by a dog on November 28th last. The lacerated parts were at once cut out, and caustic applied. Up to Monday he appeared quite well, but in the afternoon he began to experience some difficulty in swallowing, and soon after well-marked symptoms of hydrophobia set in. He gradually grew worse, and died on the following day, about thirty-six hours after the symptoms first set in.

Spontaneous Generation. At the scientific meeting of the Sorbonne, on April 7th, M. Pasteur treated of spontaneous generation. The importance of the subject in its bearing on other questions, such as that of the existence of the Deity, the eternal duration of matter, etc., was pointed out by the learned professor, who then put forth the various arguments in favour of and against the doctrine, showing the objections in a forcible manner, and altogether treating the subject with a masterly hand. (*Chem. News.*)

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

Lock Ward, No. II.

CASE OF SYPHILITIC IRITIS: USE OF MERCURY.

Under the care of K. E. Knight, Esq.

E. C., aged 19, was admitted January 10th, 1864, with syphilitic iritis, having its usual characteristic marks—effusion of lymph, adhesion of the iris, dimness of vision, etc. He was ordered to have two grains of calomel and one-third of a grain of powdered opium every six hours.

The effect of the mercury was soon visible on the vessels of the iris. Its natural colour was restored; the cornea became clear again; the red zone around it faded away; effused lymph was absorbed; and vision again restored. He was now ordered three grains of iodide of potassium and an ounce of infusion of quassia three times a day, and was discharged cured in twenty-seven days.

As syphilis, in some of its worst forms, comes under treatment from time to time in the wards of this hospital, the value of mercury as a remedy is fairly tested; and well-grounded opinions, founded on experience, can be given in its favour. If those who argue against its use had an opportunity of studying syphilis in the wards of a lock hospital, or if attendance at those institutions formed part of the curriculum of the medical student, we should not have such divided opinions now-a-days upon the best mode of treating this disease. Men of great experience hold that mercury is a specific for syphilis; but they keep aloof from a controversy of mere words, when theory is more relied upon than facts. The only remedy for this chaos of opinions on a question of such vital importance to the health, and, it may be justly added, the well-being of the people of this country, is the establishment of a special school of instruction for venereal diseases, the want of which must now be apparent to every thinking man in the profession.

CASE OF HÆMATURIA.

Under the care of F. Page, M.D.

J. C. S., aged 47, admitted November 14th, 1863, had hæmaturia for seven years, coming on periodically at intervals of from six weeks to two months. He looked pale, emaciated, and highly anæmic. Bladder and urethra were explored, and found healthy. There was no symptom of renal disease. He was ordered to have generous diet and wine, and half a drachm of tincture of sesquichloride of iron three times a day.

By a steady perseverance in this treatment for six weeks, the patient perfectly recovered, and now, at the end of four months, looks healthy, has gathered flesh, and is able to resume his work, that of shoemaking. He occasionally takes small doses of iron with dilute sulphuric acid.

The cause of passive discharges of blood from the system, unconnected with organic disease, appears to be involved in considerable obscurity. This case is interesting in a pathological point of view. Here we have a patient suffering from passive hæmorrhage, without any *apparent* organic lesion. Did the discharge depend on some abnormal condition of the blood, or on some derangement of the organic nervous influence. The suppression of hæmorrhages is very often attended with serious consequences; but in this case, although the disease had existed for some years, and had become apparently *chronic*, no harm has resulted from its suppression.

Original Communications.

ON IMPETIGO CONTAGIOSA, OR PORRIGO.

By W. Tilbury Fox, M.D.Lond., Physician to the Farringdon General Dispensary.

Certain diseases, which exhibit in the main the characters of a sporadic nature, occasionally put on an epidemic garb. We see examples of this truth among the out-patients of large hospitals and dispensaries, in the occurrence of a "run" of cases of this or that disease. During my connexion with the Farringdon Dispensary, I have met with a large number of cases of an affection which has no description in books, or has been defined only in a vague, unintelligible manner. Its apparently epidemic nature is explained, in some degree at least, by its contagious quality; though, no doubt, the predisposing causes are more active at one than at another time, giving rise to what the French term "an epidemic constitution". If, however, a case of the disease referred to occur, others will speedily be produced, merely by simple contagion.

Porrigo is the favourite modern name for the affection; but porrigo has been applied at different times to denote very many dissimilars, especially eruptions on the scalp, whether vesicular, pustular, or squamous. Under all circumstances, it will be much the best to discard altogether a term whose indiscriminate use has been a fertile source of confusion in the nomenclature of skin-diseases. To those *parasitic* diseases which have been designated by the word porrigo, the generic term tinea is applicable, as a decided simplification. If used at all, the word porrigo should be restricted in its application to the disease now about to be described, known by some as the contagious, by others as the scrofulous impetigo, the porrigo Startinii, or contagious porrigo; but I agree entirely with the suggestion of my friend and colleague, Dr. Frodsham, that, *quoad* this disease, the word porrigo should be discarded and forgotten, and its place supplied by *impetigo contagiosa*.

At the outset, I had better state clearly that impetigo contagiosa must not be confounded with ordinary impetigo; they are absolutely distinct. Mr. Startin, if report be correct, fully recognises the existence of a contagious form of impetigo; but I am not aware of any published account from that gentleman's pen. In the British Medical Journal for November 28th, 1863, is a description, by my colleague Mr. R. W. Dunn, of porrigo. He says it consists of large dirty straw-coloured spots, flattened, of irregular shape, seeming as if they were stuck or glued on the part, without any inflammation at their bases; mostly seated on the scalp, but found also on all parts of the body. When the face is attacked, the spots are a little more regular; they discharge, and commence originally as papules, which become pustular. Mr. Dunn thinks it is of parasitic nature; from this opinion I entirely dissent.

Characters. The disease varies considerably in aspect, according to its seat, as I have narrowly ob-

served. It occurs mostly on the face, where it is generally unilateral, and seated especially about the angle of the mouth and side of the nose; also on the limbs, anteriorly and posteriorly; on the trunk especially, about the shoulders, the neck, and the buttocks. The constitutional symptoms which usher in the complaint are generally sufficient to make the friends declare the child "poorly", unable to take its food properly, "mopish", and the like. The local characters of the disease show themselves as little white, apparently vesicular, or more truly pustular points, just tinged at their bases with slight redness, and generally possessed of little pain. These points, which are always isolated and distinct at the outset, speedily enlarge and umbilicate to a more or less perfect degree. Now and then, coalescence takes place between two or more pustules. This is seen especially on the face. The next change is the assumption of the characters of a perfect pustule, which may desiccate, leaving a dark dry scab, depressed in the centre generally, through or from beneath which oozes out a little thick pus or puriform discharge. Each spot increases in a perfectly centrifugal manner, until, in about a week, it attains the size of a shilling or so. A characteristic aspect is then presented; the disease looks like a flattened bleb, whose central part is depressed and shrunken; the contents giving an opacity; while the margin of the bulla, as it now may be termed, is formed by a perfect ring of varying breadth, which has the look of wet soddened white leather, just as though the central part were circumscribed by a collar composed of upraised and blebbed epidermis; and this circumferential ring enlarges *pari passu* with the bleb.

It becomes an interesting question to determine the exact value to be attached to the umbilication in impetigo contagiosa. I hold it to be almost diagnostic. Of course, it is only seen perfectly in the early stages. In pemphigus, the uplifting of the cuticle and the subsequent distension is *extreme* and perfect, and the contents are serous; in impetigo contagiosa, some differences exist. It has been said that the umbilication is simply due to the presence of a sweat-gland, tying down the centre of the bulla or pustule, whichever it may be. This, however, is certainly an erroneous explanation. The depressed condition is secondary to distinct distension, and is brought about by the peculiar nature of the disease and the character of the secreting surface. At the outset, the secretion is pretty free, but presently becomes lessened and more plastic, while the surface which pours it out tends to ulcerate; hence the part where the disease commenced—viz., the central part of the bleb or pustule—will be less distended, perhaps begin to desiccate, while the secretion is going on freely at the extending circumference, so as to produce the comparative aspect known as umbilication.

The so-called bleb or pustuloid may attain to a considerable size. The contents are peculiar; there is generally more or less pus; and always, at the early stage, at the bottom a little pellet or *bouton* of mucous consistency (aplastic lymph), which can be removed, and then leaves to view a little conical pit of ulceration. The discharge dries into crusts, tolerably thick, which adhere for many days, and then fall off, leaving ulcerated surfaces. If the crusts be detached by the finger, a nasty sticky puriform fluid is seen to cover the surface of the ulcers; these latter give out a greater or less amount of discharge, which again concretes in crusts. Fresh pustulations occur, so as to prolong the disease for a period of from three to six or eight weeks. Each spot lasts a variable time—ten days or more—leaving, in process of cure, a dull red stain. The scabs may become quite black from the commingling of dirt with the discharge.

The disease is always characterised by the presence of *circular* umbilicated *quasi*-bullous spots, which increase centrifugally, and become covered by yellowish flat crusts, which cover over superficial ulcerations of an unhealthy kind, leaving, in process of cure, dull red stains.

Modifications. There are several modifications worth considering. There may be but one solitary spot. A short time since, I saw a most typical example in a patient of Dr. Frodsham. The crust was of about the size of a florin, or nearly so. This solitary spot may be seated on the face or head; rarely on the trunk, except as the consequence of direct contagion or inoculation. When seated on the head, the crusts are very perfect, inasmuch as the hairs help out the matting together of the mass. On the scalp, the disease possesses the characters ascribed to it by Mr. Dunn. The so-called porriginous spots always commence as small elevated isolated points. They are always a primary form of disease; the crusts are circular, or nearly circular, isolated, yellowish, adherent, granular, and pretty dry.

I have seen this form of impetigo associated with strumous ophthalmia, and with otitis, both of an acutish kind. More than this, I have seen the mucous surfaces affected; all these states being dependent evidently upon the cause which gives rise to the impetigo.

On the face, it is not unusual to notice several separate foci of disease, running together into an irregular, oozy, cracked, scabbed patch. In this state, it is not unlike eczema impetiginodes; but almost invariably the peculiar umbilicated pustuloid or peculiar ulceration will be found. Again, on the surface (and head especially), there is usually little if any redness around the bases of the different spots; though they may be as large as a shilling. Occasionally, however, there is a marked exception to this rule; and there may be an intense inflammatory areola. I have seen a considerable degree of inflammation of the derma and subcutaneous cellular tissue, the erythema having a dull red hue.

In situations where the cuticle is thick, it occasionally happens that the bulla, instead of becoming umbilicated, is upraised in the centre, and filled with a thin puriform fluid; but, under these circumstances, there is an opening at its centre, through which the contents ooze out. The discharge does not observe any regularity, but takes place capriciously. Now the pustuloid (or bleb) is apparently desiccating; now it rapidly fills; and the covering or operculum is always white, looking soddened, as though the parts had been scalded. The spots are solitary; and I have always seen this either at the point of the elbow or the back of the joints of the fingers.

Now and again, the separate pustuloids are confluent; but even here their distinct individuality can be made out, and there is no crusting over to such a degree as to make it appear as one large pustule.

The degree of ulceration varies. It is always tolerably superficial, and presents a soddened, pasty, gelatinous aspect, due to the character of the secretion. The edge of the patch of ulceration is sometimes peculiar. It is often that which is seen in other diseases called "scrofulous", particularly when the sore itself is the seat of diminished or scanty discharge; viz., indurated, elevated, of a dull red hue, and slightly inverted, like some instances of lupus; only this state is of short duration, comparatively speaking. In other words, the ulcer, which is circular, may be bounded by a well defined, rounded, raised, and dull red margin of thickened integuments. It is from this feature, among others, that one is led to infer the existence of a scofulous taint in the totality of the disease.

Microscopic Characters. I have made some very careful microscopic examinations of the crusts and secretion of impetigo contagiosa. In an early state, when the isolated points first make their appearance, there are present a few pus-cells perhaps, but chiefly a homogeneous blastema, with more or less fat, epithelial *débris*, and the like. In the more fully developed condition, the same elements are seen, but with a decided comparative preponderance of pus-cells. The scabs are composed of foreign substances (cotton, fibres, etc.), epithelial cells in different degrees of development, homogeneous plasma, pus-cells, fat, hairs, and parasites (animal and vegetable). I have never detected any sign of the presence of the acarus scabiei; but have noticed most perfect specimens of the steatozoon (acarus) folliculorum; and in several instances the spores and filaments of tricophyton, but in others not a trace; and, from all considerations, I believe the presence of the latter is an accidental phenomenon. It is worth mentioning, that the small hairs in the crusts are invaded and split up by the fungus—a state which, whatever may be said to the contrary, is, practically speaking, diagnostic of the presence of a parasite, provided the hair so split up be a well developed one. In the *Transactions* of the Pathological Society (vol. vi) may be found the brief description and figures of a supposed new fungus observed by Mr. Hutchinson in the course of "contagious porrigo". "Although", he says, "a vast number of cases were inspected, I was, however, successful in only two in finding anything beyond the usual constituents of purulent crusts." He adds: "Having failed to find, in so very large a proportion of the cases examined, anything at all similar to the bodies illustrated, I cannot, of course, suppose that the observation is of any value in relation to the pathology of the disease."

One word more about the umbilication, as it has been termed. In some cases it scarcely, perhaps, amounts to more than is entitled to be called depression; but the tendency to marked depression in the centre, as compared with the circumference, is certainly the characteristic of the spots of impetigo contagiosa; and this feature is, as I have explained, dependent upon the peculiar behaviour of the secretory power of the disease. When thick crusts form, of course the aspect of umbilication is obliterated.

Causes. The disease exhibits no preference for sex. It attacks adults sometimes, but children most generally, and particularly those of the lower orders, of scrofulous habits—the fat, flabby, pale, thick-nosed, and light-complexioned ones. Want of cleanliness, light, and air, and wholesome food, help out its evolution. The disease not unfrequently follows in the wake of, or appears to be caused by, vaccination; at other times, it has no direct dependence whatever on this. In a person predisposed to the disease, it is not unlikely that any local irritant would call it forth into tangible existence.

[*To be continued.*]

CASE OF EMBOLISM, FOLLOWING SYNCOPE FROM POST PARTUM HÆMORRHAGE.

By J. Shepherd Fletcher, M.D., Manchester.

[*Read before the Manchester Medical Society.*]

[The following notes of the case are furnished by A. Ransome, M.A., M.B.Cantab.]

Mrs. R., aged 36, had previously borne two children. She had phthisis sixteen years ago, from which she recovered, but has been delicate. Her brother died of phthisis, and her father of diabetes. She was confined February 12th, with a girl. The delivery was very rapid, and was shortly followed by profuse hæmorrhage, which produced slight fainting, lasting for some time. Her recovery was rapid. She was allowed to sit up on February 25th.

On March 1st, she rose at 10 A.M. She had suckled the baby frequently in the morning. She ate rather a smaller dinner than usual; but, in other respects, nothing unusual was noticed. At 2 P.M., she was sitting up. The nurse had just taken the baby from her, and turned away; on looking round the moment after, she saw Mrs. R. with her lower jaw dropped, pale, and making signs with her hands. The nurse gave her a tablespoonful of raw brandy, and then got her upon the sofa. Mrs. R. was just able to name her next neighbour, and made signs to send for her. After this, she could make no articulate sound.

When seen half an hour after the seizure, she was lying upon the sofa, pale and much agitated; her head was hot; her hands wet with perspiration; the pulse in right wrist (the only one then examined) 104, full, and jerking. She moved both hands, to express, as it seemed, something wrong about them. The face was somewhat drawn to the left side; and the tongue, when protruded, was pushed to the right side. All power of articulation was completely gone. Mustard was applied to the back of the neck, to the stomach, and to the calves of the legs. Two grains of calomel were given, and ammoniated tincture of valerian was ordered. In about an hour from the time of the attack, she seemed to recover partially, and again spoke easily and plainly; but in another half-hour she again became speechless, though conscious, and able to answer by signs.

At 5.30, Dr. Fletcher saw her, and found that, though the pulse was easily felt in the right wrist, yet it was scarcely perceptible in the left: it was equally feeble in the brachial artery, but was easily found in the axillary, subclavian, and carotid. She could move both hands, but was unable to grasp with the right. The pulse had now become very rapid and weak. Brandy and sal volatile, and then brandy and ammoniated tincture of valerian, were given every twenty minutes; and afterwards, five grains of sesquicarbonate of ammonia and half a grain of ammonio-tartrate of iron, in camphor julep, were given alternately with brandy and beef-tea every hour through the night. Blisters were applied behind the ears. Under this treatment, the pulse gradually improved slightly in strength, and was rather more easily felt in the left wrist; but it was still excessively feeble and small.

March 2nd. 8 A.M. She had dozed a little in the night. Her head was cool; the body was bathed in perspiration. The blisters had risen. The bowels were not open; the abdomen was distended with flatus. She had passed urine voluntarily every half-hour. The pulse was 96, stronger in both wrists, but still scarcely perceptible in the left. There was rather more strength in the right hand, but she was still unable to hold a pencil. An enema of turpentine and soap brought away a copious evacuation and much flatus. During the day, she gradually recovered power in the right side. The tongue, when protruded, was less completely pushed to the right side. The pulse also was diminished in frequency, but retained its force; and in the right wrist it had slightly increased in volume. The urine was pale, of specific gravity 1007, not albuminous.

March 3rd. There was great improvement in her appearance. The skin was cool, not perspiring; pulse quieter in right wrist, stronger in left. She could hold a pencil in the right hand, and wrote several words on a slate without much difficulty.

March 5th. She articulated several words for the

first time, as "baby, papa, beef-tea, good night." She wrote, that she felt more natural altogether, but complained of pain in the left shoulder, and of tingling in the left arm and leg. The bowels were regular; the pulse better.

March 6th. She seemed more nervous; had presentiments of impending evil. The pulse was softer and weaker. She wrote, that the sense of smell, which had been impaired, was now all right again.

From this time her progress was steady, but slow. Her speech was not perfect even so late as the end of May; but her strength had so far returned, that she was then able to go away from home.

The treatment by sesquicarbonate of ammonia and small doses of iron was continued throughout, with increase of dose, and the addition of a quantity of the tincture of nux vomica.

To the details of the case, as given above by Mr. Ransome, I have nothing to add, except that, on the sixth day of July, she came by express train from the seaside in a great state of alarm, thinking another attack was impending, as she felt strange feelings of confusion in her head, with some unpleasant sensations in her right side. On careful examination, I could not detect any reason for increased fear, as in all respects she seemed better, except that the left pulse was still not equal to the right. I advised tepid shower-baths, and prescribed three grains of phosphate of zinc in pills three times a day. I saw her again in a month, when she expressed herself as quite well, and stated that the pills gave her immediate and most perfect relief from all her unpleasant feelings. Her speech up to about two months ago was slightly imperfect, and the left pulse below the right in strength.

The preceding case is remarkable for many circumstances, and is of considerable interest, inasmuch as the cause of the embolon, or clot, cannot have been such as is generally productive of this serious condition of things; and, again, the result was fortunately altogether different to that which is the general rule in cases of embolism affecting the cerebral arteries—which have been said to be almost always fatal.

The causes of embolism generally are known to be organic diseases of the left side of the heart, atheromatous degeneration of the large arterial trunks and inflammation of the veins; each one of these causes the development of fibrinous concretions, which adhere but slightly to the walls of the vessels or cavities in which they are contained, and are readily detached, when they are carried with the course of the circulation until they are arrested by some of the smaller vessels along which they are too large to pass.

The formation of fibrinous clots during syncope is an unusual cause of embolism, so far as I am acquainted with the literature of the subject; and yet, looking at all the circumstances of this case, I can find no other reason for the formation of an embolon in the case just detailed. My own opinion as to this case is that, at the time of the hæmorrhage after labour, a small clot was formed, which, during the time of feeble circulation, probably contracted some adhesion to the walls of one of the heart's cavities—most probably the left ventricle—and when the circulation became more energetic, this was detached, and moving along the aorta, was arrested at the left carotid and the left subclavian arteries, into each of which it entered, fitting on the small portion of the aortic wall between them in the form of a saddle; from which spot a portion was probably detached to be carried into one of the cerebral arteries at the time that she for the second time became speechless and partially hemiplegic, and the second portion into the lower end of the brachial when it stopped the pulse.

It will have been remarked that in the account given of the symptoms, the left side was the one in which the circulation was interrupted, whilst the right side was the one partially paralysed—this agreeing with the general rule as to cerebral paralysis.

Another remarkable feature in the case was, that as the pulse improved in the left wrist, the use of the right arm also returned; and these two symptoms seemed to move on together—to me very clearly telling of the same process of removal or absorption of the several clots. This is remarkably seen in the account of March 3rd: "Pulse quieter in right wrist; stronger in left; can hold a pencil in right hand."

On the 5th, she could write words; and on the 6th, smell returned. It was a remarkable feature in the case that, although perfectly conscious, she could not for more than a week recollect the words she desired to write on her slate, and would very often use wrong words; indeed, it was some weeks before she could always recollect the words she desired to use.

This lady had been for years subject to rheumatic pains; but she had never had any severe rheumatic attacks; and, although I am quite aware that rheumatism has been found to be often associated with cases of embolism, I cannot suppose that this had any relation to this case—as I think it will be found that it is only in those cases of rheumatism giving rise to heart-disease that any connexion can be traced between the two conditions.

Certain conditions of the blood would undoubtedly give a disposition to the formation of clots, by deposit from the blood itself; and the condition of rheumatism, I apprehend, may be one of these.

In considering the question, as to whether or not an embolism can be formed in the blood by simple coagulation of a portion of its fibrine without the existence of any organic change in any part of the heart or blood-vessels—as I believe to have been the case here—we must remember that coagulation of the blood takes place much more readily with a slow and feeble circulation, and that after great loss of blood there is generally a relative excess of fibrine and a much quicker coagulation of the blood (Day), whether this loss occurs by blood-letting or by hæmorrhage.

Pregnancy, too, has its own particular condition of blood; viz., a low specific gravity, from an excess of water, fewer red corpuscles, and a relative excess of fibrine: all circumstances favouring the occurrence of embolism. Her anæmic habit is not an unimportant point in this case, and would aid in the development of an embolon.

The co-existence of all these favouring circumstances lends additional probability to my opinion, that the case I have narrated was one of the formation of an embolon by simple coagulation; and I think I am warranted in saying that such a pathological condition does occasionally occur. The prognosis in all such cases of embolism would be more favourable than in those arising from organic disease, from the fact of the clot being less firm than detached masses of old-standing effusions are; and referring to Dr. Richardson's experiments on the coagulation of the blood, we find that he could re-dissolve the clot of coagulated blood in serum alkalinified with ammonia. This I believe was done in the living subject in Mrs. R.'s case by the administration of ammonia; and I am disposed to give a share of the credit due for the result of this case to Dr. Richardson, for the important additions he has made to our knowledge of the physiology of the blood, although I am quite

aware that his conclusions as to the cause of the coagulation have been very ably contested.

The result of this case has been most satisfactory; for the long continued difficulty of articulation led to some little fear that a permanent difficulty of articulation might be the result, as it is said to be in all cases of recovery from embolism of the cerebral arteries.

Cases somewhat similar in character to the one I have detailed are, I am convinced, of much more frequent occurrence previous to and after confinement than are generally supposed; and are reported as, and believed to be simply cases of death from syncope. I have myself seen two cases, both of which proved fatal, occurring in the practice of other medical men; and which, I believe, were cases of embolism; but this disease not being thought of, was not detected, nor was any examination made after death. After great loss of blood, coupled with a feeble state of health, I think it will be well to keep the possibility of such an occurrence in our minds, and to direct such treatment as might tend to prevent it.

The treatment in this case is somewhat novel; as I find that most of the reported cases of embolism have been treated by calomel, croton oil, etc. Such treatment, carried to the extent of acting freely on the bowels, would, in this case, I think, have proved injurious; and in suggesting the use of the carbonate of ammonia, iron, and brandy, both Mr. Ransome and myself were not influenced so much by the general condition of the system; but the special reason for preferring the carbonate of ammonia was founded upon Dr. B. W. Richardson's theory as to its action in maintaining the fluidity of the blood. Whatever may be thought of this theory, I am quite convinced that the line of treatment adopted in this case with such excellent results is the proper treatment for cases of embolism generally; and I should look with little favour upon the administration of calomel, croton oil, etc.

CASE OF POISONING BY KIDNEY-BEANS.

By William Dale, Esq., Ilkeston.

A few days since, I was sent for to see a child five years old, who had been taken suddenly ill a short time previously, and was said to be dying. On my arrival at 8 p.m., I found him bedewed with cold perspiration; the breathing slow and sighing; the pulse at the wrist very rapid and almost imperceptible; the pupils widely dilated, and insensible to light. He could only be roused by speaking loudly, but appeared, when thus roused, to understand what was said. Pressure on the abdomen apparently gave pain, as the child shrank from it, and drew up his legs. The features also expressed suffering.

The history of the case was this. The child had always been remarkably healthy up to the time of this seizure. In the afternoon, he was playing with some kidney-beans. (These beans were some of last year's seeds, which a neighbour had thrown away because they were mildewed, and he thought them unlikely to germinate.) At tea-time, he asked his mother for some water. This almost immediately returned, and with it a quantity of half-digested beans. He then complained of pain in the bowels, and gradually became worse until I saw him. I immediately administered a dessert-spoonful of mustard in warm water; and, vomiting being produced, I ordered copious draughts of warm water, with an occasional teaspoonful of sweet oil. The vomit contained a large quantity of semi-digested kidney-beans. When the vomiting had somewhat abated, I ordered two teaspoonfuls of brandy to be administered occasionally, with a little water. The pulse now became a little stronger, and the breathing more natural; the pupils also began to act slightly, but the drowsiness still remained. He was then ordered to have two teaspoonfuls of castor oil. I also ordered a tablespoonful of strong coffee to be given every half-hour. The castor oil soon produced purging; and from that time amendment commenced. The pulse grew stronger; the breathing more natural; the pupils more active; and the drowsiness less. In the morning, the only symptom remaining was a little tenderness at the epigastrium.

Reviews and Notices.

The Science and Art of Surgery: being a Treatise on Surgical Injuries, Diseases, and Operations. By John E. Erichsen, Professor of Surgery and of Clinical Surgery in University College, and Surgeon to University College Hospital. Fourth Edition, enlarged and carefully revised. Illustrated by 517 Engravings on Wood. Pp. 1280. London: 1864.

A System of Surgery. By James Miller, F.R.C.S.E.; Surgeon in Ordinary to the Queen for Scotland; Professor of Surgery in the University of Edinburgh; etc. Pp. 1387. Edinburgh: 1864.

These two classical works on Surgery have appeared nearly simultaneously in London and Edinburgh; their authors being well known teachers of chirurgical knowledge in their respective localities. Mr. Erichsen furnishes a fourth edition of his well known work. Mr. Miller's book is, we believe, the result of the union into one volume, with the necessary emendations, of the two works which have hitherto been published under the titles of the *Principles* and the *Practice of Surgery*.

Of two such works, with the favourable antecedents belonging to them, there is little to be said by the reviewer; and any attempt to determine positively which is the better of the two would be, at the least, a difficult task in more senses than one. Yet, in their arrangement, and in some other matters, there is a marked difference between the two books.

Mr. Erichsen arranges his subjects under the three divisions of General Principles, Surgical Injuries, and Surgical Diseases; and in the latter two divisions, after first noticing each injury or disease in its general bearings, he describes the lesions affecting the various parts of the body. Pathological considerations, and the description of necessary operations, are with him incorporated with the description of the injury or disease to which they specially belong. An exception, however, occurs in the case of amputations, which have a chapter to themselves in the works of both authors—Mr. Erichsen placing at near the *beginning* of his book, while Mr. Miller places it at the *end*. Mr. Miller places his pathological remarks, and the general descriptions of such diseases as aneurism, fracture, dislocation, etc., in the first part of his book—that corresponding to his *Principles of Surgery;* while a regular arrangement of diseases and injuries is adopted in the remaining portion. Mr. Erichsen, considering that the diseases of the

eye would require more space than he could afford them, purposely omits a description of them, referring the reader to works on ophthalmic surgery. Mr. Miller, on the other hand, has nearly a hundred pages devoted to the consideration of these affections. As to the fulness with which various matters are treated, there is a variety; sometimes one author, sometimes the other, is the more copious in detail; but, on the whole, Mr. Erichsen's work, with the exception to which we have above referred, is the fuller of the two.

An important feature in Mr. Erichsen's book, and one which certainly increases its value, is the elaborate manner in which he gives the *diagnosis* of various injuries and diseases. As he judiciously observes in his preface, "accuracy in this branch is an all-important requisite for success in treatment"; and therefore he has, "in each case, not merely described the signs and symptoms by which the injury or disease under consideration may be recognised, but has been careful—even at the risk of repetition—to point out the several conditions with which it may be confounded, and the means of distinguishing it from each of them".

Both authors, distinguished as they are among operating surgeons, have some very judicious remarks on the subject of operations. Mr. Erichsen, throughout the book, takes care to point out when operation is not advisable or likely to succeed; and, in the opening sentences of his first chapter, entitled "General Considerations on Operations", assuming apparently that the necessity for and advisability of operation has been established, he says:

"Manual dexterity is necessarily of the first advantage to a surgeon, and he should diligently endeavour to acquire the art of using his instruments with neatness, with rapidity, and with certainty: but manual dexterity must not be mistaken for professional skill; and, desirable as it doubtless may be to be able to remove a limb, or to cut out a stone, in so many seconds; important, in a word, as it is to become a dexterous operator, it is of still far greater importance to become a successful Surgeon. The object of every operation is the removal of disease that either threatens life, or interferes with the comfort and utility of existence; and the more certainly a surgeon can accomplish this object, the better will he do his duty to his patients, and the more successful will he be in his practice. . . . . The Diagnosis of the nature of the local disease, and of the extent of its connections, has to be made; lurking visceral affections must be detected, and, if possible, removed. The Constitution of the patient must be prepared; the best time for the performance of the operation seized; and, after its completion, the general health must be attended to in such a way as shall best carry the patient through the difficulties he has to encounter, and any sequelæ or complications that arise must be met by, and must be subjected to, appropriate treatment. . . . . It is well known that the result of operations differs much in the practice of different surgeons of acknowledged dexterity; and this variation in the proportionate number of recoveries cannot be accounted for by any difference in the degree of manual skill displayed in the operation itself, but must rather be sought in the greater attention that is paid by some surgeons to the constitutional treatment of their patients before and after the operation, and to their more perfect acquaintance with the general science and practice of surgery. Indeed, success in operative surgery depends greatly upon the selection of proper cases. The practice of operating in notoriously hopeless cases, with the view of giving the patient what is called a last chance, is much to be deprecated, and should never be followed. It is by operating under such circumstances, especially in cancerous diseases, that much discredit has resulted to surgery; for in a great number of instances the patient's death is hastened by the procedure, which, instead of giving him a last chance, only causes him to be despatched sooner than would otherwise have happened."

Mr. Miller, too, treating of the same subject, writes as follows:

"Perhaps a more common, and still more serious error" (than that of believing that rapidity of operation is specially to be aimed at), "is the imagining that operations constitute the greater and more important part of practical surgery. The student is very apt to be led away by the more garish and imposing part of his profession, to the neglect of that which is in truth by much the more valuable; and he may also forget that, in after life, he will be only occasionally called on to perform the greater operations, while daily he must exert his general knowledge and skill, as well as his minor handicraft, to avert the necessity for the knife's employment. . . . . It is surely a higher exercise of a better skill, and both the means and the result will prove infinitely more creditable and satisfactory, if, by the internal use of simple remedies, and suitable attention to hygiene, the disease" (such as diseased joint, or stone in the bladder) "shall be in its very origin frustrated, pain and danger dispelled, and health and comfort restored, all without the infliction of a scratch, or the loss of one drop of blood. . . . . The advance of surgery will ever be found characterised by a corresponding decrease of its operations, both in amount and in severity. The true object of our mission is not to cut, but to cure."

Before concluding, we must notice one fact which may be regarded as a compliment to British surgery; viz., that, since its first appearance, Mr. Erichsen's volume has passed through several editions in America, has been recently translated into German, and is now, he states in his preface, "in the hands of a French editor".

As we have already intimated, we forbear to express any absolute opinion on the relative merits of the two books. For our own part, we prefer Mr. Erichsen's—on account of its greater fulness, and probably, in part, from its having been, in past years, most familiar to us. With either, however, as a book for study and reference, we should be well content, and should only desire access to the other as a means of enlarging our information on certain special points.

Female Doctors on Horseback. An American paper states: Miss Dr. Harriet N. Austin, of New York, has come out in favour of ladies riding on horseback astride. The present style of riding, she says, is unsafe, ungraceful, unhealthy, and unnatural. Dr. J. C. Jackson, in his work on consumption, takes the same view. He says that the present style in which ladies ride, when long continued, is productive of numerous diseases; but thinks that, if women could have dresses fitted for the purpose, and would ride astride as men do, horseback riding might not only be used as a means of occasional relief from the monotony of life, but might be elevated into a national characteristic.

British Medical Journal.

SATURDAY, APRIL 30TH, 1864.

MEDICAL EDUCATION: PROPOSALS FOR AN IMPROVED METHOD.

We have stated, in our recent numbers, what we consider to be the duties and powers of the Medical Council under the Medical Act; and we have pointed out the direction, although not the precise mode, in which those powers, in our opinion, might be most advantageously exercised. We have also drawn attention to the necessity for some uniform plan of education for the medical student, as manifested in the great diversity of subjects taught, and the varying number of lectures given on each, in the several medical schools of this metropolis; and we arrived at the unavoidable conclusion that the Medical Council ought to interfere, and at once.

We now purpose to offer some suggestions towards effecting that which we consider would be an improved system of medical education; and we hope to elicit, also, the opinions of others more experienced than ourselves in the matter of medical tuition.

In the first place, we consider it desirable for the guidance of the student, not only that a minimum be fixed both as regards the time to be devoted to, and the subjects to be comprised in, his professional education, but that there should be also some general agreement as to the order in which such subjects should be studied, and the methods by which a knowledge of them can best be acquired.

As regards *the time to be devoted to professional studies*, we think that four academic years should be the minimum, each year to consist of a winter session of five months, commencing in November, and a summer session of three months. The commencement of professional study should be understood to be the time of commencing professional studies at a medical school. And here we beg leave to express our dissent from a proposal which has been made to divide the academic year into two equal sessions of four months each; an arrangement which would needlessly curtail the time for dissection, which can only be carried on during the colder period of the year.

As regards *the subjects of professional study*, we would divide them into such as are especially *preparatory*—namely, Anatomy, Physiology, Chemistry, and Materia Medica; and those which may be termed *final* subjects of study, or which teach the student the actual practice of his art—namely, Medicine, Surgery, and Midwifery. To the former, he should devote his first two years; and to the latter, another two years—thus completing four years, at least, of professional study. Botany, we are of opinion, should be included in general education; and Forensic Medicine should not be made the subject of a separate course of lectures. Our reason is this. Forensic Medicine is a special department of practice, and exercised by very few; whereas a plan of education should be adapted, not for the few, but for the many. If it be objected that a knowledge of this subject is required by every medical practitioner to aid in the detection of poisoning, or other criminal attempts, our answer is, that the knowledge which he must otherwise acquire of Chemistry, Surgery, Midwifery, and Morbid Anatomy, will or might be sufficient for that purpose.

Such being our views as to the time to be employed in professional study, and the subjects to be studied, dividing them into "preparatory" and "final"; let us state the number of examinations which the student should, in our opinion, be required to pass. In addition to regular class examinations, which we consider to be of primary importance both to teacher and pupil, as a means whereby the student's knowledge and progress may be ascertained, we think that every candidate for a qualification to practise should be required to pass at least two public professional examinations: one to be undergone after two years, and the other after four years of professional study. Should, however, any student fail to pass his first examination, he should not be permitted to present himself again for examination until after the expiration of an additional six months of study; nor should he be allowed to enter on the study of Medicine, Surgery, or Midwifery, until his first examination has been passed.

We are met here by the serious inconveniences which result from the existence of examining boards having different standards of a sufficient professional education, as tested by their examinations; and, although this is not publicly stated, the fact is sufficiently well known to students, who not unfrequently avail themselves of the greater facilities offered for passing an examination by one corporation, when disappointed in their hopes at some other, where higher attainments are required. This state of things is much to be deplored; but we trust that the corporations themselves, even without a suggestion from the Medical Council, will, before long, perceive that it is to their own interest, as well as to the students' advantage, to avail themselves of the power given in Section xix of the Medical Act, "to unite and cooperate in conducting the examinations required for qualifications to be registered under this Act."

Another evil of no little importance in reference to the safety of the public, connected with this subject of examinations, is this. Each of the three great licensing medical corporations in London, the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, has a differently

constituted board of examiners; and the Pass Examination of each differs greatly in respect to the subjects it comprises.

At the College of Physicians, the final or Pass Examination comprises the Principles and Practice of Medicine, Surgery, and Midwifery; the Examiners on Medicine and Midwifery being chosen from the Fellows of the College, and the Examiners on Surgery from the Fellows of the College of Surgeons. It may, therefore, be inferred that candidates for the License are sufficiently tested on each of these departments of practice.

At the College of Surgeons, the final or Pass Examination comprises Pathology, Surgery, and Surgical Anatomy; the Examiners being Fellows of the College. Neither Medicine nor Midwifery forms part of the Examination for the Diploma of Member; but there is a separate Examination for a qualification to practise Midwifery; two Fellows of the College of Physicians forming part of the Examining Board. This Examination is not, however, compulsory on the candidate for the Diploma of Member.

At the Society of Apothecaries, the final or Pass Examination comprises the Practice of Medicine and Pathology; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology; the Examiners possessing, for the most part, the Diploma of Member of the College of Surgeons and the License to practise as an Apothecary; four of the twelve Examiners being Members of the London College of Physicians. Surgery, be it observed, forms professedly no part of the Examination for the License to practise as an Apothecary.

Here, then, we have three Corporations, the Licentiates of each being submitted to very different examinations as regards the subjects comprised in them, understood legally to possess very different privileges of practice, "according to their qualification or qualifications," yet practising, without let or hindrance, Medicine, Surgery, and Midwifery, at their discretion, although their sufficiency on certain of these subjects may not have been, as we have shewn, in the least degree tested. *It is well known that hundreds of Members of the College of Surgeons, who have never been examined as to their proficiency in Medicine or Midwifery, are, notwithstanding, engaged in such practice. Numbers, who have no other qualification than the License of the Apothecaries' Society, are practising Surgery, although this forms no part of the examination to which they have been subjected.* Such dangerous irregularities surely ought not to be allowed. Some measures should be taken to provide that those who practise these three branches of physic should be sufficiently tested on each; and that the public should be protected against the ill consequences which cannot fail to arise from such a state of things.

Before we offer any remarks on the order in which the subjects of professional education should be studied, and on the methods by which we consider that a knowledge of them can best be acquired, let us draw attention to what, in our opinion, would be a great advantage to the student, if the division of subjects into "preparatory" and "final", each occupying a period of two years, were adopted. It must be apparent that Anatomy and Chemistry can only be successfully studied in those schools which are provided with the necessary dissecting-rooms and a suitable laboratory; in those schools, in fact, whether London or provincial, at present "recognised" by the examining bodies. The first two years of professional study would, therefore, still have to be passed at one or other of these schools. Such is by no means, however, a necessity as regards the two years to be devoted to the final subjects of study; these subjects can be studied as well —nay, probably better—at some sufficiently large institution for the sick, to which no so-called school is attached; for the number of students attending the physician or surgeon during his visit to the patients in a hospital with which a school is connected, precludes of necessity a great majority from any participation in the practical instruction given at such times; so that the facilities for acquiring this the most essential, because the most practical, part of a student's knowledge of his "final" subjects of study, are less at such hospitals, although the opportunities afforded him for learning his "preparatory" subjects are greater.

Why should not the student be permitted to enter at these schools for his first two years only, leaving him free, after having passed his first examination, to select the institution, either in London or in the provinces, in which to study Medicine, Surgery, and Midwifery, provided always, that the institution chosen offer sufficient opportunities for this purpose? Why should his experience be derived from one institution only? Why should so many of our country hospitals and infirmaries, places in every way well adapted for studying Medicine and Surgery, be useless in this respect, solely because they have no so-called school attached? There are many institutions in the large towns of this country receiving annually hundreds of patients, attended by physicians and surgeons both competent and willing to aid in the practical instruction of students on these subjects. Opportunities for acquiring a practical knowledge of Midwifery, under the direction and advice of experienced members of the profession, are quite as favourable in large provincial towns as in London. Any arrangement of the kind now suggested would, we are aware, tend to diminish the emoluments of London lecturers and teachers; but is it right, is it reputable, that a system recognised as faulty, and capable of improvement, should be suffered to continue on that account?

Having thus fully expressed our views on the chief points relating to the time and subjects of study, and having pointed out some of the advantages of the changes we suggest, let us proceed to offer, with all deference, our opinions on *the methods by which a knowledge of the subjects of study can best be acquired.*

Anatomy is divided by teachers into six species or varieties; namely, Anatomy, descriptive and surgical; physiological and general; comparative; histological and minute; morbid; pathological: and these are taught by separate courses of lectures. We do not question the accuracy of this subdivision in a scientific point of view; but we consider it an unnecessary and inconvenient arrangement for the student. Comparative and Histological or Minute Anatomy should form part of the lectures on Physiology; and Morbid and Pathological Anatomy should be included in the teaching of Medicine and Surgery. Anatomy, moreover, should be learnt, not taught. It is in the dissecting-room only that a real knowledge of this subject can be acquired; it is best learnt by demonstrations, and the student ought to demonstrate for himself. Official "demonstrators" may be appointed; but their duty should be to direct the student in his work; to explain away difficulties as they arise; to examine him from time to time; and to ascertain that he is learning as he ought. Knowledge would be thus gained practically; and it would make a deep and lasting impression on the mind. This would make a clean sweep of nearly a hundred lectures at once; and time now occupied by these would be at the student's disposal for other purposes.

Physiology must, of necessity, be in part taught by lectures; they should not, however, in our opinion, be more than two a week. They should be explanatory of general principles rather than of minute details; and be supplemented by frequent class examinations. These lectures should, as we have said, include also just so much of Comparative and Histological or Minute Anatomy as may be essential for teaching the functions of the several organs of the body.

Chemistry is now divided and taught as Chemistry proper, practical, and experimental. We would suggest that the student should learn Chemistry in the laboratory, and not in the lecture-room. It must be remembered that chemistry is not to be the occupation of his life; and, although we admit that he may study with advantage the physical forces as explanatory of chemical changes and as bearing on vital actions, one lecture a week on this subject would, we think, be amply sufficient. On this subject, also, class examinations should be held.

Materia Medica lectures we hold to be of very doubtful advantage. As regards the general appearances and physical characters of drugs, these can be learnt by an examination of specimens which the museum of the school ought to contain. A knowledge of their chemical composition affords very little aid in determining their medicinal action; and as to their uses and effects, these surely are better learnt at the bedside of the patient. We discountenance, therefore, a separate course of lectures on this subject; and we have less compunction in doing so, because the study of practical pharmacy will afford the student better opportunity of familiarising himself with the characters of drugs; and the class examinations on Medicine and Surgery will test his knowledge of their uses and effect.

Such are the subjects which should occupy the student's first two years of study. Anatomy must, of necessity, be learnt during the winter. Physiology should be taught during the summer; and Chemistry and Materia Medica may be studied at any period of the year.

The suggestions now made neither necessitate the discontinuance of those courses of lectures at present given, nor a diminution in the number of lectures. Teachers who are enamoured of the employment may pursue their favourite pastime; but attendance on lectures by the student ought to be voluntary, and not compulsory. And this rule would determine, we imagine, the question of their continuance, or the contrary.

Under the present system, not fewer than eleven lectures in each week are to be attended by the student during the six months of the winter session, and nine in each week during the three months of the summer session; amounting, in the aggregate, to about eight hundred and sixty lectures during the first two years of his professional study. This number would be reduced by the plan we have proposed to about one hundred and sixty lectures during the same period; and we believe that the student would obtain more useful knowledge, take more pleasure in its acquisition, and have more time to spare. This time, however, saved by a better system, may be applied with advantage in many ways. The student should attend every operation; and a portion of every week day should be set apart for hospital attendance. Not that it is intended he should commence systematically to learn diseases, medical or surgical, at this early period of his career; but there is much more to be learnt in the wards of a hospital than is implied in the word disease. The habit of observing, comparing, reflecting, reasoning, comes only by degrees; and there is no better place for acquiring this habit than that now mentioned.

After the student has passed his first examination, he ought, as we have stated, to be free to choose whether he will continue his studies at the school where they were commenced, or pursue them at some institution where a knowledge of the *Practice of Medicine, Surgery, and Midwifery* can be acquired. The

instruction given by the physicians and surgeons of such institutions should be entirely clinical. Diseases, being objective in their nature, are better studied and understood when seen than when described. Three hours of lectures a week on *Medicine* and three on *Surgery* are, to our minds, so much time lost. If lectures relating to these subjects be given, they should have reference to the causes and means of prevention, and not to the signs and symptoms, of diseases. The teaching of *Pathological Anatomy* naturally forms a part of the teaching of medicine and surgery; and, in addition to diseases being made the subjects of clinical study and teaching during life, fatal cases should be made the subject of a short explanatory lecture, illustrated by the diseased organs or tissues, and other specimens or drawings. These demonstrations would teach the student the consequences of disease; and he would thus more certainly learn both morbid anatomy and pathology. The division of *Surgery* into *Aural*, *Dental*, *Ophthalmic*, etc., may be convenient for grouping together diseases of the same parts, and for clinical teaching; but courses of lectures on each of these parts of surgery cannot be needed, for very few students become specialists; and, as we have already said, a plan of education should be adapted, not for the few, but for the many.

Would such a system as that now proposed, it may be asked, secure to the student a sufficient knowledge of all those subjects which ought to form part of his professional education? We answer unhesitatingly, in our opinion, certainly. His study would be practical and real. There would be more learning, and less teaching; more education, and less sham; more time for reading, for observation, and for thought.

In the remarks we have now made, we have not hesitated to criticise freely, but we trust fairly, the system of education as at present followed in the schools. We may be charged with ignorance and presumption in speaking thus of a system approved by the medical corporations and by custom; but we know how slowly and how unwillingly corporate bodies originate or even accept reforms, and how custom at last assumes the force of law. We deliberately, therefore, risk such accusations as may be brought against us, convinced that the present system of medical education is not only faulty, but capable of improvement; and that if the Medical Council will exercise its moral influence, and, if necessary, its legal powers, the medical corporations will lend their powerful aid also towards effecting such improvement; and we may then hope to see a system of medical education worthy of the name—a system which will tend both to the interest of the public and to the honour and respectability of the profession.

MORTALITY IN THE VIENNA LYING-IN HOSPITAL.

Professor Spaeth of Vienna has given a sketch of the Lying-in Hospital at Vienna from 1784 to 1863. The hospital was established by Joseph II, in 1784. From 1784 to 1822, it was under the direction of Simon Zeller and J. L. Boër. The number of births during that period were 71,395, and the number of deaths 897; the mortality being about 1.25 per cent. The epidemics during this period of thirty-seven years were not severe. From 1822 to 1833—the time when the second clinical lying-in department was established—32,336 women were delivered; and of these 1714 died, being a mortality of 5.30 per cent. During these eleven years, epidemics were almost constantly present. From 1833 to 1839, Klein and Bartsch directed the hospital; and during this period there were in the first clinique, 12,253 births and 902 deaths, and in the second clinique 9353 births and 620 deaths; consequently, the mortality of women was 7.36 and 6.62 per cent. Puerperal diseases were almost constantly present; but were most fatal in the year 1836-37. During the next period, 1839 to 1847, the management of the two cliniques was altered, the physicians having exclusive charge of the first clinique, and the second clinique being chiefly under the management of midwives. The effect of this change was well marked. The mortality in the second clinique diminished; of 21,155 women confined, 810, or 3.82 per cent., died; whilst under the fearful epidemic of 1842-43, the mortality in the first clinique increased to a terrible height, 2482, or 10.14 per cent., dying, out of 24,455 confined. The greatest mortality occurred in December 1842, reaching, in fact, to 31.3 per cent. In 1847, Dr. Semmelweiss called attention to the origin of puerperal diseases, through infection from decomposed animal matters, and took measures for furthering cleanliness; ordering all students to wash their hand in chlorine water before attending the women. Hereupon, the mortality rapidly diminished; and up to 1849 (when Semmelweiss gave up the direction), of 6589, only 142 died, or 2.15 per cent. At the same time, in the second clinique, the mortality was also low. From this time up to 1864, the mortality has never been so great as in former times; although the hospital has been visited by severe epidemics. In 1854 and 1855, there was a mortality of 9.1 per cent. and 5.4 per cent. in the two cliniques. The last epidemic occurred in the winter of 1861-62, and produced a mortality of 7.7 and 10 per cent.

Professor Spaeth discusses the cause of these visitations. They cannot, he says, be cosmical or telluric; because outside the hospital, in the neighbourhood, no such mortality has occurred. Neither does it appear that these visitations had any connexion with epidemics of typhus, scarlatina, measles, etc.; for it

often happened that, when these diseases were raging, the Lying-in Hospital was in a healthy condition. Nor does it appear that cold has any direct influence on the health of puerperal women; and if these diseases are more common in winter, the cause is to be ascribed to the want of opening the windows. For these and other reasons, the Professor is convinced that the cause of puerperal epidemics lies in the hospital itself, and that its influence is exerted either during labour or within an hour after its completion. The chief, and probably the sole, agent of puerperal fever is decomposing animal matter, whether arising in the hospital or brought into it from without. The cure for the evil is, therefore, evident; great cleanliness, good ventilation, and separation of the sick from the sound. Semmelweiss was too exclusive in considering that the puerperal fever was caused solely by the infected fingers of the dissecting student.

An esteemed correspondent's arguments on education rest on a series of suppositions, which, we believe, are quite fallacious. True, the courses of medical lectures in Germany are very extensive; but, unless we are mistaken, the ordinary run of German medical men is inferior to the British medical man as an educated practitioner in medicine. If scientific medicine be more advanced in Germany than in Great Britain, the reason is this, that in Germany the government so arranges the scientific chairs as to make it worth a man's while to devote himself to science. The competition of the schools here, as a rule, prevents a man from giving himself up to the illustration and scientific investigation of any one special subject. In this country, and especially in London, men give lectures in order to get (indirectly, of course) private practice, not to advance the study of science. Lecturers here keep an eye ever on the main chance. Can three medical lecturers in London be named who are not lecturing with the view of private practice in their eye? Dr. Beale has fallen into the same error with some of Mr. Syme's indiscriminating critics; viz., that because we have endeavoured to get scientific study put into its proper place, and administered in the right form and at the proper moment, therefore we are enemies to scientific medical study. Our critics seem to forget that a child must learn to walk before he can run; and that just so must the student learn the A B C of medical knowledge before he can dabble successfully in the unknown X Y Z of scientific medical researches. A wise teacher takes his pupil gradually upwards from the simple to the compound. What we complain of is, that students are sometimes crammed not only with the compound, but the supradecompound, before they have yet mastered the simple terms of their business. There surely must be some limit to the powers of a student's mental digestion; and what we want to get at is, the fitting amount and the proper quality of nutritive matter adapted to them in his pupil state. Dr. Beale seems to think there is no limit to the voracity and capacity of the student. The quantity which must be forced down him is, he says, ever more and more; his appetite for science must be like that increase of love "which grows by what it feeds on". Examinations are more diffuse and extensive, and *therefore* more diffuse and extensive must be the student's powers of answering questions. Instead of indulging in prophetic and possibly wrong assurances of what may happen if all our suggestions were carried out, why does not so well known and capable a teacher as Dr. Beale lay down for us some kind of education course which he considers fitting for the student? We should prefer his opinion down in black and white on these particulars, to all the many generalities of assumption and assertion of which he treats, and which may be right, or may be wrong.

The Manchester Medico-Ethical Association has issued its Sixteenth Annual Report. We are glad to find so laudable a society lives and flourishes. It cannot fail to be an useful beacon in the midst of the professional ethical immorality which we see going on amongst us. The report tells us that "no town in England has fewer medical squabbles than Manchester"; and, naturally enough, the reporter attributes the fact to the existence of the Association. The Association also at its meetings discusses most important questions affecting the practice of medicine. Its manifest tendency, therefore, is to discourage quackery and to advance the social position of the profession. May its efforts not be without their due reward.

Dr. Radford, Honorary Consulting Physician to St. Mary's Hospital, Manchester, a veteran still energetic in the furtherance of medical knowledge, is endeavouring to gain for his town the benefits of a reception-house or hospital for the treatment of the contagious diseases of children. If he accomplish his object, he will leave behind him the memorial of another great good done by him to the society in which he lives. We need hardly speak to medical men of the advantages of such an institution in a large and densely populated town. The removal of a child attacked with scarlet fever from the crowded room in which it lies sick, may prevent the spread of the disease through the whole family, and through the district in which the family lives; it may, in truth, be the means of saving the life of the parent, and consequently of preventing all his family from being pauperised. If society were wise, it would quickly see that its pecuniary interests are, in this case, intimately bound up with its moral obligations. To heal the sick—to take charge

of children affected with contagious diseases—is manifestly, in numerous instances, to save the father's life, and so to prevent his widow and children becoming a burthen on the ratepayer. On the low ground, therefore, of self-interest, the erection of such hospitals is most desirable. We sincerely trust that Dr. Radford's efforts will be successful; and that his success may produce many imitators.

Since last week, Garibaldi has himself declared that his prime object in coming to England was to "thank the people". It must have been clear to himself and to every one else that there was nothing either for medicine or surgery to do in reference to his leg. This visit, therefore, in its medical aspect, has been simply a pretence. We do not for a moment accuse the high and simple-minded hero of being any party thereto; but, as many persons imagine, he has been made use of by others—has been what the French call *exploité*—in the business. If all we have heard be true in reference to the offers made, directly and indirectly, by various medical men, of their services (uncalled for and unnecessary) to Garibaldi, our profession will not shine overmuch in the General's eyes, or in the eyes of any of those whose guest he has been. We ask the question again: What was there for surgery to do in his case? What single thing has surgery actually done for Garibaldi since he came to England? Common sense must have convinced all reasonable men that Garibaldi's proposed "progress" through England would have been simply ridiculous; and that his cup of honour was filled to overflowing in London. But we are sorry to say that we believe there are very few people in the country who are convinced that his state of health unfitted him for going through the anticipated fatigue. As we last week said, English surgery has not been happy in its dealings with Garibaldi. We cannot but feel that Garibaldi has been made use of by the profession, rather than the profession by Garibaldi.

The army authorities have been advertising during the past week for contracts for lemon-juice, knives and forks, blacking, groceries, rape and other oils, and tin mess-cans; and this week they advertise for doctors to do "temporary service". Any gentleman qualified to practise medicine and surgery under the Medical Act may apply (if he like) to the Director-General—"army assistant-surgeons being required." Pay to be at the rate of ten shillings per day, and allowances equal to those of a staff assistant-surgeon. No one over forty years of age need apply. We have only space this week to make this remark upon the advertisement: that any gentleman who accepts office under the above terms will assist the Director-General in seriously injuring the position of the army medical officers, and will also aid in dragging down his profession one degree lower than it at present occupies in the social scale. We shall take an early opportunity of asking who are they who represent our profession at head quarters, and under whose management it is that things have been brought to such a pass as this?

The position so often assumed in this Journal, that the King and Queen's College of Physicians of Ireland had no right to grant the degree or title of Doctor of Medicine, has received its full justification in the judgment of the Master of the Rolls. On the 26th instant, his Honour decided that the College had no right to grant the degree of M.D.

King's College has at last determined—taught by experience and the necessity of the case—to act wisely; viz., to elect its assistant-physicians and assistant-surgeons for life, instead, as of late, for a short term of years.

Our Medical Council has decided to admit reporters to its sittings. We, therefore, give a summary of the debates and doings of that body up to the time of going to press. The first day's meeting was occupied in deciding the question of the admission of reporters. The profession will, no doubt, reap occasional amusement, if not advantage, from a perusal of the Council's discussions. It certainly has a right to expect something for its money. As each day's sitting costs the profession about £120, and as more than one sitting has been devoted, at different times, to the settlement of the reporting question, we may safely say, that the decision has cost us at least £250. We hope it will turn out that we have not bought the article of publicity at too heavy a cost in the present instance. We trust that we shall be pardoned for taking occasionally a mercantile view of the Council's labours; but it is certainly well to remind our "Friends in Council" that their minutes are golden ones. Eleven or twelve shillings is, we believe, the cost of every minute spent in Council—a fact which will, we trust, not be lost upon the speakers there.

If Miss Garrett fail in her application to the College of Physicians, she can, it appears from the following, obtain a degree on the other side of the Atlantic:

"*A Female Medical College.* The Legislature of the State of New York has passed an Act authorising the New York Infirmary for Women to confer the degree of M.D. This institution is under the charge of Miss Blackwell. The New York Infirmary has thus far done nothing in education except to train nurses. It is now the purpose to organise a systematic course of medical instruction, and give diplomas. The course of instruction will be the same as in other colleges. The faculty is not yet chosen, but it is designed to select the lecturers from the best class in the profession."

VERY remarkable fact was mentioned in the House Commons by Major O'Reilly, when treating of e comparative expenses of the French and English mies. He showed that, as a rule, the expenditure r soldier in the French army was greatly less—on average, about one-half less—than in the English my. But he found that, in one particular item, e expenditure in both armies was about equal; and at was in the medical department. Have we not re a clue to the notorious discontent existing in this partment in our army? Does it not indicate that ggardness and cutting down go on in this depart-ent in a way unknown in other departments.

"Regimental pay and allowances for food cost England £41:15 per man, and in France £20. he French soldier was as well clothed as the Eng-sh; but, while the cost of the former was only 2:2:6, the latter cost £4:6. Martial law in Eng-nd cost 6*s.* per man, and in France only 2*s.* 6*d.* ores cost in the French army £1:10 per man, in e English army about £8:10. Small arms in Eng-nd cost £1:6, and in France 7*s.* 2*d.*; gunpowder, 1:8 and 16*s.* French military education was quite qual to ours; and yet the cost there was 6*s.*, as gainst £1:4 here."

A long list of this kind is given; and in all items e marked difference prevails, except in the one re-rred to.

"But the cost of medical attendance was more early alike, being £1:16 in the English army, and 1:10 in the French."

Perhaps some of our army brethren can give us an planation of what seems to us a very remarkable ct, when tried by the light of the universal discon-nt prevailing in the medical department of the my.

E recommend the following extract from a leading ticle of the *Times*, to the consideration of those any medical gentlemen who are busy in supplying e working classes with medical advice gratis. The atement of the *Times* is one which we have re-eated again and again. Perhaps, from the mouth of e great popular expounder, it may receive the at-ntion it deserves.

"But one thing is certain. The working classes of is metropolis spend in stimulants of one sort or nother, not only to recruit their strength, but to en-ven the idle hour, an immense aggregate, sufficient maintain on the voluntary principle all the insti-tions for religion, for education, *for charity*, for the romotion of art and science, and even for more costly aterial improvements, in this metropolis."

ROM the last report of the Cotswold Village Hospi-l, we learn that thirty-eight patients were treated it during the past year. And that of £96 received uring the year, £23 were paid by the patients. mongst the items of expenditure, we note no charge r medicines. The whole expenses of the establish-ent for the year were £97. Again, we must ask, hy should the medical officer do all this business of society without pay? We see his name amongst the list of subscribers. Why should he, after performing his duty as a generous member of society, also do the work of society?

MR. GAMGEE of Birmingham, on the 20th instant, presented to the Academy of Medicine an account of a case of operation for ovariotomy which he had performed a few days before at Paris. He also presented the multilocular cyst which he had extracted.

Professor Bœckel of Strasburg relates a case of thyroidean laryngotomy, which he lately performed, in order to remove a number of polypoid vegetations situated behind in the glottis in a young girl. He turned back the pieces of the thyroid cartilages, "like opening a book", and in this way readily removed them. The wound was cauterised with nitrate of mercury. The tissues slowly healed; and the young girl was sent back to the country "perfectly cured", to all appearance; the fits of suffocation to which she had been previously subject having entirely vanished. Her voice, however, was completely gone. Some time after this, she died of a disease of which M. Bœckel could get no account. By this method of operating, the polypous growths may be wholly removed and destroyed, he said. "Of course, thereby the voice is destroyed; but better to lose the voice than life."

Professor Tardieu, in his medico-legal report on the famous case of M. Armand, says that the only signs of injury found on the man Roux, three hours after he was discovered, were the deep burns which had been made on his arms and the calves of his legs, "to bring him back to life". He was conveyed to the hospital, to be cured of these burns; and there the wounds became inflamed, so that for a time his life was in danger.

Rooms are to be established in all the Parisian hospitals, wherein the patients who are not confined to bed can meet and talk and amuse themselves—an example well worthy of being followed in our own hospitals.

NEW CURE FOR SMALL-POX. Dr. Lord of New York, whether in jest or earnest we know not, writes as follows: "In connection with the use of sarracenia purpurea in variola, I would call attention to a statement, that a great discovery is reported to have been recently made by a surgeon in the English army in China, in the way of an effectual cure for small-pox. The mode of treatment is as follows. When the fever is at its height, and just before the eruption appears, the chest is rubbed with croton oil and tartar emetic ointment. This causes the whole of the eruption to appear on that part of the body, to the relief of the rest. It also secures a full and complete eruption, and thus prevents the disease from attacking the internal organs. This is said to be now the established mode of treatment in the English army in China, by general orders, and is regarded as a perfect cure."

The Medical Council.

REPORT OF PROCEEDINGS, April 1864.

The Medical Council commenced its session for the present year on Monday last.

Monday, April 25.

G. Burrows, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

Committees. The following committees were appointed.

Business Committee—Dr. Andrew Wood (chairman); Dr. Embleton; Dr. Corrigan; and Mr. Rumsey.

Finance Committee—Dr. Sharpey (chairman); Mr. Arnott; Dr. Fleming; Dr. Aquilla Smith; and Dr. Quain.

Committee on Returns received from the Bodies in Schedule A—Dr. Embleton (chairman); Mr. Cooper; Dr. Thomson; Dr. Leet; Dr. Apjohn; and Dr. Stokes.

Admission of Reporters. Dr. Andrew Wood moved, and Dr. Alexander Wood seconded:

"That reporters be admitted to the meetings of the General Medical Council."

To this an amendment was moved by Dr. Acland, and seconded by Dr. Christison:

"That a committee be appointed to consider, and to report to the present meeting, the advantages and the disadvantages to the business of the Council which may arise from the admission of reporters; and to suggest the various ways in which (should the Council resolve to introduce them) they might be admitted to the Council, Branch Councils, or Committees."

Dr. Thomson moved, and Mr. Cooper seconded a second amendment:

"That the Council deem it expedient and desirable that their proceedings should be published, and that a Committee be forthwith appointed to consider and report upon the best means of accomplishing this object."

The second amendment was put to the vote, and the numbers were found to be equal for and against it. The President then gave his casting vote in favour of the amendment.

The following members of Council were appointed a Committee to consider and report as to the best mode of publishing the proceedings of the Council: Dr. Thomson (chairman); Mr. Cooper; Dr. Storrar; Dr. Alexander Wood; Dr. Apjohn; Dr. Corrigan; Mr. Rumsey; and Dr. Stokes. On the motion of Dr. Alexander Wood, seconded by Dr. Stokes, it was resolved that the above-named Committee "be requested to report to-morrow" (Tuesday); "and that the consideration of that report take precedence of all other business."

Standing Orders. Dr. Quain moved, Dr. Andrew Wood seconded, and it was resolved,

"That a Committee be appointed to revise the standing orders"; the Committee to consist of Dr. Christison (chairman); Dr. Storrar; Dr. Alexander Wood; Dr. Corrigan; and Dr. Quain.

Tuesday, April 26.

George Burrows, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

Publication of Proceedings. Dr. Thomson presented the following Report from the Committee appointed to consider the best means of publishing the proceedings of the Council.

"The Committee on Publication of the Proceedings of the Council met this day, and having considered the matter remitted to them by the Council, agreed, by a majority, to adopt the following resolutions, and directed the Chairman to lay these resolutions before the Council as the Report of the Committee.

"1. That reporters be admitted to the meetings of the Council.

"2. That a special reporter be engaged by the Council to prepare a report of the proceedings.

"3. That the Council reserve the power of withholding the privilege of admission to reporters, whenever the Council may think fit."

This Report, after discussion, was adopted; and the Business Committee, with the President and the Registrar, were appointed a Committee to carry it into effect.

Standing Orders. Dr. Christison presented the following Report of the Committee appointed to revise the standing orders.

"The Standing Orders Committee appointed, on the 25th instant, to revise the standing orders of the Council, report that they have for the present confined their attention to Articles 7, 8, 9, and 10 of Section III, 'Order of Business.' They recommend that these articles be repealed, and that the following be substituted:

"1. That the seconder of a motion may, if he please, reserve his speech.

"2. That if an amendment be proposed on a motion, the amendment shall be disposed of before any other amendment shall be moved.

"3. That such an amendment shall first be put to the vote; that if it be negatived, a second amendment may be moved, and shall be disposed of in the same way as the first amendment; and so on until no further amendment shall be proposed.

"4. That should every amendment be negatived, the original motion shall then be put to the vote.

"5. That if any amendment be carried, it shall then be put as a substantive motion, and treated, as to further amendments and the right of speaking on it, in all respects as an original motion."

The resolutions of the report were considered *seriatim*, and adopted.

Executive Committee. Mr. Arnott moved, Dr. Paget seconded, and it was resolved:

"That the number of members of the Executive Committee be confined to four, exclusive of the President."

And on the motion of Mr. Arnott, seconded by Mr. Syme, it was resolved:

"That the members of the Executive Committee shall be elected by ballot, by means of marked lists."

Certain claims of Messrs. Spottiswoode were referred to the Finance Committee to be reported on.

Wednesday, April 27th.

G. Burrows, M.D., President, in the Chair.

The minutes of the preceding meeting were read. When the motion for their confirmation was put,

Dr. Fleming suggested that the printed minutes of the Council be paged continuously, so as to afford facility of reference, and be more easily preserved and published.

Dr. A. Smith thought there would be a difficulty in paging the reports of the Branch Councils.

Dr. Paget suggested that the difficulty mentioned by Dr. Smith might be obviated by using different forms of numerals for the different Councils.

Dr. Sharpey said that, in another institution with

hich he was connected, the minutes of Council were gularly paged, and bound when a sufficient quanty had accumulated.

Dr. FLEMING gave notice of a motion for the apointment of a Committee to consider the best mode paging the reports.

The minutes were then confirmed.

The British Pharmacopœia. Dr. QUAIN said that ie subject of the *British Pharmacopœia* must be reerred to a Committee; and, as the discussion on medical education was likely to last several days, he sked leave to propose at once the following resolution, as a matter of form and of necessity.

"That a Committee be appointed to consider and eport on the arrangements to be made for producing ie next edition of the *British Pharmacopœia.*"

Mr. HARGRAVE seconded the motion, which was arried; and the following members of Committee ere appointed: Dr. Christison (Chairman); Dr. Acand; Dr. Alderson; Dr. Apjohn; Dr. Aquilla Smith; nd Dr. Quain.

Education of Medical Students. Dr. STORRAR moved,)r. SHARPEY seconded, and it was resolved:

"That the Council do now resolve itself into a Committee on Education."

The Council accordingly resolved itself into such Committee; Dr. Burrows, by request, in the Chair.

Dr. STORRAR moved:

"That the Committee proceed to consider one by ne the recommendations of the Council, relating to General and Professional Education and Examiation.

He said that, of all the matters submitted to the Council, none was more important than this. Five ears ago (1859) he had brought forward the subject, nd certain recommendations had been agreed on; nd he thought it would not be improper to review he ground that had been gone over, and see what rogress had been made. Some of the more sanguine mong the members would doubtless be disappointed hat more had not been done; while those who knew he difficulties of altering old courses might be of pinion that the Council should advance slowly, and would consider that as much had been done as could be expected. He thought that some good at least had been done, in bringing about the general recognition of the need of preliminary education and of practical examination. It would also be admitted that, if much progress had not been made, it was from want of consent on the part of the examining bodies to various of the regulations; some of the boards adopting certain recommendations, and being lax with regard to others; while other boards treated the same recommendations in the reverse manner. He felt that it was specially important to endeavour to ascertain where it might be practicable to give something in the hope of getting something. He then proceeded to recapitulate the circumstances under which the recommendations regarding education were called into existence. They sprang out of Sections XVIII and XX of the Medical Act. In the first meeting (1858), returns were called for from the examining boards; and in 1859, a Committee was appointed to examine their regulations in reference to Section XX of the Act. The duty of the Council was, if the regulations of the examining boards fell short of what was required, to report, as provided in Section XX, to the Privy Council. But here a difficulty arose. Suppose the Council came into contact with a body whose course of study was deficient, the latter might say, "Give us a standard, and we will fit our regulations to it." The Committee saw that, before they could act, they must establish a standard for the guidance of the Council, as well as to guide the examining bodies. On proceeding with their task, they perceived that not only was it necessary to surrender something to custom, but that advantage would be gained by allowing a certain latitude to the examining bodies. They therefore determined to express their standard in as general terms as possible, and drew up their recommendations under three heads: 1. General Education and Examination; 2. Professional Education; 3. Professional Examination. This being done, an objection was raised that there was no notice taken of persons proceeding to the higher degrees in medicine; but, on taking legal advice, it was found that the Council had no power in this matter. The recommendations thus drawn up were sent to all the examining bodies. He wished to lay stress on the word "recommendations", as not meaning absolute regulations or rules. All the authority that the Council possessed was that of representing the shortcomings of the examining bodies to the Privy Council; and such shortcomings they measured by the standard of their recommendations. It had appeared to him that it was desirable to consider whether any of the recommendations could be improved. They should be taken as a sort of catalogue of the various questions to be considered.

Mr. HARGRAVE seconded the motion.

Mr. SYME had understood that, if the recommendations were not complied with, the culpable body was liable to punishment. But it was well known that, in reference to one board which had rebelled, the Medical Council had determined to take no proceedings: and it was but last year that the Council came to the conclusion that the time for employing force had ceased, and that for the use of moral suasion had arrived. He therefore thought it useless to go into the consideration of the recommendations: both for the reason already given, and because it would cramp the discussion of the general question. The Medical Council should take a view of the whole subject, point out what was deficient, and suggest a remedy. He moved as an amendment:

"That the Committee do now proceed to consider the whole subject of Medical Education and Examination, with the view of preparing a report for the guidance of the licensing bodies."

Dr. ANDREW WOOD seconded the amendment. He would, however, not be thought to be one of those who would abandon the use of the Medical Council as a means of compulsion, and employ it only for the purpose of moral suasion. If moral suasion were an effective means of establishing efficiency and uniformity of qualification, then no Medical Council would be required. He thought that no one member of the Council was responsible for the defects of the Medical Act; which was only a compromise, and could only be regarded as a transition Act. He would read the education clauses of the Act in the light of the other Medical Bills which had been previously brought forward. If he understood the meaning of the Act, its object was to abolish special privileges and monopolies, and to put all practitioners on an equality, and to establish at the same time a means of ensuring a fair and just amount of medical education and examination. As to the objects of the educational clauses, they were, as regarded the public, the establishment of a safeguard against examining boards granting licenses to candidates who were not properly qualified; and, as regarded the licensing bodies themselves, the ensuring of a just and fair system to all, so as not to allow some to have a low standard to the prejudice of others. The Council had started by issuing recommendations on the subject of general education and examination, with the intention of enforcing them. The Royal College of Surgeons of Edinburgh (which Dr. Wood represented) had adopted them, not because they altogether approved them,

but from a spirit of loyalty to the Council. But they found that other boards, such as the Royal College of Surgeons of England, acted differently; and they also found that, if they adopted these recommendations *pur et simple*, they would be placed at a great disadvantage. Hence the Edinburgh College of Surgeons resolved to follow what was right in their own eyes, and desisted from carrying out certain of the recommendations. He believed that if the Council had acted firmly, in regard to the College of Surgeons of England, and had carried the matter before the Privy Council, they would have found what their real powers were. If the Privy Council supported them, they could have enforced their powers; but if otherwise, they must either have submitted to act as a Council of moral suasion, or have gone to Parliament for increased powers. His object in seconding the amendment was to give an opportunity of considering the whole subject anew. Various remarks on medical education had been made outside the Council; and he thought this good, so far as these remarks had given a basis on which the Council might proceed. He thought it would be wrong that, while the question was being freely discussed outside, it should not be fully investigated in the Council. Let the matter be freely ventilated, and reconsidered next year; and then let the Council either use the powers given them by the Medical Act, or go to Parliament for a new Act.

Dr. Storrar could not see any essential difference between the original resolution and the amendment.

Mr. Arnott was disposed to support Dr. Storrar's motion; as several new members had been added to the Council, and might lay new views before the meeting; and, in the lapse of time, several amendments in the recommendations might have suggested themselves to the older members. He objected to the remarks made by Dr. Andrew Wood in reference to the College of Surgeons of England, and thought that that body should not be singled out for condemnation. Dr. Wood had stated his aversion to compromises; but it was impossible to get on without them. He considered that the Council had been too stringent in the details of its recommendations, and that it should have confined itself more to the expression of principles. With regard to going before the Privy Council, he would ask whether that body would allow the Medical Council to override the systems followed in the Universities of Oxford and Cambridge. If the Council framed resolutions, and then endeavoured to obtain the sanction of the Privy Council to them, they would give the control of the examining boards into the hands of the Privy Council. He would ask the Medical Council to hesitate before dealing with the Privy Council. A *Pharmacopœia* had been formed, and the Medical Council had represented to the Privy Council that the Colleges of Physicians were willing to give up their former privileges: but the Privy Council addressed special letters to each of these bodies, and ascertained directly from each of them their readiness to give up its right of publishing a *Pharmacopœia*. If the Medical Council were to go to the Secretary of State nothing would be done, even if they were unanimous, in the way of gaining a bill granting compulsory powers. Those who were not bound by any previous opinion should reconsider the recommendations and frame a curriculum; and two years should elapse before adopting any further proceedings. The Council would be of service without having any despotic power; and they would get more power when they had shown themselves worthy of it.

Dr. Alexander Wood did not precisely agree either with Dr. Storrar's resolution or with Mr. Syme's amendment. If any thing was omitted in the recommendations, it would be missed by following Dr. Storrar's plan; while at the same time the discussion on medical education could not be entered on without some basis. If Mr. Syme's motion were carried, he would suggest that a committee be appointed to draw up a plan for discussion. He regretted that any one examining board should be dragged forward on account of not having complied with the recommendations of the Council; for few bodies had complied with them. With the present constitution of the Council, he thought it bound to carry out its requirements. He did not desire any strong powers; if the Council possessed the power of moral suasion, let it be used.

Mr. Syme would remind Mr. Arnott that the College of Surgeons had been mentioned, because it was the only body, of all those mentioned in Schedule A, that was notoriously accused of not following out the recommendations of the Council. He had no intention of specialising it.

Mr. Arnott believed that some imagined the College of Surgeons of England to have acted from a spirit of hostility to the Medical Council. It was not so; but the College considered that, by adopting the recommendations, an injustice would be inflicted on the candidates for its diploma.

Mr. Hargrave thought that the conduct of the College of Surgeons should not have been brought forward.

Dr. Paget observed, in reference to Mr. Arnott's remarks concerning Oxford and Cambridge, that the practice of the University of Cambridge was in strict conformity with the recommendations of the Medical Council.

Dr. Embleton thought that some of the recommendations had become obsolete and required to be recast. He thought they could not be enforced on the examining boards. Each of these might be regarded as capable of drawing up regulations; and all that the Council could do was, to see that the regulations came up to a proper standard. If they did not do so, then the conduct of the body so rebelling should be laid before the Privy Council; but he thought that no board would place itself in such a position.

Dr. Acland said that much time and labour had been bestowed on the recommendations; and the attention given to the document had been such, that it ought not to be regarded as entirely useless and set aside. The late president of the Council, Mr. Green, a man of deep thought, and who had carefully studied the subject of education, had paid much attention to the framing of the recommendations. Even if Mr. Syme's motion were adopted, must not the present arrangement of the recommendations be ultimately adopted by any committee that might be appointed? It would certainly give much trouble, even if it were possible, to make a better arrangement. He could not imagine but that every member of the Council might have an opinion to express on the several clauses as they now existed. Again, some of the Council had been on it five years, and had done their best; and nothing would pain them more than that the code of recommendations, regarding which so much trouble had been taken, should be cast away, so that the Council should begin to consider the question *de novo*. He would remind the Council that it had never before been attempted in England to bring the regulations of the examining boards into shape; and he considered that it would much facilitate matters if the present recommendations were adopted as the basis of discussion.

After a few remarks from Dr. Sharpey, the votes were taken, when there appeared: For Mr. Syme's amendment, 5; against it, 16. The amendment was consequently lost; and Dr. Storrar's motion was

en carried by a large majority, 17 voting in its vour.

Dr. Storrar proposed, and Dr. Sharpey seconded, "That the first recommendation; viz., 'That all idents pass an examination in general education fore they commence their professional studies', be opted."

Dr. Acland would point out an inconvenience ising from the wording of the recommendation. e presumed the Council meant to say that students ust pass the general examination before they com- ence the period of time to be allotted to professional udies. The subject had come under his notice at xford.

Dr. Apjohn asked how the recommendation would ect certain Bachelors of Arts of the Dublin Uni- rsity, who had commenced their medical studies fore taking their degree.

Dr. Acland said that, at Oxford, a candidate had esented himself whom he could not admit to exa- ination, because he had not complied with the atutes of the University, which required four years professional study after the degree of B.A. had en taken. He believed that there were certain ar- ngements in the Universities and other boards that uld not be brought into one shape. Nor was this ecessary; for the object of the degree in Arts was ot to give a title to a man, but to ensure his pos- ssion of a proper mental training before commen- ng his studies.

Dr. Apjohn said that another reason for not com- ying with the first recommendation, was the exist- ice of the privilege possessed, under Act of Parlia- ent, by the students of the School of Physic in eland, of being instructed in the University of ublin.

After a few words from Dr. A. Smith and Mr. rnott,

Dr. Storrar asked whether the students referred by Dr. Apjohn were not ultimately intended to elong to some one of the examining bodies? If so, ien care must be taken that a preliminary examina- on be passed by them before entering on their pro- ssional studies.

Mr. Cooper thought the recommendation tho- oughly desirable, and one which should be fol- owed.

Dr. Andrew Wood believed it to be one of the ost important recommendations. It was not, how- ver, originated by the Council; for the Apothecaries' ocieties of London and of Ireland, and the College f Surgeons of Edinburgh, had insisted on pre- minary general education. The latter body at first ade it optional for the students to be examined in eneral education before commencing professional tudies; but, when the day of examination came, in- tead of thirty, about one hundred and twenty pre- ented themselves. The object of preliminary educa- ion was evidently not the mere proof of possession f knowledge, but the proof of proper training; and e believed that the recommendations of the Council ad diminished the number of medical students, by ebarring illiterate men from entering the profession. n Scotland, at least, it had also had an effect on the chools, by causing the education to be directed so as o enable youth to pass their preliminary examina- ions. Hence the Council, though it did not originate reliminary examination in general education, had lready done good service. It could not be expected o make this rule stringent beyond a certain extent. n the Edinburgh College of Surgeons, with every lesire to make the general examination preliminary, here was a difficulty. A young man might present imself for examination, and pass in four or five sub- ects, but fail in one. It would be a hardship to pre- vent him from beginning his professional study; and, therefore, the College gave him a certificate of having passed in certain subjects, admit him as a medical student, and require him to pass in the sub- ject in which he was deficient before he entered on his second session. He suggested that Clause 15 of the recommendations (allowing exceptions to be made under certain circumstances) should be added to the first recommendation.

Dr. Storrar objected to pointing out loop-holes to the examining boards. He agreed with Dr. Acland that the real value of the preliminary education lay in the mental training; and considered that, if the student were not qualified for passing the preliminary examination, he was not fit for the study of medi- cine. If, in the transition state of things, any of the boards thought fit to relax their regulations, they must do so on their own responsibility.

After some remarks from Dr. Thomson, Dr. Chris- tison, Mr. Rumsey, Dr. Leet, Mr. Hargrave, Dr. Alexander Wood, and Dr. A. Smith, in support of the resolution,

Dr. Acland proposed, as an amendment, and Dr. Paget seconded:

"That all students pass an examination on subjects to be included under the head of General Education, prior to the date from which the commencement of their professional studies is to be reckoned."

The amendment being put to the vote, there ap- peared for it, 5; against it, 12. It was consequently lost.

The original resolution was then carried.

Dr. Storrar proposed the adoption of the second recommendation; viz.:

"That the time of commencing professional studies shall be understood to be the time of commencing studies at a medical school; and that no qualifying body be held to have complied with the recommenda- tion of the Council which shall allow the examination in general education to be passed after the com- mencement of professional study."

On the suggestion of Mr. Arnott, it was resolved to transfer the first part of the recommendation, ending with the words "medical school", to the re- commendations on Professional Education; and to omit the remainder of the paragraph.

Dr. Parkes moved, and Mr. Hargrave seconded:

"That testimonials of proficiency granted by the National Educational bodies, according to the sub- joined list, be accepted; the Council reserving the right to add to or take from the list. 1. A De- gree in Arts of any University of the United King- dom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council; 2. Oxford Responsions or Mo- derations; 3. Cambridge Previous Examinations; 4. Matriculation Examination of the University of Lon- don; 5. Oxford Middle Class Examinations (Senior); 6. Cambridge Middle Class Examinations (Senior); 7. Durham Middle Class Examinations (Senior); 8. Durham examinations for Students in Arts, in their second and first years; 9. Durham Registration Exa- mination for Medical Students; 10. Dublin Univer- sity Entrance Examination; 11. Queen's University, Ireland, two years' Arts' course for the Diploma of Licentiate in Arts; 12. Ditto, Preliminary Examina- tions at the end of A.B. course; 13. Ditto, Middle Class Examinations; 14. Ditto, Matriculation Exa- minations; 15. First Class Certificate of the College of Preceptors; 16. 'Testamur' granted by Codrington College, Barbadoes; 17. Degree of Associate of Arts granted by the Tasmanian Council of Education, with a Certificate that the Student has been examined in Latin and Mathematics."

Dr. Andrew Wood thought the Council ought to

specify the branches of General Education which they considered necessary. It would be much more satisfactory, and would show to the parents and guardians of those about to enter the profession what was required. He would suggest that certain subjects be rendered imperative, such as English, Latin, and Arithmetic as far as Decimal Fractions: and that a knowledge of two other subjects, such as Geometry, Natural Philosophy, Algebra, Greek, French, etc., to be selected at the option of the candidate, should also be required.

Dr. STORRAR objected to specifying any particular subjects, lest it should be imagined that a knowledge of them was all that was required. When the Council took the subject under consideration five years ago, the ground adopted was that no special form of general education is required for a professional man. Let a man be first well educated, and then train him to a profession. He thought that the medical boards should be relieved from undertaking the general examination of young men.

Dr. FLEMING thought there would be an advantage in having a defined code—a prescribed minimum—of preliminary education.

Mr. RUMSEY thought it would be well if there could be a general scheme of subjects required; not a minimum, but an indication of the branches of knowledge with which any one entering the profession ought to be acquainted. He had sketched such a scheme in his work on *State Medicine*.

Dr. ALEXANDER WOOD, in reference to some remarks made on the question whether the examining boards on the list fulfilled the requirements of the Council, stated that their curricula of examination had been carefully investigated by the Committee appointed for the purpose.

Mr. COOPER considered that there should be a fixed standard for all, and that it should not be too high. He thought that of the Apothecaries' Hall too high, as he had known thirteen out of thirty-nine candidates to be rejected on one occasion.

Dr. CORRIGAN proposed as an amendment:

"That testimonials of proficiency granted by the National Educational Bodies, according to the list contained in the third recommendation, be accepted, provided that the examinations conducted by those bodies comprise at least the following subjects: English, Greek, Latin, Mathematics, Arithmetic to the end of Decimal Fractions, and one Modern Language."

Mr. RUMSEY seconded the amendment.

After some discussion, in which Dr. ANDREW WOOD, Dr. ALEXANDER WOOD, Dr. STORRAR, Dr. PARKES, Dr. PAGET, Dr. CHRISTISON, and Dr. ACLAND, took part, the amendment was put to the vote; when there appeared—for the amendment, 5; against, 13.

Dr. ALEXANDER WOOD then proposed, and Dr. ANDREW WOOD seconded, as an amendment to Dr. Parkes's motion:

"That a minimum standard of preliminary education and examination shall be fixed by the Council; that testimonials of proficiency granted by the National Educational Bodies may be admitted, provided the Council deem the education required by them to be sufficient; and that a Sub-Committee be appointed, to prepare a minimum standard to be submitted to the Council for its consideration."

The hour of adjournment (6 P.M.) having arrived, the further consideration of the subject was deferred until the next day.

The Council, at its meeting on Thursday, again formed itself into a Committee on Medical Education. After further discussion, Dr. Wood's amendment was lost, and Dr. Parkes's motion was carried. The Committee then proceeded with the discussion of other of the recommendations.

Correspondence.

DR. BEALE ON MEDICAL EDUCATION.

LETTER FROM LIONEL S. BEALE, F.R.S.

SIR,—In one leading article in the JOURNAL of April 16th, you deprecate the practice of compelling the student to attend numerous courses of scientific lectures. In another, you exhibit indignation at a contemporary for its laudation of things Germanic, and its low estimate of British ophthalmology.

The very doctrines you have lately been advocating with regard to medical education, must of necessity bring about the result which you seem so much to deplore, not only with reference to ophthalmology, but with regard to every other branch of scientific professional knowledge. If the views advocated in many of your leading articles upon medical education were carried out practically, our British schools would soon cease to be esteemed by the profession, by the public, and by students, as places in which the most perfect knowledge of the medical sciences was to be obtained, and they would no longer be respected as institutions concerned, not only in teaching but in prosecuting and adding to, and advancing in every possible way, medical knowledge.

You have been advocating a reduction in the courses of lectures and in the number of lectures, although you admit that the German student has at this very time to attend many more than the British student. If the German education is more extensive and more thorough than British education—if German medical science is more advanced than British medical science—if minute observation is more thoroughly taught in Germany than in Great Britain—if greater importance is attached to the more purely scientific departments of medicine in that country than in our own—there will be laudation of things Germanic; and those who desire the most advanced and the most scientific medical education which it is possible to obtain, will obtain it in Germany, and will naturally form a high estimate of things Germanic.

It is by advanced work that the reputation of schools is made; and if the British schools for twenty years do little advanced work in any department, while a German or a French school does much work in the same time, is it wonderful that our students should rush to the latter, and learn all they can; and having done so, is it unreasonable that they should respect German and French scientific work? and when such students become practitioners, is it surprising that they should desire to hear from time to time what is done in these foreign schools, and that there should be a demand for information on these points in our medical reviews?

There will always be men who feel anxious to know, not only how a case is to be doctored honestly, but the exact nature of the changes upon which the symptoms depend, and how and why the remedies act. These matters can only be entered upon by men who have studied many of those sciences which some persons consider unnecessary or useless for medical education, because they have nothing to do with "doctoring".

Those who want to know what is known of these things, will seek information in any part of the earth

ere the information exists. But if it is to be learnt home, they will learn there.

With regard to this very subject, ophthalmology, re are, at this present time, surgeons in London o would gladly teach what has been done, and at is now being done, in Germany—men who are ll qualified to teach exactly that for which there is reat demand; but you and others raise a cry that student is over-lectured at present; and, so far m teachers being encouraged to teach advanced thalmic work, and especially the more purely entific branches of the subject, some of the leaders public medical opinion in this country do all they to show that what these well informed working n know and desire to teach to others ought not to taught in our schools. Such men may carry out ir own work privately; but unless they have the portunity of giving lectures (and advanced work this kind can only be taught to a number of stu- nts by lectures); unless they are encouraged to form original investigations, and keep themselves ll up in the advanced work of the continental hools; and teach this advanced work—they are verless to advance the school of British ophthalm- gy as a school.

I do not, of course, mean to assert that ophthalm- gy is not taught, or not well taught, in any of our hools; but it certainly is not even yet taught in all ndon schools; nor is the same amount of import- ce attached to this subject here as abroad; while, I agine, there are few who would advocate such course on ophthalmology in this country as is ven annually, for example, by Donders of Utrecht. vertheless, it is only by thorough work and by tho- ugh teaching such as this, that the reputation of a chool" can be made and sustained. It would be surd to insist that every student should be deeply rsed, and compelled to pass a very strict examin- on, in all branches of ophthalmological science; but ery student should be compelled to learn some- ing; and with the enormous advantages we possess, ere ought to be full courses of lectures, purely entific as well as practical, to which every student sirous of learning could enter. The professors who ok part in such instruction would keep up the high putation of the several departments of an ophthal- c school.

You may say we do not want a reputation for pure ence; we want the reputation of being sound prac- al doctors, and this only. But, then, there is a dif- ence of opinion among practitioners, students, and e public, as to the precise kind of reputation a great edical school in such a city as this ought to have. me of us think that it is the province of a great edical school to teach both science and practice in e very best way that these things can be taught at e time. And students who hold this opinion, and id out that more science is to be got from German, an from British schools, go there to obtain the ience, while they will learn the practice in our own spitals.

So it must happen that if an opinion, founded upon e fact of the amount of new work and good and und work done and recorded in our journals, gains ound, that a better knowledge of ophthalmic ience is to be obtained in Berlin, than in Dublin, in dinburgh, or in London, those who desire the best nowledge of ophthalmic science will go to Berlin, stead of spending time in Dublin, Edinburgh, ndon, or elsewhere; and if this be so, it is only ght that we should acknowledge the advantages of e Berlin school in this particular; and the same lds good for every other subject of medical or other ucation.

You have expressed very summarily your opinion of Mr. Callender's pamphlet; and you appear to have made out the longest list of courses of lectures delivered in our schools which your editorial ingenuity could devise; but you might, by adding subjects which some consider ought to be taught, have easily lengthened it still more. As one object in your article on education seems to have been to "astonish" your readers, by doing so you might have given to them and to yourself still greater gratification.

You might have added, for example, medical chemistry, physiological chemistry, pathological chemistry, among some other subjects, which I, for one, think might very advantageously be taught in our schools. You may meet this, and much more that might be urged in the same direction, with ridicule; or you might show that it was useless, or impossible, or injurious; but it is obvious, if men want to know (and I suppose the articles in our daily and weekly papers are enough to convince us all that men do desire to know) these and other purely scientific things, and they cannot learn them here, and can learn them abroad, with the great facilities now existing for travelling, they will go to continental schools; and in this particular they will esteem their foreign school more highly than their own. As the general public becomes every day better informed upon scientific questions bearing on medicine, it is of paramount importance that medical men should be at least equally well informed, or, without doubt, we shall not retain the respect of the public.

So far from receding, we must advance. So far from diminishing our means of teaching, we must increase them. Instead of advocating a reduction of the subjects, it would be far more to the point if you would consider how these could be taught better, and how others which are required could be conveniently and advantageously introduced. How very much, for instance, would be gained, if the elements of comparative anatomy, physiology, botany, and chemistry, and natural philosophy, were taught in the senior forms of our public schools; so that the mind of the student would be trained for the study of science from an early age. These things cannot possibly be expunged, but they might be taught at a different period of education. But this opens a wide field for discussion, into which I will not now enter.

The tendency of examinations is to demand from the student not less, but more; and it is not likely that, in these days of rapid advance, the demand will diminish.

To provide against the "intellectual flatulence" which you fear future medical students will suffer from, would it not be well to consider if the pabulum might not be presented in a more palatable and more digestible form, and the meal-times somewhat better arranged, before you advocate a wholesale reduction in the quantity and quality of the food? You seem scarcely aware of the keenness of the intellectual appetite in these days; and you are, I think, quite wrong in your estimate of the amount of intellectual nutriment necessary to afford the growing student a fair chance of gaining a vigorous constitution, which will enable him, when he arrives at mature age, to withstand that intellectual storm which is now gathering in every part of the civilised world, and threatens ere long to drive before it all those who have, from their youth up, rested content with the minimum of intellectual strength sufficient to supply them with their daily sustenance.

I am, etc., LIONEL S. BEALE.

61, Grosvenor Street, W., April 18th, 1864.

RE-VACCINATION.

LETTER FROM THOMAS JACKSON, ESQ.

SIR,—Whilst your pages are warm in the discussion of Medical Gratuitous Services, will you allow me a corner in them to ventilate the subject of Re-vaccination?

I am vaccinator to the Ferriby District of the Sculcoates Poor Union, Hull; and in May, June, and July, of last year, during an epidemic of small-pox, re-vaccinated successfully some sixty adults.

In the September quarter of last year, I sent in to the board my claim for these re-vaccinations; and am now, within the last few weeks, told that they refuse to acknowledge them, on the plea that the legislature has not contemplated re-vaccination, and that public vaccinators cannot legally demand payment for such services.

Under the Public Health Act of 1858, her Majesty's Privy Council issue to public vaccinators regulations and instructions, which not only authorise the performance of re-vaccination, but require it to be done.

It is, perhaps, superfluous to your readers to give these regulations; but I will do so (extracts from some of them) to make my case better understood.

No. 1 says: "Do not re-vaccinate persons who in infancy have been efficiently vaccinated, unless they be more than 15 years of age; or if, during any immediate danger of small-pox, more than 12 years of age."

No. 4. "Legibly write in his register the letter 'R' against the name of any person, adult or adolescent, who, having in early life been successfully vaccinated, is re-vaccinated."

No. 6. "Do not take lymph from re-vaccinations."

No. 5. "Guardians and overseers, in their respective unions and parishes, shall forthwith take measures to bring the performance of public vaccination into conformity with these regulations."

This rule evidently requires that our contracts be made in accordance with the regulations; and as the Privy Council "may from time to time issue such regulations as they think fit", they must be considered imperative.

The Sculcoates guardians think otherwise; and submit a case for the opinion of Mr. R. Lush, Q.C., who, in answer, says, Sept. 18th, 1863.

1. "I am of opinion that the provisions of these acts extend to all persons, whatever their ages or circumstances may be, who choose to avail themselves of the privilege of being vaccinated at the public expense, provided they have not been already successfully vaccinated.

2. "The statutes, however, do not appear to me to contemplate re-vaccination; and I am of opinion that a medical officer cannot charge the Union for the vaccination of a person whom he knows to have been successfully vaccinated."

To the question, "Whether the Public Health Act, and the orders issued therein, in any way repeal, alter, or enlarge, the provisions of the 3rd and 4th Vict., so as to charge the poor-rate with the vaccination of persons previously successfully vaccinated?" the answer is

3. "I am of opinion they do not."

4. "I am of opinion that the contracts must be construed with reference to the Acts of Parliament by which they are authorised; otherwise they would be void, as being *ultra vires*."

If this opinion, sir, be a correct one, we are, indeed, called upon to perform a vast amount of gratuitous service; for re-vaccination is considered as powerful in preventing the inroad of small-pox, as infantile vaccination; and we shall be constantly applied to, to perform it.

We should err in refusing obedience to the order of the Privy Council, can the Sculcoates Board violate them?

I shall be glad to know your opinion, as well as that of any medical *frère* on this question, and also the practice adopted in other unions.

Last week, I addressed the Poor-law Board, Whitehall, for their decision; but have not yet received an answer.

I am, etc.,

THOMAS JACKSON.

Walton, near Brough, East York, April, 1864.

[The treatment of medical men by Poor-law officials is, we need hardly say, too constantly both shabby and grinding. There is only one way in which such treatment can be met. Our advice, in this case to Mr. Jackson is, that he never again re-vaccinate any case until he has obtained from the Guardians promise of payment. He should point out to the Guardians the dangers which result to the individuals whom he deems not sufficiently protected by the first vaccination; and secondarily, to the public through their not being re-vaccinated; and then leave the matter with a clear conscience. We should consider, from Mr. Lush's opinion, that Mr. Jackson is under no legal obligation to re-vaccinate. EDITOR.]

Medical News.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. (Double Qualification.) The following gentlemen passed their first professional examination during the April sittings of the examiners.

Allshorn, A. H., Enfield	O'Niell. P., Castledermot
Carrick, George L., Cronstadt	Steel, William E., Blaenavon
Chisholme, Wm., Edinburgh	Veitch, Wm. Young, Coundon
Cornish, Henry, Taunton	Walsh, David J., co. Cork
Duguid, William, Elgin	Wardleworth, Thomas, Lancaster
Elmslie, Wm. J., Aberdeen	Wicks, Aubrey, Cambridge
Godfrey, Frank, Salisbury	Worthington, James Vincent, Lancaster
Kynock, Patrick, Roxburgh	Young, David, Perth
M'Craith, Edward, co. Cork	
Mickle, John, Douglas	

And the following gentlemen have passed their final examinations, and been admitted L.R.C.P.Edinburgh, and L.R.C.S.Edinburgh.

Cosgrove, William Dunbar, Aberdeen	Laing, Alexander, Aberdeen
Crerar, John, Perthshire	M'Caul, James, Edinburgh
Eames, Wm. L., co. Cork	Ropes, Francis C., London
Jamieson, James, Bowden	Stewart, William, Ayrshire
	Topham, David, co. Cavan

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentlemen passed their first professional examinations during the April sittings of the examiners.

Christie, G. A., New Brunswick	M'Arthur, Peter, New York
Compigne, Horatio D. S., Gosport, Hants	Moniot, John A., Penang
Lytle, John D., Maghera	Robinson, C. H., Yorkshire
	Smith, James, Dumfries

The following gentlemen passed their final examinations, and obtained the diploma of the College.

Barrie, Andrew, Glasgow	MacSwiney, E. V., co. Cork
Bruce, Wm., Edinburgh	Millar, John, Edinburgh
Ducat, Andrew D., London	Miller, A. G., Edinburgh
Gaffney, J. B., co. Roscommon	Mouat, George B., Stirling
Hunter, James, Ayrshire	Poole, Samuel W., Edinburgh
M'Crea, Samuel, co. Down	Semple, Wm. H., Stranraer

APOTHECARIES' HALL. On April 21st, the following Licentiates were admitted:—

Bain, John William Devereux, Brunswick Terrace, Blackwall
Gunning, John Edmund, Surbiton, Surrey
Istance, Richard, Carmarthen
Murphy, Joseph Wm. Carter Neynoe, 75th Regiment

DEATHS.

HER, Horatio, Esq., Surgeon, of Earlestown, Newton-in-Makerld, on April 20.
SON. On April 14th, at Chester, aged 49, Margaret, wife of eorge Churchill Watson, M.D.

EDICAL SOCIETY OF VIENNA. Dr. Morell Maczie has been elected a corresponding member of society.

RIGIN OF SPECIES. A work has appeared by M. urens, entitled, *Criticism of the Book of M. Darwin n the Origin of Species.*

ROFESSOR LANGENBECK of Berlin has been apted head-surgeon of the Prussian army, and has for Düppel.

EATHS OF MEDICAL MEN FROM FEVER. We have iced the death of five of the ten resident physicians Bellevue Hospital who contracted the fever, and have to record the fact that three more are prosed by this disease. (*American Medical Times.*)

ADCLIFFE TRAVELLING FELLOWSHIP, OXFORD. Radcliffe Travelling Fellowship has been awarded A. B. Northcote, B.A., of Queen's College. Mr. thcote took a first-class in Natural Science in rch Term, 1861.

NIVERSITY OF ST. ANDREWS. The graduates of University of St. Andrews will hold a dinner at London Tavern on Tuesday next, May 3rd, when stimonial to Mr. Day, late Chandos Professor at University, will be presented. The testimonial sists of a carved cabinet (by Rogers) holding, in nty volumes, the *Règne Animal* of Cuvier, with coloured illustrations. The dinner promises, we eve, to be largely and influentially attended. Dr. hardson is to occupy the chair.

NCREASE OF MEDICAL STUDENTS. There has been rge increase of students in attendance upon all medical colleges of the country. The schools of w York and Philadelphia have again reached rly the maximum of their former attendances. e young men coming forward represent the higher sses of society, and bring to the profession a much re thorough preliminary education. The great ucement which the Army and Navy hold out to lified medical men is the cause of this stimulus l attraction to the medical profession. (*American dical Times.*)

OISONING BY PHOSPHORUS. A woman has been mitted at Llangadock for wilful murder of her ld. The infant, it appeared, from evidence given the inquest, was seized with vomiting and purg; the matters vomited smelt strongly of "brimne"; and the motions; and the evacuations from bowels "shone in the dark." Dr. Prothero made *ost mortem* examination, and deposed that the stoch was inflamed and softened, its mucous and scular coats being in some parts destroyed. The ntents of the bowels, etc., were examined by Dr. B. Herapath, who made a minute analysis of m, and arrived at the following results: "Evidence the presence of free phosphorus in minute quany was obtained from the contents of the stomach; ilst evidence of phosphorous acid, the lower oxide phosphorus, was obtained by Scherer's test, as moled by myself, from the contents of the stomach, d of the large and small intestines; whilst a still ger quantity of the same phosphorous acid was wn to have been absorbed or imbibed by the tiss of the stomach and intestines, and to be present the liver; whilst the presence of dextrine in the intestinal canal shews that starch had been present there during life. I infer that phosphorus was probably the cause of the acute inflammation of the mucous surface of the stomach and intestines, of which the infant died." The viscera were brought to Dr. Herapath on the 24th ult.; the child died on the 4th, a period of twenty days having elapsed since the death. The poison was found with difficulty, but chiefly as phosphorous acid.

UNIVERSITY OF OXFORD. It is proposed to continue to pay towards the Linacre Professorship (till funds otherwise accrue) £140 *per annum*; to the Professor of Chemistry for chemical apparatus £150 *per annum*; to the same Professor for an assistant in lecturing £100 *per annum*; to the same Professor for a practical demonstrator £150 *per annum*; to the deputy of the Professor of Experimental Philosophy £120 *per annum*; and to the Professor of Zoology for a servant £15 *per annum*. The five grants are to be made for a period of five years only.

GRATUITOUS MEDICAL SERVICES. A spirited agitation is going on, and gaining ground throughout England, to abolish the system which has prevailed to such an extent in the United Kingdom, of giving gratuitous advice and assistance to persons who, in many cases, can well afford to remunerate medical men. That the profession is really getting alive to this destructive system of gratuitous medical advice is evidenced by the sensible and businesslike resolutions passed by the Medical Society of Liverpool. It is to be hoped that the example set by the Liverpool practitioners will be followed elsewhere, undeterred by the silly attacks of the *Medical Times*, on what it is pleased to term the British medical tradesmen, the parallel of whom it finds in the pot-house keeper alluded to in Fielding's novel of *Joseph Andrews*, from which work the writer of the article in the current number of that journal publishes nearly a column about Mrs. Towwouse, and having as much to do with the admirable papers on this subject in the BRITISH MEDICAL JOURNAL as with the Man-in-the Moon. (*Dublin Medical Press.*)

GARIBALDI'S CONGÉ. An old acquaintance, Mr. Assolant, gives an amusing account to Garibaldi's departure. "'My dear friend,' said the Duke of Sutherland, 'you should by this time be fatigued with all these receptions.' 'Not a bit of it,' returned the simple hero. 'My foot is much better since Nélaton—' 'My friend,' continued his grace, 'you are in ignorance as to your real condition. Our fogs do not favour the recovery from accidents. The London climate is unhealthy, and we should be for ever grieved were the liberator of the Two Sicilies laid up with a bad cold. Return, then, my dear fellow, to Caprera, and I will see you home.' 'But I assure you,' answered Garibaldi, 'I am very well, and this popular enthusiasm warms my heart.' 'No matter,' continued the duke, 'Dr. Partridge believes that—' 'Dr. Partridge?' asked the hero. 'Is it he who declared there was no ball in my foot? That's a good joke indeed!' 'But,' insisted the other, with evident impatience, 'Partridge is not alone of this opinion. Palmerston and Clarendon do not augur well of your stay in London.' 'Palmerston and Clarendon!' exclaimed Garibaldi. 'I never heard before that they were medical authorities. Where have they taken their diplomas—in Edinburgh or Paris? Ah! this is the reason of Clarendon's visit to the Tuileries. He has been commanded there to pack me home, and England obeys.' 'My dear Garibaldi, you know nothing of the matter.' 'But I want to be let alone. Why did you come and take me from Caprera? Am I a natural curiosity which may be concealed or exhibited at the will of its possessor?'"

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Epidemiological Society, 8 P.M.—Entomological.—Royal Institution (Anniversary).—Odontological.

TUESDAY. Pathological.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Meadows, "On the Treatment of Vesico-Vaginal Fistula"; Mr. Nunn, "Destructive Inflammation of the Hip-Joint following Delivery."

THURSDAY. Harveian Society of London, 8 P.M. Dr. Sisson, "On the Origin and Nature of Syphilis."—Royal.—Linnæan.—Chemical.

FRIDAY. Western Medical and Surgical Society, 8 P.M. "Practical Evening for Cases and Specimens."—Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

RE-VACCINATION AND THE POOR-LAW.—Mr. Jackson, District Vaccinator at Ferriby, is refused payment of his just fees, because "it is past the time."

"A letter was read from Mr. Jackson, the medical officer for Welton, stating that it was not his intention to waive his claim against the Board for re-vaccination.—Mr. Ellison: I will move that it be paid.—The Chairman: And I will second it.—The Clerk: You can't; it is past the time; six months have elapsed.—Mr. Ellison: That's a very shabby way of making your payments."

When Mr. Jackson made his claim in a correspondence, the refusal was grounded on the non-liability of the guardians. Thus every "shabby" method is resorted to for the avoidance of the payment of the surgeon's just debts.

A CORRESPONDENT makes the following useful suggestion:—"It would be of much use if we could obtain the actual result of change of climate in the patients sent abroad for the winter. If their English medical attendants would give the effects they find on their return, the needed information would be gained. Would it be possible to obtain this information by some such plan as is now adopted, of naming a reporter, and requesting such information to be sent to him? My firm conviction is, that, as a rule, patients are much worse off abroad than in England; but to ascertain the fact, or some approach to it, would be satisfactory. Indeed, to furnish evidence to give medical men in doubtful cases sufficient reasons for opposing a change, would be very serviceable, for the expense and wretchedness caused by sending doubtful or hopeless cases abroad is untold."

COMMUNICATIONS have been received from:—Dr. W. TILBURY FOX; Dr. ROUTH; THE SECRETARY OF THE ODONTOLOGICAL SOCIETY; THE HON. SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; THE HON. SECRETARIES OF THE HARVEIAN SOCIETY OF LONDON; Dr. J. S. FLETCHER; Mr. BRODHURST; Mr. T. M. STONE; Dr. SKINNER; Dr. LIONEL BEALE; Dr. THUDICHUM; Mr. THOMAS MATHER; Mr. THOMAS JACKSON; Dr. HOLMAN; Dr. R. B. HOLLAND; Dr. W. BIRD HERAPATH; Dr. M. L. SIRCAR; Dr. E. GOODEVE; THE REGISTRAR OF THE MEDICAL COUNCIL; Dr. N. CHEVERS; Dr. SANKEY; Dr. RICHARDSON; Dr. STEVENS; and Dr. DRYSDALE.

ESTABLISHED 1840.

Bowmer's Medical Agency.—In consequence of the decease of Mr. Joseph Bowmer M.R.C.S., the representatives of that gentleman have transferred the business so long and successfully conducted by him at

50, Lincoln's-inn-fields,

to a member of the Medical Profession, who, from his business experience, energy, and well-known ability (combined with his personal knowledge of the requirements of Medical gentlemen), appeared to them to be *specially qualified* to carry out successfully the negotiations entrusted to him. They, therefore, respectfully beg to introduce to Mr. Bowmer's clients and the Profession generally his successor,

MR. J. BAXTER LANGLEY, M.R.C.S.,

(late student of King's College, and for some time business manager of one of the London daily newspapers), to whom all correspondence referring to the business of this Agency is in future to be addressed.

March 10th, 1864.

MEDICAL TRANSFER AND AGENCY,

50, Lincoln's Inn Fields, W.C.

Mr. J. Baxter Langley, M.R.C.S. (King's Coll.), begs to inform the members of the Medical Profession that he has undertaken the Medical Transfer and General Professional Agency business till recently carried on by the late Mr. Bowmer.

Mr. Langley devotes his prompt personal attention to the negotiations entrusted to him, and treats confidentially and with care all matters relating to Professional business.

Gentlemen desirous of relinquishing their Professional connexion or prepared to receive partners, can be introduced to gentlemen ready to invest in *bona fide* transferable practices and partnerships. The strictest reserve will be practised in all the preliminary arrangements, and no expense incurred (except in special cases) unless a negotiation be completed.

Gentlemen who have recently obtained their qualifications, or who may be looking for new spheres of employment as principals or assistants, are invited to communicate with Mr. Langley with a view to the satisfaction of their requirements. Having been engaged in practice himself, Mr. L. believes himself peculiarly competent to give advice as to the value of partnerships or transfers. Mr. Langley can refer to the Professors of his College, Members of Parliament, Clergy, and others, as a guarantee of his integrity and honour in all negotiations entrusted to him.

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Competent Assistants provided without delay, free of expense to the principals. No gentlemen recommended whose antecedents have not been inquired into.

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Medical Assistants.—Wanted Immediately, competent In-door and Out-door ASSISTANTS, qualified and unqualified, for Town and Country. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

£350. For immediate sale, a *bonâ fide* old established select and unopposed VILLAGE PRACTICE, in one of the most charming spots in Berkshire, within 28 miles of London. Receipts for last year paid up to the present date (including about £120 of transferable appointments), upwards of £400. Great scope for increase. Apply, "851," Mr. Langley, Medical Transfer Office, 50, Lincoln's-inn-fields, W.C.

£100. An unusual opportunity is presented to any energetic well qualified gentleman having this sum at his command to enter upon a practice of £400 a-year in a rapidly increasing suburb. No serious opposition. The vendor could give a short but, he believes, an effective introduction. Apply immediately to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

Gulstonian Lectures

ON

THE USES OF BLOOD-LETTING IN DISEASE.

Delivered at the Royal College of Physicians.

BY

W. O. MARKHAM, M.D., F.R.C.P.,

PHYSICIAN TO ST. MARY'S HOSPITAL.

[*Concluded from page* 463.]

VENESECTION is, I maintain, not a remedy of inflammation, but a remedy of the accidents which accompany, or, rather, arise out of, certain inflammations and non-inflammatory diseases; viz., those inflammations and diseases which are accompanied with obstructions of the cardiac and pulmonary functions. It is, therefore, of service in those inflammations only which are attended with such obstructions.

Let me repeat, in brief, what I hold to be the proofs of this proposition. In all ages of medicine, venesection has ever been most especially lauded as of service in those affections which are attended with such obstructions to the play of the thoracic organs. As science advanced, and men came to understand better the special character of diseases, they began to bleed less; first, they gave up the practice in external inflammations, under the teaching of facts *oculis subjecta*; and then, at length, in all other inflammations, excepting in those attended with pulmonary or cardiac obstructions. At the present time, there is never any pretence of bleeding, except in the class of affections alluded to. Is not the conclusion obvious?

The very symptoms, let me remind you, for which venesection is practised in such cases, are the very symptoms which are representatives to us of pulmonary and cardiac obstructions. The very relief given by the bleeding is just the kind of relief which, we know, experimentally results from venesection in such cases. The relief given by bleeding, when practised in pneumonia, is the very same relief as that which is given by bleeding in chronic cardiac and thoracic aneurismal affections. It is precisely the relief which naturally flows from the removal of mechanical impediments to the respiratory and cardiac movements; and the relief is given, although the physical conditions of the local inflammation in the lung, for example, remain unchanged. The relief, again, is in all cases immediate; while the blood is still flowing, the relief is profoundly felt, if the bleeding be of service at all. Moreover, no one ever thinks of resorting to venesection in pneumonia, if the inflammation be so limited as to produce little or no impediment to the respiratory or cardiac functions. Yet, if bleeding be a good remedy for the cure of the inflammation of the lung *per se*, why is it not as requisite when the lung is very partially as when it is very largely inflamed? The destruction of a small portion of the lung may be as dangerous to life as the destruction of an entire lung. But the mere removal of the obstruction to the play of these organs is not the only good which results from the venesection. I need not stop to tell all the long series of beneficial consequences which follow the bleeding. The entire vegetative life of man is renewed through the freedom of action given to these vital organs. To interfere with the play of the heart and lungs is to interfere, *pro tanto*, with the proper functional activity of every organ of the body. All these great benefits I claim as the indirect results of the bleeding. Nor have I time, nor is it needful for me, to discuss more nearly how the relief given in such case is effected by the bleeding. Enough for my argument is the fact that it is given. I will only observe, that it seems to me to be, in the main, of a mechanical character; by the withdrawal of blood, relief is given to the distended, oppressed, and, I may say, of necessity, partially paralysed heart. See what happens. When pneumonia extensively pervades a lung—and it is only, remember, in such severe case that bleeding is ever thought of as a remedy—suddenly a large extent of the pulmonary aërating surface is rendered useless; and as the amount of blood in the body remains unchanged, there is all at once established an undue relation between the mass of the blood and the aërating surface. The result is obvious. One lung is suddenly called upon to do the work of two; the blood is obstructed in its passage from the heart to the lungs, and the right side of the heart begins to labour and becomes engorged. But engorgement and dilatation of the heart is, of necessity, *pro tanto*, obstruction to, and partial paralysis and loss of natural force, of the heart; and all these evils increase *pari passû* with the degree and duration of the obstruction. Leaving out of consideration all those other evil consequences which necessarily flow from this one, may it not be most reasonably argued, that the relief of this condition is the main, the starting-point of the benefits accruing from venesection in pneumonia? The suffering which finds relief through the bleeding in pneumonia is, I take it, the very same in kind as that which is the expression of the agony of angina; and in both cases, as I argue, it takes its origin in an oppressed and partially paralysed heart. In angina, the cause of the paralysis of the organ lies within its very self—in its enfeebled and degenerated muscular walls; whereas, in pneumonia, it finds its source from without; viz., in the obstructed pulmonary circulation. And just so, likewise, do we find that venesection, which relieves the one affection, is worse than useless in the other? We find also, indeed, that in all cases of heart obstructions, whatever their cause—that in pneumonia, for example—there are periods when venesection will no longer avail to give freedom of action to the enfeebled heart; then, indeed, when its partially paralysed force is paralysed beyond redemption. Remember, again, the relief, when given by venesection in pneumonia, is given whilst the blood is flowing from the vein, and long before the patient begins to feel faint—long, therefore, before that period of syncope arrives, which is said to be of such service in causing the blood-vessels of an inflamed part to become pale and empty.

The experiments of Dr. John Reid, touching asphyxia, also surely corroborate the view I am maintaining. He showed that when the heart had ceased to beat in asphyxiated animals—had become paralysed through over-distension—its action might once

again be renewed, and even so as to preserve life by giving exit to the blood from the engorged right side of the heart.

It may seem strange that, in the latter half of the nineteenth century, I should offer within these walls illustrations of the uses of blood-letting; but, in consideration of the prejudice existing against the remedy at this time, I may, perhaps, be pardoned if I relate a few examples of what I cannot myself do otherwise than regard as demonstrative of the life-preserving effects of venesection—examples showing the incorrectness of the theory, that diseases will not bear bleeding now as they did formerly; and examples of the fact, that a dread of bleeding is at this moment prejudicial to the interests of the sick.

Not long ago, I saw a female suffering from severe pneumonia, so that her life was considered in danger. To my view, she was in that condition of body, and presented those signs which strongly indicated the propriety of venesection. The gentleman in immediate attendance upon her received the proposal with dismay. He at last, however, gave his consent to the operation, on the condition that his hands were to be washed of the expected results. I will only say, that the patient was largely bled, was thereupon immediately relieved, and made an excellent recovery; the marked change in her condition admittedly dating from the moment of taking the blood.

The next case I will give is one of chronic disease of the valves of the heart. The subject was a large and powerful man. When I saw him, his legs were œdematous, his abdomen dropsical, and from the great oppression of his breathing, it was manifest that his lungs were already invaded with effusion. This was his first attack in this way; and all these severe symptoms of heart-affection had come rapidly on him. During a week he had been subjected to treatment; but neither diuretics, nor purgatives, nor diaphoretics, etc., had availed to relieve him. Indeed, if ever there were a case of the kind, in which early dissolution might be predicted, this surely was one. I then and there had him bled, or rather bled him myself, as the young surgeon in attendance had never seen the operation performed. About thirty ounces of blood were taken. The relief was unmistakable; it was immense and immediate; and I will only add, that on the very next day he was up, walked about on the third day, and made a complete temporary recovery from the dropsical attack in question.

The next two cases I will give are from the surgical practice of my colleague Mr. Walton, who has, like myself, no prejudice in favour of a present asthenic phase of humanity. A man of 78, hale and temperate, fell from a cart, and did or did not break a rib or two. In two or three days, pain on inspiration was felt in the back; purgatives and opium gave no relief. On the eighth day, the pain was intense and killing, the dyspnœa great, and the face distressed. Mr. Walton now saw the man for the purpose, I understand, of deciding and taking the responsibility of venesection. The patient was at once largely bled; the blood being allowed to flow until the breathing became easy. The relief was immediate and permanent.

In another case, the ribs were also broken; and as the symptoms, in the course of three days, became of an alarming character, Mr. Walton was called in to decide whether venesection might be resorted to, the patient being sixty-eight years old. When Mr. Walton saw the man, he had been sitting for two days bolstered up in a chair; his legs œdematous; his lips blue and congested; and the gentleman in attendance upon him considered him to be dying. Mr. Walton immediately bled the man largely—to about thirty ounces. "The result was most satisfactory," the report runs, "enabling the patient to resume the horizontal position; and, from being asphyxiated and at the point of dissolution, gradually to improve and recover." I could, sir, give you other cases of a like character, and of quite modern date, if it were necessary; but it would be merely repeating the same tale. I know that, in cases of this kind, many members of the profession would at once resort to the remedy; but I am equally certain that the majority of practitioners, however much their better judgment might incline them to the right conclusion, do hesitate, and fatally hesitate, at the present moment, in resorting to venesection in such cases. The phantom of asthenia rises before them, and paralyses their actions. I have attempted to show that this phantom—this change of type in diseases—is a theory unsupported by satisfactory and trustworthy data; that the idea so widely spread and so generally accepted, that men will not bear bleeding now as formerly, is unfounded in fact, and contrary to experience; and sincerely do I hope that I may have in some small way assisted in removing a delusion which, as I believe, banefully weighs upon the practice of our art.

I have also attempted to define the right limits and the true effects and the proper application of blood-letting in diseases; pointing out that, as it seemed to me, physiology, pathology, and experience all concur in teaching us: that venesection has no directly beneficial influence over inflammations; that it is only of service during certain stages of those inflammations in which the action of the heart and lungs is impeded; and that its use lies in removing the obstructions which arise incidentally out of those inflammations.

In dealing with this wide and unlimited subject, I have, of necessity, been forced carefully to avoid the temptations which have beset me on every side; I mean the discussion of the hundred interesting topics incidental to the tale of blood-letting which present themselves to him who treats thereof. I have strictly confined myself to two especial points; viz., the attempt to show the fallaciousness of the change-of-type theory; and to the explanation of the real uses of bleeding in inflammation; believing firmly that the removal of the theory and the acceptance of the explanation would necessarily involve, with all reasonable people, a reconsideration and a readoption of venesection as an ordinary remedy in diseases. This, sir, must be my apology with those of my hearers who may think I have treated the question in too exclusive a spirit.

Allow me, sir, in conclusion, to say one word of apology. I fear that I may seem at times to have expressed my own views too dogmatically, and too lightly to have estimated the value of the opinions which I have opposed. Should I have fallen into this error, let me assure you that it was not from any want of due respect to those whose opinions I naturally regard so highly, but solely from the earnestness of the conviction with which I have attempted to impress my own views upon your notice.

Lectures
ON
ORTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture XII.
ON TALIPES, OR CLUB-FOOT.

Club-Foot occurs especially in four principal forms or varieties; namely, equinus, varus, valgus, and calcaneus. There are also compound varieties, such as equino-varus, equino-valgus, calcaneo-valgus, and others, which, being very rare, scarcely require separate mention.

Talipes equinus is essentially a non-congenital distortion, and it is that form which is most commonly met with. It occurs, however, very rarely as a congenital affection. Figure 30 was taken from such a case. In this instance, the forearms were extended on the arms, through retraction of the triceps muscle, and the legs were extended on the thighs; the left foot was affected with equino-varus, and the right with equinus. The positions and the rigidity of the feet remained the same from birth until I saw the child, as was testified by Dr. William Fox, who placed him under my care. Since this time, I have seen two other cases of congenital equinus.



Fig. 30.

The *characters* of this affection are elevation of the heel through morbid contraction of the muscles of the calf of the leg, the foot being neither everted nor inverted.

In this form of distortion the extremities of the metatarsal bones and the toes rest on the ground and support the weight of the body, as is shown in Figure 31. Any contraction of the muscles of the calf of the leg, however, is known as equinus. Thus, though the heel rest on the ground, and the contraction be only so much as to prevent the foot being flexed on the leg, it is equally known as equinus.

There are certain conditions of the limb which it is useful to attend to, in forming a diagnosis as to the nature of the affection. Thus, in spasmodic equinus, the toes are retracted like the claws of a cat; but, when the anterior muscles are paralysed, the toes are folded back, as is represented in Figure 32; or even the entire dorsum of the foot may rest on the ground, as in Figure 33. When the foot is thus retroverted, loss of power is general on the anterior surface of the leg.



Fig. 31.

When any lateral deviation of the foot is superadded to elevation of the heel, then other muscles



Fig. 32.

than those of the calf of the leg are called into action, as the adductors of the foot or the abductors;



Fig. 33.

and thus a compound distortion is produced, whether equino-varus or equino-valgus. The deviation is

determined by the greater power of one or other set of muscles, by the manner in which the superincumbent weight is transmitted, or by some other such cause.

The *anatomy* of this distortion is well displayed in Fig. 34. The drawing was made from a limb which was kindly sent to me by Mr. Hester of Oxford, and which is now in the Museum of the College of Surgeons, No. 9 B. The distortion had existed for fifty years. The bones of the foot were softened and fragile. A thin layer of cartilage only remained covering the articular surface of the astragalus. The foot was very much bent upon itself from the transverse tarsal joint. The effect of this condition is always to add to the apparent elevation of the tuberosity of the os calcis; but the os calcis is found, upon dissection, to deviate very slightly in such cases from its normal horizontal position.



Fig. 34.

The astragalus is generally in severe equinus thrust forward, and even as in Figure 31, it is almost luxated—thrust out, as it were, from the tibio-tarsal articulation. I have known the head of the bone to present so prominently beneath the skin, as to occasion ulceration.

The metatarsal bones assume more or less a vertical position, and their extremities, transmitting the superincumbent weight, become slightly separated one from another, and so increase somewhat the breadth of the anterior portion of the foot. Before this degree of distortion is reached, the longitudinal arch of the foot becomes contracted and its extremities are approximated; so that the sole of the foot is rendered more concave, and the foot itself is shortened. This is perhaps the most important change which occurs; the ligaments on the dorsum of the foot, and especially the astragalo-scaphoid ligament, becoming elongated, and in an equal degree the powerful ligaments in the arch of the foot are shortened.

The muscles which are contracted are the gastrocnemius, soleus, and plantaris, in the calf of the leg. These occasion elevation of the heel. And in the sole of the foot the flexor brevis digitorum tends to bring the metatarsal bones into a vertical position, and with contraction of the plantar fascia to decrease the span of the longitudinal arch. From a continuance of the same causes, retroversion of the foot may take place, when paralysis of the muscles on the anterior surface of the leg is complete.

Atrophy of the muscles of the calf of the leg commences before the most severe grade of distortion is reached. The bulk of the muscle appears to be higher than is natural on the leg, and the length of the tendo Achillis seems to be increased. In severe distortion, very slight motion is permitted at the ankle-joint, in consequence of the tensely contracted condition of the extensor muscles and of the position of the astragalus. At length, the purposes of the tibio-tarsal and the tarsal joints being no longer fulfilled, the cartilages become thinned and irregular on their surfaces; the synovial membranes are softened; the ligaments lose their elasticity; and the muscles undergo fatty degeneration.

The *treatment* of this, as indeed of every other distortion of this class, consists of two parts; namely, first, the restoration of the limb to its normal position; and secondly, the restoration of function.

Distortion may frequently be removed by mechanical means alone, and without the use of the knife. We find this to be the case, whether we have to act on bone, ligament, muscle, or skin. This was known to Hippocrates; and it has been more or less practised ever since.

When the distortion is the result of paralysis, mechanical means are frequently sufficient to restore the right position of the limb; and spasmodic contractions may likewise in a very large number of cases be overcome, and the limb may be replaced by similar means. Some cases, also, of congenital distortion may be successfully treated in a similar manner. It may further be said that those paralytic and spasmodic cases which can be thus treated, ought on no account to be subjected to section of tendons. By means of the instruments ordinarily in use, these distortions are to be removed without subcutaneous operations.

There remains, however, a very large class of cases which cannot be treated successfully otherwise than by the section of the tendons of the contracted muscles and by the sections of fasciæ. This is the case, as a rule, with congenital distortions which are treated during childhood. But when these distortions are of long standing, it is extremely difficult effectually to remove the deformity; and without the section of tendons and fasciæ, it is impossible. Much care is required to prevent injury to the soft structures during the long continued extension which is necessary to unfold, for instance, talipes varus in the adult. It is a duty to shorten this painful period as much as possible; and by dividing tendons and fasciæ, to remove the impediments as far as it lies in our power. Besides, there is nothing more painful than continued extension; but section of tendons is painless.

When the distortion is considerable, it is absolutely necessary to divide tendons; for long continued and forced extension will cause injury to the muscular fibre—rupture, inflammation, and paralysis, and the function of the muscle must remain ever after impaired; whereas the power of the limb is restored, when the tendons are divided and allowed to reunite, before extension is made.

The tendo Achillis may be divided from half an inch to one inch above its insertion. Both in the child and in the adult, this operation is easily performed if the tendon be made sufficiently tense. If, however, the limb be so held that the tendon be left lax, its section will not only be difficult, but at times and under certain circumstances it may be well nigh impossible. While, on the other hand, if too much force be used, the divided ends of the tendon will be drawn forcibly

asunder, and the integument will be drawn on to the operator's knife, and be divided.

In dividing the tendo Achillis, the knife should be held obliquely, and passed beneath the tendon, the patient being prone and the heel presenting upwards. The cutting edge being then turned upwards towards the tendon, this will be divided in withdrawing the knife, slight upward pressure being made at the same time. When it is severed, the tendon yields with a snap. This depends, however, almost entirely on the manner in which the foot is held; but resistance immediately ceases, and the operator is then aware that the section is complete.

On withdrawing the knife, the wound should be closed with lint and adhesive plaster, and the patient should remain in the recumbent posture during the remainder of the day. When the puncture has healed, extension may commence, and be continued slowly, until the desired position of the limb has been acquired. Except in experienced hands, however, this extension is dangerous. It is apt to be carried on too rapidly and too far. Extension can scarcely be too slow; and it is infinitely better that it should be too little rather than too much. The latter is irremediable. But, with some aptitude for the treatment of these cases, and with care in the management of them, they may without difficulty be brought to a successful termination.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WESTMINSTER HOSPITAL.

CLEFT PALATE: OPERATION: CURE.

Under the care of CHRISTOPHER HEATH, Esq.

[*Reported by* MR. WATTS, *House-Surgeon.*]

WILLIAM C., aged 16, was admitted into Henry Hoare Ward on February 8th, 1864, with congenital cleft of the soft palate. The split extended through the whole length of the soft palate; but the parts were well developed, and the fissure was not a wide one.

February 9th. Mr. Heath performed the operation of staphyloraphy after Mr. Fergusson's method, but with wire sutures. The levatores palati muscles were freely divided, and the soft palate was well loosened from its attachment to the bone in front. A thin slice was then removed from each side with a double-edged knife, and the sutures introduced. In introducing the sutures, Mr. Heath used an ordinary curved needle, with a loop of silk on the right side, and a needle with a moveable head carrying a fine wire on the left side; the end of the wire was then bent into the loop of the silk, and was drawn through the flap of the opposite side from behind forwards. Two wire sutures were thus introduced, which kept the parts well together. The boy behaved pretty steadily, but required a good deal of persuasion to allow the operation to be completed. He was ordered milk diet, strong beef-tea, and extra bread.

February 10th. The parts looked healthy, and were in good position.

February 16th. The front part of the cleft was quite united. Mr. Heath removed the front stitch. The patient was ordered to use alum gargle.

February 18th. The posterior stitch was removed. Union was complete throughout; and the remnant of the uvula was in its proper place. He was made an out-patient.

In some remarks upon this case, Mr. Heath said that he preferred Mr. Fergusson's mode of operating to Mr. Pollock's (which was performed on the same day by Mr. Power), as it avoided all injury to the palate itself, and also enabled the surgeon not only to divide the muscles, but to free the palate itself from the bone to a considerable extent, which he considered a very important matter. The use of wire for the sutures was very advantageous, not only as avoiding irritation, but because the two sides could be more accurately fitted together than was possible with silk suture. Mr. Heath said that he preferred a needle with a moveable point for introducing the wire, because he found it difficult to draw the wire out of the eye of the ordinary needle, but was easily able to grasp the eye of the needle and draw it forward with the wire attached.

Original Communications.

CASE OF CATARACT: WITH REMARKS.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

Cataract in a very Feeble and Enervated Old Man. Preliminary Treatment. Influence of Age and Debility on Success in Operating. Retraction of the Eyeball and remarkable Prominence of the Eyebrow. Operation, and Difficulty in overcoming the Mechanical Obstacles. State of the one Eye, by which Spontaneous Dislocation of the Cataract occurred. Fluid Degeneration of the Cataract in the other. Question of Chloroform. After-Treatment. Result.

As I never met with a case like this, with such a combination of physical peculiarities, rare morbid states, and strongly marked general characters, I determined to make it the subject of practical remarks, not only on account of the abundant materials it supplies, but because I believe that, as the many facts are gathered from a single individual, they will be more impressive than if they were derived from several sources.

This gentleman was seventy years old. On the subject of age, and its influence in the extraction of cataract, I am often questioned. Mere age in itself matters nothing. There is no limit in time, provided a person be strong in proportion to his years; but, most surely as senile feebleness is premature, and as the diseases incidental to the later term of life creep in and destroy vital force, so does the average of failures increase. Hence it is that a man of eighty may afford a better expectance than another of sixty. It would not be easier to point out here than in operations on other parts of the body, the source of adverse influence; and I will but observe, that the want of adhesion of the cornea—a common feature in the most frequent instances of bad result—is, I believe, an effect of something wanting or wrong elsewhere (I mean constitutionally), and not the mere miscarriage of a simple local process, due to a mechanical cause.

My patient was naturally thin and feeble, but now he was unusually depressed from sea-sickness and

the want of suitable food. In a few weeks, however, all that was attainable was accomplished. This leads me to speak of preparatory treatment, about which I have no lack of inquiry from patients and professional men. Now, there is much mystery and fallacy afloat on this head. Very little scope, especially among the rich, really exists for medical aid beforehand, except when, as in the example before us, some cause has directly impaired the health. Then we must try and improve a constitution, suffering from induced debility, to the highest standard that the idiosyncrasy of the person will allow. But vital force is not to be found in drugs. If a man is healthy, leave him alone; he may be disimproved by medicines. Nor is it necessary to reduce the food, and to purge, if there be an appearance of good health. Towards the limit of the natural term of life, we should not, without ample necessity, cut off the accustomed nourishment or the usual stimulants; and it will be better not to meddle with a long habit of costiveness, than to risk the chance of irritating the stomach and bowels with physic.

A plethoric state from over-feeding and want of exercise, which used to be written about so much in the last generation, I very rarely see among the aged with cataract. Of course, it requires attention; but a big belly and a fat face must be distinguished from plethora. Any derangement of the digestive organs, which may interfere with the functions of assimilation and nutrition, demands much attention, because, in such a state, destructive inflammation is apt to follow local injury. A whitish tongue, or one that is loaded, will accompany such a state; but, as the aged are apt to have a rather coated tongue, I particularly look to the urine, and regard the deposit of uric acid, or of the urate of ammonia, as sure indications of dyspepsia, or excess of nitrogenised food, or of fever; and that of phosphate of lime, or the triple phosphate, of the opposite states of prostration and nervous depression.

I found, in the example before us, three physical conditions which make the operation of extraction unusually difficult. The eyebrow was very prominent; the eyeball much retracted, and its anterior chamber very narrow. An operator must decide for himself when such limits are passed, in any of these states, as will oblige him to modify, to alter, or to abandon the mode of operating under ordinary circumstances. I found it absolutely impossible to extract by the upper section—that which I considered incomparably the better. However, I managed to accomplish the lower to my complete satisfaction. But then I used an under-sized knife; and my assistant depressed the lower eyelid with a wire retractor, for which I never before saw the necessity, as there was no room for the finger; and steadied the eyeball with a pair of forceps. The difficulties were not without a practical bearing; because, as far as my experience goes, I settle for myself the question of the possibility of overcoming any natural difficulty opposed to the excecution of the operation; and I believe, what I have long suspected, that, except when there is a malformation, congenital or acquired, extraction is not impossible; and if so, that the badly devised operation of depression need never be resorted to. I have not employed it for many years. I may say, in parenthesis, that the beautiful operation for solution —the most certain and sure, as applied to cataract, of any ever invented—is inapplicable to the aged, except the cataract has become soft by degeneration and disintegration.

But all the difficulty did not cease when the preliminary steps were made. Directly that I commenced to use the curette, I found that the cataract was loose, having separated with the capsule from its natural attachments at the circumference. The greatest nicety was required to hook it out; and I accomplished my object without any loss of the vitreous humour, or prolapse of the iris. It is enough to say, without going into minute anatomical detail, that this dislocation was due to the breaking down or softening of the parts which in health hold the circumference of the capsule, and keep it with the lens in position. Sometimes the cataract is dislocated by the slightest touch of the curette; but the displacement may be spontaneous, occurring without an operation, and be complete or partial; in the latter state, it swings as on a hinge. This is for the most part in the aged. In young persons, the partial spontaneous detachment may exist without cataract; but I have not seen it unaccompanied with chronic inflammation of the eyeball. A knowledge of this pathological state serves in two ways. It should make an operator very careful in the use of the curette, as it is often present, and perhaps is never absent in some degree in all cases of capsulo-lenticular cataract in the aged. Then it affords an explanation for the so-called natural and sometimes sudden cure of cataract. Many of these cases, attributed in former times to all kinds of causes in the spiritual and material world, have been recorded. The dislocation, whether complete or partial, requires a fluid state of the vitreous humour. Although the true nature of the accident was known before the ophthalmoscope came in, our present better means of examining the eye help us out of some difficulties connected with it, that occur now and then.

The loss of transparency of the lens is then very frequently associated with unhealthy changes in one or more parts of the eye, especially in the aged. An operator, in the pride of his skilfulness, should not forget this, and fall into the error of speaking too confidently of the expected success of his operations, and so promise more than the nature of circumstances will allow.

Now for a few words respecting the left eye. I shall pass over the first parts of the operation, as they were done in the same manner, and under the same difficulties, and with equally happy results. But I must notice a certain change and destruction of the cataract. When using the curette, with, of course, immense care, out gushed a sepia-coloured fluid, the result of one form of fluid degeneration of cataract. This was a troublesome complication; it obscured the chambers of the eye for a time, and rendered any proceeding uncertain. At last I saw that the cataract had not quite dissolved; about half remained, and which I scooped out. This partial conversion of the opaque lens-fibre into a fluid is only a more advanced degree of what may be called the commonest change in a cataract, that of softening and disintegration of the superficies, the fullest accomplishment of which is complete fluid degeneration of the entire cataract; which, however, is very rare indeed. The only matter in connexion with this fluid change in part, or in whole, worth mentioning, is, that it may not be possible always and beforehand, in old persons, to distinguish with certainty between the dark mahogany full-formed cataract and it, by any subjective or objective signs. After all, there is no practical disadvantage arising from this; for, if there be the nucleus of the cataract remaining—the usual occurrence—it will be the easier extracted through an ample opening in the cornea; and, if not, the fluid in which abounds broken-down lens-fibres, cholesterine, and oil-globules, had better be evacuated by a free incision, as it is an irritant to the eye, and often, besides, causes severe general disturbance.

Chloroform was not used. In old, feeble persons,

it very often produces a depressing effect, which, I believe, materially interrupts the necessary process of local repair. This is not to be wondered at when there is nausea for a day or more, with headache and febrile excitement, and inability to take food for a longer period. The circumstances under which I should sanction its employment must indeed be rare.

I am in the habit of attributing much of the success of my extraction cases to the after-treatment, of which I can only notice a few points. The operation in itself has a lowering and reducing effect; and the indication is, to supply, to support, and to restore. Besides this, under ordinary conditions, an accustomed supply is needed for accustomed waste and nutrition; and we most certainly make a step in the wrong direction when we cut off the supplies. Wholesome food, given in a state of system capable of assimilating it, will not produce diseased action. Starvation is no safeguard against inflammation, while it frequently retards the needed reparation. An old person fed on slops is almost sure to have his digestive powers impaired. From the first, then, I allow the usual diet, at the usual times, but in careful moderation. I do not absolutely prohibit accustomed stimulants. In this case, a full diet and the ordinary quantity of brandy were taken. I avoid as much as possible long confinement to bed, in order to prevent the enfeebling effect. I insist on the couch and easy chair as soon as possible. Then there is nothing I am more particular about than keeping the eye quiet; for the more it is disturbed, the more will it be irritated. I do not take off the court plaster I apply after the operation for four or five days, except it be uncomfortable, when I renew it; and I rarely ever open the eye under a week. The highest attainable result is to be got only by this.

My case ended well. The right eye healed rapidly, without pain or even uneasiness; and sight was restored. In the left, irritation ensued, and was kept up by a minute prolapse of the iris. When my patient left England, three weeks after I operated, there was yet some intolerance to light and redness of this eye; but he could read large type. I was sure that only time was wanted to make it as good as the other.

ON IMPETIGO CONTAGIOSA, OR PORRIGO.

By W. Tilbury Fox, M.D.Lond., Physician to the Farringdon General Dispensary.

[*Continued from page* 469.]

Nature of the Disease. This part of the subject is replete with difficulty; and great care must be exercised in sifting and interpreting the evidence, for any hasty assumption must inevitably do much mischief. We have to deal with a disease which is eminently contagious. Now, it has been observed, that an eruption of the kind under notice is observed after vaccination. The unbalanced state of system produced by the action of the vaccine virus is favourable, no doubt, to the occurrence of any disease to which there is a predisposition, or which is waiting to show itself. Moreover, the vaccination may be the means of introducing specific poison into the system. Hence we have several interesting questions suggesting themselves for discussion.

I. The contagious property of the disease: What is its nature?

II. What, if any, are the relations between impetigo contagiosa and the eruptions secondary to vaccination?

III. Does vaccination give rise to impetigo contagiosa? If so, by what means—by the introduction of a special poison, or by modifying existing disease?

These are questions well worth consideration.

I. Of the contagious character of the disease there can be no shadow of doubt; facts are very decisive upon the point. It has possibly been noted by others than myself, that most dermatologists admit, in a hesitating way, the likelihood of the existence of a contagious form of impetigo, especially in children; but, so far as we are taught, there is no decided opinion in the affirmative expressed in books. Of course, it is only in hospital and dispensary practice that the proper evidence is likely to be obtained. My attention was first decidedly drawn to the point by the case of a little boy who had contracted (unmistakably) the disease from the bite of a playmate affected with the disease. The mother of the child scratched her neck with the steel of her bonnet; and the wound, coming into contact with a spot on the forehead of the child when lying on its mother's neck, received some of the purulent discharge, and a well marked spot of impetigo contagiosa was developed. It has also been a matter of constant remark with me, how very frequently the disease extended from one to several members of the same family by pure contact—from children to mothers, from playmate to playmate, etc. So distinctly and clearly is this the fact, that the testimony of parents and others is *spontaneously* offered; and, making all due allowance from whims and fancies, there still remains a decided and irresistible amount of evidence in favour of the opinion which these folk hold.

From the uncertainty of the above, an appeal was at once made to the certainty of the experiments of inoculation upon the arms of myself and others. I took some of the viscid contents of the pustuloid, and introduced it to a scratched surface on the anterior aspect of the forearm of a woman. Within twelve hours, the edges of the scratches were red, slightly swollen, and itchy. The next day, a slight blush was seen; the centre of the little patch looked elevated into a little red point; and in forty-eight hours it presented the appearance of a little yellowish head. On the third and fourth days, a well marked areola was present. Desiccation now commenced; the centre, before depressed, puckered together; and a little oozing took place from beneath one edge. The size of the spot was one between those of sixpence and a shilling. The parts around felt hot and stiff. The future progress of the inoculation is that of the disease itself. Either healing occurs, or an oscillation takes place between suppuration and scabbing, or the surface ulcerates superficially. I desire to call attention to the very important fact of having most carefully examined the contents of the pustuloid bleb which has afforded the matter used in the inoculation, and affirm most positively the absence of any element whatsoever of a vegetable parasite. The inoculated disease is positively not due to the transplantation of a fungus, but of a fluid possessed of special properties. One very important conclusion flows from the facts mentioned, and it is this; *that impetigo contagiosa is in no sense parasitic.* This is one great step gained on the negative side of the question.

II. The second question, expressed in general terms, embraces the alliances and similitudes of the disease. Its contagious quality separates it in one respect, by a very broad line, from ordinary pustular and vesicular affections, such as ecthyma and pemphigus. Can it be ranked at all among the acute specific diseases? Scarcely so; but actual observation would certainly seem to show that some, at

least, of the examples of "anomalous forms of vaccinia", belong to impetigo contagiosa. My attention was called by Dr. Harley, during a conversation, to some cases published by him in the *Medical Times and Gazette* for August 1863, which he styled "Bastard Vaccinia", with a query. Briefly stated, they are as follows.

A child, aged 2 years and 3 months, vaccinated January 9th, on February 9th was brought to Dr. Harley, covered on its face and neck by a number of vesicles, which, at first glance, appeared exactly like vaccination-vesicles. The report was, that the vaccination took well; but, about three days after it was done, several "spots" appeared behind the left ear, and others on the face during the course of the next few days. Nothing is said as to the quality of the matter. Behind the left ear there was a large sore, caused by the coalescence of the vesicles; and round its lower margin the discharge had dried and formed a thick yellowish scab. On the left arm were three large erythematous-looking spots, with red bases, and covered by dense yellow crusts. These were the original vaccination-vesicles. There were three smaller vesicles, in a less advanced stage, at the tip of the shoulder; and on the neck were several having the exact appearance of vaccine vesicles on the eighth day. In some, the pit in the centre was quite visible; in others, not so well marked. On the head were a few vesicles, and on the surface about twenty, with all the appearances presented by the true vaccine vesicles from its earliest to its latest stage. The disease lasted about a month.

The second case occurred about three weeks after vaccination. The inoculation with some of the discharge reproduced the disease; but the pustule was very much more advanced in its different stages.

The third case was quite independent of any vaccination.

I believe that these and like instances give us the clue to the nature of impetigo contagiosa. Certainly the resemblances of the two classes of cases are most decided. Vaccinia is a very regular disease as to time and intimate changes; its periods of incubation, eruption, pustulation, maturation, and desiccation, are marked by most certain limits of known and expected occurrence; but the cases quoted of so-called "bastard vaccinia" are peculiar in several particulars. In them, the disease is made up of successive crops of eruption; the changes are more rapid, and irregular in point of time, and cannot in all cases be immediately connected with the introduction of the vaccine virus into the system. The great resemblance is the umbilication in the two instances. I saw, not long since, a case of true impetigo contagiosa, in which there were eleven umbilicated small bullæ over the knee, with spots of impetigo contagiosa on other parts of the body; the former bearing an exact resemblance to some instances of vaccinia, yet totally unconnected therewith. In these instances of so-called bastard vaccinia, it seems very strange that vaccination should take "well", as people have it, and then be followed by a profuse eruption of vaccinia just afterwards. It will be noticed that, in one of Dr. Harley's cases, inoculation was comparatively much more advanced in its developmental stages than vaccinia—a state of things which tallies most completely with that of the inoculation of impetigo contagiosa.

We have logically arrived at thus much: that the disease is not parasitic; and that it bears great resemblance to, if it be not identical with, so-called bastard vaccinia, meaning by that term the eruptions consequent upon vaccination.

[*To be continued.*]

British Medical Journal.

SATURDAY, MAY 7TH, 1864.

THE ARMY, NAVY, AND INDIAN MEDICAL SERVICES.

AMONGST all the subjects of importance which must be brought before the present session of Parliament, none will be of more consequence to the medical body, as well as to the community, than the present disorganised state of the militant medical services.

It may be worth while to examine a little into the causes of the widely spread discontent which undoubtedly exists in the public mind with regard to the position of the members of these services. Unfortunately, in our country, the army and navy services have been looked upon too much as an appanage of the aristocracy; and jealousies on the part of the higher authorities and of the other departments have tended to prevent the aspirant after distinction in the medical branches from attaining the objects of a laudable ambition. In no department has zeal been rewarded by more gain to the public, and in none has less credit been given to the authors of so much good. The most important improvements in the "domestic" management of armies and fleets have been, if adopted at all, adopted tardily and without acknowledgment. The most valuable suggestions have been disregarded, and the claims of their authors to the honorary distinctions often lavished upon the combatant departments were for very many years contemptuously ignored.

The pressure of public opinion, or, to speak more correctly, of the opinion of a few men possessing at once parliamentary influence and ideas in advance of their time, at length compelled the authorities at the head of the public offices, always obstructive, to yield to the medical department those distinctions which they now share, in very small proportion, with the favourites of the War Office and the Horse Guards. An impetus was given to the enforcement of regulations to prevent disease, by the sad events of the Russian war of 1854-6. An improved system was introduced, by which the surgeons were authorised to inaugurate plans for retaining the health of troops; and the advantages of this system were made manifest in the last China war, when the sickness and mortality were kept down to the average of home stations. Above all, the Medical Warrants of October 1858 for the army, and of May 1859 for the navy, published by Royal command (which, no doubt, placed the various branches of the military and naval medical services in a much higher position as regards rank and other advantages than formerly), spread general satisfaction in those bodies, and in-

duced many of the *élite* of the junior graduates of the schools to enter them.

No doubt was for a moment entertained but that, the new regulations having been promulgated under the name of Majesty, they would be unhesitatingly adhered to by the supreme military authorities. They had the effect of removing the prevailing discontent, and enticing numbers of highly educated men to fulfil the requirements of the services. No sooner, however, were the Warrants issued, than their provisions were infringed by commanding officers, ashore and afloat, in various indirect ways. They were never extended to the Royal service serving in India. In other parts of the world, the due precedence, according to the amended scale of rank, was withheld in many instances. Various petty annoyances were inflicted, and more especially upon the medical officers of the navy, through the jealousy of officers of the combatant and administrative departments. The authorities whose paramount duty it was to support and protect the medical staff—the War Office, Horse Guards, and Admiralty—have systematically refrained from doing so. Thus the name and authority of the Sovereign have not sufficed for the dispensation of justice: promises, we may say solemnly given, have been flagrantly violated. In addition, orders issued in 1861, by the sole authority of the War Office and the Admiralty, deprived medical officers of the rank expressly assigned them by the Warrants of 1858 and 1859. The interpretations given to referred points of relative rank, and others, involving the comfort and respect which the medical officers felt to be their due, as a result of the Royal concessions, were all against them. Difficulties now again were found in obtaining medical recruits. Yielding, not to a sense of justice, but to the pressure of necessity, the Government, by order from the War Office, March 7th, 1863, published an amended Warrant, confirming in great measure, but not entirely, the privileges accorded by the Warrant of 1858, and reinstating the department as to some points of rank of which they had previously been deprived. This new Warrant is now supposed, but, we fear, erroneously, to guide the relations of the army medical department with their superiors and their combatant brethren.

With reference to the navy, its medical service, like that of the army, hoped that its long-standing grievances were at length redressed, when the Queen was advised to grant them a charter in the shape of what we may call the New Navy Medical Warrant of May 1859. The rights which this document accorded, if honestly acted up to by the superior authorities, would, as in the case of the army, have made the service attractive to the juniors of our profession; but it appears to have been, from the first, substantially ignored. In matters involving rank, pay, and pension, the claims of the medical officers have been systematically disregarded. In consequence of the discontent which arose and the difficulty of obtaining candidates for the service, in 1861 an amended Warrant was issued (Order in Council, April 16th, 1861). This is supposed, apparently without justice, to regulate the proceedings of the Admiralty regarding the department; for we hear constantly complaints that this Warrant also, in most essential particulars, is practically a dead letter. By side winds, if not openly, its provisions, where favourable to the medical officer, are set aside, as in the case of the army.

While the royal medical services are in such an unsatisfactory condition, the state of the late East India Company's service is in no better plight. For several years past, the Indian Secretary has been supposed to be on the point of carrying out, in conjunction with the Government of India, a scheme by which the just expectations of the service may be satisfied; but nothing is ever settled. The members of the service have their claims for pay and pensions for themselves, their widows, and families, guaranteed them by Act of Parliament; but, if the Queen's name and authority are insufficient to protect those who have confided in the Royal Warrants for the British services from insult and injury, can the medical officers of the Indian army feel sure that their rights are thoroughly secured to them, even if solemnly guaranteed to them by an Act of Parliament? As regards the young men now entering the Indian medical service, with no stable position, no parliamentary sanction for their entertainment and protection, exposed to the evils of an unhealthy climate and the jealousies of military authorities, no career can bear a more unpromising aspect. This would be the case with any other nation. We, however, have the finest parts of the world as our colonies. In comparison with the chances of civil practice at home or in the colonies, what inducements can protracted military service in India offer to the aspiring candidate? It is plain that, for the future, nothing but guarantees of high rates of pay and pension, with superior advantages of rank and position, will suffice to induce young men of ability to enter the Indian service. But we have seen that the proclamations of a Royal Warrant afford no adequate guarantee that its provisions will be secured.

We much fear that a fatal blow will be found to have been struck to the confidence which the profession naturally placed in the promises of Government. Certainly, as a body, we ought to be content with nothing less than the covenant of 1858. The privileges granted by that document, which has been called the Magna Charta for the medical department, must be secured to them by Act of Parliament, or in such a way that they may never be in danger of being recalled by the caprice of the War-Office, Horse Guards, the Admiralty, or the India-Office. The

greatest grievance is the denial of adequate rank—not brevet, but real substantive rank—relative to that of the combatant officers.

In the public services, rank is all-important; for it carries with it consideration both from superior and subordinate branches, and this again, all the substantive advantages following the different gradations.

When a surgeon, whom royal authority has permitted to take rank with the majors of a regiment, according to the dates of their respective commissions, is brought down to rank only as the perpetual junior among them, his position is lowered; and we may be sure that his commanding officer, having more sympathy with his major than with the doctor, will decide any contested point rather against than for him. When a surgeon, who has been granted the rank of a mounted officer, is ordered by his commanding officer to dismount, and the authorities support the view of the case adverse to him, his position is degraded in face of the whole body of combatants and subordinates of the medical department who are serving with him. When an assistant-surgeon of the navy, to whom his diploma should secure the consideration due to a scholar and a gentleman, and to whom the Queen has granted the rank equivalent with that of a lieutenant or a commander, is not even allowed a cabin, because the captain wants the spare one for his steward, will the young officers and the crew hold his office or himself in respect? The whole body becomes lowered in the eyes of the world, and deeply interested in the correction of these anomalies.

The Indian medical service seems to have no influential friends; and offers absolutely no inducements to the aspirant. Unless Parliament can be induced to take up the case of the doctors in earnest, the public will find too late that it has no adequate medical establishment in any department to prevent and cure diseases among its troops, ashore and afloat, in any part of the world.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS.

We believe that the leaders which have from time to time appeared in this Journal, touching the right of the King and Queen's College of Physicians to grant the degree of Doctor in Medicine, have mainly tended towards bringing the question into a court of law for decision. The court has decided in the most unmistakeable terms, as we had already concluded from the facts of the case, that the College aforesaid had not the right which it had assumed to grant degrees. We need not repeat the history of this matter; it has already been detailed at length in previous numbers of this Journal. The facts are simply these. From 1692 to 1860, the King and Queen's College of Physicians were contented with their chartered rights of issuing a license to exercise the faculty of physic; and, by a law passed in 1736, they actually provided that none of their Licentiates should assume the title of Doctor of Medicine unless they were graduates in medicine of a University authorised to grant degrees. In the year of "grace" 1860, however, the College attempted to extend its powers. Armed with the opinion of the present Baron Deasy, the College in 1861 issued a form licensing A. B., and certifying that "he had obtained, and was thereby entitled to, the degree, title, and qualification of Doctor of Medicine, and Licentiate of the said College." The College afterwards, however, became aware that it had no authority to issue the *Degree;* and, accordingly, in 1862 it issued a new form, in which it authorised A. B. to assume, not the degree, but the *title* of Doctor of Medicine, in addition to that of Licentiate in Physic. This assumption Trinity College resisted; and the Master of the Rolls has now negatived the right of the College of Physicians to confer either the title or the degree in question.

"I decide the case," said his Honour, "upon the construction of the charter of the College of Physicians. I am of opinion that the power given to the College of Physicians to grant such licenses did not give them the power of conferring the degree or title of Doctor of Medicine. The alteration by the College of the form of license, in 1862, omitting the word 'degree', shows their consciousness of having usurped a power they did not possess. It is surprising that a body of such high character and great respectability as the College of Physicians should have allowed themselves to be so misled as they have been in this case. If the College of Physicians had read their charter without the aid of legal spectacles, they would have found how plain, clear, and unambiguous the language of it is."

We think we may fairly claim some credit in this matter. We took the subject up on broad professional grounds. Many gentlemen in this country, overpersuaded by the assumed authority of the King and Queen's College, supposed that, in taking its license, they were also taking the degree of Doctor in Medicine. We thought it our duty to warn the profession against doing so until the clear title had been proved; and the conclusion of this trial has most fully justified us in doing so.

No medical corporation has, we believe, ever before received such a well-merited castigation from the hands of justice. But what will the King and Queen's College now say to those many unfortunate gentlemen whom it has deluded into taking its license on the strength of the supposed M.D. attaching to it? Will these gentlemen sue the College for restitution of their money thus wrongfully obtained? The whole case is, in every sense, a deplorable one; and we cannot say that we think the King and Queen's College of Physicians has done much, by the part it has played, towards raising medical men and medical corporations either in public or in professional esteem.

We gladly, in conclusion, notice the fact that

is Honour, in giving judgment, called especial ttention to the different conduct of the London ollege of Physicians.

"The College of Physicians in England," he said, have the power of granting license to practise hysic; but, so far from seeking to usurp a power hich they do not possess, one of their bye-laws proides that 'no Fellow, Member, or Licentiate of the ollege shall assume the title of Doctor of Medicine, r use any other name, title, designation, or distinction implying that he is a graduate in medicine of a Jniversity, unless he be a graduate in medicine of a Jniversity.'"

THE MEDICAL COUNCIL.

Our Journal of this day contains a copious abstract f the proceedings of the Medical Council during everal days, together with a more condensed account of what was done subsequently to Monday. The subjects that have occupied the greatest share of ttention have been: Medical Education; the *British Pharmacopœia;* and the Medical Act.

Mr. Syme's motion, "That the Council proceed to rame a course of study for medical education, which nay be recommended to the licensing bodies," and he elaborate amendment proposed by Dr. Allen Thomson, formed the groundwork of a discussion which lasted during the greater part of three days. The reports of the speeches made on the occasion will show that there was considerable diversity of opinion among the members of the Council with egard to the nature and extent of preliminary education, the proper course of medical study, and the node of conducting examinations; but there was a general agreement as to the propriety of moderating he number of courses of lectures, and some other natters. It was the general opinion, however, that t would be inexpedient to attempt to lay down ninute details for the guidance of the licensing odies. The debate resulted in the rejection of both he amendment and the resolution. Ultimately, a Committee was appointed to report during the present session, the result of whose deliberations has not been made known in sufficient time to be published n this week's Journal.

Regarding the *Pharmacopœia*, it has been determined to take measures for the preparation of a new dition; and a small Committee has been appointed or that purpose. We may here notice, that the Treasurer, in presenting the financial statement, included an account of the "expense incurred in the preparation and publication of the *British Pharmacopœia*, from the commencement of the undertaking up to the 19th of April, 1864, except some incidental charges, estimated not to exceed £10; also the number of copies printed, and the present state of the sale of the work, with the proceeds of the sale up to he same date." This account showed the total expense of the work to have somewhat exceeded £6000; and the returns from sales to have been a little above £5000; leaving a balance of £1200 against the *Pharmacopœia;* to meet which, there were copies in stock to the value of nearly £2800.

The great subject of amendment of the Medical Act was discussed on Tuesday and Wednesday. The motion of Dr. Corrigan, for immediate action, was met by an amendment proposed by Dr. Storrar, to the effect that, in the face of the diversity of opinion at present existing, it was inexpedient to engage in fresh legislation. This amendment was lost by a large majority; but Dr. Corrigan's proposal was superseded by another amendment, emanating from Dr. Alexander Wood, providing that the Branch Councils should consider how to procure amendment of Sections 20, 31, and 40 of the Act, in place of attempting to obtain an entirely amended Bill; and that the whole subject should be considered at an early period of next session. It was the general feeling, that the regulation of the practice of druggists should not be introduced into the Medical Act; but it was at the same time recognised that the subject was one on which the Council could, and ought to, take some action.

Such is an outline of the proceedings of the Medical Council during the week. Comment on them we reserve to a future occasion.

Mr. Windham has found his way into the Bankruptcy Court, as all the world long ago anticipated he would do. The *Lancet* seizes upon the fact as a proof that he was of lunatic mind at the time when the inquiry into his mental state was held. Are all bankrupts and spendthrifts, then, *ipso facto* lunatics? Of course, it would be a very desirable thing to prevent persons from making beggars of themselves and of their families through indulgence in vicious extravagancies; but no sane person would surely wish to place every individual in a lunatic asylum who is guilty of extravagance and vice. The law is made for the protection of society at large; and society wisely determines that it is better that Mr. Windham should be allowed to go to ruin, than that all vicious and extravagant people should be liable to be shut up in a madhouse. The *Daily Telegraph* makes some appropriate remarks on the psychological doctrines of the *Lancet*.

"The *Lancet* drops some tears, compounded of equal parts of salt, sentiment, and what is meant to be caustic, over the fate of Mr. William Frederick Windham. Its angry bile is poured out because 'the press' was hard upon Dr. Forbes Winslow 'for venturing to assert that William F. Windham was incompetent to manage his affairs.' This is, on the whole, an instance of as perverted a misrepresentation, or of as weak a comprehension, as we have seen a public print exhibit. So far as we recollect the spirit of the discussion, Dr. Forbes Winslow was never contradicted upon the opinion that Mr. Windham was incompetent to manage his own affairs. Everybody held that, sooner or later, the property

would be dissipated in 'shameless profligacy and reckless waste.' Not only is it no surprise to us to get to the end of this wretched young man; but, since his desperate viciousness had but one issue, it is a relief to us and to public morality to have 'Finis' written upon his sad and bad story. Dr. Forbes Winslow pronounced him 'incompetent to manage his affairs,' and so did we; but that gentleman would have had him shut up for the sake of his relations, against which we stoutly protested. What! is a fool not to have the right of ruining himself by his folly?—is a prodigal to be saved from the consequences of his vice and lechery by public incarceration? Examine such a doctrine closely, and it will be seen that no one would dare to raise it but relations anxious about their reversionary rights, or mad-doctors, who lump *amentia* and *dementia* in one category. We maintained that, worthless as the character of Windham was, and sure as was his ultimate ruin, he was not lunatic, nor idiotic, nor insane; but only thoroughly and unmistakably vicious. It is true that, in a nobler sense than is dreamed of at Hanwell or Colney Hatch, to be bad is to be mad; to seek delights from debauchery is an insane abandonment of right for wrong. But where is the asylum that will hold Dr. Winslow's patients, if we lock up those that are mad in this sense? If Windham had not been the owner of an ancestral estate, would Dr. Winslow have called him 'mad' or merely a blackguard? We refused to grant mad-doctors the right to lock up fools as well as sane and insane persons; we declared—though we did not hope to please General Windham and the *Lancet* thereby—that if this miserable young man was bent upon coming to 'the husks and the gutter', it was the business of those who brought him up, and of his friends, if he had any, to dissuade and save him—not of the law. Ten thousand times more precious than all the estates in Norfolk is the principle of individual liberty; and to invade this the English law was invoked—happily in vain."

One of the evils which we formerly mentioned as likely to arise from the admission of reporters to the Medical Council is well exemplified in the speech delived by Dr. Andrew Wood in support of the admission of reporters. Dr. Andrew Wood's speech was manifestly written for the occasion and prepared for publication, as shown by the fact of its actual publication in the *Lancet*. Dr. A. Wood is an excellent speaker, and he enjoys speaking; and he tells us in this very speech that some of the most business-like men in the Council are the longest-winded men. Now, if medical councillors, in addressing each other, were speaking as lecturers to students, it would be all very right that they should give lengthy details of useful platitudes and common places; but gentlemen have been selected to the Council on account of their knowledge of the subject they are met to discuss, and, therefore, require no such student-lecturing. In this speech of Dr. Andrew Wood's, we find an excellent exposition of the uses of a free press and of open discussion, and as such we have no exception to take to it; but we will venture to say, that those who heard it were heartily glad when he had arrived at his conclusion. There was not a man in the Council who did not well know all that Dr. Wood said upon the subject before he said it; and more than this, we will be bound to say, that there was not a man of them whose vote was influenced by it, or who had not made up his mind which way he should vote on the question before he entered the Council-Room. What we should really have liked to have heard, are the reasons which those gentlemen gave, who have changed their opinions on the subject of admission of reporters, and who supported the motion, which they once most strenuously opposed.

M. Tardieu, the Dean of the Faculty of Medicine of Paris, has called a meeting of the students to take into consideration the propriety of forming a "Fraternal Association". The object of it is to provide against unforeseen eventualities which may interfere with the student's course of study, and to draw closer the kind links of student-fellowship. Large subscriptions have already been made to it by MM. Roger, Diday, Ricord, etc.

The Director-General of Public Assistance, hearing that an *externe* of Antoine was confined in his room by a dissecting-wound, immediately gave orders for his removal to a private room in the Municipal Sanitary House.

We lately referred to a case of aneurism of the sciatic artery, which had been operated on by M. Nélaton by means of an injection of perchloride of iron. The pulsation of the tumour ceased after the use of one single injection into the tumour; and the patient, one month after the operation, is rapidly approaching to a complete cure.

The French Senate, during two of its sittings, discussed two petitions—one, signed by several medical men, praying for the abolition of the grade of *officier de santé*; and another, signed by several *officiers de santé*, praying for the abolition of the law which limits them to practising in one single department. The Senate dismissed the doctors' petition, and referred the *officiers de santé's* petition to the Minister of Public Instruction and of Agriculture.

The treatment of hooping-cough by inspiration of the gaseous products given off during the purification of coal-gas, has produced, says M. Diday, results as satisfactory and as immediate at Lyons as in other towns where it has been tried. "My colleague Dr. Rater," he says, "the first amongst us who has proved its use, is preparing a summary of this new and precious therapeutical method. Many children affected with hooping-cough, who were made to walk up and down for two hours and a half near the purifying vessels, were rapidly relieved; many of them afterwards had no paroxysms of cough." The gases given off in the purifying process of gas are, carburetted hydrogen, carbonic oxide, sulphuretted hydrogen, and ammonia. To which of these gases, or to what combination of them, the good is to be attributed, remains to be proved.

The Medical Council.

REPORT OF PROCEEDINGS, April 1864.

Thursday, April 28th.

G. Burrows, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

Medical Education. On the motion of Dr. Storrar, the Council resolved itself into a Committee on Education, and resumed the consideration of the amendment moved at the last meeting by Dr. Alexander Wood, and seconded by Dr. Andrew Wood, viz.:

"That a minimum standard of preliminary examination shall be fixed by the Council; that testimonials of proficiency granted by the National Educational Bodies may be admitted, provided the Council deem the education required by them to be sufficient; and that a Subcommittee be appointed, to prepare a minimum standard to be submitted to the Council for its consideration."

Dr. Alexander Wood said that, when the Council first formed a Committee on Education, there was great variety among the Examining Boards as to their requirements in general education, and consequently there was a difficulty in dealing definitely with the subject. Now, however, the Council was in a position to say what it considered essential as the standard of preliminary education, and to point out at least what was the lowest qualification that could be accepted. He believed that it was the unanimous opinion of the Council that it would be best for the Medical Examining Boards to be relieved of the task of conducting the examinations in general knowledge, and that these should be left to the Educational Bodies. There was, however, much variety in the requirements of the national educational bodies enumerated in the recommendation; and he saw a difficulty in recognising any which might seek to be added to the already existing list, unless a standard of what was required were formed. Dr. Corrigan had recommended that a knowledge of Greek should be insisted on; but he (Dr. Alexander Wood) did not see how this could be effected, considering the sources from which the ranks of the profession were in great measure recruited, and the small encouragement given to men of education in the poorer districts. As to the idea that the amount of education of practitioners would be reduced by fixing a minimum standard, he did not see that there was any danger of this taking place. What he desired was, that the Committee should point out the lowest amount of education with which they would be satisfied. If any evil were done in the way that had been suggested, it was through the lowness of the standards already required by some of the boards.

Dr. Corrigan dissented from the opinions expressed by Dr. Alexander Wood. He could not consider that there should be a lower standard of education for practitioners in rural districts. In every case, a practitioner's education should be such as to render him competent, in whatever situation he might be placed. If the inhabitants of the rural districts would not pay for the services of well educated medical men, surely it was not the duty of the Council to lower the standard of education. Referring to the necessity of a knowledge of Greek, he would ask whether a student ignorant of this language could understand the terms used in a lecture on anatomy. As to the reason assigned for dispensing with Greek, that many of those desirous of entering the profession did not know it, he would only say that they ought to have some acquaintance with it. Let some knowledge of Greek be insisted on, however small the amount.

Mr. Hargrave supported the proposal for the introduction of Greek. He objected also to any difference being made between the preliminary examination of the surgeon and that of the physician. In 1859, a Committee of the Royal College of Surgeons in Ireland had recommended that candidates for the diploma should have a knowledge of the following subjects: English, Arithmetic, Euclid (Books 1 and 2), Natural Philosophy, Greek (1st book of *Iliad, Gospel of St. John, Lucian's Dialogues*), and Latin (two books of Virgil's *Æneid*, and the third book of Livy). He objected to a minimum being fixed. Men were naturally lazy, and would, if a minimum were established, content themselves with merely coming up to it. The medical practitioner ought to have a high general education. That a well educated man would not be appreciated, he did not think. Certain civil engineers, who many years ago took university degrees, were at the time ridiculed as being merely theoretical and not practical men. Now, however, they were taking the lead in their profession.

Dr. Paget thought that the amendment would be scarcely necessary, if the medical licensing bodies would cease to hold examinations in general knowledge. Abundant means were provided in England and Ireland; and surely the Universities in Scotland might institute examinations short of those required for degrees in arts. A minimum standard was desirable; but it was already implied in the list of general educational bodies which it was proposed to recognise.

Dr. Embleton supported the proposal for the formation of a Subcommittee. He thought that in this way a result would be arrived at that would be satisfactory to the Council, to the Examining Bodies, and to the Public.

Mr. Arnott opposed the amendment. With regard to leaving the general examination to the educational bodies, he observed that the College of Surgeons conducted their preliminary examinations by means of the College of Preceptors; but he was not prepared to say that the College which he represented would be disposed to leave the whole matter to the College of Preceptors.

Dr. Andrew Wood said that, if the medical licensing bodies could dispense with conducting the general examinations, and transfer them entirely to the educational bodies, there would be no need of fixing a minimum. He did not wish to lower the standard of education, but that a guide should be issued as to what was required of students. If a minimum were indicated, also, it could be applied as a means of measuring the qualifications of the general examining bodies.

Dr. Acland would vote against the amendment. He feared that the Subcommittee proposed would report during the present session; and he did not think that, considering the difference of opinion existing in regard to the matter under discussion, a conclusion should be arrived at so rapidly. The subject was a very difficult one; and, among other difficulties, it was very uncertain what subjects should be classed among the non-professional branches of education. He would not object to the appointment of a Committee, provided it were not required to report until next year.

Mr. Cooper said that the Apothecaries' Company were desirous that the examination in general education should be a *bonâ fide* examination; and that a standard should be fixed by the Council.

Dr. Alderson thought there was something wrong in the preliminary examinations. In 1863, the appli-

cants to be examined in general education at the London College of Physicians were only one half of those who presented themselves in 1862; while the number of applicants for the license had increased fifty per cent. Perhaps some other bodies were less stringent in their requirements, as regarded general education, than the College of Physicians.

Dr. STORRAR suggested that, when the College of Physicians first offered its license, there might have been an extraordinary number of well prepared men desirous of presenting themselves. In regard to the curriculum of general education, he would be glad to see Greek introduced if it were possible. But, looking to the present state of education and to the imperfect manner in which the recommendations of the Council had been carried out, he saw a difficulty in doing this. The Council was merely deciding what was best at the present time, and it would be in their power to increase their standard: it was therefore better to put off the demand for Greek until another year. He referred to the Report of the Civil Service Commissioners, as bearing on the subject under discussion. The Report showed that the failures among candidates were all in merely elementary matters: and hence the Commissioners concluded that, having regard to the great object of examination—evidence of thoroughness of knowledge—it would be better to be content with a limited range of subjects, so that the knowledge of them displayed by candidates were perfect. The Council had already produced some improvement in middle-class education; but, if it fixed too high a standard, the result would be to encourage superficiality in knowledge.

Dr. PARKES asked how the efficiency of the general examining boards could be judged of without forming a minimum standard.

Mr. RUMSEY believed that, if a Subcommittee were appointed, the subject would still have to be discussed when the Report was brought up.

The votes were then taken, when these appeared, for the amendment, 9; against it, 12. The amendment was consequently lost. The original motion, proposed by Dr. Parkes and seconded by Mr. Hargrave (see JOURNAL, April 30, p. 483, col. II) was then carried.

Dr. STORRAR moved, and Mr. ARNOTT seconded:

"That the fourth recommendation of the Council be adopted, viz.:

"'That the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council.'"

Dr. STOKES said that it had been suggested, that Mr. Syme and those who thought with him were disposed to ignore the recommendations of the Council. This was not the case; but, if proceedings were carried on as at present, it would not be possible to lay before the public the opinions of many members of the Council on several important subjects, such as general and professional education, the moral training of the student, the certificate system, reciprocity among the licensing boards, etc. The time of the meetings could be much better employed in considering these questions than in discussing details in a Committee of the whole house. He moved as an amendment:

"That, with the view of saving time, a Subcommittee be appointed, for the purpose of preparing a Report on the subject of medical education, which may form a definite basis for the discussion of the question in the General Council."

Mr. SYME seconded the amendment. Nothing was further from his intention than to depreciate the recommendations of the Council.

Dr. STORRAR regarded Dr. Stokes's amendment as merely a revival of that proposed on the previous day by Mr. Syme. He was surprised to hear such a proposal from Dr. Stokes. On previous occasions, Dr. Storrar had proposed to refer the subject of medical education to a select Committee; but had, on the recommendation of Dr. Stokes himself, consented to its being discussed by a Committee of the whole house.

After some remarks from several members,

The CHAIRMAN said that, from the experience which he had had as a teacher and in the business of the College of Physicians, he did not think that the course recommended by Dr. Stokes would be likely to facilitate business; but that, on the contrary, time would be lost by adopting it. It was in the power of any member of the Committee to make a substantive motion at any time, and to give full and valuable information on any one topic. Again, to refer the question to a Subcommittee would be acting exactly contrary to the principle which had been affirmed by the Council—of laying before the public the opinions of the members on education. And, further, when the Subcommittee brought up its report, each member would probably wish to discuss the subject anew. He must, with all deference to Dr. Stokes, vote against the amendment.

The amendment being put to the vote, there were for it, 7; against it, 12. It was consequently lost.

The original motion was then carried.

Dr. STORRAR moved, and Dr. SHARPEY seconded:

"That the fifth recommendation of the Council be adapted, viz.:

"'That no certificate of proficiency in general education, which does not affirm the proficiency of the candidate in Latin, be deemed a sufficient proof of preliminary education previous to the commencement of professional studies.'"

Dr. CORRIGAN proposed as an amendment, and Dr. APJOHN seconded:

"That no certificate of proficiency in general education, which does not affirm an acquaintance with Greek and Latin, be deemed a sufficient proof of preliminary education previous to the commencement of professional studies."

Dr. SHARPEY would very gladly support the requirement of a knowledge of Greek; but he did not see how such a recommendation could be carried into effect in the present state of general education. If the demand for Greek were introduced it should be as a prospective measure—an acquaintance with that language being demanded after, perhaps, January 1866. He believed that even a very moderate knowledge of Greek—such as the ability to read Xenophon or the Greek Testament—would be very valuable to the medical student.

Mr. HARGRAVE thought that a knowledge of Greek should be made imperative after 1866.

After some remarks from Dr. ALEXANDER WOOD, Dr. ACLAND, Dr. CORRIGAN, Dr. STORRAR, and Dr. CHRISTISON, the amendment was put to the vote and lost; 7 voting for it and 12 against it. For the original motion there appeared, for, 8; against, 8. The numbers being equal, the Chairman gave his casting vote in its favour; and it was carried.

Dr. STORRAR proposed, and Dr. SHARPEY seconded:

"That the sixth recommendation be adopted, viz.: 'That students who cannot produce any of the testimonials referred to in the third resolution, be required to pass an examination in arts, established by any of the bodies named in Schedule (A) of the Medical Act, and approved by the General Council, provided that such examination be in every case conducted by a special board of examiners in arts.'"

Dr. CORRIGAN did not see why the medical licensing bodies should be treated with greater strictness than the educational bodies mentioned in the third recommendation. The last clause of the present mo-

tion implied that the Fellows of the Colleges of Physicians were all unfit to conduct examinations in general knowledge. He moved as an amendment:

"That the words after 'General Council,' in the fifth line of the sixth recommendation be omitted; and that the recommendation be adopted as thus amended."

Mr. HARGRAVE seconded the amendment. The College of Surgeons in Ireland was obliged by the recommendation, notwithstanding the competency of many of those connected with it, to go beyond the college for examiners in arts.

Dr. STORRAR said that the recognition of general examinations by the licensing bodies had been agreed to, by the former Committee on Medical Education, as merely a temporary measure, to be adopted until the examinations could be entirely handed over to the general educational bodies. Those connected with the medical bodies might be very good classical scholars, but bad examiners; this was one reason why it was desired to hand over the duty to men whose special province it was. Again, if the members of the medical licensing bodies were recognised as examiners in general knowledge, there was danger that they would be unduly influenced by consideration for the condition of the candidates.

After some remarks from several members,

Dr. ANDREW WOOD said that the Edinburgh College of Surgeons had conducted the examinations by means of a conjoined board of experts and of examiners belonging to the College; and he believed that the same was done in the Edinburgh College of Physicians, and in the Faculty of Physicians and Surgeons of Glasgow.

Dr. PAGET thought the board of examiners in arts should be distinct from that of examiners in medicine, but would not exclude members of the latter.

Dr. CHRISTISON said that men competent to examine in arts ought not to be precluded from doing so, on the ground that they belonged to a medical body. There was one point which had not been noticed. He had been informed that some of the licensing bodies had separate boards for general examinations, but that the medical board decided the result of the examinations. He thought this ought not to be. In the University of Edinburgh, the general examination was formerly conducted by the medical faculty; and he, for one, was very glad to be free from the task.

The votes being taken, there appeared, for Dr. Corrigan's amendment, 11; against, 9. The amendment was consequently carried.

Dr. STORRAR proposed, and Dr. SHARPEY seconded:

"That the seventh recommendation be adopted, viz.: 'That without professing to lay down any complete scheme of general education for persons intending to become members of the medical profession, the Committee recommend that the scheme of examination in arts of the licensing bodies be, as nearly as practicable, similar to that of any of the National Educational Bodies above specified.'"

Dr. CORRIGAN said that the effect of this recommendation would be to hold out a premium for the lowest possible amount of education.

After some remarks from Dr. ALEXANDER WOOD and Dr. ACLAND, the motion was put to the vote, and negatived.

Dr. STORRAR moved, Dr. EMBLETON seconded, and it was resolved:

"That the eighth recommendation be adopted as follows: 'That all medical students be required to be registered.'"

Dr. STORRAR moved, Dr. A. SMITH seconded, and it was resolved:

"That the ninth recommendation be adopted, viz: 'That the lists of students registered be closed within fifteen days after the commencement of each session or term.'"

Dr. STORRAR moved, and Dr. SMITH seconded:

"That the tenth recommendation be adopted, viz: 'That no student beginning professional study after September 1861, be registered, who has not passed an arts examination, in conformity with resolutions 3 or 6.'"

Dr. ALEXANDER WOOD moved, and Dr. ACLAND seconded, the following amendment:

"That a Committee be appointed to consider the best scheme of registering medical students."

The amendment was carried, and the following Committee appointed: Dr. Alexander Wood, *Chairman;* Mr. Arnott; Dr. Embleton; Dr. Fleming; Dr. Apjohn; and Dr. Stokes.

The Council then resumed.

Application from the Catholic University of Ireland. The REGISTRAR read the following letter from the Secretary of the Catholic University in Ireland.

"Catholic University of Ireland, 86, Stephen's Green, Dublin, April 18th, 1864.

"Sir,—I have the honour to enclose, for the information of the General Medical Council, a copy of a correspondence between our Institution and the Registrar of the Branch Council, Ireland.

"By this it will be seen that we have been recommended by the Branch Council, to make application to the General Medical Council, in order to obtain recognition of our entrance examination.

"I have also done myself the honour to forward two copies of our Calendar for the present year, by which it will be seen, that our University gives as complete an education as institutions which are recognised by your Council (pp. 48 to 52.)

"May I beg that you will do us the favour to submit to the Council, our application to have our entrance examination recognised by them, and may I hope that the Council will favourably entertain our request.

"I am, sir,

"Your obedient servant,

"(Signed) THOMAS SCRATTON, *Sec. Cath. Univ.*

"Dr. Hawkins, Registrar, 32, Soho Square, London."

Accompanying the letter were copies of correspondence between the Secretary of the Catholic University and Dr. Steele, Registrar of the Branch Council for Ireland.

Dr. CHRISTISON said that the first point to be ascertained was, whether the body calling itself the Catholic University possessed a charter or other deed of incorporation.

Dr. STORRAR said that a precedent for the action of the Council had been in some measure already established. When the College of Preceptors applied for a recognition of their examinations, he had inquired whether that body possessed a charter, which it was found to do. Subsequently, when a similar application was made in behalf of the associated schoolmasters of Scotland, this application could not be entertained on account of their want of this qualification. It would be impossible to recognise the Catholic University unless it had a charter.

Mr. HARGRAVE said that the education required by the Catholic University was very high; and would propose that the entrance examination of that body be recognised.

The correspondence was ordered to be entered on the minutes; and, the hour of adjournment having arrived, the further consideration of the subject was postponed.

FRIDAY, APRIL 29TH.

G. BURROWS, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

Catholic University of Ireland. The application from this body was again brought under consideration; and, on the motion of Dr. CHRISTISON, seconded by Dr. STORRAR, it was resolved:

"That the following answer be returned by the Registrar, to the communication now before the Council:

"SIR,—I have laid before the General Medical Council your letter of the 18th inst., requesting that the entrance examination of the 'Catholic University of Ireland' should be recognised among the examinations in preliminary education received from the various chartered or incorporated educational bodies; and in reply, I am directed to request you will have the kindness to transmit to the General Medical Council a copy of the Charter or Act of Incorporation of the 'Catholic University.'"

The British Pharmacopœia. Dr. CHRISTISON presented the following report of the Committee appointed on April 27th, relative to the *Pharmacopœia*:

"The Committee report: 1. That it is desirable to make further arrangements during the present session of Council, for preparing the next edition of the *British Pharmacopœia*. 2. That a Committee of the Council be appointed to superintend the preparing for the press, and the editing of the work, and to submit the same to the Council for approval, in proof. 3. That the gentlemen already nominated in London, Edinburgh, and Dublin, for the purpose of reporting from time to time on the improvements in pharmacy, be requested to continue their services, and that their report be communicated to the *Pharmacopœia* Committee of the Council. 4. That an editor or editors shall be appointed by the *Pharmacopœia* Committee, who shall prepare the work, in all its details, under their control."

Dr. STORRAR moved, Dr. CHRISTISON seconded; and it was agreed:

"That the report of the Committee, relative to the *Pharmacopœia*, be received and entered on the minutes."

Dr. ANDREW WOOD moved, Mr. HARGRAVE seconded; and it was resolved:

"That the Council resolve itself into a Committee on education, and that the President be requested to take the chair."

The Council accordingly formed itself into such Committee.

Registration of Students. Dr. ALEXANDER WOOD presented the following report from the Subcommittee on the best scheme of registering medical students:

"Your Subcommittee is of opinion that the registration of medical students, if properly conducted, is a matter of primary importance, as giving security to the Council and to the profession; 1, That every student has passed an examination in arts before commencing his professional studies; 2. That the exact date at which a student has commenced his professional studies has been ascertained and registered, so as to show how far the recommendations of the Council in these respects have been complied with.

"The chief difficulties which past experience has shown to exist, appear to your Committee to be; 1. The want of a sufficient distinction between students commencing their studies and those who may be commencing their second, third, or fourth sessions; 2. The fact that many students enter at several different schools at the same time.

"Having regard to these difficulties, your Subcommittee begs to recommend the following regulations, as at once simple and practical. 1. That the registration be placed under the charge of the Branch Registrars. 2. That each student be only once registered, and that when he first enrols himself as a medical student. 3. That the registrar of each school of medicine, or other authorised person, keep a list of all students entering for the first time at that school, agreeably to the subjoined form. 4. That the register at each school be closed within fifteen days after the commencement of each session or term. 5. That these lists, as soon as possible thereafter, be transmitted, along with the certificates of each student having passed an Arts Examination to the Branch Registrar of that division of the kingdom where the school is situated; and that he from them frame an accurate register of medical students of that division of the kingdom where he has charge. 6. That the register of medical students so prepared by the registrars, after examination by the several Branch Councils, be transmitted to the Registrar of the General Council, who shall, under direction of the Executive Committee, print the same in alphabetical order, and supply a copy of this authorised list to each of the bodies in Schedule A to the Medical Act. 7. That the several licensing bodies be requested, after October 1868, to abstain from examining any candidate for license or degree whose name does not appear on the authorised list of medical students. 8. That the Branch Councils be desired to take means to make these regulations known to the medical students at the various medical schools.

"ALEXANDER WOOD, *Chairman.*"

Subjoined to the Report was a Form of Register, arranged under the heads of Name; Age last Birthday; Preliminary Examination and Date; Date of Registration; and Place of Study.

Mr. SYME thought that the term "professional studies" required explanation. It included at present chemistry and botany, which, in his opinion, should be taken before the commencement of professional study. The object of registration, he thought, was to shew that students went through a proper course of instruction.

Dr. ANDREW WOOD said that there were two objects in registering students: 1, to ensure their having had a preliminary education; and 2, the reason pointed out by Mr. Syme, which was a very important one. He could not consent to relinquish the registration of students from year to year. The report, he suggested, should be entered on the minutes; and, before its adoption, the Committee might decide what branches of education were to be considered preliminary and what professional, and then determine on the registration clauses.

Dr. ALEXANDER WOOD believed that the duty of the Council was to ensure the preliminary examination, and to fix the commencement of professional studies. It lay with the examining and licensing bodies to take care that the students duly attended to their studies during the required period. For the Council to do more than this, would be a tyrannical act. He moved:

"That the Report of the Subcommittee on Registration of Medical Students be received and entered on the minutes."

Dr. EMBLETON seconded the motion.

Dr. ACLAND said that, whether the discussion arose on the report before the Committee, or at some other period, they would not be able to proceed until they had determined what subjects were professional and what non-professional.

The motion was then carried.

Dr. ANDREW WOOD moved, and Dr. EMBLETON seconded, and it was resolved:

"That the consideration of the Report on the Re-

gistration of Medical Students be deferred till after the discussion of the question of professional education."

Course of Medical Study. Dr. STORRAR moved, and Dr. PAGET seconded:

"That the seventeenth recommendation of the Council be adopted; viz., 'That the age of 21 be the earliest age at which any professional license shall be obtained.'"

Mr. SYME moved, and Dr. ANDREW WOOD seconded, the following amendment:

"That the Committee proceed to consider the subjects and course of study requisite for a medical professional education."

The amendment was carried; 11 voting for, and 7 against it.

Mr. SYME said that he would now give expression to his views derived from an experience of about forty years, as to what should be the proper course of medical education. There was no doubt that the subjects of anatomy and chemistry ought first to engage the student's attention. But, if he commenced their study only at the beginning of his professional course, sufficient care could not be devoted to them; therefore, he (Mr. Syme) would recommend that chemistry —and also botany—should form part of the preliminary education. At all events, a certain amount of knowledge of chemistry should be required before the commencement of professional studies. In his first year, after registration, the student should study practical chemistry, and gain an acquaintance in the dissecting-room with the bones and muscles. In his second year, he should take practice of surgery, anatomy and physiology, and clinical instruction, and should especially study practical anatomy. In his third year, the student should attend to practice of physic, midwifery, pharmacy, and therapeutics, and should devote much of his time to hospital attendance. In the fourth year, there would remain for him, medical jurisprudence, hospital practice, surgical anatomy, study in the dissecting-room, and, if possible, dispensary practice. He then proceeded to notice the evils arising from an excess of lectures. He believed that the present evils arose from the reduplication of the courses of lectures, and from the system of examination. At present, examinations were generally divided into two parts; and the result was, that, if a student failed to pass the examination which took place in the middle of his course of study, or at the end of his second year, he proceeded with the work of his third year while his mind was still occupied with subjects, such as chemistry or botany, on which he ought to have passed an examination a year before. If the student could be made to proceed on a regular plan, and be freed from a reduplication of courses, all would be well. There were two possible plans in which this might be effected. One was, to reserve the whole examination to the termination of the period of study. The other, which was better, was to examine the student year by year in the subjects which he had been studying. In that case, even if he were thrown back with regard to one subject, the burden on his mind would not be so great as if he had to bear in it the subjects of two years' study. He moved:

"That the Council proceed to frame a course of study for medical education, which may be recommended to the licensing bodies."

Dr. ANDREW WOOD seconded the motion; and observed that the Committee was now about to grapple with a reality. It was a satisfaction to him that the motion had been brought forward by one so distinguished for practical sense as Mr. Syme—not, however, that he (Dr. Wood) could agree with him in all points. The subject to be considered was, what should be the qualifications of a student, and by what test should the possession of such qualifications be ascertained? Various important questions arose in connection with this. The first of these was, what is preliminary, and what is professional education? He believed that great mischief had arisen from mixing these, and that both had been in consequence studied at a disadvantage. The Committee had declined to fix a minimum of general education. In this he believed they were wrong; because the student ought to know what subjects were regarded as preliminary. He believed that nothing had more interfered with the progress of students in Edinburgh than the mingling of chemistry and natural history with their professional studies; and the students themselves were quite aware of this. He was sure that, if chemistry and botany were removed to the category of preliminary subjects, not only would the students gain a more perfect knowledge of professional matters, but the chemistry and botany themselves would be better learned, and in such a way as to render the students better prepared for entering on their professional studies. In learning botany, for instance, the student would be undergoing a discipline of diagnosis, which would aid him in his study of medicine; and the study of vegetable physiology would assist him in acquiring a knowledge of animal physiology. He thought even that students would gain rather than lose by deferring the commencement of their professional studies. He then went on to sketch a course of professional instruction. In his first year, the student should take practical anatomy and practical chemistry during the winter, and physiology and pharmacy in the summer. It would be very important to take physiology before beginning to study the strictly practical departments; but Mr. Syme had not placed it before surgery. In the second year, the student should attend to practical anatomy, to surgery, and to clinical surgery in the summer. In the third year, practice of physic should be studied during both winter and summer sessions (of four months each); and in the summer, morbid anatomy should be added. Clinical surgery should also be studied during the winter term; and at the same time the student might attend to psychological medicine and some other important subjects. In the summer, he should study clinical medicine, midwifery, and therapeutics, in addition to medicine and morbid anatomy, as already noticed. In the fourth year, the winter should be devoted to clinical medicine, medical chemistry, and dispensary practice; and the summer to medical jurisprudence and clinical medicine. As to the number of lectures required from students, he believed this was less in the south than in the north. Students had been, within his remembrance, required to attend courses in which lectures were given on five or six days in the week; and, in some courses, the lectures were given twice a day; so that sometimes the whole day from 9 A.M. to 5 or 6 P.M. was spent in attendance on lectures. He admitted the value of lectures above mere practical instruction, and would fully recognise their importance in denoting to students the salient points to which their attention should be directed. On the other hand, he would not depreciate practical observation; but at present, there was an excess of lectures and a deficiency of opportunity for practical study. Much good might be done by a proper arrangement of subjects, so as to guide the student by an inductive process from principles to practice. He believed that the Council had done good by their recommendation of a preliminary examination. In regard to the professional examination, he could not conceive anything better than making class-examinations imperative.

In Edinburgh, these examinations had been in late years more and more coming into favour; and were most effectual, if anything was so, in rescuing students from grinders. The class-examinations were advantageous both to the lecturers and to the students. They enabled the students to ascertain how they were progressing; and the teachers to ascertain whether they made themselves intelligible. Further, they led the students to give steady attention to the subjects, and not leave them to be got up in the last year. Those examinations were permissory; but he did not see why they should not be made obligatory. Whether they should supersede examinations by a board was another question, of which he would reserve the consideration. With regard to the question of dividing the examinations, he thought that it would be best to have the whole examination at the end of the period of study. The class-examinations would prevent the student from neglecting his studies; but to the yearly examinations, as suggested by Mr. Syme, there was the objection that the student, having passed an examination in anatomy or any other subject, might cease to retain it in his mind. By deferring the examination to the end of study, the even tenor of the student's way would not be interrupted. He (Dr. Andrew Wood) would not have the final examination made too minute.

Dr. Smith said there would be a difficulty in transferring botany and chemistry to the preliminary department. The teaching of these subjects would be handed over to the educational bodies; and he doubted whether some, such as the College of Preceptors, would undertake the duty.

Mr. Rumsey would urge the great importance of making a distinction between matters of general science and the more immediately professional subjects. Medicine was, strictly speaking, founded on the pure sciences; but these were not *per se* belonging to medicine, and were, indeed, studied without reference to that profession. If purely scientific subjects were to be regarded as parts of medical education, then the time of study should be extended beyond four years. He would entreat the Council to look at the theoretical aspects of the question, as well as at the routine method of teaching.

Dr. Apjohn said that it would be impracticable for the Council to separate scientific subjects from professional education. The matter must be left to the licensing bodies. The University of Dublin, for instance, could not make the separation, being bound down by an Act of Parliament. He thought that the course of study suggested by Mr. Syme did not differ much from the curricula at present adopted.

Mr. Arnott had read with much care the writings of Mr. Syme and Dr. Andrew Wood, and of Mr. Callender, on medical education. He agreed with Dr. Apjohn, that the plan sketched by Mr. Syme was very like that which at present existed. He objected to the Council being embarrassed with the consideration of details, and would take no part in determining what subjects should be studied at any given time, nor how many lectures should form a course. He had many years ago attended, in Edinburgh, a course of lectures which was not completed in six months; and from this he had gained great instruction, because in it principles were laid down. On the other hand, a lasting impression had been made on his mind by a course of lectures on Surgery by Mr. Abernethy, which lasted only three months. Hence he thought it impossible to lay down a fixed rule as to the duration of courses of lectures. He would not object to defining the period of commencement of study, the subjects to which the student should attend, and the number of courses of lectures; but he would not enter into any further details.

Mr. Hargrave did not think that the Council could enforce any scheme of study on the medical corporate bodies. The College of Surgeons of Ireland, for instance, had charters granting powers which prevented such action. As to the statement that the students were overloaded with lectures, he had never heard any complaints of the kind; and he believed that in Dublin the students had sufficient time for lectures and for hospital practice, and also for home study. He objected to any limitation by the Council of the number of lectures. With regard to class-examinations, he did not see how it was possible for a lecturer to give his class a proper examination every week. As to the division of the general examination into sessional examinations, the College of Surgeons of Ireland had tried the plan, and had not found it satisfactory. They had, therefore, returned to the old method of holding the examination at the end of the period of study; and had also made the examination open to the profession. Two of the Council of the College were also present at each examination—a proceeding which appeared to give much satisfaction to the students. He would not have any change made at present, but would recommend that the whole subject of medical education be thoroughly ventilated, and any decision on it deferred to another session of the Council.

Dr. Stokes thought it was very important to determine whether the Council should interfere with the licensing bodies in regard to special points—even in the way of recommendation. He was of opinion that the Council ought not to dictate the nature of medical studies, or the order of their sequence. Different licensing bodies might have very good reasons for pursuing different plans; and any attempt to establish uniformity would be a failure. Again, to establish an order of sequence of medical studies would be unjust, even if it could be done. For instance, a young man might have an opportunity of commencing medical study by attendance on a hospital, or he might be an apprentice; and it would not be fair to say that none of this study should be counted, because he had not studied botany before he looked at a patient. Again, there was difficulty in attempting to fix the duration of courses of lectures; for the value of lectures lay in the mode in which the instruction was given, and teachers varied as to the time required by them for imparting knowledge. He had no doubt, however, that the student might be relieved as to the number of courses which he was required to attend. As to the order in which subjects should be studied, he was disposed to leave matters as at present, remembering that the examinations still existed as a test of the student's knowledge. He had, however, no objection to indicating an order of study which, in the opinion of the Council, it would be best to follow. As to class-examinations, they might be very useful, or the contrary. They were of very little use when the instruction had been simply oral, and not demonstrative. Their object should be to test and develope the power of observation in the student, and to train his faculty of reasoning on medical subjects. He would not advise that the class-examinations should be made obligatory. In the final examination, too high a test should not be applied. He thought that in general too much was expected of students; whereas all that was required was, to ascertain whether the candidate might be with safety allowed to practise his profession. He was in favour of holding yearly examinations, as in this way the student would be relieved. The duty of the Council, he considered, was to suggest general principles, and to point out what matters it thought most important to be attended to by the licensing boards.

Dr. Alexander Wood approved of the spirit of Mr. Syme's proposal. It led, however, to the supposition that the aim sought was to decide on details; whereas the object was to discuss general principles. It was important that the opinions of the members of Council should go forth, and be made known to the licensing bodies, by whom the regulations for study were framed. The Committee, however, seemed to have lost sight of the real object of education—not the putting a certain amount of knowledge into a student, but the drawing out of certain mental faculties and their products. It was an error to advocate yearly or more frequent examinations as a substitute for the final examination; because all the subjects of medical study are intimately connected, and the knowledge of no one can be entirely dispensed with at any time. A former President of the Council, Sir B. Brodie, had very correctly said that what was most required was, to amend the preliminary education of the students. It appeared to him (Dr. Alexander Wood) that the Committee were forgetting that advice; and that, if chemistry and botany were removed to the preliminary studies, these subjects would be thrust on the minds of youth at a time when they were not capable of comprehending them. If the student were forced to commence scientific studies at an earlier age than at present, his mental culture must be interfered with. He quite agreed with the opinion that medical students were at present too much encumbered with courses of lectures. With regard to examinations, it had been stated that even the best students had recourse to cramming. The cause of this he believed to be in the demand for details, rather than for principles, made at the examinations. Now it was not possible for the Council to make good examiners; but a check might be put on examination in details, by suggesting the parts of subjects with which the memory should be charged; and the examiners should then be left to bring out the knowledge of the students as they best could. Mr. Syme had recommended the entire abandonment of the present examination system. On the other hand, the University of Edinburgh itself declared that "it was unwilling to alter the system without further experience, as it had worked exceedingly well." When such contrary opinions existed, the Council would act unwisely in deciding during the present session on any of the points that had been mentioned. The Committee might consider how far it should be recommended to make examinations public. Such a plan, he thought, would be beneficial both to the public and to the profession. It would be a security of fair treatment to the student, and would remove all suspicion of injustice towards those who might be rejected. With regard to visitation of examinations by the Council, he thought it was not practicable, unless some general plan could be formed.

Dr. Corrigan differed from Dr. Alexander Wood's opinion that students ought not to be examined in petty matters of detail. The purpose of examination, he maintained, was not to ascertain how far the student possessed a knowledge of principles, but to find how far he is acquainted with details—such as the diagnosis of dislocated hip from fracture of the neck of the thigh-bone. Dr. Andrew Wood would remove botany, chemistry, and natural history to the preliminary education; but there was no evidence of instruction in these subjects being required by the seventeen educational bodies, from which students must present certificates before entering on their professional studies. All that was necessary, he thought, would be to make the final examinations public. In the King and Queen's College of Physicians, every Fellow and Licentiate of the College was entitled to be present; and a similar system, he believed, was followed in the College of Surgeons of Ireland. As a proof of the value of publicity of examinations, he referred to the high reputation of the fellowship of Trinity College, the examination for which was open to the public.

Dr. Christison trusted that the Committee would not lose sight of the fact, that the subject under discussion was the education of general practitioners; and from these it was not possible to demand a very extended education. He differed from those who believed that the Council could successfully deal with minute details, such as the order of study, etc. There were still, however, some points regarding which the opinion of the Council might be laid before the licensing bodies and the public. There was, for example, a general agreement among the members that it would be expedient to recommend the medical schools so to organise their courses of instruction, as to allow as much time as possible, during the student's last two years, for the practical study of medicine and surgery. He hoped, also, that the Council would not yield to any outcry that lectures are altogether useless. The delivery of lectures was still the best system of instruction; and the student attending them was impelled by rivalry, and was enabled to compare his own progress with that of those around him. Lectures were not, as some supposed, of modern date, but were the earliest method in which instruction was known to be delivered: they were given in the school of Salerno. The Council were also generally agreed that the medical student should commence by learning chemistry and botany. Many, however, left chemistry to a later period, and consequently got into confusion. Beyond requiring these subjects to be studied first, he would not interfere with the course of study; because the subjects were so interwoven, that it was not possible to lay down any rule as to the course to be pursued. With regard to materia medica, he would remark that the course was very curiously organised: it included both pharmacy and therapeutics, as it had done from the days of Dioscorides. These subjects, diverse as they were, were in London injudiciously thrown together in a course required during the first year. It might be desirable, then, to consider whether this and some other branches of study could not be differently organised. Botany and natural history, he thought, should be taken before the commencement of professional study: but he could not say the same of chemistry. He thought that there had been an underrating of the connexion between chemistry and medicine—a connexion which was daily increasing. How chemistry should be organised and taught, was a different question, and a difficult one. Elementary chemistry should, if possible, be separated from practical: and chemistry and anatomy should form the chief objects of the student's attention during his first session. With regard to practical study, he would have the hospital attendance of the students combined with clinical instruction. He agreed that various courses of lectures were too long; and that, if the Council issued recommendations, they should endeavour to obtain a revision of the length of the courses; but he would leave it to the schools to consider how this was to be done. The certificate system was one regarding which great abuses existed; and the schools should be recommended to revise the system thoroughly, and to ascertain whether it might not even be given up altogether. When he was a student, no certificates were required, and the classes were well attended. But the London College of Physicians complained that there was reason to believe that some of those who entered their names at the Uni-

versity of Edinburgh did not attend the lectures. The certificate system was therefore introduced: he had enforced it rigorously during more than thirty years, and he did not think that it had at all ensured the regular attendance of students. And, even if attendance in body were compelled, it was impossible to compel it in spirit. With regard to examinations, the question was, how they should be managed. He thought that the University of Edinburgh could bear testimony to the benefit of dividing the examination into two parts. By this plan, the labour of the students had been lightened. But, on the other hand, the further subdivision of examinations, so that they were held at the close of the second, third, and fourth years, led to an increase in grinding. He would, therefore, not multiply the number of examinations, unless they could be held at the close of each year, on the subjects studied during the year. He approved of the plan adopted by some of the professors in the Edinburgh University, of having written class examinations, to the answers in which special values were affixed. The plan not only elicited good answers, but enabled the examiners to ascertain more accurately what knowledge the students possessed: and he would recommend it to the consideration of other schools. These class-examinations, if generally adopted, might in great measure take the place of the final examination; but not altogether so, for there should still be a practical examination at the close of the period of study. As to the objection that the student was likely to lose sight of the subjects of which his knowledge had been tested in the partial examinations, he observed, that it was quite easy to ascertain in any of the subsequent examinations whether he had done so. He thought the Council should show its opinion of those examinations which candidates for admission into the public services were required to undergo, after having satisfied the licensing boards. The public services, he believed, had in this way lost some of the best University graduates.

Mr. Syme said that the objection had been made, that there was a deficiency of practical knowledge among students. How could it be otherwise, when their time was required to be occupied with such subjects as chemistry and botany! As to the fear that, if these were studied at an earlier period, classical studies would be interfered with, he could not agree that this would be the case. He had no wish to lay down details, but was desirous of establishing a discussion of the principles on which medical education should be conducted.

Dr. Thomson thought the Council was to some extent committed to certain opinions. Last year, the following resolutions had been agreed to. "That, looking at the various curricula of professional education enforced by the licensing bodies enumerated in Schedule (A) to the Medical Act, the Council are of opinion that the number of courses of lectures required to be attended, might be reduced with advantage, so as to give the student a larger amount of time for self-education." "That the overloading of the curriculum of education—whether as to the number of courses, or of lectures in particular courses, —must be followed by results injurious to the student." "That the Medical Council resolve to take into consideration, at the next meeting, the propriety of recommending a reduction in the number of courses of lectures which the regulations of the various licensing boards at present render obligatory." "That, with the view of facilitating the consideration of this subject, the General Council request to be favoured with the opinion of the bodies in Schedule (A), on the possibility and propriety of this, before next meeting." The contents of these resolutions formed the legitimate subject of discussion at the present time: although subordinate questions—such as the age at which license to practise should be granted, the duration of courses of lectures, etc., would no doubt come under notice. In the discussions which had taken place outside the Council, the superabundance of lectures had occupied a very prominent position. The Council would require to act with caution before they made a broad assertion of the superfluity of lectures. Courses might be repeated too often, and lectures might be too numerous: but there was no doubt that in some subjects lectures were necessary, and very beneficial both to the student and to the practitioner. Principles must be taught; and hence lectures must constitute a large proportion of the means of instruction. He would also refer to the influence of a good lecturer on the minds of the students; an influence which, he believed, had been happily illustrated in his own case. As to examinations conducted during the course of study, he regarded them as being useful both to the student and to the teacher. He could scarcely imagine a system of lecturing to be successful without class-examinations. He had for many years followed the plan of holding not only weekly oral examinations, but also occasional written examinations, classifying the students according to their answers: and he had found the plan to work well.

The further discussion of the subject was postponed.

Saturday, April 30th.

G. Burrows, M.D., President, in the Chair.

The minutes of the last meeting having been read and confirmed, the Council resolved itself into a Committee on Medical Education.

Course of Medical Study. Dr. Thomson resumed his observations, recapitulating the remarks which he had made on the previous day. The last point to be considered was, how far it was possible to lay down rules for the minutiæ of education. He had studied this subject carefully, and had probably in the course of time changed his opinion; but only in accordance with the general change of sentiment. He remembered the time when improvement in medical education was supposed to consist in doubling or trebling the number of courses of lectures to be attended by the student. Now, however, it was thought that the object was to ascertain on what subjects lectures might be most appropriately attended, and how knowledge could be best communicated. He believed that the Council was not yet prepared to legislate with unanimity on this matter. There were many subjects, lectures on which he would gladly see included in the curriculum, were it not that their introduction would still further overburden the students. The Council should content themselves with laying down certain principles on which they could agree, and which they could recommend to the licensing bodies as a guide to the course of medical education to be pursued. He had thought it best to embody his views in a resolution embodying a series of recommendations; and, as professional education and examination could not be separated, he would bring them under one head. There was great evil in attempting to specify certain branches to be studied by lectures, or to frame a measure which might not give satisfaction either in the Council or outside, and which might have the effect of suppressing emulation among teachers, and of preventing men distinguished in various departments from coming forward as lecturers. He had noticed with great satisfaction the general disposition on the part of the licensing bodies to second the efforts of the Council; and he believed that, by allowing freedom of action, this disposition of the schools and licensing bodies to aid the Council would

e increased. He moved as an amendment to Mr. yme's motion:

"That, instead of proceeding to frame a course of tudy for medical education, etc., the Council adopt he following resolution:

"That, viewing with general approval the condiions required by the different bodies enumerated in chedule (A) of the Medical Act, of candidates for a ualification, the Council do not think it expedient, or the present, to proceed to frame a complete or ormal scheme of professional education and examinaion. But, in order to indicate the general nature of heir views upon this subject, they resolve to comunicate the following recommendations for the uidance of the various licensing boards:—1. That wenty-one years be the earliest age at which a proessional license can be obtained. 2. That no licence e obtained at an earlier period than four years after he registration of the candidate as a medical student. That the course of study required for a licence hall comprehend not less than four winter sessions, r three winter and two summer sessions, at a recogised medical school; and that evidence shall be proluced that the remaining period of the four years has een passed in the acquisition of professional knowedge. 4. That the professional examination be diided into at least two parts; that the first of these, mbracing the preparatory branches of study, be not ndergone before the conclusion of the second sesional year of nine months; and that the final examiation be not undergone till the completion of the hole prescribed course of study, nor at an earlier eriod than three years and nine months after the ommencement of professional study. 5. That the rofessional examinations be conducted partly in riting and partly *vivâ voce;* and in all parts which dmit of it, also practically and by demonstrations. That the Council recommend to the several liensing bodies, that the courses of instruction required y them severally should be framed in such a manner s to secure a due share of attention, both to the reparatory and to the final, or more strictly pracical, branches, and by class examinations, and all ther means which may be deemed proper, to promote s far as possible the self-culture and useful practical ducation of those who seek to obtain a licence. The ouncil would accordingly suggest to these bodies, hat it is desirable to avoid enforcing attendance pon a large number of courses of instruction during he same term of study, and to arrange the subjects f examination in such a manner as will guide the tudent in the most approved order of study. 7. hat the regulation of the extent and duration of ourses of lectures and instruction be left to the auhorities of the several medical schools; and that in he case of branches of scientific study, not purely rofessional, which are included in the curriculum, he scope and extent of attainment required of the andidates be indicated by means of a published conpectus of the subjects of examination to be issued y the several examining boards. 8. That, with a iew to secure fairness and efficiency in examinations, he Council resolve to institute a system of superision or inspection, to be conducted in the meantime or each division of the country, under the direction f its Branch Council; the results of which superision are to be reported annually to the General ouncil."

Dr. SHARPEY seconded the amendment.

Dr. PARKES, referring to some remarks made by Dr. Christison at the close of his speech on the prelous day, was desirous of explaining why an examiation was required for entrance into the Indian edical services. In every examination of the kind which he had taken part during the last ten years, many candidates who presented themselves had been so imperfectly prepared, that they could not be admitted into the service. He wished it to be distinctly understood, that his remarks were not intended to be applied to the numerous gentlemen who had passed the examinations creditably, and who were performing their duties in various parts of the world; but to some instances which, though exceptional, yet demanded notice. Was it possible to admit men who did not know the radius from the ulna, or the os calcis from the astragalus? or who described the œsophagus as lying in front of the arch of the aorta? or who said that the aorta sometimes arose from the right ventricle? Again, in surgery, he did not think Mr. Syme would be satisfied with a candidate who, when asked how he would treat a case of wounded artery, replied that he would amputate the limb above the seat of injury; or one who, when required to describe the treatment of acute inflammation of the knee-joint, answered that he would make a free incision. In medicine, also, it would not be possible to allow a man to pass who, with a well-marked case of aneurism of the thoracic aorta before him, and with the name of the disease written on a card over the patient's head, could not describe the symptoms of the disease; nor one who, having been educated both in England and in Scotland, had never heard that "scabies" meant itch. He would here bear testimony to the care which some schools, especially that of Edinburgh, paid to the subject of dietetics. But one candidate, possessing licenses from English boards, when asked to classify the articles of diet, had answered to the following effect: "Foods are divided into nitrogenous, comprehending vegetables; and non-nitrogenous, comprehending all meats, including the carnivora. The non-nitrogenous articles of food are further divided into, 1. Albuminous—example, hens' eggs; 2. Fibrinous—ex. flesh of the ox and pig; 3. Caseous—ex. cheese; and 4. Gaseous—ex. soda-water." Dr. Stokes had very justly said that the object of examination was to find out what a candidate knew or did not know. It was easy to find the latter, but often very difficult to ascertain the former. In one instance, after long trial, his colleague Mr. Paget had been obliged to sum up his opinion in these words, "Dull all over." The medical corporations were admitting men who could not practise with safety; and, as long as this was the case, so long must the army medical department examine for itself. One powerful reason for this was, that in civil practice there was a constant check on incomplete qualification—a practitioner must prove himself worthy of confidence, or break down from incompetency, and every member of the public could choose his own medical attendant; while in the army there was no choice—the soldier must go to a particular medical officer. Dr. Christison might admit the necessity of the second examination, and say that it should be practical. With this he (Dr. Parkes) would agree to a great extent; but it was a matter of details, and if Dr. Christison would draw up a scheme, he was sure that careful attention would be given to it by the Director-General of the Army Medical Department and by the Secretary of State. How, he would ask, was the army medical service to be recruited? Was a return to be made to the old system of patronage? He thought not. Could a number of nominations be given to the Colleges and Universities, these bodies being asked to send some of their best men? Even if this were possible, there must still be an entrance examination as a security that properly qualified men were really sent. There then remained only the system of open competition, by which the best qualified candidates were selected; and he hoped that nothing would be done in the

Council which should diminish the confidence of the Government in this system. As to the details of the army medical examination, it consisted in natural history, anatomy and physiology, medicine, and surgery. The system was commenced in the time of the East India Company; and natural history had been introduced, because there were many appointments in India, capable of being held by medical men, in which a knowledge of this subject was required; and also because, although there had been several great naturalists in India, the medical profession had not contributed that share of knowledge which might be expected. Another reason was, that it was considered that the study of natural history was a good training for medicine. Of late years, however, there had been no actual examination in natural history; the questions asked under this head being questions in materia medica, botany, etc. The subject had never been made so far compulsory as to cause any candidate to be rejected for insufficient knowledge of it, if he were well qualified in medicine and surgery. The amount of knowledge of anatomy and physiology required was that which was necessary to the physician and surgeon; at the same time, some more elaborate questions were put, for the purpose of bringing out the more highly qualified men. In medicine and surgery, the examination was made as practical as possible; and very high marks were assigned to the practical portion of the examination. In regard to the general question of examination, he could not consider the present system satisfactory, when it allowed men to obtain licenses who could not make a chemical examination of water, or who did not know the skeleton, or who could not put up a fractured limb or pass a catheter. How was the Council to remedy this state of things? In the first place, it must see that the examinations were sufficient to ascertain whether a man possessed such knowledge as would enable him to do good; next, it should indicate, in general terms, what points required consideration and reformation. He was, however, convinced that no real good would be effected until the Council organised a scheme for the supervision of examinations.

Dr. Sharpey could not help adding to the evidence which Dr. Parkes had brought forward, as to the want of practical skill in some of the candidates for the army medical service. Some years ago, Mr. Paget and Mr. Busk had invited him to be present at the examination in operative surgery. Many of the candidates performed the operations rightly; but one, being required to cut down and tie the subclavian artery, raised instead the omo-hyoid muscle; another, to tie the iliac artery, cut through everything—skin, muscle, and peritoneum, and, in stitching up the wound, left portions of omentum protruding through it. It appeared from the course which the debate had taken, that the opinion was that the way in which the Medical Council could act most efficiently, was by endeavouring to arrive at certain general resolutions, and to found recommendations thereon. It was plain also that such recommendations should have reference to the general principles of education, and that the settlement of details should be left to those immediately charged with the education of the student. It was a known fact that different modes of conducting education prevailed, and had long prevailed; and each method had its advantages and its defects. It had been proposed to establish uniformity; but he would rather look to results, and was not so enamoured of uniformity as to seek it at the expense of freedom of action. The Council, indeed, must take care lest, in endeavouring to establish uniformity, they should bring the whole system to a dead level of mediocrity. There was, he believed, no difference of opinion as to the age at which a student should be allowed to pass his examinations, or as to the propriety of requiring four years to be spent in professional study. Then, as to the subjects of study, should the Council propose a scheme? He did not well see how this could be done; and any attempt in this direction would very probably be frustrated by difference of opinion. Again, it had been urged, and very speciously, that the Council should recommend an order of study. This, when tried practically, he believed would be found unadvisable. The Society of Apothecaries—and he could not speak of this body but with respect for the exertions it had made to improve medical education—had introduced a set order of study; but it had been found impracticable to carry it out. He had himself been obliged to recommend commencing students, who were obliged to attend his lectures on physiology during their first year in order to obtain certificates, not to devote their attention seriously to this science in their first session, but rather to study anatomy and chemistry. Again, in laying down an order of study, the Council would have the same difficulty from difference of opinion, as would arise in regard to the subjects. He believed that the order would be sufficiently regulated by a proper division of the examinations. As to examinations, great advantage had been found to attend the plan long adopted in the University of Edinburgh, of dividing the examination into two parts. It disembarrassed the student from the necessity of retaining in his mind a multitude of details. In the University of London, there had been for several years a "Preliminary Scientific Examination", including Natural Philosophy, Chemistry, Botany, and Zoology; and youths could be examined in this before commencing their professional studies, provided they had attained the age of 17. He would recommend this plan to the notice of the other licensing bodies; not that they should introduce such subjects as zoology as necessary, but it would be well, he thought, if they could give some encouragement to students to pass in chemistry before commencing their professional studies. In Edinburgh, there had been a partial substitution of class-examinations for the final examination. He thought there might be much advantage in applying this plan to preparatory subjects. In the first place, it ensured constant attention on the part of the student to the subject; whereas, if examination on it were deferred to a later period, he might be obliged to make up for want of attention. Again, examinations conducted in this way could be made more full and searching than final examinations; and they would give the student an opportunity of being warned of his defects in time for improvement. The great advantage, however, lay in relieving the student's mind from details. It had been said, that under this plan a student would be liable to lose what he had learned; but he (Dr. Sharpey) did not believe that, because the student might forget for a time, the impression once made on his mind could be erased. There might be a temporary obscuration; but the knowledge would return to the mind. The great object should be, to make a student learn a subject as well as he could, for once; and, if this were done, he would not forget it. He believed that, if two candidates were tested at the end of a year, one of whom had been subjected to class examinations, while the other had undergone merely the final examination, the former would be found to have retained most. The substitution of class-examinations for final examinations might be applicable in the Scotch Universities; but it was difficult in England, and he did not see how the difficulty was to be overcome. The only suggestion which he could make was, that the candidate should be re

uired by the licensing boards to come up each ear for examination in the subjects which he had udied during the session; and, in doing this, re must be taken that he passed in certain subjects efore presenting himself for examination in others. le did not think that any plan of conducting such xaminations in the London medical schools could be rganised; but he believed that the lecturers of the chools would be very glad to confer with the licensing oards on the subject. Examinations on subjects not urely professional, such as chemistry, should be conucted according to a programme which defined the xtent of knowledge required. This was the plan llowed by the University of London. As to practcal examination, it should be introduced whenever was possible to do so. As an illustration of its ecessity, he mentioned that a young man who once resented himself for examination at the University f London, gave good written answers on anatomy nd physiology, but, at the *vivâ voce* examination on ne subject and specimens, he could answer nothing. lis explanation was, that, from the duties in which e was engaged, he had had no time to attend to issection. Mr. Syme had objected to clinical exaninations; but he (Dr. Sharpey) held that students ught to be examined at the bedside, because this ested their practical knowledge, and encouraged the ursuit of clinical study. He thought that some eans should be devised for a supervision of examinaons. There was one way in which this might be one without difficulty; namely, by providing that, henever an examination was conducted by means of ritten papers, the answers should be inspected by ne members of the Branch Councils, or by persons ppointed by them. Members of the Branch Council ight also be present at the practical examination. s to the alleged excess of lectures, Dr. Christison ad explained that the courses had neither increased n length nor in number. Mr. Syme, however, had aid that practical studies had increased in impornce, and that too little time was allowed for them. ut, if the time required for attendance on lectures ere diminished, would the time saved be properly mployed? Some thought there would be a difficulty n employing the extra time; and it was known that ne alleged overoccupation was used as a plea by idle tudents for neglecting their duties. The diligent tudents found sufficient time for everything. The roper plan would be, to dispense with the necessity f attending a second course of lectures on any one ubject; and to make the first course as complete as ossible. In short, he thought that it would be best o leave matters as much as possible to the schools nd teachers, so as to leave room for salutary compeition. In regard to class-examinations, he had found us had been observed by Dr. Christison) that the ttendance on them was at first good, but afterwards radually diminished. And, so long as these exminations were conducted orally, it would not be ossible to examine more than ten or twelve students n an hour. But these examinations were useful not nly to those examined, but to the hearers. He had lways impressed this fact on his pupils; and he had bserved that many of them made notes of any imortant remarks made by him during his examinaion. The class-examinations might be improved by he introduction of written examinations; and their alue was so great that they should be made compulory. This would enable lecturers to grant certifiates to students on the ground of attendance at the xaminations. It had been proposed to divide the ear of study into two portions, each of four months. le did not wish to object to this plan, if it should be eemed advantageous in other parts of the kingdom; ut in London it would not be advisable, inasmuch as it would take away two of the best months for dissection—October and March. He feared, indeed, that it would do more harm than good.

Dr. Storrar thought it very desirable that attention should be directed to certain points of importance. The first of these was the separation of the natural sciences from the course of medical study. He doubted whether any recommendations could be issued on this subject: but in some bodies, such as the University of London, the separation had been made, and he thought the Council might in some way hold out an inducement for other boards to follow the same course. As to the course of study, it would be impracticable and unwise to attempt to establish uniformity. There was this advantage in diversity, that different intellects could be appealed to by different processes. With regard to the number of lectures required, there was great diversity in practice. The University of London required no attendance on lectures for the preliminary scientific examination; for the first examination for the degree of M.B., the candidate must have attended three courses, to be selected by him from a specified list of twelve, and must also produce certificates of construction in dissection, practical chemistry, and practical pharmacy; and for the second examination for M.B., he must have attended two courses, besides having attended hospital practice and conducted twenty labours. The division of the sessions must be a matter of arrangement to be left to the boards; but he would remind the Committee that a session of medical study should not be looked on as merely consisting in attendance on lectures. He would not interfere with arrangements made in Edinburgh and Dublin as to the arrangement of sessions: but he thought the English plan, of having a six months' winter and a three months' summer course, a very useful one. Certificates of attendance on class-examinations should be required. These could not, however, except in the Scotch Universities, take the place of final examinations. If the attempt were made in London, it might bring the teachers and the examining boards into collision.

Mr. Arnott considered that, as far as the discussion had gone, the leading idea was that the present system was the best for teaching medicine. Up to a recent period, the professorial system had been exclusively followed in Edinburgh; but within the last ten or fifteen years, the question had been raised there whether the English tutorial system had not also some advantages; and attempts had been made to combine the two. With regard to the examinations, he was bound to consider what was the best method for sending out practitioners. If examination in doctrines and principles alone led to the admission into the profession of men not fit for the exercise of their calling, the Council would not be doing its duty in being content therewith. He had listened carefully to the speech of Dr. Parkes, whom he was glad to see in the Council. He had obtained from the army board a list of the rejected candidates; and these were furnished from all the licensing bodies, except Oxford and Cambridge; not from any one in particular. He (Mr. Arnott) had witnessed one of the examinations in operative surgery for the army medical service; and had seen candidates who did not know a leg- from an arm-splint, etc. In his opinion, Dr. Parkes was quite justified in supporting the necessity of a second examination for the army medical service. Having been engaged in teaching during thirty years, he was perfectly satisfied that the essential defect of the present candidates was not ignorance of doctrine, but a want of practical knowledge of their profession. How was this to be remedied? Systematic lectures must, and ought to, occupy much

of the students' time; and he knew no better mode of giving instruction. But no obstacle should be thrown in the way of the acquisition of practical knowledge. Within a few days, he had met with an apparently well-informed pupil, who had never seen a case of hernia operated on in an hospital. And how was it possible that a practitioner should know how to act if called to a case of this kind, unless he had witnessed such cases? The opportunities afforded in the London hospitals were, however, not sufficient. In the last census, it was shown that, at the time of taking it, there were (excluding naval and military and workhouse hospitals) in Scotland, 1,518 patients in hospitals; and in England and Wales 10,414, of whom 4,000 were in the London hospitals. He had made out a list of ninety-seven provincial hospitals which ought to be made available for instruction. He would not interfere with lectures; but would urge the Council not to interfere with the acquisition of knowledge from any source. In his own experience, he had known a series of first-class students to be sent up from one general practitioner. As to clinical examination, to which several attached much value, he did not underrate its importance; but, at the present day, there were no means of carrying it so far as was necessary.

Mr. Cooper doubted whether students could take in all the information required, in the four years required by the recommendations of the Council. The Society of Apothecaries required apprenticeship. The value of this depended much on the practitioner with whom the pupil was placed. If placed under a man of intelligence and education, he would get the best foundation for a general practitioner. He considered that the apprenticeship system had been too lightly thought of, and that it was the best preparation for those intended for general practice.

Dr. Alderson could not support any proposal for making examinations public. He had been informed by the late Dr. Robert Williams, that the College of Surgeons in Ireland had adopted the plan of public examinations. After two or three times, the public ceased to attend; and the grinders alone came, and became possessed of the questions.

Dr. Corrigan would vote both against the resolution and against the amendment. He would vote against the resolution, because he did not think it the business of the Council to frame a curriculum of study. The object was, to find out what a candidate knew, and not where he learned it. If one College said that students must be educated in London, and another that they may be partly educated elsewhere, let them not be interfered with, but let each body establish its own curriculum. He did not think that the Committee could do better than establish its position on the same platform as the University of London. Against the amendment he would vote for three reasons. First, it entered into details which should be left to the licensing bodies. Secondly, it set out with a preamble from which he dissented; for he did not approve of the conditions required by all the licensing bodies,—and if any reason for this were required, it was in the evidence furnished by Dr. Parkes. Had any of the recommendations, on which so much time had been bestowed, been followed by the licensing bodies? [He here read extracts from the answers from the representatives of the examining bodies, with the view of showing that the first recommendation had not been complied with.] The next point to be considered, was that of practical examination. The remarks made by Dr. Sharpey, Mr. Arnott, and Dr. Parkes—the evidence of the latter being of special value—would make the licensing boards put their houses in order. It had been said that practical examination could not be carried out; but it was carried out by the army board, by th University of London, and, he believed, by son other boards. He was sorry to find Mr. Syme asser ing its impracticability, and the inconvenience whic it gave to patients. He (Dr. Corrigan) had bee much engaged in clinical teaching, and had nev heard any complaints from patients. A third obje tion which he had to the amendment, was that recommended a system of visitation of examination He regarded this as quite impracticable. Was h being at the present time President of the King an Queen's College of Physicians, or Dr. Stokes, to vis the college to ascertain whether the examinatio were properly conducted? Was he to visit the Un versity of Dublin, to see that Dr. Apjohn was ex mining properly in chemistry? The persons delegate to visit and report on the examinations must kno the subjects as well as the examiners themselves.

After some observations from Dr. A. Smith, M Hargrave, and Dr. Alexander Wood,

Dr. Acland proposed, Dr. Embleton seconde and it was resolved, that the discussion should b adjourned.

The Council then resumed.

Report of Pharmacopœia Committee. Dr. Quai moved, Mr. Rumsey seconded, and it was resolved: "That the Report of the Committee on the *Pha macopœia* be adopted." (See proceedings of April 29t p. 504.)

Monday, May 2nd.

George Burrows, M.D., President, in the Chair.

The minutes of the last meeting were read an confirmed.

The British Pharmacopœia. Dr. Quain propose that the Committee on the *Pharmacopœia*, alluded in the Report which had been adopted, consist, wit the president, of four members; two in London, or in Scotland, and one in Ireland. Their duties wou be to draw up a plan of the modifications and chang required in the *Pharmacopœia*, and to submit th same to the present session of the Council; to a point one or two editors, who should be paid a re sonable sum for their labour, and whose duty should be to ask for and receive suggestions an transmit them to the chairman of the Committe and to undertake, under the supervision of the Com mittee, such other duties as might be required. H proposed:

"That the *Pharmacopœia* Committee consist of fo members: Dr. Christison (chairman); Dr. Sharpe Dr. Apjohn; and Dr. Quain."

Mr. Syme seconded the motion.

Dr. Sharpey said that he had long ceased to tak much practical interest in pharmaceutical matter but if the Council thought he would be of service, h was willing to give his time and labour to the work

Dr. Christison had been desirous of continuing watch over the progress of the *Pharmacopœia;* an already he had agreed to take under his charge th improvements in pharmacy. But since the subje had last been brought forward, he had been led consider whether he could devote the necessary tim to the work, and whether he could still act as member of the Committee; for he was unwilling undertake any duties which he could not discharg He understood, however, that the Committee w only to consider the defects in the present *Pharm copœia*, and the means of remedying them. H would with much pleasure undertake his share of th task; but if no change were to be made for a lon period, and then a series of great changes were re quired, it would be more than he could attend to.

Dr. Corrigan would make a few suggestions to the *Pharmacopœia* Committee. First, a posological table is required. There might be difficulties in framing it, and objections to it; but when it was remembered that the book was intended for the use of pharmaceutists, it was important that they should have some guide as to the doses of the medicines, in order to be able to detect mistakes in prescriptions. Another deficiency, which he had much felt, although he recognised the work as an admirable one, was the absence of a proper arrangement in the index. A prescriber wished to know what were the various forms of prescribing any medicine, such as camphor, mercury, or iron. On turning to the index, however, he would find in its proper alphabetical place only the article itself, and would have to search through the whole index, and probably turn to two or three parts of the book, before he could find the preparations. He wished, then, that the index could be extended—and made, in fact, a *catalogue raisonnée*.

Dr. Andrew Wood said that it would certainly have been of great importance to insert a posological table. This had not been done in previous *Pharmacopœias*; but the present work was a revolutionary measure, and the Council was bound, having regard to the safety of the public, to give as much information as possible to the prescriber. He agreed also with the remarks made by Dr. Corrigan as to the index. Another defect which had been pointed out to him by many was, that there was not sufficient indication of the changes that had been made. He believed that if these matters were attended to, much of the opposition to the *Pharmacopœia*, at present existing, would be removed.

Dr. Christison said that the necessity of attending to the points referred to by Dr. Corrigan and Dr. Andrew Wood was fully recognised by the members of the *Pharmacopœia* Committee.

Dr. Alexander Wood was glad to hear the assurance given by Dr. Christison. At the same time, criticisms which were not deserved, had been passed on the *Pharmacopœia;* and this had evidently arisen from many persons having expected, not a pharmacopœia, but a dispensatory, such as that of Dr. Christison. He thought the *Pharmacopœia* an excellent work; and had been informed by the most eminent chemists in Edinburgh that, with one or two exceptions, the processes for the preparation of the medicines were admirable.

After some remarks from Dr. Quain and Dr. Apjohn, the motion was put to the vote, and carried.

The Council then formed itself into a Committee on Medical Education; the President in the chair.

Course of Medical Study. Dr. Paget, in commencing the resumed debate, first vindicated the University of Cambridge from the charge, made by Dr. Corrigan, of not complying with the recommendations of the Council. The University, in fact, had confirmed some of their regulations—such as that requiring registration of students—so as to be in conformity with the desires of the General Council. Referring to the matter under discussion, he said that the debate had given an opportunity of eliciting opinions, and of bringing forward important facts, such as those mentioned by Dr. Parkes regarding the deficiency of some of the candidates for the army medical service. Blunders of the kind alluded to by Dr. Parkes were liable to be met with in all examinations; but the *gravamen* of the case was, that those who had been rejected by the Army Medical Board were probably now practising their profession in the Kingdom. This was certainly not a very pleasant reflection; and it was unpleasant to the Council, as a portion of the responsibility of allowing men so unqualified to become practitioners must no doubt rest with it. As to excess of lectures, he had had no such experience of this as had been referred to by some of the other speakers. He agreed on this subject with the opinion of the University of Cambridge—that two courses at a time were sufficient. He had not so high an opinion as some of the value of systematic lectures; and he doubted whether they did more than introduce a subject to the attention of the student, and give him an interest in it. There should certainly be strong proof of the excellency of the lecture system, to make the Council require the whole four years to be spent in this kind of instruction. No one, however, now thought it so good as the tutorial system, in regard to several branches of medical education. At the same time, he strongly deprecated interference with the mode of teaching followed in the medical schools. Many of the teachers in these were very able men; and it would be best to leave them to their own free action. The Council would be better employed in fixing a minimum standard, than in determining what should be the maximum of education. That standard must, of course, be in a great measure determined by the examinations. No doubt the present system of examination was defective; and this was not only the case with regard to medicine, for there had been complaints in Cambridge for the last twenty years regarding the examinations in other subjects. The present plan, however, had many advantages; it required, among other things, a working up on the part of the students, which was beneficial. The great business of examiners was to conduct the examinations so as to defeat the tricks of grinders; and he believed no one could pass a practical examination who was not well acquainted with the subjects. He thought that some of the opinions expressed in Mr. Syme's pamphlet, in regard to examinations, were unduly strong. Mr. Syme had objected to clinical examinations; but he surely knew that every hospital contained many patients who could be safely examined, without resorting to those to whom such proceeding would cause great suffering. The plan of clinical examinations had been satisfactorily followed at Cambridge during the last twenty-two years. He could not agree with Mr. Arnott's statement, that there was a difficulty in carrying out these examinations. He had a high opinion of the value of class-examinations as a means of instruction; but the proposal to use them as a test of proficiency was a very different matter. He believed that, used for this purpose, they would be found fallacious and inefficient, and would so far lose their present character, as to become a boon to idle and shallow students, who could cram up for them in twenty-four or forty-eight hours. The plan of holding examinations at the end of each session was, in his opinion, not perfect; but it was preferable to that of holding three or four examinations in the course of a session, by which the student's knowledge would each time be tested on a mere fraction of a subject. He agreed with the general tenor of Dr. Thomson's amendment; but would point out a discrepancy between the second recommendation and the conclusion of the fourth. He also objected to the commencement of the fourth recommendation. It would be unwise to interfere with any arrangement, by which students could be examined in chemistry and botany before the time there specified for the first examination.

Dr. Acland did not think that, if Mr. Syme's resolution were adopted, there was any hope of being able to bring it to a practical issue. Without entering into details which had been already discussed, he would say that he should be obliged to vote both against the amendment and against the resolution. Looking to the matter practically, he had come to

the conclusion that there was one way out of the difficulty in which the Council was placed, viz., to refer the several subjects under discussion to a select committee. The Council would remember that in 1847 the President, when examined before a committee of the House of Commons as to which branches of medical study were necessary and which auxiliary, had stated that the period of medical study was not sufficient to enable students to attend to collateral subjects. This had a bearing on the question of a minimum of education. With regard to a maximum, he found it very difficult to determine; and he did not think the Council could arrive at a conclusion on the subject, either with regard to preliminary or to professional education. Even if the subjects of preliminary education could be fixed, the Council would have to reconsider the time of medical study, and to determine what is meant by the term "medical school". He had last session asked for a definition of a medical school; and this was necessary, for in Edinburgh the University Medical School included all appliances, while in London those who formed the medical schools were obliged to take up subjects not immediately connected with the hospital to which the schools were attached, and to carry out the completion of the school by means of English energy. As to courses of lectures on such subjects as ophthalmology, he considered that, instead of ridicule, those who instituted them were worthy of commendation. Again, if the Council fixed a maximum of study, it would have to decide what subjects examining boards were bound to require; but surely those engaged in examination knew the best means of testing the knowledge of candidates. He did not see that the Council could do better than refer the entire subject to a committee, with instruction to report to the next session of Council. The duties imposed on the Council by act of Parliament were difficult and delicate, and could not be defined by a board of twenty-four persons sitting in public. As to publicity of examination, those at Oxford were open to the public, and were attended. But, if a system of supervision were organised, as proposed in Dr. Thomson's eighth recommendation, how was it to be carried out. *Quis custodiet custodes?* The Council owed Mr. Syme great thanks for having led them to grapple with the question as a whole; but he (Dr. Acland) looked with alarm on any attempt to vote on details.

Dr. Embleton, in reference to some remarks made by Dr. Corrigan, said that the University of Durham had complied with all the recommendations of the Council except the twenty-fourth. During an experience in teaching of twenty-five years' duration, he had seen many changes in the medical curriculum, and in the length of time required to be spent in study. The period had been lengthened, and the number of lectures had for some time been increased; but in recent years the latter had been diminished. This had chiefly been effected through the Apothecaries' Company, which deserved praise for the course it had taken in regard to medical education. He disapproved, however, of the system of apprenticeship; at the same time, he considered that it would be beneficial to recognise pupilage with a surgeon as a part of the curriculum. He could not agree that students were required to attend too many lectures —at least in England. In the Newcastle Medical School, the average time spent daily by each student in attending lectures was less than two hours; and Mr. Callender had shown that in London the attendance was not carried to an excessive extent. A student could not be worth much, who could not attend two lectures a day. The cry that the students were overburdened with lectures had come from Scotland; although, he believed, the requirements of the Scotch Universities were less than those of the Lon Apothecaries' Company. Lectures were necess because a great part of our knowledge was rece by the ear—perhaps more slowly, but not less sur than by the eye. As to preliminary education was a question how much the student should be quired to possess. No doubt arithmetic, ancient modern languages, and natural philosophy—and haps chemistry and botany—should form the foun tion for medical studies. General education, wh ever might be its extent, should be directed not o to the giving instruction, but to the bringing out mental powers; and the moral training of yo should be especially attended to. The Council sho put forth a minimum of professional education, w regard to age, the number of courses of lectures to attended, the subjects of instruction, the time to spent in attending to them, to show the licens boards what was required; and if the boards did follow this standard, they should be reported to Privy Council. Class-examinations were very portant; but they could not supersede examinati by boards. They should be made compulsory; if this could be done, registration of attendance lectures might be dispensed with. He did not ag with Mr. Syme in condemning clinical examinatio but of course these should not be conducted on tients who were in such a condition that subject them to such a proceeding would be unsafe or hurt He had found no difficulty in obtaining proper tients for clinical examinations. As to visitatior examinations, he believed it to be absolutely nec sary; if it were not so, provision would not have b made for it in the Medical Act. The manner, h ever, in which it should be carried out was a diffic subject, which he would not pretend to settle. agreed much with Mr. Syme's motion; but thou the object could be more effectively carried out means of a small committee.

Dr. Fleming said that the present discuss would do much good out of doors, and would sh that the Council was earnestly directing its attent to education. Medical students, as a body, follo their studies too much as a matter of routine. object to be attained was, to draw out the stude mental faculties; and he was satisfied that this co not be better done than by a well-arranged systen class-examinations, which would encourage stude to examine into the opinions and facts expressed their lecturers. With regard to the question of s stituting these for final examinations, he did think the difficulties connected with the licens boards so great that they could not be overco The division of the examination into two parts one of the greatest improvements that had been m in recent years. The remarks which had been m by Dr. Parkes must, he thought, convince all of necessity of a special examination by the army dical board. It might be, perhaps, that a large portion among those who were imperfectly quali had applied for admission into the army; but important fact was, that they all had licenses practise from one or two boards. How could present system, then, be regarded as satisfactory candidates, having passed the examinations of sc boards, were at last found unqualified? The pres system of granting licenses must at some time gage the attention of the Council; and, he thoug the necessity of passing examinations at two differ boards had an injurious effect, as it divided resp sibility. He would prefer that practitioners sho enter the profession through one comprehensive amination. Ninety-nine persons out of every hund in the *Medical Register* were general practition And why should not matters be so arranged, th

, having passed one examination, should be able ractise his profession in all its departments? He not wish to bring all grades of the profession to level; but the time had passed when a man d rise to eminence merely by belonging to this or corporation. Position was now gained through vidual merit. A system of supervision of exa- ations was, in his opinion, absolutely necessary, ough he was not in favour of public examina- s. He thought that business would be furthered ne appointment of a Committee to consider and rt on the motions proposed.

r. HARGRAVE said that the system of public inations had been followed in the College of geons of Ireland, and that the result had been satisfactory.

r. LEET felt that the Council owed much to Mr. e for giving the opportunity of discussing the tion of medical education on a broad basis. He ght that, the Council having for five years re- mended preliminary examination, the time was come when they should make it compulsory. four years of professional study should be so nged as to devote two to elementary and two to tical subjects. As to the lectures, he did not see they could be dispensed with; but the number ıt be reduced. Class-examinations he regarded eing useful; but they could not supersede the examination, which should be made as practical ossible. Clinical examination was not always ticable; and therefore clinical teachers should be uraged to give certificates to candidates attend- their instruction, which certificates might be n into account by the examining boards.

r. CHRISTISON, in explanation, observed that he not intended to say that there should be no inations of candidates for the public services. ıt he objected to was, the extension of the ex- ıation into minute details.

ıe CHAIRMAN said that, after the extended and ırsive discussion which had taken place, it would be becoming in him to omit saying a few words. ıad listened attentively to the information com- icated by the members of the Committee; and arrived at the conclusion that the Council was at present in a condition to draw up a scheme of ation and examination. Such a scheme might rawn up by a Branch Council for any one of the e divisions of the kingdom; but it could not be icable to all. The Council must endeavour to blish certain fundamental principles, and leave ils for the present to the educating and licensing es. The four main points on which the Council ld express an opinion were: preliminary educa- ; the duration of the curriculum of medical study; age at which licenses should be granted; and the e of examination. As to preliminary examina- , the Council could not at present lay down a me, but must be content with accepting the cer- ates of certain educational bodies. If it were pos- to agree on a scheme of general education, he ld prefer that proposed by Dr. Corrigan; but he not see how anything of the kind could be carried

It had been proposed by some, that the sub- of chemistry and botany should be transferred eneral education; but, however practicable this ht be in other parts of the kingdom, it was in- patible with the present system of education of majority of English schoolboys. If it were done, ould exclude from the profession most of those ght up at the larger schools, such as Eton, Har- , Rugby, etc., however well they might be qua- d, by mental training, for the study of medicine. n, as to the period to be spent in study; if the miary means of students in general were suffi- ciently ample, it would be desirable to lengthen the period; but, on the other hand, there was in some quarters an evident inclination even to curtail the period of four years, as shown, for instance, in the proposal to divide the year into two sessions, each of four months. All were agreed, however, that study, to be profitable, must be spread over some time. There was a close analogy between the cultivation of the mind and the tillage of the soil; and it would be absurd to suppose that students could master all the subjects of medical science, unless they were required to attend to them for a considerable time. What was meant by the commencement of professional education? The Council had recommended that such education should commence at a medical school. But what was a medical school? He felt very much with Dr. Acland, that it was difficult to say plainly what the term meant. He would certainly, *à priori*, prefer an institution where the student could begin by hearing lectures on elementary subjects; but, when he looked back on his own experience, and remembered the details of their personal experience given by some of the members of the Council, and when he called to mind the fact that some of the best among his own pupils had commenced their studies in provincial hospitals, such as those of Exeter, Plymouth, Gloucester, Bedford, etc.—he could not say that there was only one plan that should be pursued. As to lectures, he did not think them worthy of being either generally extolled or generally disparaged. He did not see how such subjects as physiology and chemistry could be taught, except by lectures; but, with regard to practical subjects, this mode of instruction was less necessary, and might be dispensed with. Whatever might be the state of affairs in Scotland as to overburdening students with lectures, the time required in London was two hours daily; and if a student could not devote so much time as this to attendance on lectures, he was not, Dr. Burrows thought, fit for the medical profession. The point to be considered was, on what subjects lectures should be delivered, and what amount of time should be given to them. Medical students were, like other men, very variously constituted; some could derive advantage from lectures; others were capable of learning for themselves. But, in most cases, mental training was required; and this was afforded by lectures. Altogether, much was capable of being said on both sides of the question. He believed class and sessional examinations to be of great value in urging students forward in the acquisition of knowledge, and in pointing out where improvement was necessary. His experience in this matter had been like that of other members of the Council. Out of a class of 120, forty or fifty would at first attend his class-examinations; but these would gradually fall off, until the number diminished to ten or twelve—and these were the most diligent students, the men who least of all required the discipline of the examinations. The final examination should be made practical; but he would not say whether it should be divided into two or three parts. Referring to the observations on the army examinations made by Dr. Parkes, he said that it would be impossible, when the difference between the condition of the surgeon in the army or navy and the civil practitioner was remembered, to do otherwise than submit candidates for the public services to a practical examination. At the same time, he must vindicate medical students in general from the supposition that the instances brought forward by Dr. Parkes were to be regarded as average specimens of those who passed the examinations of the licensing boards. [Dr. PARKES said he had merely stated a fact; he quite agreed with the remarks made by the chairman.] The fact was that, for some reason, the public

service was at a discount in the profession; and that men of fair acquirements would not readily enter it without some extraordinary inducement. There must be some cause for this behind the scenes—something "rotten in the state of Denmark," if he might use the expression; and Dr. Parkes and his colleagues would do well to recommend the army authorities to make the service more attractive to the medical profession. As to publicity of examinations, it was very important that these should be made efficient; and if publicity could be safely carried out, it should be; but the oral part was the only one that could be so treated. The Council, however, must consider the question of supervision of examinations.

Mr. Syme said, with reference to the definition of a medical school, that it should possess a hospital and facilities for the study of practical anatomy. He was more and more convinced that the present system of examinations was imperfect. To practical examinations on living patients he was opposed, because the plan was not consistent with the principles on which patients were admitted into hospitals, and moreover, because it was impracticable. Suppose that a student were examined on a case of fractured bone, was he to be required to move about the ends of the bone and detect the crepitus? He did not see how any such examination could be made, except something very superficial—a mere sham. Even supposing that two or three candidates might examine a patient, a hundred could not. With regard to class-examinations, Dr. Paget had said that students could cram for them. His (Mr. Syme's) plan was this. The patients were brought into his class-room, and examined before the students; and each student taking part in the class-examinations was required to take notes of the cases. On a certain day, the students had a list of the cases given them, of which they were expected to write the histories. Dr. Corrigan had accused the Scotch universities of disobedience to the recommendations of the Council. Now, these bodies had acted under the directions of the University Commissioners, which they could not oppose; but, when they differed from the Council in words, they did so in such a manner as not to appear mutinous. The statements of Dr. Parkes with regard to the army medical service had much interested him. There was once a chair of military surgery in the University of Edinburgh. Now, he had always held, that those who were intended for the public services should study for a time at some public hospital; and, on the death of Sir George Ballingall, the chair of military surgery had been, on his (Mr. Syme's) representations, abolished. When the hospital at Netley was established, he had believed that his wishes were being fulfilled; but then, unhappily, the system of entrance examinations was introduced. It might be, that some of the candidates for the army were unqualified; but, if the licensing bodies had failed in their duties, what had the Council done? Had it expressed to the various boards what was necessary? Year after year it had published a list of practitioners; and in that list were the names of those who had given no evidence of being fully qualified for the practice of their profession. He was quite sure that if the House of Commons were to call on the Council to say what they had done to rescue the public from unqualified practitioners, the answer would be difficult. Returning to the subject of army medical service, he said that the licensing boards should do their duty, and that the candidate should have a certificate of fitness from a clinical teacher. He should then study at Netley Hospital for six months; and, if not then found properly qualified on examination, should be dismissed. He had listened with much pleasure to the opinions expressed regarding lectures. But there was no good thi which might not be rendered evil; and, while go lectures were the best means of instruction, an exce of lectures was bad, inasmuch as it prevented pra tical study. The demonstrator of anatomy in t university of Edinburgh had informed him, that t second and third years' students had only one hou day for practical anatomy. Lectures in excess also p vented students from exercising their own minds. had never—however much it might surprise hearers—attended a lecture on surgery. He object to certificates, but was in favour of the registrati system. He rather regretted that the apprenticesh system was ignored by some of the boards. It migh he thought, supersede the first year of study at medical school, provided the pupil had some acquain ance with anatomy. He suggested that Dr. Thoms should withdraw his amendment, and he (Mr. Sym his motion, and that the whole subject be referred a committee.

Dr. Thomson said that he had not expected th the amendment, drawn up by Dr. Sharpey and hi self, was to be adopted in the precise form in whi it stood. He would willingly agree to Mr. Sym proposal, provided it were understood that, wh there were some matters which must be deferr there were also some which might be reported on once.

After some further remarks, the votes were take when there appeared, for Dr. Thomson's amendme 2; against it, 14. It was consequently lost. Syme's motion, on being put to the vote, was una mously negatived.

Dr. Storrar moved, and Dr. Christison seconde "That the seventeenth recommendation of t Council be adopted."

Mr. Syme moved as an amendment, and Dr. A drew Wood seconded, that the whole subject of m dical education and examination should be refer to a committee.

After a short discussion on the order of busine the hour of adjournment having arrived, the furth consideration of the subject was postponed.

Tuesday, May 3rd.

G. Burrows, M.D., President, in the Chair.

The minutes of the last meeting having been r and confirmed, Mr. Hargrave moved, and Cooper seconded:

"That the Council resolve itself into a Commit on Education, and that the President be reques to take the Chair."

Dr. Christison proposed as an amendment:

"That the Council do not resolve itself into a neral Committee of Education; but that a Sel Committee be now appointed for the purpose of c sidering the recommendations of the Council on p fessional education, and the various motions notices of motions as to education, which have b submitted to the Council, with the view of prepar such a report on medical education as may be p sented, and, if approved, passed during the pres session."

He thought that so much important matter had b elicited in the discussion that had taken place, would enable the Committee to frame a report wh would be generally acceptable to the Council, which might go forth to the examining bodies. did not think that the Committee could enter i all the subjects, and least of all into the detail education; but there were points on which the Co cil was unanimous, or nearly so; and on thes report might be made at once.

Dr. Storrar seconded the amendment.

Dr. CORRIGAN thought the adoption of the amendment would only lead to the renewal of what he considered a fruitless discussion. In 1859, the course of referring the subject of medical education to a special committee had been adopted; but being found useless, had been given up. He believed that the course at present proposed would lead to no more satisfactory result than it did five years ago.

Mr. SYME said that the circumstances were very different. The members of the Council had never fully expressed their opinions on medical education until the present session; but during the last three years the subject had been fully discussed; and there were materials on which the Committee could form a satisfactory report embracing general principles.

Dr. STORRAR said that the Committee of 1859 had been a great success instead of a failure. Its report had been adopted, and was the basis of all that had taken place in regard to medical education up to the present time.

Dr. ANDREW WOOD objected to the remark of Dr. Corrigan, that the discussion had been fruitless. Was the Council to consider details first and then principles? To do this, would be like what was called in Scotland "Jedburgh justice,"—hang a man first, and try him afterwards. He regarded the debate as one of the most useful that had taken place in the Council; and he believed that it would show the public that the Council was a reality and not an abstraction. A series of motions had been founded on the debate, which, if sent to a working committee, would be put into a practical form. Was the Council to do nothing but spend eight or ten days in the condition indicated by the poet—

"Man never is, but always to be, blest"?

a report could be drawn up and agreed to, it would show the licensing bodies that the Council was determined to do what it could to make education and examination efficient.

Mr. HARGRAVE opposed the amendment; and after some remarks by Mr. RUMSEY and Mr. ARNOTT, it was carried by a majority of 18 to 2.

Dr. CHRISTISON then proposed, Mr. SYME seconded, and it was, after some discussion, agreed that the Committee consist of the following members: Dr. Christison (Chairman); Mr. Arnott; Dr. Paget; Mr. Storrar; Dr. Alexander Wood; Dr. Thomson; Mr. Apjohn; Dr. Parkes; and Dr. Stokes.

The Medical Act. The REGISTRAR read the reports of the Medical Acts Amendment Committee, referred to the Branch Councils, and the Resolutions of the Branch Councils respecting them. On the motion of Dr. CORRIGAN, seconded by Dr. SMITH, these documents were ordered to be entered on the minutes.

Dr. CORRIGAN then moved:

"That the proposed Medical Bill, as amended by the Medical Acts Amendment Committee of last year, be forwarded to our solicitor, with directions to have it drafted, as soon as possible, and returned to the Executive Committee;

"That the Executive Committee take means to have the Bill so drafted laid on the table of the House of Commons, at the commencement of next session of Parliament;

"That a copy of the Bill so drafted be forwarded without delay by the Executive Committee to the Branch Councils, to the several bodies enumerated in Schedule (A) of the Medical Act, to the Pharmaceutical Society, and the press; so that all parties concerned may have ample opportunity, in the interval between publication of the Draft Bill and next meeting of Parliament, of considering the Bill, and of suggesting such Amendments as they may desire;

"That the General Medical Council meet at as early a period as may be necessary next year, to consider the various Amendments that may be suggested in the interval, in order to insert in the Bill such Amendments as may meet their approbation."

Dr. STORRAR moved as an amendment, and Mr. ARNOTT seconded:

"That looking to the great diversity of opinion which exists in Great Britain, in regard to the objects which it is desirable to obtain by an Amendment of the Medical Acts, it is not at present expedient that the Council should engage in fresh legislation."

On the motion of Dr. ALEXANDER WOOD, seconded by Mr. HARGRAVE, it was agreed:

"That the debate on the Amendment of the Medical Acts be adjourned until Wednesday, the 4th of May."

The debate on the subject was accordingly adjourned. [We must reserve the report of the speeches until next week.]

Report of Finance Committee. Dr. SHARPEY, as treasurer, presented the report of the Finance Committee, which was ordered to be received and entered on the minutes. The Report showed that the income of the Council, from all sources, during the year 1863, had been £5,467 : 1 : 7; and the expenditure £4,549 : 7 : 7; leaving a balance of £917 : 14 in favour of the Council. The Report also contained a statement of the expense of the *British Pharmacopœia* from the commencement, which amounted to £6,229 : 6 : 5. To meet this, £4,937 : 11 had been received for copies sold, and £85 : 3 remained due for copies supplied to Her Majesty's Government, making altogether £5,022 : 14. There was thus an excess of expenditure amounting to £1,206 : 12 : 5; to meet which, the Council had in stock copies of the work, of which the value was estimated at £2,790.

The Chemists and Druggists and the Medical Act. An application from "The United Society of Chemists and Druggists" to be heard against proposed amendments of the Medical Act, with resolutions passed by that society, were read, and ordered to be entered on the minutes.

The Council Minutes. Dr. SMITH proposed, Mr. HARGRAVE seconded, and it was resolved:

"That a copy of the two volumes of the *Minutes of the Medical Council*, be presented to each of the Universities and Corporations in Schedule (A) of the Medical Act."

Mr. ARNOTT moved, Dr. STOKES seconded, and it was agreed to:

"That a copy of the Letters from the bodies mentioned in Schedule (A) to the Medical Act, explanatory of their Regulations, be presented to each of the Universities and Corporations in Schedule (A)."

Dr. FLEMING withdrew, by leave of the Council, a notice of motion which he had given in reference to numbering the pages of the Minutes.

The Council then adjourned.

WEDNESDAY, MAY 4TH.

G. BURROWS, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

The Medical Act. A memorial from practitioners at Banbury, respecting Section 40 of the Medical Act, was read and ordered to be entered on the minutes; as was also a letter from the King and Queen's College of Physicians in Ireland, respecting the visitation of apothecaries' shops.

The debate on amendment of the Medical Act, adjourned from the previous day, was then resumed. Several members spoke on the subject, after which the amendment that had been proposed by Dr. Stor-

rar was put to the vote and lost; 4 voting for, and 13 against it.

Dr. Alexander Wood then proposed, and Dr. Sharpey seconded, as another amendment to Dr. Corrigan's motion:

"That the Council, while appreciating the labour and care bestowed by the Medical Acts Amendment Committee on the heads of a Medical Bill proposed in their Report, regret that it is impossible, at this late period of the Session, to enter on the full consideration of so wide and important a subject;

"That the Council request the Branch Councils, in the interval between this session and the succeeding one, to consider how Clauses XX, XXXI, and XL of the Medical Act could be best amended;

"That the Council resolve to appoint an early day, at their meeting next session, for the consideration of the whole subject."

Further discussion took place; and the amendment was carried by a majority of 10 to 9. Dr. Corrigan required that the names of the majority and minority should be entered on the minutes. These were: *For the Amendment:* Dr. Alderson; Dr. Paget; Dr. Embleton; Dr. Storrar; Dr. Alexander Wood; Mr. Syme; Dr. Leet; Dr. Sharpey; Mr. Rumsey; and Dr. Christison: *Against it:* Mr. Arnott; Dr. Andrew Wood; Dr. Fleming; Dr. A. Smith; Mr. Hargrave; Dr. Apjohn; Dr. Corrigan; Dr. Parkes; and Dr. Stokes.

The amendment was then put as a substantive motion, when

Dr. Andrew Wood proposed, and Mr. Hargrave seconded, the following amendment:

"That it be remitted to the Executive Committee to have drafted by a Parliamentary Solicitor a Bill, having regard chiefly to Clauses XX, XXXI, and XL of the Medical Act; that the Bill so drafted be transmitted confidentially to the Branch Councils for their opinion; that thereafter the Bill be re-drafted, so as to be in a condition to be submitted to the General Medical Council at its next meeting."

After more debate, the votes were taken, when there appeared, for Dr. Andrew Wood's amendment, 6; against it, 14. It was consequently lost. Dr. Alexander Wood's motion was then carried by a majority of 13 to 8.

An Application from Mr. Thomas Edis, to be replaced on the *Register*, his name having been omitted through change of residence, was ordered to be complied with.

The Case of Robert Jacob Jordan was brought under the notice of the Council; and after some discussion as to the proper mode of proceeding in the circumstances of the case, it was resolved, on the motion of Dr. Alexander Wood, seconded by Dr. Andrew Wood:

"That the name and qualification, as Licentiate of the Royal College of Physicians of Edinburgh, of Mr. Robert Jacob Jordan, be removed from the *Register*."

A letter having been read from the secretary of a reading society at Croydon, respecting an indecent publication, it was moved by Dr. Corrigan, seconded by Dr. A Smith, and agreed to:

"That, as advised by their solicitor, there does not appear to the Medical Council to be any evidence to connect the publication with any registered practitioner, and that the publication referred to does not, therefore, come within the province of the Council."

On Thursday, the Report of the Committee on Medical Education was presented, and ordered to be printed, with a view to its being considered on Friday. The Council occupied itself in disposing of various motions and other business standing on programme which had been arranged by the Busin Committee; and, at six o'clock, again adjourned.

Association Intelligence.

SOUTH-EASTERN BRANCH: EAST KEN DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Rose Hotel, C terbury, on Thursday, May 19th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Thomas Boycott, M.D., *Hon. Sec*

Canterbury, May 2nd, 1864.

SOUTH-EASTERN BRANCH: WEST KEN DISTRICT MEETINGS.

The fourth meeting for the seventh session was h at Dartford, on April 29th; J. Armstrong, M. President of the Branch, in the Chair. There w present eighteen members and visitors.

Communications. The following papers were read:

1. Notes of the *Post Mortem* Examination of a C of Internal Strangulated Hernia. By John M. B ton, Esq.
2. Laceration of the Perinæum. By W. Hoar, E
3. Case of Chlorosis with Hæmorrhage. By Innes Nisbett, Esq,
4. Mr. Cooper Forster exhibited Aitken's The mometers (constructed by Casella), and discours upon their use in the detection of disease, stating t results arrived at by the German experimenters.

Condolence. The Secretary read a letter from M Martin, widow of the late Secretary to the Branc acknowledging the letter of condolence addressed her by the Secretary, on the part of the members, the West Kent district. Mrs. Martin expressed h self as being grateful for the sympathy felt for h and truly sensible of the esteem entertained for h late husband by the members of the district a Branch.

Dinner. After the usual vote of thanks, the me bers and visitors adjourned to dinner.

BENGAL BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held Calcutta on February 2nd. The retiring Presiden Norman Chevers, M.D., took the Chair, and del vered an Address on State Sanitation; after whic he resigned the Chair to his successor, Edwar Goodeve, M.B., who also made an address.

The following addresses were also delivered:—

On the Present State of the Medical Profession i Bengal. By S. G. Chuckerbutty, M.D.

On Recent Therapeutical Changes. By W. Bea son, M.D.

Officers and Council. The following are the office and Council of the Branch for the present year:— *President*, Edward Goodeve, M.B.; *Permanent Vic President*, Norman Chevers, M.D.; *Vice-President* S. G. Chuckerbutty, M.D.; T. E. Charles, M.D. *Treasurer*, Baboo Kanny Loll Dey; *Secretary*, Mo hendro Loll Sirca, M.D.; *Other Members of Counci* J. Fayrer, M.D.; S. B. Partridge, Esq.; Mouloi Tamiz Khan; and Baboo Money Loll Dutt.

Correspondence.

APOTHECARIES' COMPANY AND THE COMMENDATIONS OF THE MEDICAL COUNCIL.

LETTER FROM A. M. RANDALL, ESQ.

—Although the Court of Examiners of the So- f Apothecaries are extremely unwilling to enter ntroversy, they request me to forward for your tion the following resolution passed by the Me- Council, at their general meeting in London, 0th, 1863.

oved by Mr. Teale, seconded by Dr. Stokes; greed to:

iat the Medical Council, whilst appreciating eat value of the practical opportunities afforded student, who is a pupil of a regular member of ofession holding the appointment of surgeon to spital, general dispensary, or union workhouse; whilst considering that a year spent in such ge might be regarded as one of the four years nal study recommended by the Council, is hat such year of pupilage, apart from the ystematic study of the elementary ences of medicine, should not be con- the first year, but at some period e subsequent years of professional study." sequence of which resolution, the Court of rs on August 20th, 1863, issued the following

ce is hereby given that in accordance with ecent recommendations passed by the General al Council, the candidates for the license of this ty will be required to attend lectures and hospi- ractice during three winter and three summer ns only." I am, etc.,

ALFRED M. RANDALL,
Secretary to the Court of Examiners.

othecaries' Hall, April 28th, 1864.

e are not surprised that the Society of Apothe- s should not wish to enter into any controversy us on this subject. There is surely no necessity ny controversy. We made a statement, and ad- d facts in its support; and shall only be too y if the Society of Apothecaries will give us an rtunity of saying that our conclusion was wrong. stated, that the regulations of the Society of hecaries were not in accordance with the recom- dations of the Medical Council; the Medical ıcil requiring four years of professional study and Society of Apothecaries requiring three years. Society first of all answered our statement with a le denial, to the effect that its regulations were tly in accordance with the recommendations of Council. To this we replied, that the plain read- of its own regulations (as given in the *Medical ctory* of 1864) showed that this was not the case. is second letter, the Secretary of the Society does let it be observed, repeat his former assertion, its "regulations are strictly in accordance with recommendations of the Council"; but gives us, e suppose, the document upon which the Society ıed its regulations of 1863. Now, this document o recommendation at all; it is simply an opinion he Council. But granting that the opinion has force of a recommendation, still the Society is not onformity even with this opinion; for the Society far as we can find) has issued no regulations to effect, that the year of pupilage, which is to ton as a year of professional study, should not be conducted until after the first year of professional study; nor has it issued regulations requiring that such year of pupilage must be spent with a member of the profession "holding the appointment of surgeon to an hospital, etc." On the face of these facts, and as shown by the very document now forwarded to us by the Secretary of the Society, we therefore must again repeat, that the Society of Apothecaries' regulations are not in accordance with the recommendations of the Medical Council. And we must add, that we trust the Secretary of the Society will do us the justice either of confessing that he was in error when he gave so flat a denial to the statement originally made by us; or will point out in what particular the statement was incorrect. EDITOR.]

DIAGNOSIS OF OVARIAN FROM UTERINE TUMOURS.

LETTER FROM T. SPENCER WELLS, ESQ.

SIR,—In Dr. Routh's Lecture, published in your last number, page 464, there is a passage containing two statements which I think it necessary to correct, as they might convey impressions to your readers unfavourable both to M. Nélaton and to me, if I were to allow them to pass without notice.

The following is the passage to which I refer.

"The frequenters of the Samaritan Hospital last year may remember a remarkable case in one of Dr. Savage's beds, which made some noise about that time. This patient had gone the rounds of several of the London hospitals. The eminent accoucheur to one, after two careful examinations, said it was indubitably pregnancy. Another, similarly circumstanced in another metropolitan hospital, said it was ovarian disease; a third, that it was extrauterine pregnancy; a fourth, that it was a fibroid. An eminent French surgeon, then in England, stated in the most positive terms that it was a fibroid, although unconnected with the uterus. The majority amongst us, however, were of opinion that it was ovarian disease. An exploratory incision verified this diagnosis. Ovariotomy was performed by Mr. Wells, and the case did well."

Although the patient alluded to in this passage was under my care, I never heard that she had been to more than one hospital except the Samaritan; and the only "eminent accoucheur" who, to my knowledge, suspected pregnancy, certainly did not think it "indubitable"; on the contrary, he said distinctly that, if she were pregnant, it was some form of extra-uterine pregnancy. This, however, is a much less serious matter than the injustice done to M. Nélaton. So far from stating "in the most positive terms that it was a fibroid", M. Nélaton distinctly said to me and to Dr. Savage that he was uncertain as to the nature of the tumour, but that he was convinced (*je suis convaincu*, were his words) of its independence of this uterus. Then, as to the exploratory incision, I must say that no such incision was made. I was convinced of the possibility of removing the tumour, and did so without any exploratory incision.

The whole case, however, is one of such great interest, and there are so many points in which I differ from Dr. Routh's report of my patient, that I venture to ask you to publish the following remarks, which I made while the case was still fresh in my memory, and which were published in the *Medical Times and Gazette* of July 26th, 1862.*

I saw the patient a few weeks ago, and found that she had remained in excellent health.

* We regret that, through press of matter, we are forced to omit the remarks alluded to.—EDITOR.

I felt at the time, and still feel, so deeply indebted to M. Nélaton for the lesson which he gave upon the difference between associated and transmitted movements, in cases where it is doubtful how far an abdominal tumour is or is not independent of the uterus, that I could not allow him to be charged with a mistake in a case where he had really done a great deal to prevent mistake, and not beg for an opportunity of doing him justice. I am, etc.,

T. Spencer Wells.

3, Upper Grosvenor Street, May 2nd, 1864.

Medical News.

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 26th.

Appleby, Frederick Henry, East Retford, Notts (University)
Baker, George Benson, Southport, Lancashire (St. Mary's)
Bond, Thomas, North Petherton, Somerset (King's)
Browne, Edgar Athelstone, Notting Hill (Charing Cross)
Bruce, Alexander, Albert Terrace, Regent's Park (University)
Coghlan, William Boyle, M.A. Queen's Univ., Ireland, Manchester (St. Thomas's)
Dove, John R. B., Falfield, Berkeley, Gloucestershire (London)
Foster, John Frederick, Guernsey (St. George's)
Freeman, Henry Wm., Bideford, Devon (Middlesex)
Gibson, Robert Chapman, Fyfield, Ongar, Essex (Guy's)
Harris, Henry G. B., Coombe Down, Somerset (St. George's)
Hayward, John William, Seasalter, Kent (Guy's)
Lower, N. Holman, Lewes, Sussex (Guy's)
McCready, Edward McCankey, M.B. Trin. Coll., Dub., Birmingham (Dublin)
Meiklejohn, Robert Morris, Bombay (Edinburgh)
Rayner, Alexander Clement, Bedford (Charing Cross)
Shorland, Edward Peter, L.S.A., Westbury, Wiltshire (Guy's)
Siddall, Joseph B., L.S.A., Morton, Derbyshire (St. Thomas's)
Smith, Thomas Haywood, Alcester, Warwickshire (Guy's)
Turner, John Sidney, Seaford, Sussex (Guy's)
Viant, Henry, Totton, near Southampton (Guy's)
Wallis, Albert James, Cambridge (St. Bartholomew's)

Admitted on April 27th—

Adcock, Charles, Birmingham (Birmingham School)
Bullus, William, West Bromwich (Birmingham School)
Corban, Laurence, Cork (Middlesex)
Couling, Henry, Kingston Bagpuize (Guy's)
Davidson, Charles, Orkney
Ensor, Alfred, Dorchester (King's College)
Green, Thomas Henry, Saffron Walden (University College)
Haines, Richard Wheeler, L.S.A., Bromsgrove (King's College)
Hughes, John Henry, M.D. Queen's Univ., Ireland, Armagh
Langworthy, George V., Modbury, Devon (St. Bartholomew's)
Long, Charles Frederick, L.S.A., Ipswich (Guy's)
Lush, Wm. G. Vawdrey, L.S.A., Wilton (St. Bartholomew's)
McCandlish, William, Glasgow (St. Bartholomew's)
Madeley, George Henry, Kensington (King's College)
Maundrell, Edward, Calne, Wiltshire (University College)
Nason, Thomas Robert, Nuneaton (Guy's)
Powdrell, John, L.S.A., Farndon (St. Bartholomew's)
Reade, Albert Comberbach, Congleton (St. Bartholomew's)
Salter, John Henry, Arundel (King's College)
Simpson, Spencer Henry, Stowmarket (St. Bartholomew's)
Snape, Joseph, Liverpool (King's College)
Snell, Ebenezer, Plymouth (Middlesex)
Snook, James W., Wellington, Shropshire (St. Bartholomew's)
Spooner, William, Southampton (University College)
Yates, William, Richmond (Westminster)
Wearing, Allen, Lancaster (St. Bartholomew's)

Admitted on April 28th—

Adams, Arthur Bayley, Lymington, Hants (London)
Akerman, William, St. Just (University College)
Bailey, Frederic Charles, L.S.A., Woolwich (St. Bartholomew's)
Birt, Joseph, Leamington
Dawson, John, Great Yarmouth (London)
Eccles, William Soltau, Plymouth (St. Bartholomew's)
Hardin, Walter, Woolwich (St. Thomas's)
Hawkins, Edmund Woods, Commercial Road (London)
Hudson, Ernest Arthur, Queen Anne Street (St. Mary's)
Knapp, William Frederick, Headington (St. Bartholomew's)
Knott, Thomas Henry, Bath (Guy's)
Mackenzie, George Welland, Tiverton, Devon (London)
Maturin, Henry, Lymington, Hants (St. Bartholomew's)
Norton, Edward, Birmingham (Middlesex)
Raven, Thomas Francis, Cambridge (St. Bartholomew's)
Rayner, Henry, Hythe, Kent (St. Thomas's)
Richards, Frederick William, Winchester (St. Bartholo
Shaw, George H., Attercliffe, near Sheffield (St. Bartho
Smith, James Taylor, Newcastle
Steele, Henry O., Harlsey, Yorkshire (Guy's)
Tidy, Charles Meymott, Cambridge Heath (London)
Weld, Charles Humphrey, Tenterden, Kent (Middlesex)

Admitted on April 29th—

Bradley, Charles, Nottingham (University College)
Burnham, Ralph, Preston, Yorkshire (Westminster)
Chabot, Frederick, Camberwell Road (St. Thomas's)
Coward, William Robert, South Shields
Cropp, Frederick John, Clapham (St. Bartholomew's)
Davies, Herbert, Llanybyther, Carmarthenshire (Univ.
Duckering, Samuel, L.S.A., Grantham
Dyer, Edward, Canonbury (Charing Cross)
Eck, Vincent Frederick, Cleveland Square (St. Bartholo
Heygate, Wm. Nicholas, Hanslape, Bucks (St. Thomas's
Hope, Henry, Richmond (St. Bartholomew's)
Iles, Daniel, L.S.A., Fairford, Gloucestershire (St. Thon
Sankey, George Frederick, Maidstone (St. Thomas's)
Shrapnel, Joseph N. S., L.S.A., Isle of Wight (University
Snaith, Francis, Boston, Lincolnshire (St. Thomas's)
Thomas, Robert Wrentmore, Bristol (St. George's)
Wagstaffe, William Warwick, Lambeth (St. Thomas's)
Whitworth, James, Port Talbot, Glamorgashire (Univ.
Williams, David Martin, Calcutta (Charing Cross)
Winn, Algernon William, Scarborough (King's College)
Winter, Robert, Hampstead (St. Mary's)

Apothecaries' Hall. On April 28th, the following Licentiates were admitted:—

Blick, Thomas Edward, Islip, near Oxford
Sutcliffe, William Henry, Manchester

At the same Court, the following examination:—

Thomas, David Howell

APPOINTMENTS.

*Coleman, E. H., Esq., appointed Consulting-Surgeon to Staffordshire General Hospital.

Royal Navy.

Gilmour, R., Esq., Assistant-Surgeon, to the *Euryalus*.
Lauder, Edward, Esq., Assistant-Surgeon, to the *Fisgard*.
Molloy, Gerald, Esq., Assistant-Surgeon, to the *Indus*.
Pursell, Thos., Esq., Acting Assistant-Surgeon, to the *Adv*
Smyth, W. D., M.D., Surgeon, to the *Archer*.

Militia.

Perkin, R. C., Esq., to be Assistant-Surgeon 1st Warwi Militia.
Watson, W., Esq., to be Assistant-Surgeon 1st Regiment Lancaster's Own Militia.

Volunteers, (A.V. = Artillery Volunteers; R Rifle Volunteers):—

Briggs, H., M.D., to be Assistant-Surgeon 3rd Adminstrativ talion Lancashire R.V.
Gradwell, W., Esq., to be Assistant-Surgeon 3rd Adminis Battalion Lancashire R.V.
Livett, H. W., Esq., to be Hon. Assist.-Surg. 10th Somerset
Newstead, G., Esq., to be Surgeon 3rd West Riding R.V.
Oswald, J. W. J., Esq., to be Hon. Assist.-Surgeon 7th Essex
Shillito, J., Esq., to be Assistant-Surgeon 3rd West Riding
Simpson, J. H., M.D., to be Surgeon 4th Administrative Bat West Riding R.V.
Storey, J., Esq., to be Assistant-Surgeon 1st Northumberland
Storrs, R., Esq., to be Assistant-Surgeon 4th Administrative talion West Riding R.V.
Wyllie, G., Esq., to be Honorary Assistant-Surgeon 22nd Re shire R.V.

DEATH.

*Cooper, Henry R., Esq., at Ixworth, aged 49, on May 2.

Sir Joseph Olliffe contradicts a rumour w is being circulated, that it is his intention to r from the practice of his profession in Paris.

Laval University, Quebec. The Council of University have conferred the honorary degre LL.D. upon Dr. Gibb of Portman Street.

National Association for the Promotion Social Science. A special meeting was held a Waterloo Place, on Tuesday, May 3rd, when a Re on Inquests held during the year 1862-3 in the C tral District of Middlesex, was read by Dr. Lankest

OYAL COLLEGE OF SURGEONS. Two hundred and nteen candidates lately underwent their primary nination at the College of Surgeons in one fort- it! The fact augurs well for the coffers of the ege.

UBLIC ESTIMATE OF MEDICAL MATTERS. It is thy of note, as showing the estimation in which public hold the affairs of the medical profession, not a word of notice has hitherto appeared in *Times* touching the meeting of the Medical Coun- and the remarkable debates there carried on.

MERICAN ADULTERATION. A parcel of opium, e of which consisted of cakes evidently unbroken, lately delivered to a laboratory in Philadelphia; of the cakes, previous to being prepared for dry- was broken, and found to contain sixteen leaden ets, weighing seven and a half ounces, evidently rporated for increasing the weight.

HE MEDICAL BENEVOLENT COLLEGE. We must ind our readers that the Twelfth Festival Dinner he Medical Benevolent College will be held on 14th inst., at Willis's Rooms. We call especial ntion to the fact, because on this occasion, and t t time, one of our own profession, Sir ofessio cock, occupies the chair. We trust the inion, t ill not fail to show by their presence that ical and to support one of their own class, as ancillary sci gest nobleman of the land.

ed du g t N-GENERAL HAMMOND. The prosecution con t-martial upon Surgeon-General Hammond nine ently closed without establishing one of the e. s set forth in the indictment against him. A nti of a million of the public money has been ended in a vain attempt to blast the reputation an officer whose administration of one of the most portant Government Bureaux has challenged the niration of the medical profession of this and eign countries. (*American Medical Times.*)

MEDICAL ADVERTISING. Hanging out the sign- rd seems to be looked upon as the shortest road to dical success in the present day; not the legitimate play of the name-board before the shop or amongst he trade," but the flaunting of name with alpha- ical tail and sonorous titles before the public eyes every occasion when a peg can be found on which hang the placard. To "keep the name before the blic" in any phase or by any means is the great dern medical maxim, and it is evidently considered many medical men far easier to stuff their names d qualifications down the public throat than to ke themselves celebrated by hard work and honest our. (*Dub. Med. Press.*)

TOOTH-DRAWING A PLEASURE. The *New York Den- Review* writes as follows: "We are under the ne- ssity of believing that the world still progresses, in dental point of view, by the introduction of nitrous ide, as dentists are not afraid to take their own æsthetic. We must confess that chloroform or her we were unwilling to take ourselves, and never d to insensibility, and never gave it with entire edom from apprehension. But nitrous oxide we ve often taken for our own satisfaction, without e slightest deleterious effects, and the pleasurable nsations we feel are beyond description. *In fact it nders the much needed extraction of teeth a pastime of easure and happiness.*"

THE LATE DR. MAYNE OF DUBLIN. Dr. Robert ayne died of fever on April 7th. He was just step- ng forward into the first rank as a consulting-phy- cian. Although no man ever examined a fever case ith more care and forgetfulness of himself, yet he ared fever, and often said he knew if he took it he would die of it. He seemed to feel that the over- wrought medical man, who takes fever at fifty years of age, has but a very bad prospect of recovery. His first paper, entitled "Observations on Pericarditis," appeared in the seventh volume of the *Dublin Medical Journal.* It was published before the author had passed his examination at the College of Surgeons. This able paper has since been translated into French and German. Dr. Mayne was engaged in the teach- ing of anatomy for more than fifteen years. He laboured well in this department, and the numerous beautiful preparations and dissections existing in the museum of the Carmichael School prove this, as well as the articles upon "The Optic Nerve," and "The Perinæum," in Todd's *Cyclopædia.* But it was when he became Physician to the South Dublin Union Workhouse that his ability and industry, and the practical grasp of his mind was fully displayed. He began now to form an unrivalled collection of pa- thological drawings. His contributions to the Patho- logical Society were now very frequent. Of these we can but mention a few: "Adhesive Phlebitis," "Purul- lent Cysts of the Heart," "Malignant Tumours of Ab- domen and Pelvis," "Induration of Brain," "Bronchial Phthisis," "Cerebro-Spinal Arachnitis, "Aneurism of the Base of the Brain," etc. Two very important papers were published, the first in vol. vii of the *Dublin Quarterly Journal,* upon "The late Epidemic of Dys- entery in Dublin"; the second in vol. x of the same, entitled "Observations on Chronic Dysentery." A perusal of the list of his works shows that Dr. Mayne was a laborious student to the last. In addition to constant industry in acquiring by observation fresh knowledge for himself, he had a most admirable manner in imparting it to others. It is but a very few years since he began clinical teaching, when he was appointed Physician to the Adelaide Hospital. Dr. Mayne's loss will be felt by the profession. He was a straightforward honest man, one who was above taking any advantage of a professional brother in any way—above resorting to any trick to ingrati- ate himself with patients. If it is a fault to be modest when others would be proud, this was his. A man of this stamp upholds the character of our pro- fession, and *is* a loss. Again, those who met him in consultation know the care he took of the reputation of his junior; there was no needless change of treat- ment, no innuendo, no shrug of the shoulder. He did unto others as he would they should do unto him. As a consequence of all that he was, he had the unani- mous confidence and warm regard of every member of the profession who knew him. By his profession he would very soon, had he been spared to us, been placed in the foremost rank. Dr. Mayne was an ap- prentice of Dr. Beatty's. He was an A.B. and M.B. of Trinity College, and Licentiate and Fellow of the College of Surgeons at first. However, upon becom- ing a Fellow of the King and Queen's College of Physicians a few years ago, he resigned his Fellow- ship at the College of Surgeons. He was educated at the Richmond, Whitworth, and Hardwicke Hospital. At the time of Dr. Graves' death, when Dr. Lees was appointed to the Meath Hospital, he succeeded the latter at the South Union Workhouse, where he laboured until three years ago, when he was elected Physician to the Adelaide Hospital; besides this, he held at the time of his death the offices of Examiner and Censor in the College of Physicians, and Physi- cian to the Post Office. His remains were followed to the grave by a vast number of his professional brethren. About two hundred students from the Adelaide Hospital and Carmichael School followed the hearse, and, when the cemetery was reached, took the coffin upon their shoulders and bore it to the chapel and thence to the grave. (*Dub. Med. Press.*)

The Dental Hospital of London. The second anniversary festival of this institution was celebrated on the 27th ult. Last year 12,250 persons attended the hospital, and this relief included nearly 8,000 extractions, and over 2,000 gold, foil, and other filings. The school continues in a satisfactory state. The number of students has largely increased.

Odontological Society. At the last monthly meeting held on April 4th, Edwin Saunders, Esq., in the chair, a number of casual communications were made on various models then presented to the Society's museum. The secretary read a paper by Mr. H. Kyan of Preston, on the Extraction of Teeth and Roots as a Preparation for the Introduction of Artificial Substitutes. The author considered that the presence of roots in the mouth impaired the breath, and prevented uniformity in the resisting surface of the gum, thereby causing unsteadiness of the artificial substitutes. They could not, as a rule, be subjected to pressure without occasioning disease. His experience led him to adopt the practice of extracting all teeth and roots which were liable, even remotely, to occasion future trouble. The discussion that followed elicited the opinion of the Society to be in favour of conservative surgery; and that as a rule it was far more desirable to preserve than to extract all teeth and roots. The thanks of the Society were accorded to Mr. Kyan, and a paper on "Some forms of Irregularity and their Treatment" by Mr. Cartwright, was announced for the next meeting.

"Spell" Medicine. At the Penryn Petty Sessions, Jane Lacy, a "cunning woman" was charged with having pretended to use subtle device and craft in order to remove a "spell" from Mrs. Joanna Bate, who died on March 21st. Mrs. Bate had been suffering from bad legs, and was advised to call in Mrs. Lacy, who said she "had a spell upon her, but, with the help of God, in five weeks she would be the woman she was seven years ago." The prisoner further said that a person had "wished" that Mrs. Bate's arms might fall useless at her side, and that she might be struck blind; but that instead of the "wish" being fulfilled, the spell had fallen on her legs. She described the person who had "ill-wished" Mrs. Bate, and said the spell had fallen on her when the planets were crossing the moon. She administered medicine and gave lotion for rubbing the legs, and altogether charged £1:12:6 for her services, which amount was paid. Before operating she required a lock of Mrs. Bate's hair. The magistrates committed her to two months' imprisonment, with hard labour.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.15 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. G B. Brodie, "Statistics of Queen Charlotte's Lying-in Hospital"; Mr. Berkeley Hill "On the occurrence of an additiona Muscle to the Subclavius."—Zoological.—Ethnological.

Wednesday. Microscopical.—Geological.

Thursday. Royal Society.

Friday. Royal Institution.—Astronomical.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Erratum.—At page 471, for "William Dale, Esq.", read "William Date, Esq."

We have been forced to postpone much correspondence in consequence of the length of the Medical Council reports.

Communications have been received from:—The Registrar of the Medical Council; Mr. T. M. Stone; Dr. Frederick J. Brown; Mr. Lowndes; Mr. Brodhurst; The Honorary Secretary of the Harveian Society of London; Dr. J. West Walker; Dr. Gibb; Dr. Boycott; A Surgeon; Mr. Haynes Walton; Dr. Philipson; Mr. A. M. Randall; Mr. Reginald Harrison; Mr. C. F. Maunder; Mr. J. Z. Laurence; Mr. Christopher Heath; Mr. W. Date; Mr. T. Jackson; Dr. Lionel Beale; Dr. Drew; Dr. Falconer; Mr. H. Terry; Mr. Thomas Jones; The Honorary Secretary of the Royal Medical and Chirurgical Society; Mr. William Martin; Dr. J. Hughlings Jackson; Dr. Holman; Dr. T. Stephens; Mr. T. Spencer Wells; Mr. Gaskoin; Mr. F. M. Edge; Rev. W. J. Morrish; Equitas; Dr. J. Lorimer; Mr. S. N. Harrison; Mr. J. Vose Solomon; and Dr. Richardson.

BOOKS RECEIVED.

1. Second Annual Report of the Cumberland and Westmoreland Lunatic Asylum. Carlisle: 1864.
2. The Eighth Annual Report of the United Lunatic Asylum, Nottingham.
3. Diseases of the Throat and Windpipe. By G. D. Gibb, M.D., M.A. Second edition. London: 1864.
4. The Economical Use of Fuel and the Prevention of Smoke. By F. Edwards, jun. London: 1864.
5. Report of the Richmond District Lunatic Asylum, Dublin, for 1863. Dublin: 1864.
6. The Practice of Employing Certain Substitutes for the Genuine Ingredients in some Articles of Daily Food. By a Lady. London and Brighton: 1864.
7. Sussex Lunatic Asylum: Fifth Annual Report, for 1863.

ADVERTISEMENTS.

Medical.—A Gentlemen, 30 years of age, qualified, and who can give most satisfactory references regarding moral character and steadiness, wishes an Out-door Situation as ASSISTANT in the Country.—Address C. Y., Post Office, Whitstable, near Canterbury, Kent.

Prize Designs.—"As affording the most striking contrast, Mr. Benson shows with these a fresh exhibition of modern watches, with cases made from Prize designs at the South Kensington Museum, some of which are fine specimens of engraving."—*Times*, Sept. 15, 1862. Chronometer, duplex, lever, horizontal, repeaters, centre seconds, keyless, split seconds, and every description of watch. adapted to all climates. Benson's Illustrated Pamphlet on Watches (free by post for two stamps) contains a short history of watchmaking, with prices, from 3 to 200 guineas each. It serves as a guide in the purchase of a watch, and enables those who live in any part of the world, to select a watch, and have it sent safe bypost. Prize Medal and Honourable Mention, Classes 33 and 15. J. W. Benson, 33 and 34, Ludgate Hill, London. Established 1749.

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Introductory Lecture

ON

THE HISTORY OF MIDWIFERY.

DELIVERED AT

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BY

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GENTLEMEN,—The regulations of the examining bodies, which have restricted lectures on Midwifery to a short summer course, have obliged me to use the strictest economy in the disposal of that period. Hence I have avoided as much as possible giving "Introductory Lectures." However, the progress which midwifery has certainly made as an art, and the attention which it is now receiving, led me to the conclusion that it might be well to give you an outline of its history, in order to point out to you the course which it has steadily but gradually pursued, and the results which it has obtained; and especially to warn you of the shoals and rocks which lie in the way of those who would embark upon its waters, and hope to pilot themselves safely to a harbour of success.

In the history of midwifery, it is not necessary for me to occupy your time with details of its early origin. I need not commence with Esau and Jacob, and detail to you the several remarkable births in the Sacred Writings. I shall not dwell upon the midwifery of the Greek, Roman, and Saracenic periods; it will be sufficient if I prove to you that, when the delivery of women was left almost exclusively to their own sex, the great fathers of medicine, Hippocrates and Celsus, did not neglect midwifery. After them, Moschion, Ætius, and Paulus of Egina, followed up the subject, and published several very valuable observations.

Some idea may be formed of the state of midwifery in the days of Hippocrates, from the simple fact that he laid down the rule that, when the child lies either across the womb or presents the feet, the woman cannot be delivered; and compares the case to an olive in a bottle, which can easily be drawn through lengthways, but, if the olive be thrown across the neck of the bottle, it cannot be extracted without either crushing the olive or breaking the bottle.

Celsus had a faint idea of the operation of turning when he stated that, in cross births, the hand should be directed to the head *or the feet*;* but, unfortunately, the efforts were always directed to replace the head, but not to seize the feet.

Ætius, who wrote about the fourth century, compiles the works of his predecessors: pointing out that malposition of the child was not the only difficulty in delivery, but also that the maternal parts may also interfere. He mentions narrowness of the pelvis, anchylosis of the os pubis, and the presence of polypi, as causes of obstruction; and further adds, that the soft parts themselves are sometimes a cause. To remove these difficulties, a plan was proposed, which is worth your notice. Adopting a suggestion of Philumenus, he observes: "The surgeon may see the cause of difficulty by distending the pudendum with an instrument":† that is, with a speculum. Such had been the practice of those days, to distend the vulva, vagina, and, if possible, the os uteri, to see the difficulty in the way of the child's delivery. The effects of such practice soon shewed themselves, in producing inflammation and increased difficulty in the delivery; it was, therefore, given up. The use of the speculum, however, has been revived for another and most useful purpose; and, strange to say, the opponents of that instrument have not hesitated to bring forward the practice of the days of Ætius, and the very instrument itself then used, as a powerful objection to its use in the present day; as if the passage of an instrument into the vagina for the purpose of examining the non-gravid os uteri were the same thing as the introduction of a dilator to force open the perinæum, the vagina, and even the os uteri itself, for the delivery of the child. Ætius also describes a crotchet (*uncinus attractorius*) very like what Mauriceau had figured twelve centuries afterwards. He alludes also to a double crotchet, applied and used very like the modern forceps.

Such was the knowledge of midwifery among the Greeks and Romans. Among the Saracens, we find a further advance. Serapion, Rhazes, Avicenna, Albucasis, all wrote on midwifery. Rhazes invented the fillet; and Albucasis describes a forceps similar in its object to the present forceps—that is, to save the child.

The advance which midwifery was making was, however, arrested; it could make no advance in the darkness of the middle ages. The knowledge formerly acquired was completely lost; and when the art of printing first shed its faint light on the surrounding darkness, we obtain some slight knowledge of its position. We find, in the year 1565, Dr. Raynaldi publishing a translation of Rhodion's work, which was held in great esteem throughout Europe; nevertheless, it omits all the knowledge published by the Arabian physicians, and contains all the mistakes of Hippocrates, and the most objectionable features of his practice. The title of Raynaldi's book is sufficiently expressive of the pompous style adopted by some of his successors—pompous in proportion to the ignorance it betrays. It is called *The Birthe of Mankind; or, the Woman's Book.* It was printed in black letter; and contained numerous precepts and recipes for midwives, as well as domestic hints to the patient herself, even to the use of cosmetics. This work, intended to benefit midwives, received from them the strongest opposition; it was looked upon as an inroad upon their profession, and an interference with their practice.

The breach made was actively followed up. The physician and the surgeon began to give obstetrics more of their attention; and, in 1573, Ambrose Parè had even the temerity to open wards in the Hôtel Dieu for the purpose of instructing midwives. His rash experiment would have failed, had he not some means of proving his superior knowledge. At that time, the opinion of Hippocrates prevailed, that a woman having a cross-birth could not be delivered; and the only attempt ever made to save the woman

* "Medici vero propositum est, ut cum manu dirigat vel in caput *aut etiam in pedes*, si forte aliter compositus est." (Celsus.)

† "Chirurgicus autem difficultatis causam, *per instrumentum* pudendum diducens, conspicatur." (Ætius.)

was to try and replace the head. Ambrose Parè proved that, by seizing the feet, the child could be safely extracted.

This fact at once caused a revolution in practice; and his pupil Guillemeau brought it more strongly forward in 1598, in a work which he called *The Happy Delivery of Women*. Turning the child was the remedy, not only in cross-births, but even in difficulties when the head presented. The Hôtel Dieu became the great centre for instruction, not only in surgery, but in midwifery; and here we find Mauriceau standing conspicuously forward, not only as a leading practitioner, but an eminent teacher of midwifery. His work *Sur les Maladies des Femmes Grosses et de ceux qui sont Accouchées*, was published in 1668; and is valuable, not because of the doctrines it contains, because many of these have been discarded, but because of the faithful account of his own experience. He gives a detail of about 800 cases, which may be read in the present day with as much interest as when they were published. Smellie, at a later period, did the same thing, and his work is thus rendered equally valuable.

I mention these facts the more particularly because it proves the extreme importance of clinical midwifery, and leads me to urge upon you its study; to learn to note the cases you attend accurately and briefly. If you do this with patience, you will by and by have an accumulation from which you may select, and if you please may publish, what perhaps may prove a valuable collection of obstetric practice.

In the time of Mauriceau, there was no way of extracting the child, or of saving the woman, but by Ambrose Parè's operation of turning, or by using the crotchet, not in the way now adopted, but by fixing it outside the head, either in the orbit, the mouth, or the chin. Mauriceau contrived a *tire-tête*, an instrument to be placed inside, not outside, the cranium; and, therefore, for this purpose, the head must be opened. This was done with a broad curved bistoury. Thus, the operation of craniotomy was introduced; which, in Mauriceau's hands, proved most successful, because, at the sacrifice of the child, the mother's life was generally preserved.

Nearly about the same time (1650), a physician appeared in England, as remarkable for the success of his practice, and the reputation in which he was held, as Mauriceau was in Paris. This was Dr. Chamberlen, who invented *a secret mode* of delivering women without destroying the child. His secret was the *forceps;* and whether he obtained the secret from Albucasis, or it was his own invention, its leading feature was its secrecy. The secret was closely preserved, being made known only to his sons, who also practised midwifery; and it became in this manner a family inheritance.

The reputation of the Chamberlens spread, not only in England, but in France. They made the most unscrupulous use of their secret, delivering all cases indiscriminately. Mauriceau's *tire-tête* and Chamberlen's forceps stood opposed to each other; the advantage being in favour of Chamberlen, because the child was not destroyed.

Mauriceau was then in the zenith of his practice; and Dr. H. Chamberlen (the son) went to Paris for the purpose of selling his secret. He boldly asserted that it was in his power to deliver any woman without destroying the child. It so happened that Mauriceau had a case of labour, where the contraction of the pelvis was so great from mollities ossium, that he could not extract the child with the *tire-tête*. Labour was protracted to the eighth day; and Chamberlen expressed his surprise that so eminent a man as Mauriceau could not deliver the woman, promising to do so in half an hour. He was given the opportunity; but after several half-hours had passed, she remained undelivered. Chamberlen gave it up in despair. The woman died the following day; and, on inspection, the uterus was found ruptured. This Mauriceau attributed to the forceps; and claimed a triumph for his *tire-tête* over such a vile instrument. Thus commenced the controversy between craniotomy and the forceps, which has lasted ever since.

We are now in the seventeenth century of our history; and our attention is at once arrested by the illustrious Harvey. He did not think obstetric medicine beneath his attention; but applied his great mind to the development of its principles. In 1651, he published his *Exercitationes de Generatione Animalium, de Partu, de Membranis et Humoribus Uteri*. In these, he not only brought forward his new doctrine of generation, *omnia ex ovo*, which displaced the absurd speculations of previous physiologists; but he also explained his views on the mechanism of parturition. He advocates Ambrose Parè's rule of turning by the feet in transverse positions. He mentions cases of superfœtation in women whom he attended; and gives numerous illustrations of the durations of pregnancy both in man and the inferior animals. These essays, although no doubt composed long before, were not published until he had reached the advanced age of 73. To publish a work at such an age, when he could hardly hope to reap the profit of his industry, needs some explanation. The manner of the publication strongly proves the character of the man. Harvey lived in the troubled period of Charles I and the Commonwealth; and from the persecution he experienced in consequence of his heretical doctrine of the circulation of the blood, he had long retired from practice and from public life. He was not, however, idle; he employed the greater portion of his time in his researches on ovology, a subject which he had followed so entirely for his own amusement, that his observations would have been lost to the profession, had it not been for a visit paid to him by his friend Dr. Ent. Among the many subjects of philosophical interest which formed the topics of their conversation, that of generation was alluded to, when Harvey casually referred to his own observations. Dr. Ent requested to see them; and having done so, earnestly begged to have them published. After some friendly altercation, Harvey gave him permission, "either to publish them now or to suppress them till some future time."

"I went from him" (says Dr. Ent) "like another Jason in possession of the Golden Fleece; and when I went home and perused them, I was amazed that so vast a treasure should have been so long hidden."

Thus appeared a work, second only to his treatise on the Circulation of the Blood, in the important change which it produced in the opinions of the profession. Roonhuysen, in Holland, a contemporary with Chamberlen, invented the vectis, which was also kept secret, until two public spirited practitioners, Jacob de Vischu and Hugo van der Poll, purchased the secret, and at once made it known to the world.

Thus, while this era was remarkable for the intro-

luction of two very valuable instruments, which ıave introduced a most important change in the prac-ice of midwifery, it was also distinguished by the ntroduction of a principle which has had a most nischievous effect upon it. Midwifery was, in the he strictest sense of the term, an art; the mode of lelivery a secret to be learned; and a meddlesome nterference to abbreviate a natural process was con-sidered an evidence of superior skill. Even in the present day, the same doctrine has its advocates; and ı meddlesome midwifery is considered by no means a bad one. With regard to Chamberlen and Roonhuy-sen, the great patrons of this practice, I can only consider them in the light of fortunate empirics, whose inventive genius contrived instruments by which they could cut short any labour, and who, by the powerful aid of mystery, made it available to their own aggrandisement.

Reflecting on the lives of Harvey and of Cham-berlen, I cannot help contrasting the scientific emi-nence of the one with the trading spirit of the other; the persecution and poverty of Harvey with the affluence and reputation of Chamberlen. This unjust distinction seems not to have ceased even with their lives. When I first came to London I visited, like all strangers, the venerable pile which contains the ashes of your monarchs, your senators, your philosophers, your poets; and, while thus tracing through these a monumental history of your country, my attention was arrested by an imposing cenotaph to Chamberlen. Chamberlen in Westmin-ster Abbey! I could not help asking, where is Harvey? Echo answered, where? Chamberlen is, I believe, the only doctor (not a poet) there.

The seventeenth century is remarkable: first, for the great Harvey; secondly, for the introduc-tion of very important operations in the practice of midwifery—craniotomy by Mauriceau, and the forceps by Chamberlen. Hence, during this century, midwifery had been undergoing a gra-dual change in its character. Previously, it had been very much neglected; left altogether to mid-wives, unless the efforts of Nature failed in com-pleting the delivery; then, the "man-midwife" was called in. To ask for his assistance, under such cir-cumstances, implied the necessity for an operation always fatal to the child, and often extremely hazardous to the mother. The man-midwife might succeed in saving the mother; but his frequent want of success was anything but advantageous to him, and in no way contributed to raise him in public estimation.

The great success, however, of Mauriceau's cranio-tomy, in saving the mother's life in cases of great danger; and that of Ambrose Parè's operation of turning (introduced in the sixteenth century); and of Chamberlen's forceps in saving the child; caused a higher value to be placed upon his assistance. The gloomy apprehensions which clouded his character began to disappear; and more attention was conse-quently given to the improvement of midwifery.

The eighteenth century contains a much more nu-merous list of eminent obstetricians. Before then, no one but Harvey paid any attention to the me-chanism of parturition; it was assumed that the head of the child passed in the conjugate axis of the pelvis, and nothing more was thought about it until Sir Fielding Ould made it the subject of his attention. Sir Fielding Ould was master of the Dublin Lying-in Hospital in 1760, the immediate successor of Bar-tholomew Mosse, its founder. He visited Paris, and was present at a labour delayed in consequence of the funis being round the neck of the child. He had the opportunity of observing the head descend and recede several times, the direction being with face towards the shoulder. Those present considered it to be a preternatural position, and no doubt would have inter-fered; but, fortunately, a few pains completed the delivery. This fact was not lost on Sir Fielding Ould; and he made the manner in which the head is ex-pelled the subject of constant experiment. He proved that the head did not pass through the pelvis in the conjugate axis but obliquely; and thus made the first step towards the only true path of obstetric knowledge—a careful and strict observation of facts. He first endeavoured to determine by accurate re-searches, not from preconceived notions, the natural course of parturition.

At this period, the invention of Chamberlen at-tracted much attention. The high value attached to a means of delivery in difficult cases by which both mother and child could be saved, made "the secret mode of delivering women" a most desirable problem to solve. Those who could not find it out, made it their business to condemn it in every possible way. Dr. Maubray was in this predicament; and in his *Female Physician* found great fault with "the dan-gerous instruments then in use." The female physi-cian was the midwife, and she quite agreed with Dr. Maubray. Others took a different view; and inven-tive genius was placed on the rack to discover the secret. Some succeeded in finding out the principle of the construction. A series of cases were detailed by Giffard, and published by Dr. Hody, in which a forceps is figured, but made differently from Cham-berlen's. Afterwards, Chapman published a work especially for the purpose of making known the secret. The forceps of Chapman was similar to Gif-fard's; but that of Chamberlen was still a secret. The attention of the profession was now strongly directed to these instruments, and every effort made to improve them. The "man-midwife", as he was called, became an operator of no mean importance; being looked upon, not as he was formerly, the de-stroyer of human life; but as its preserver. Hence, obstetric instruments and their improvement occupied his entire attention; and though all agreed in offer-ing improvements, the different writers of the period present a remarkable contrast in their manner of sug-gesting them. We may compare Burton with Smellie. We find Burton offering to his readers a most complicated machinery in most bombastic lan-guage. After describing the different instruments then in use, he proceeds to observe:

"These dangerous and tedious ways of delivering women induced me to spend a few serious thoughts in order to contrive some more safe and expeditious method of relieving the fair sex, and I hope my labour has not been in vain; and as I always pro-fessed myself an advocate to serve my country to the utmost of my power, I do in this (as I have hitherto done upon all occasions) prefer the public good to my own personal interest, and, therefore, now take this method of laying open to the world the improve-ment I have made, that every person may be as capable of assisting the fair sex as myself." (P. 231.)

A patriotic spirit alone leads Dr. Burton to prefer the public good to his own private interest; and his

patriotism is expended in contriving an instrument which few but he himself could employ. These instruments are now in the possession of the Obstetrical Society—here is a copy of them. Compare the language and the instrument—the inflation of the one, the complexity of the other; and they will give you some general idea of the man who was the original of Dr. Sterne's celebrated character in *Tristram Shandy*, Dr. Slop, who broke the bridge of Master Shandy's nose with "his vile instruments". Very different was Smellie. To him we are indebted for leading improvements both in the forceps and other instruments, which are the basis of their present construction. He contrived the lock at present adopted in the English forceps. He also brought forward a scissors for perforating the cranium, in place of Mauriceau's knife; this, as improved afterwards by Denman, became the perforator. The crotchet was placed inside the cranium, in place of the *tire-tête;* and the present operation of craniotomy was thus established. But Smellie did more than this. He made no boast of his inventions, but carefully studied Nature. Every case he attended was matter for observation and thought. He was puzzled by the explanations given of the passage of the head through the pelvis. He found that Sir Fielding Ould was right in his view; but, in order to satisfy himself, he measured the pelvis in almost every direction. He found that the widest space in the brim was the transverse, and in the cavity and outlet the antero-posterior. He therefore laid it down, that the head entered the brim transversely, passed through into the cavity, changing into the antero-posterior, in which it was expelled. Thus, by a careful observation of facts, he revolutionised the theories of Mauriceau. He laid down rules for the forceps, never before understood; and placed operative midwifery on a foundation upon which the present superstructure is raised. Notwithstanding the reputation of Smellie, and his admitted skill in the application of instruments, such was the prejudice in the public mind against these operations, that he was obliged to perform his operations secretly. Chamberlen did so to conceal his invention; but Smellie was obliged to continue the practice, in order to avoid the attacks made upon him. His enemies were chiefly the midwives; and one of their strongest objections was the indecency of these operations—"the patient being exposed," etc. Smellie neither exposed his patient nor his instrument; nevertheless, they were not appeased. Dr. Burton attacked him, of course; but a more treacherous opponent assailed him under the assumed name of Mrs. Nihil. Smellie outlived these attacks, and laid the foundation of the present improvements in operative midwifery.

I have already stated that Smellie, like Mauriceau, published a large number of cases to illustrate his practice. These I should strongly recommend to your perusal. Study them, and learn how to note your own experience.

If we look back upon this course of obstetric history, we find that at first midwifery was scarcely considered to be worthy of the attention of medical men. The exertions of a few helped to remove this prejudice; but still it was considered as an art in which the ready application of instruments seemed to be the essential requisite. It was in no way viewed as an object of scientific research, except by the immortal Harvey. It now presents itself in a different light. Smellie brought the art of midwifery to a high degree of perfection; but to William Hunter we are indebted for a scientific knowledge of parturition. He followed in Harvey's footsteps, and carefully traced all the changes which take place in the uterus during gestation. He pointed out the provisions of Nature for the dilatation of the womb, the expulsion of the child, and the separation of the placenta. He demonstrated the muscular fibres of the uterus, and the arrangement of its arteries and veins. The result of his observations proved to him that midwifery was something more than an art. He found the artists of the profession too often only intruders on Nature's offices; and that sometimes her operations were not only interfered with, but frequently altogether deranged, by their ignorant meddling. He therefore enforced in his lectures the importance of viewing parturition as a natural process; that our attention should be directed to favour, not to hasten, the efforts of Nature. He objected in the strongest terms against the advocates of a quick and secret mode of delivery. His protests proved the extent to which the practice had been carried, and the mischief it had done. His views, supported by the clearest demonstrative evidence, soon began to effect an important change in the practice of midwifery. He effected a most essential improvement in checking uncalled for interference, and in placing the study of midwifery on its true basis by showing it to be the study of Nature.

To William Hunter we are indebted for following up what Harvey had begun, and for recalling the attention of the physiologist to a subject which has since been brought to a high state of improvement. He made embryology his study. He examined the successive changes in the ovum from the earliest germ to the matured infant, and seized with avidity every opportunity to illustrate his subject. The result was that splendid record of his industry, the *Illustrations of the Anatomy of the Gravid Uterus.* Whether we consider the success with which, under no common difficulties, he has demonstrated the development of the gravid uterus, of the fœtus, the general accuracy of his conclusions, the fidelity of his facts, the truth of his illustrations, we are equally astonished at the research and the surprising industry of the author. Hunter's plates differed from all that preceded them, in being faithful representations of Nature. They perfectly conveyed his beautiful dissections of the gravid uterus.

Towards the close of the eighteenth century, midwifery was gradually rising into position, and obstetric authors became more numerous. Perfect, Atkins, Bland, Osborne, Denman, John Clark, Rigby of Norwich, Joseph Clarke of Dublin, Hamilton of Edinburgh, all contributed their quota to the general stock of obstetric knowledge. The instruments employed were greatly improved; the rules for using them more clearly laid down. But, what was of equal importance, a check was given to their too frequent use, especially the forceps. The process of Nature in parturition was better understood; and the accoucheur was called in not merely to operate, but to determine whether an operation might be dispensed with. His advice became valuable as the obstetric physician. The public began to repose in him more of their confidence, and his assistance was sought for more frequently in ordinary labours. He gradually took the place of the midwife, who

was, in fact, superseded, except in the lower classes.

Among these authors, I shall direct your attention to Denman, not only as following Hunter more directly in the order of our history, but as being the author of a work which was justly considered to be the standard authority of its day. Denman avoided the extremes of Smellie and of Hunter. He was less bold than the former in the use of the forceps, less hesitating than the latter when interference was called for. Holding as it were the balance between these great men, the principles he laid down were considered to be the safest guides for practice. To those of you who would wish to make midwifery specially your study, I should strongly recommend his work. I do so because it is the result of an extensive personal experience, improved by a sound and unbiassed judgment. If the study of an author can communicate any sympathetic influence, if the tone of the author's mind can be so conveyed, I have an additional reason for recommending him to your attention. If you can acquire from Denman the same caution in avoiding the precipitate intermeddling which was then, as I fear it is now, too frequently met with; if you are taught to exercise the same calm discrimination in the difficulties of practice; if, along with your increasing experience, your judgment is equally improved by his observations, and you can exercise the same clearness in arriving at a correct conclusion,—you will be fully repaid by studying Denman, and imbibing the sound reasoning with which his doctrines are laid down.

The influence of these eminent men—William Hunter, Denman, Osborne, Joseph Clarke of Dublin—conspired to arrest the practice of interfering with labours, and delivering unnecessarily with instruments, which they found to be so mischievous; but their caution was carried to too great an extreme. Labours were allowed to go on far too long before assistance was rendered; and the result generally ended in the death of the child, if not of the mother. Hence we find Dr. Hamilton of Edinburgh and Dr. Burns of Glasgow protesting against such delays; and the question became one of active, if not angry controversy.

While, in Great Britain, these noisy controversial discussions were going forward, on the continent a far more interesting and practical question was silently making its way; and a knowledge of the manner in which the child passes through the pelvis was, and is now, being more accurately ascertained.

Formerly, as I have stated, the head was supposed to pass through the pelvis in the conjugate axis. Smellie with great pains disproved this, and showed, from his measurements of the pelvis, that it must enter the brim in the transverse axis, and be expelled in the conjugate. This law, however, was determined upon in his study, not at the bedside; hence he fell into the views of Deventer, Levret, and others, who looked upon the mechanism of parturition as a scientific problem, to be demonstrated like any proposition in Euclid. But a different mode of determining this question, than in the study with a pelvis and a pair of compasses, was adopted by Saxtorph of Copenhagen so early as 1772. He published a work on the subject*—a work little known here, but now brought before us by Dr. Leishman of Glasgow, in his admirable work on *The Mechanism of Parturition*. Saxtorph stated that the head passed neither in the transverse nor the conjugate axis, but in the oblique. We find Saxtorph followed by Solayrés de Renhac, who not only agrees with Saxtorph's view of the oblique descent of the head, but enumerates six different positions in which it may pass. These positions were afterwards published by his distinguished pupil, Baudeloque, who observed of his master, Solayrés de Renhac, "Il n'avait que la nature pour maître." This knowledge was obtained, not in the closet, but at the bedside of the patient. To make these researches accurate, Saxtorph laid down strict rules for making a vaginal examination. He says:

"An improper mode of examination often hinders the recognition of truth. When, for example, the woman is not placed in such a position that the finger may find an easy entrance for examination. When the woman, *as is here the fashion,* lies on soft pillows. When the body is not held motionless in the proper posture, or the interval between the pains is neglected for the examination of the position of the head; or when, although all these circumstances are observed, the finger is not carefully and observingly carried round all the parts of the head and the margins of the pelvis, by which means only it can reach them. If the nearest facts only, and not those deeper, are observed, we cannot recognise with exactness the fontanelle lying high and obliquely backwards, together with the presenting sutures, and their relation to the extent of the pelvis." (Leishman's *Mechanism of Parturition*, p. 33.)

Thus, by determining the position in which the head passed through the pelvis, not by preconceived or what might be called mathematical notions, but by actual observations, Saxtorph pointed out the true principle which should be adopted in determining truth.

The positions given by these men, by Baudeloque, by La Chapelle, and others, were received by the profession without further inquiry, until Naegele took up the question. He, like Saxtorph and Solayrés de Renhac, determined to judge for himself, and took the utmost pains to ascertain the course followed by the head, and proved that the motion was one of rotation; that what is called the first position was the easiest to pass; but that when the head entered the pelvis, in the third or more difficult position, it was rotated as it advanced into the second. I shall again have an opportunity of explaining to you his views; but, at present, my object is to show you the foundation of Naegele's reputation; being a close, painstaking observer, taking nothing for granted, but proving by actual observation every fact which he brought forward.

In the history which I have now brought before you, the lessons which it teaches are not hard to learn. We find, in the early periods of obstetric practice, great bombast and little real knowledge. The delivery of women was considered as an art to be learned, not as a natural process to be observed; and, inasmuch as any woman may be delivered by instruments the moment the head comes within its reach, the artists of the profession made their fortunes by their skill in relieving the patient from her sufferings. The injuries which followed their operations led to a strong reaction, and the most eminent men of the eighteenth century were unanimous in their condemnation of this practice.

* "Theoria de diversa partu ob diversam capitis ad pelvim relationem mutuam experientiâ fundata."

As yet, however, but slight attention was given to ordinary labours. When any difficulties occurred, or operations were required, all such questions were carefully examined, and rules laid down for practice; but the phenomena of natural labour were left, in the strictest sense, to Nature. On the continent, however, Saxtorph, Solayres de Renac, Baudeloque, and Naegele took a different view. Every case they attended was a subject of interesting inquiry. They educated their sense of touch to the highest point; and, carefully watching the progress of natural labour, they ascertained that the head did not descend in one position, as was supposed, but in several. The frequency of these positions is at present a subject of close observation with the scientific accoucheur.

The lesson which these eminent men have taught us is the value of patiently observing natural labour. They pointed out the instruction you derive from them. They showed the greater facility you acquire in at once recognising a difficulty. The acute sense of touch, which enabled Naegele to mark the progress of the head, at once enabled him to perceive what may retard its advance, and perhaps to remove the impediment before it obstructed the action of the uterus. I only ask you, gentlemen, to follow his example, not to be governed in your views of obstetric practice by what are called authorities, but to judge for yourselves. Nothing is so easy as to follow an authority, once you decide who is to be your guide. I should rather ask you to seek, at the bedside of your patient, a knowledge of the truth. I would ask you to make every case you attend a subject for observation, and briefly to note the facts you have ascertained. You will thus acquire that *tactus eruditus* so essential to successful practice.

I am induced to press this point upon your attention, more particularly because formerly—indeed, I might say, until very lately—no interest was taken in natural labours; all attention was given to cases of difficulty or danger. Hence the obstetric student was very anxious to witness operations, to watch the treatment of hæmorrhages, etc.; but the ordinary cases of labour he was given to attend were thought to be a bore. Six cases of labour were considered sufficient by the examining bodies as a test of practical knowledge; but when that number was increased to twelve, and to twenty, the students were startled, and many of them thought this to be too great a demand upon their patience. I have endeavoured to prove, from the history of midwifery, the reverse; and would convince you that it was the want of attention to natural labour which led to so many mistakes when it became difficult. I am anxious to prove to you that the most eminent men in the profession, like Mauriceau, like Smellie, like Hunter, noted all their cases; and these cases formed the basis of their future reputation. You can do the same; and, if you wish to practise midwifery successfully, I would say, in conclusion, do not trust implicitly to books, which can be read in your studies; neither be governed by authorities, which are often wrong; but let your study be the bedside of your patient, and your book, *the book of Nature*.

Drugs Imported from China. During 1862 we received from China, of camphor 1222 cwt.; of cassia 345,140 lbs.; of oil of cassia 20,166 lbs.; of rhubarb 165,326 lbs.: and of other essential oils 62,634 lbs.

Original Communications.

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., Spilsby, Lincolnshire.

In a previous communication to this Journal (May 16th, 1863), I attempted to show that the theory of the nature of diphtheria might be embodied in the following conclusions.

1. The characteristic formation is but an external complication, and has no specific relation to any particular state of the general system.

2. The general diseases with which this formation is found to be associated are most various—ranging from the most trifling malaise to the most virulent septicæmia, and extending through the whole class of acute specific diseases.

3. Possibly during the prevalence of a diphtheritic epidemic there may be a distinct general disease altogether different from other known diseases, but we have no positive evidence on the subject.

4. Diphtheria, in the sense in which the word has hitherto been employed, is to be looked upon, not as one disease, but rather as many diseases, alike only in being associated with the common characteristic formation.

I shall endeavour now to explain how, by adopting such a theory:

1. The difficulties which have hitherto beset bibliographers in collecting the ancient history of the disease, are to a very great degree removed.

2. The various questions arising on the subjects of diagnosis, prognosis, etiology, and contagion admit of more satisfactory solution; and

3. Treatment having more reliable indications becomes less empirical, more rational, more successful.

One of the greatest difficulties with which those who have written on the history of diphtheria have had to contend, has been to determine whether the author they were quoting was describing diphtheria, in the generally accepted sense of the term, or merely instances of ordinary diseases complicated with peculiar manifestations. We frequently read of cases wherein the characteristic false membrane is so minutely and accurately described, both with regard to its physical and pathological properties, as to leave no doubt as to its perfect identity with the like phenomenon as at present seen; and yet in the same case or series of cases we find, perhaps, as clearly portrayed the diagnostic sign of some well known general disease, the eruption of an exanthem, the false membrane of croup, etc. Then it is we become impaled on the horns of a dilemma; we must either reject such cases as evidence of the previous existence of diphtheria as a specific disease, or we must acknowledge that of old, as at present, the pathognomonic sign was observed to present itself in connection with a great diversity of general symptoms. Should the conclusions set forth in a former part of this essay be correct, this difficulty no longer exists, and the study of the earlier history of the affection (or affections) becomes proportionately more simplified and intelligible.

My position would perhaps be best illustrated by selecting extracts from different authors who have written on the history of diphtheria. If we take Dr. Headlam Greenhow's classical work on the subject, and refer to his chapter on "Diphtheria in the Sixteenth, Seventeenth, and Eighteenth Centuries," I think that, notwithstanding the extreme care with which his cases are selected, abundant evidence can be

ound to show that the difficulty in question exists, and hat many different general diseases, alike only in eing complicated with the common diphtheritic sign, ave been confounded together and brought forward s supporting the fact of the previous existence of a oi-disant specific disease. We shall find sufficient to how that during the later centuries, as is familiar to very observer in the present, the diagnostic sign of iphtheria—the peculiar formation, was observed to e associated with scarlet fever, with epidemic sore-hroat, on blistered and erysipelatous surfaces, with mall-pox and with measles, with croup, with "putrid ever of any kind" (and this class would probably in-lude those cases wherein purpura and petechiæ are nentioned as symptoms), with ague or remittent fever. A goodly list of general diseases which, were I dis-osed to quote from Dr. Greenhow's next chapter, on "Diphtheria in the Nineteenth Century", might be considerably increased. In short, the more nearly we approach the time of our own epidemic, the more closely particular cases are watched, and their gene-al symptoms faithfully recorded, the more conclu-sive becomes the evidence that there is no one par-icular state of the general system to which the term iphtheria can, with any approach to precision, be applied, but that hitherto all the ills that flesh is heir to have been huddled together as one disease, simply because they present a common complication.

The query then presents itself: Can we receive records such as those alluded to as evidence of the previous existence of diphtheria? If we adopt the theory advocated in these papers, the question admits of ready and easy answer, for they unquestionably prove the previous existence of epidemics of diseases in connection with the remarkable diphtheritic product; but if, on the other hand, we agree with those who believe in the theory of diphtheria being an acute specific disease, the question is at once surrounded with difficulties, and we are compelled to resort to such apologetic phrases as "It seems probable, as has sometimes happened in more recent epidemics that scarlet fever and diphtheria were intermingled; that the cases of *scarlet fever* had a *diphtheritic character*; and that, whilst in all probability Dr. Fothergill saw some cases of uncomplicated diphtheria, he yet *confounded* the two diseases." Again, "That the epidemic of diphtheria of that day, like that of our own time, was apt, so to speak, *to impress its character upon other diseases* and included simple sore throats unaccompanied by exudation, as well as those of more malignant nature." Again, "That diphtheria in that day, as well as in our own, was frequently confounded with scarlet fever" (Greenhow, p. 28, 30, and 35); not necessarily confounded at all, when we believe in the theory that would make scarlet fever, in common with a host of other general diseases, amenable to the influence of an external complication. What other specific disease *impresses its characters* on such a number of fellow diseases? Why continue to believe in the existence of a disease, of which its strongest advocates are unable to adduce one diagnostic sign. Absent the peculiar complication, the diphtheritic false membrane, and what is diphtheria? Present it, and what is not?

Diagnosis. Much has been written to show what diphtheria is not; very little to define what it is; and without something like a definition, without some signs or symptoms, differing from the signs or symptoms of other diseases, diagnosis becomes almost impossible. Pages have been written, and particular cases cited, to show that diphtheria is not scarlet fever, nor croup, etc., and to point out the differential diagnosis between it and these several diseases; but on the other hand, equally well might pages be written to prove that in particular cases it is nothing more than one or other of these diseases peculiarly complicated. It is the specific disease theory which finds a difficulty in these apparently contradictory statements; and it is the same theory which demands from its votaries much, and to my mind, useless argument on the subject of diagnosis, but which has, I fear, succeeded only in making a very important subject a matter of confusion worse confounded. How often has every practitioner, whose lot it has been to practise during a diphtheritic epidemic, been asked the momentous question—Is it diphtheria? and found it perplexing at first how rightly to answer it. The term has become so associated with fearful consequences that he hesitates to apply it to mischief (in this particular case perhaps) so slight, and yet the diagnostic sign—there it is. He knows full well that he has frequently met in practice with the like sign in connection with a great variety of general diseases—the acute, the chronic, the benign, the malignant, the specific, the non-specific—that he naturally hesitates before giving a decided answer to the question, an answer which involves the application of a single term to a series of widely different phenomena alike only in one, and that by no means important feature. If we speak of diphtheritic diseases, diagnosis becomes at once rational and easy. When and wherever the formation presents itself—and I need not here enter on the diagnosis of that well known morbid product—the case is clearly diphtheritic; but what the general disease with which it is associated may chance to be, must be left to the ordinary rules of diagnosis applicable to such general diseases.

[*To be continued.*]

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

MARCH 31ST, 1864.

R. GEE, M.D., Vice-President, in the Chair.

PUBLIC BUSINESS.

Gratuitous Medical Attendance. Dr. IMLACH moved—"That the Medical Society of Liverpool regrets that sudden and dangerous accidents and illnesses occasionally occur among the poor of large towns, to meet which the present arrangements of the Poor-Law Board and of the Medical Charities are inadequate. That the public has no right to expect that the members of the medical profession shall, *nolentes volentes*, be burthened with gratuitous attendance upon such cases, and insulted at inquests for declining to attend strangers. That it is the duty of Boards of Health or of the police to secure medical attendance on such cases by paying, out of the public purse, fees for all such urgent cases as the police officer on the beat may report as requiring immediate attendance."

Dr. IMLACH said there had been a number of letters in the papers on this subject. He read the following memorandum, a minute of the Watch Committee, that had been handed to him by Major Greig, the head constable.

Memorandum relative to Medical Attendance upon Cases coming under the Notice of the Police. In August 1859, the following order was issued to the police: "When the attention of the police is called to poor people in the streets, or in their dwellings, in cases of sudden or extreme illness, they are at once to call on the nearest parochial medical officer. In all other cases, when time will permit, the relieving officer of

the district must be applied to." In cases of casualty, such as accidents, etc., occurring in the streets, the parties are taken to the nearest Hospital; if the injury sustained be not of a serious kind, they are taken to the dispensary. In *extremely urgent cases* the police would call upon the nearest medical man; and, if the parties were too poor to pay, the surgeon, having been employed by the police, would send in his bill to the Watch Committee. This class of cases is not of very frequent occurrence. At the two outer Bridewells of the North Town division, which are a considerable distance from the dispensaries, provision has been made for medical attendance, when necessary, upon the prisoners taken there. Very valuable aid in cases of casualty is derived both from the hospitals and dispensaries, and, as a rule, the medical attendance in cases of emergency is prompt. Thus, in 1859, it seems that the police, if they called on any medical man, might pay him; so that in Liverpool there really is some provision for these urgent cases, but this rule has no publicity, and he thought if the resolution he proposed were published, it would be of great use.

Mr. Bailey seconded the resolution.

Dr. Skinner suggested that urgent and severe midwifery cases should be specified, as it was to these that, from their occasional long duration, medical men particularly disliked being summoned by strangers.

Dr. Prytherch mentioned a case to which he had been called by a police officer, and had not been paid; he doubted very much whether the police would pay him for attendance on a case of midwifery.

Dr. Barrett had been a parochial medical officer, and had known of this minute; in one case he had sent in his charge first, as is necessary, to the patient, and then to the Watch Committee, but had found great difficulty in recovering payment.

Dr. Balman proposed "That a committee of the Medical Society be appointed to consider the best mode of administering medical aid to the *casual* and necessitous working classes, in addition to the charities already in existence for that purpose."

He read from the *Liverpool Mercury* an account of the late case at Birkenhead, and the coroner's remarks, and said that, though it would be a needless and wanton interference with our liberties that should attempt to cajole or compel us to attend any frivolous case to which we might be called at the most inconvenient or unseasonable hours, yet he maintained that when we are called to a labour no delay is admissible, and to disobey the summons to attend is to expose the patient to great risk, and we may thus be the means of bringing the blood of the unhappy patient upon our own heads. He thought any one who refused his aid and assistance to a woman, in this hour of sorrow, not only neglects a great Christian duty, but lays himself open to the charge of inhumanity and want of feeling. He suggested that a hospital, or a certain number of houses of refuge, for these urgent cases of midwifery might be raised, and should be under the care of midwives, and have attached, or within call, a salaried accoucheur. These houses might be made known to strangers through the police. Dr. Balman passed to the subject of self-supporting dispensaries, and referred to that existing at Derby; and thought that these institutions, though they might not meet these sudden emergencies, would be highly valuable as affording to the prudent and thrifty of the working classes such medical aid as they may require, and that without any sacrifice of independence, and without that sense of degradation that attends the reception of gratuitous charity.

Mr. Higginson seconded the motion. He thought the committee, when appointed, might also consider Dr. Imlach's resolution. After all it would ultimately rest with each man's feeling of humanity whether he would go to these cases or no.

Dr. Barrett thought there was every provision made as to confinements by ladies charities, etc.

The Chairman said a county court judge in London had decided that confinements were not cases of emergency.

Mr. Hakes thought the two resolutions before the meeting were very separate in their nature. No doubt we, with the public, regret the recent affair at Birkenhead; but we are not to be upbraided for that affair. He thought we might express our regret at that matter, and also at the remarks it had given rise to.

Dr. Vose said that a gentlemen in large practice at Birkenhead had told him that he did not think the woman died of hæmorrhage, and he thought it most improper that the coroner, himself a surgeon, should attribute the death to hæmorrhage without a *post-mortem* examination. Parturition is a serious thing, and death may occur in its course from various causes. We have no right to assume there was no organic disease. He thought the profession had been most disgracefully libelled.

Dr. Imlach thought the profession had been grossly insulted because they did not always go at once, whenever called upon, although they might be weary, or ill, or so forth. A friend of his, not a medical man, happened to have Dr. on his door, and was once abused for not going out at night when sent for.

Mr. Lowndes moved, as an amendment to Dr. Imlach's motion, "That this Society does not think it necessary to take any steps with regard to the recent sad affair at Birkenhead."

He said that we had not sufficient evidence as to the conduct of the medical men in that case. If they did not understand the urgency of the case, or if they were ill or advanced in years, they might deserve our sympathy; but if they had not these reasons, they might deserve rather our censure. The coroner's jury had been spoken of with great contempt by Dr. Imlach, but they were not different from others of the middle-class of Englishmen, and they thought of the poor woman left to bleed to death, and expressed themselves accordingly. When we clearly understand there is a great emergency, instead of trying who can be last, we should try who can be first. He quite agreed with what had been said in the *Medical Times and Gazette* on this subject.

Dr. Shearer seconded the amendment.

Mr. Walker had heard that two other surgeons, in addition to the one named, had gone to the case.

The amendment was then put and lost, only three members voting for it. Dr. Imlach's resolution was then carried, as were also motions to the effect that a copy of it should be sent to the medical journals, the local daily papers, and the chairman of the watch committee. Dr. Balman's resolution was also carried, and a subcommittee nominated.

PATHOLOGICAL DEPARTMENT.

Large Fatty Tumour. Dr. Nottingham shewed a specimen removed from over the dorsum of the scapula of a woman at the Southern Hospital. It was of twenty years' growth, and weighed four pounds ten ounces.

Scirrhous Tumour of the Mamma. Dr. Nottingham shewed a specimen.

Ring Pessary. Dr. Nottingham shewed a ring pessary made of some black wood, which was removed from a very old person thirty years after its introduction. It was lying high up vertically in the antero-posterior axis, and was removed with difficulty. Referring to the curious things that are sometimes used as pessaries, Dr. Nottingham said he had once seen a

ken wine glass with the cup of the glass down-rds, and in another case, an iron ring taken from chain of a plough, used for this purpose.

British Medical Journal.

SATURDAY, MAY 14TH, 1864.

THE MEDICAL COUNCIL IN ITS SEVENTH SESSION.

OSE of the profession who are satisfied with much king and little wool-gathering will not this year d fault with the Medical Council. The admission reporters has, at all events, doubled the length of speeches. As, however, most of us are men of siness, and expect a return for our outlay, we fear t there will be with the profession at large a neral feeling of disappointment at the announce-nt of the results of the operations of the Medical uncil for 1864. "It came, it has met, it has ne." What has it done? It has talked exceed-gly. It has argued well, and legitimately and ille-timately. Its eloquence has echoed under the roof the College where it held its sittings. Its sayings e recorded, and its words of wisdom will be put permanent record. Resolutions and amendments numerable have been proposed, seconded, and ssed or rejected. But what has this palaver—the lminating one of all—brought forth? For six ng weary years the profession has stood *erectis ribus*, in earnest expectation of some relief to its oes at the hands of this medical Olympian Jupiter; t the sixth year has passed, and still left the earnest pectation on the stretch. The Medical Council as once again closed its sitting, and once again with ne passing of a few innocent resolutions—suggesting ry little, and enforcing nothing.

We should be sorry to say that the Medical Council as a splendid failure; but really it looks very much ke it. If we could gather hopes from the sayings nd doings of this year, that in 1865 or 1866, or ven in 1867, the Council would do something posi-ve—we mean, *would perform the functions pre-cribed for it by the Medical Act*—we should still ave some faith in it. But let any one read the yings and doings of this Council of 1864, and note s resolutions, and say if there be anything more rominently apparent than this; viz., that the Me-ical Council confesses its inability to interfere with he medical corporations; or, in other words, that, as ar as it is concerned, the medical corporations are at iberty to make their own regulations, and settle at eisure and pleasure their own examinations. Now, f the Medical Council is to meet year after year, nd is to come to this same annual conclusion, that he medical corporations are best capable of knowing the wants of the profession, and of framing regulations accordingly, may we not fairly ask, What, then, is the use of the Medical Council?

Evils are spread through the profession as thick as blackberries; and the Council, after six years of labour, has touched not one of them. Its labours have ended in words; it reposes upon what is called "moral suasion".

Let us again shortly inquire how this *Council of Medical Education* has done its duty. It has given us a *Register*, and it has produced a *Pharmacopœia*. The uses of the *Register* are problematical. The honour of being registered can scarcely be very great, so long as our names are placed side by side not only with all varieties of the qualified quack, but with others less reputable, who boast that they are registered practitioners of medicine. Neither for the gift of a *British Pharmacopœia* has the Council reaped many thanks. But these things it had to do; and it has done them, at all events.

But it has other and far higher duties to perform. Being a *Council of Medical Education*, its duty is, preeminently, to regulate medical education. It has the power, and therefore it is its duty, to require information of the Colleges, etc., as to their courses of study. It has the power, and therefore it is its duty, to supervise the examinations of candidates for medical licences. It has the power, and therefore it is its duty, to bring before the Privy Council, for condign punishment, any defects of study or examination in the regulations of any medical corporation.

The Medical Council has, therefore, the power to lay down general regulations for the education of medical students, and has the power to enforce them upon the medical corporations.

But if the Medical Council is to come to the conclusion (and such seems to us to have been the general feeling of the members in the seventh session —the session of 1864) that each corporation is to fix its own courses of study, and to regulate its own examinations, of what use, we must again ask, is the Medical Council?

The argument so often and again repeated by Councillors, that education and examination which are good in one place may be bad in another—that in different schools different methods of teaching are good—seems to us most strange. "You cannot," these arguers said, "lay down a series of educational regulations which will fit all our schools. We each know best what we want." But surely, if there were any reason in such an argument, every cosmopolitan school should have half a dozen methods of teaching, in order to accommodate its different style of students. But are we really to believe that the course of education which is fitted for an English medical student is not fitted for a Scotch student; and *vice versâ*? Do Scotch professors mean to say that English students cannot learn

their profession in Scotland or in Ireland? or that Scotch students could not learn theirs in England? Do Councillors really wish us to believe the manifest absurdity, that medical instruction should differ according to the latitude and longitude in which the medical school is situated? Of course, the real meaning of this suggested fallacy is simply, that the corporations do not want to be interfered with by the Council; that they want to carry on their business after their own fashion. Well, if the Council gives assent to this view of the matter, if it objects to the method of teaching and to the examination of any particular corporation, and yet does not interfere with it—does not perform its duty prescribed by Act of Parliament—may not men fairly ask, Of what use is such a Council? We shall be told that the Council has issued recommendations. Yes, we know it has; and know also that its recommendations have been evaded by interested corporations; and that it acquiesces in the evasion.

It is not as if the evils to be removed were not rampant, instant, and paramount. It is not as if the Medical Council had not deplorable facts beneath its eyes—facts demanding immediate attention. If it is, as it plainly is, the duty of the Council to remove these evils, how does it reconcile it to its collective conscience thus year after year to give them the go-by?

It is preeminently the duty of the Medical Council *to regulate the qualifications of practitioners in medicine and surgery*. Does it perform this duty? The Medical Council well knows that numbers of gentlemen are yearly *passed* by examining boards, and by them let loose on the public as *qualified practitioners*, who yet are unqualified to practise. How can the Council be silent under the desperate and overwhelming facts laid before them by Dr. Parkes? The very gentlemen, gifted with double qualifications in medicine and surgery from our examining boards, who were found by Dr. Parkes to be utterly unqualified to take charge of the soldier's health, are doubtless at this moment exercising their craft upon the general public, and, of course, *under the sanction of the Medical Council*. The Council gives its assurance through its *Register* to the public, that the aforesaid gentlemen are qualified practitioners. In giving its silent sanction to such a state of things, does the Council do its duty?

Again, it is a fact that candidates, who have been found not qualified for practice by one licensing board, have, within a week of their rejection, been let loose by other licensing boards as qualified practitioners, and registered as such by the Council. It is a fact, that the Royal College of Surgeons of England requires no word of examination in medicine from the candidates for its diploma; yet there are hundreds of gentlemen — we believe, some hundreds in London alone—who have no other qualification than that College diploma. Need we say that, with the exception of the very few who practise pure surgery, the greater part of the practice of these surgeons is purely medical?

The Society of Apothecaries, again, asks no question in surgery; and yet gentlemen holding the licence of this Society alone practise surgery.

Most examining boards demand four years of professional study; the College of Surgeons and Apothecaries' Hall demand only three years. But, in fact, the whole affair of medical education and examination is in a deplorable state of confusion; and every candid soul must feel that there is, at present, but little security for the proper education of the medical student; or that they who have passed examining boards are really qualified practitioners of medicine. Well might Mr. Syme say: "If the House of Commons were to call on the Council to say what they had done to rescue the public from unqualified practitioners, the answer would be difficult."

For six years has the Medical Council had this labour and this duty laid upon it—the work of bringing medical education out of all the confusion in which it is involved, and of putting examinations on a fitting basis. "*Hic labor, hoc opus.*" This is its proper function, and this its duty. But what has it done?

The answer is this; *in esse* it has nothing to show, beyond long discussions and wordy resolutions; *in posse*, it is rich of hopes. It boasts of a rare ventilation of the subject (though we believe not one single fact has been elicited at this meeting which was not well known to every member of Council at the meeting of last year); it has faith in the good sense, and the patriotism, and the consciences of the medical corporations; it believes, for example, that the College of Surgeons of England can be operated upon by the force of "moral suasion"; it does not yet see its way to an uniform system of education; in fact, its present conclusion seems to be much of the same kind as that which Mephistopheles tells the medical student is the end of all medical practice: you search through the great and through the little world, strive and labour with all your energies, and at last you conclude that it is best to let things go as God pleases (*alles am Ende gehen zu lassen, wie es Gott gefällt*).

We wish we could have given a different summary of this year's doings of the Medical Council; that it had been in our power to point to some practical good actually accomplished by it. And surely, we are not unreasonable in asking something positive from it now, in the seventh year of its existence. We might even have been contented could we, from a survey of its present operations, have looked forward with any reasonable anticipations of better doings in the future. But what grounds have we for such hopes? The Council last year was just as wise, and possessed all

ne information which it possesses now. The Coun- l last year discussed the very subjects which it as again discussed this year. Which of the old and ading members of the Council is there, who has gained ne item of knowledge on the matter of medical edu- ation through this fourteen days' discussion? Which f them is there, who was not just as able to legislate t the beginning as he was at the end of the session?

The Council is composed of gentlemen who are representatives of all the highest intelligence and of he highest practical knowledge of the profession. Nevertheless, its seventh session has ended, as all ormer ones have done, in little more than words.

Is the Medical Council, then, a splendid failure? s it, from its very nature, so constituted as to be ncapable of action or production? Is it, indeed, imply a discussion-forum? Must we be forced to he conclusion, that there is in its constitution some adical defect? Must we fall back upon the idea, hat its members regard themselves rather as the representatives of the interests of individual corporations, than as the representatives simply of the interests of the medical profession and of the public; hat they are class, rather than imperial, legislators?

Can it be that the Medical Council is in itself little nore than a mere corporation; and that, therefore, t feels tenderly and acts tenderly towards other corporations?

In justice, nevertheless, we feel bound to add, that here are evidently gentlemen on the Council who re ready to perform their duty, as we define it, in ts wide and patriotic sense, who look beyond the narrow interests of individual corporations, and, indeed, take imperial views of the question of education. Amongst these we would especially record the names of Mr. Syme and Dr. Andrew Wood. These gentlemen seem to us to have stuck manfully to their text; and we believe that, if their advice had prevailed, the Council would not have parted without having laid down some definite scheme of education, without having provided for the efficiency of examinations, and without having plainly told the corporations, that it was resolved to see its recommendations carried into practice.

BREAK-DOWN OF THE ARMY MEDICAL DEPARTMENT.

We are happy to find that there is at last some chance of justice being done to our army medical brethren. The Horse Guards has again fallen into the state of a certain personage who, when sick, would become a monk; in fact, it is getting once again into its Crimean condition as regards medical officers. There are two hundred vacancies in the army for medical officers, and there are seven applicants! "The medical examination for the army, which was intended to be competitive" (said General Peel), "was now reduced to such a level that it was impossible to get ordinary students to undergo a mere qualifying examination." The House of Commons, therefore, now confesses that the service is not popular. And the Marquis of Hartington admits that something must be done to remedy the evil. He, however, regards the question as a purely money affair.

"The deficiency of surgeons had not been connected with the failure to carry out the recommendations of the commission on which the warrant was founded. In all essential particulars, those recommendations had been complied with; and the medical officers had obtained every substantial advantage contemplated by those recommendations. In one or two points these had been departed from; but they were hardly of a character to deter any medical man, otherwise desirous of doing so, from entering the service. It was perfectly true that, in consequence of objections raised by the Director-General, acquiesced in by the Horse Guards, and sanctioned by the late Lord Herbert, medical officers, although enjoying the relative rank laid down for them in the warrant, were not to act as presidents of boards of survey or other boards, when one of their number happened to be the senior officer present; but he could not imagine that trifles such as these would make any medical man hold back who intended to connect himself professionally with the army. The difficulty of obtaining medical officers might, in part, be accounted for by the fact, that there was a diminution in the number of men educated for the medical profession. The great private undertakings likewise entered into competition with the Government, and offered to medical men more immediate advantages, as well as the prospect of a more speedy rise in the world, than could be hoped for in the army."

And the Marquis argued that

"If, within the next few years, the demand which had sprung up in this country for members of the medical profession should not be met by an increased supply, her Majesty's Government would have to consider the expediency of offering increased advantages, not in the way of additional rank, but of increased pay."

Moreover, he added that,

"Within the last few days, Earl de Grey had consulted, not only the Director-General and others, but likewise medical men unconnected with the army. He was not in a position to state the nature of their recommendations; but he could assure the Committee that the subject had not escaped attention, and that measures would be promptly taken to keep up the necessary supply of medical men."

One thing, therefore, is evident enough; viz., that the system has entirely broken down under the management of the present Director-General. We are very glad to find (though we can scarcely think it complimentary to the Army Medical Board) that Earl de Grey has "consulted medical men not connected with the army."

The Director-General of the Army Medical Department appears to us to take a confined view of his duties; his chief attention being apparently directed to the screwing down the expenses of his department. He has, under such inspiration, tried every expedient, compatible with the existence of an army

medical establishment, to raise medical men for the service; but he has signally failed. The age of admission has been extended from 25 to 30 years; and this favour has raised seven applicants for the two hundred vacancies! His last move is to get the medical work of the army in England done by civil medical men; and, we suppose, to make the army medical officers do double duty abroad. In this latter attempt, we sincerely trust that he will not receive the assistance of the profession.

The present position of the Army Medical Department indicates, and we regret to say it, that our profession is not represented at the Horse Guards by men who have either the scientific ability or the professional *esprit de corps*, which ought to animate those who come between the Government and the medical officer of the army. If the true position of our army medical brethren had been properly laid before the Horse Guards authorities, and if our Directors-General had had the courage and the scientific reputation which men occupying such positions ought to possess, the Army Medical Department could never have fallen into its present anomalous—and we may say disgraceful—position; and Earl de Grey would not have been forced to go to medical men "not of the army" for advice and assistance. Let our readers read the present condition of the army medical service, as described by Colonel North, and say if they think that those who have presided over the department can have done their duty.

"Colonel North said that officers in the medical service did not so much complain of the question of rank. What they wanted was, the permission to retire after twenty years' service. The country had a right to expect that its troops should have the best possible medical advice. At present there were no less than two hundred vacancies in the medical department. During the Crimean war, there was scarcely a family in the country that did not mourn the loss of some relative. A committee was appointed in 1856, which reported that the medical officers had been deficient during the war. Eight years had elapsed, and the same state of things existed. If war broke out to-morrow, what would the troops do for surgeons? The authorities were obliged to send assistant-surgeons out to India who had only just returned from Canada, New Zealand, or the West Indies. A class of acting-assistant-surgeons had been appointed who had never before been heard of in this country; and some of the regiments had no assistant-surgeons."

In consequence of the application by Miss Garrett to the London College of Physicians, to be admitted to examination for their licence, the College has taken the opinion of counsel as to the power of admitting females to examination; and counsel have advised that, under the Charter of the College, females are not admissible to examination. The College is, therefore, relieved from all necessity of discussing the subject. It has, happily, not the power to admit females to examination.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East Anglian, [Annual.]	Guildhall, Bury St. Edmunds.	Friday, June 17th, 2 P.M.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Rose Hotel, Canterbury, on Thursday, May 19th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Thomas Boycott, M.D., *Hon. Sec.*

Canterbury, May 2nd, 1864.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The sixth ordinary meeting of the session was held in the Victoria Rooms, Clifton, on Thursday evening, April 28th; Francis K. Fox, M.D., President, in the Chair. Thirty-eight members and four visitors attended. The minutes of the previous meeting were read and confirmed.

New Member. Herbert Cooper, Esq., was elected a member of the British Medical Association and of the Bath and Bristol Branch.

Papers. The following papers were read and discussed.

1. Hospital Dietaries. (No. 2.) By J. Beddoe, M.D.
2. On the Hour of Death in different Diseases, illustrated by the Hour of Death in Phthisis. By A. Haviland, Esq.
3. Note on a Case of Tapeworm. By G. F. Burder, M.D.
4. Case of Ovariotomy. By H. Marshall, M.D.
5. Case of Diseased Humerus. By C. Steele, Esq.
6. Cases illustrating the Effect of Suppurative Inflammation of the Dental Periosteum. By C. Gaine, Esq.

Aphasia. Dr. Trousseau has lately described, in a series of five lectures at the Hôtel Dieu, a new and most interesting disease. That is to say, the disease is not a new one, but it now for the first time takes its nosological rank. After a long discussion between doctors, university men, philologists in general, and even Greeks, as to the etymology of the word most proper to characterise the malady, the Greek word *aphasia* was adopted, but not until the various words *alalia, amnesia, aphemia, aphrasia,* and *anafidia,* had been passed in review and eliminated. This richness of the Greek language in synonyms furnishes to the reader a ready indication of the character of the disease. It is a more or less complete loss of the power of speech. (*New York Times.*)

The Medical Council.

REPORT OF PROCEEDINGS, April 1864.

Tuesday and Wednesday, May 3rd and 4th.

G. Burrows, M.D., President, in the Chair.

We now give the debate on the Medical Act, which was omitted last week through want of space.]

The Medical Act. The following resolution, passed on June 3rd, 1863, was read:

"That the Report of the Medical Acts Amendments Committee be forwarded to the Branch Councils for their observations thereon."

[The report was published in the Journal for June 13th, 1863, p. 634.]

The subjoined observations of the Branch Councils were read, and, on the motion of Dr. Corrigan, seconded by Dr. A. Smith, were ordered to be entered on the minutes.

Branch Council for England, March 4th, 1864.

Moved by Dr. Storrar, seconded by Mr. Arnott, and agreed to:

"That the Branch Council, having given their attention to the report of the Medical Acts Amendment Committee, forwarded by the General Council to the Branch Councils for their observations thereon, are of opinion that it is not expedient at the present time, to engage in fresh legislation."

Scottish Branch of General Council, April 2nd, 1864.

On the motion of Dr. Andrew Wood, it was resolved:

"I. That the Branch Council have considered the proposed amendments on the Medical Act, remitted to them by the Medical Council for their observations thereon.

"II. That the Branch Council believe that much of the dissatisfaction of the medical profession, with reference to the working of the Medical Act, has arisen from the faulty construction of some parts of that Act.

"III. That, in an especial manner, this has been the case regarding two points; viz., 1st, the failure of Clause XL to carry out its objects of protecting the registered practitioner, and of enabling the public to distinguish between qualified and unqualified practitioners; and 2nd, the insufficiency of Clause XX as regards provision for the enforcement of the regulations issued by the Medical Council in reference to medical education.

"IV. That the Branch Council, without expressing a definitive approval of any of the subjoined clauses which have been proposed to be substituted for Clause XL, consider the subject well worthy of the mature consideration of the Medical Council."

[Draft I. "Any person not legally possessing any of the qualifications under Schedule (A) to this Act, who shall profess the practice of medicine or surgery, taking or using the name or title of a physician, doctor of medicine, doctor, licentiate in medicine or surgery, bachelor of medicine, surgeon, general practitioner or apothecary, or any name implying that he is a legally qualified practitioner, shall," etc., etc.

Draft II. "Any person professing to undertake the treatment or cure of diseases, who shall wilfully and falsely pretend to be, or take or use the name of a physician, doctor, bachelor of medicine, surgeon, general practitioner, or practitioner in medicine or surgery, apothecary, or any name, title, prefix, addition or description contained in Schedule (A) to this Act, or any other name, title, prefix, addition, or description implying that he is a legally qualified medical practitioner, not being possessed of a legal medical qualification which would entitle him to a registration, shall, upon a summary conviction for any such offence, pay a sum not exceeding £20."

Draft III. Clause taken from the New Medical Act for Victoria:

"On and after the day of 186 , it shall not be lawful for any person, unless registered under this Act, to pretend to be, or take or use the name or title of physician, doctor of medicine, licentiate in medicine or surgery, master in surgery, bachelor of medicine, doctor, surgeon, medical or general practitioner, or surgeon, apothecary, or accoucheur, or licentiate or practitioner in midwifery, or any other medical or surgical name or title; and every unregistered person so offending shall forfeit and pay a sum not exceeding £50, to be recovered in a summary way before any two justices of the peace, by any person suing for the same in any Court of Petty Sessions."]

"V. That the Branch Council approve of the clause proposed to be substituted for Clause XX, viz:

"'It shall be lawful for the General Council to lay down such regulations respecting the education and examination of practitioners in medicine, surgery, and pharmacy, as may appear to them fitted to insure adequate knowledge and skill in the several departments of the profession; and the said General Council shall then submit said regulations to her Majesty's most Honourable Privy Council. And the said regulations, if sanctioned by the said Privy Council, shall then be obligatory upon all universities, colleges, and other bodies enumerated in Schedule (A) to this Act.'

"VI. That, in regard to the proposed clauses for the regulation of pharmacy, the Branch Council, whilst they consider it very desirable that there should be certain legal regulations as to the sale of drugs in this country, with a view to the safety of the public, think that that object would be best carried out by means of special statute.

"VII. That the Branch Council consider that the Medical Council, at their approaching meeting, should take the subject of the Amendment of the Medical Acts into early consideration, with a view to their submitting the result of their deliberations regarding it (should they resolve that legislation is called for) to the Secretary of the Home Department, during the session of the Council."

Irish Branch of General Council, March 14th, 1864.

The Council resumed the consideration of the proposed Amendments of the Medical Act, and altered certain of the sections as follows.

Preamble. Omitting the first sentence, to the word "Practitioners," also the words "And" and "moreover," in the following lines. Thus:

"Whereas it is necessary for the safety and protection of the public, towards securing adequately educated practitioners in the several departments of medicine, surgery, and pharmacy; be it therefore enacted, etc., etc."

Sect. xxix. Introducing the words, "Registrar of each Branch," after the word "The" in the first line. Thus:

"The Registrar of each Branch Council may refuse to register any person who may have been convicted, in England or Ireland, of any felony or misdemeanour, or in Scotland of any crime or offence; and if any registered person shall be so convicted, or shall, after due inquiry, be judged by the General Council to have been guilty of infamous conduct in a

professional respect, whether before or after registration, the General Council may, if they see fit, direct the Registrar to erase the name of such person from the Register."

SECT. XL. Omitting the words, "or Surgeon," between the words "Practitioner" and "Apothecary." Thus:

"On and after the day of , 186 , it shall not be lawful for any person, unless registered under this Act, to pretend to be, or take or use the name or title of physician, doctor of medicine, licentiate in medicine or surgery, master in surgery, bachelor of medicine, doctor, surgeon, medical or general practitioner, apothecary or accoucheur, or licentiate or practitioner in midwifery, or any other medical or surgical name or title; and every unregistered person so offending shall forfeit and pay a sum not exceeding £20, to be recovered in a summary way before the justices of the peace."

"RESOLVED: That the Bill as now amended be adopted, and communicated to the Registrar of the General Council, in accordance with the resolution of the said Council."

Dr. CORRIGAN moved the following resolutions:

"That the proposed Medical Bill, as amended by the Medical Acts Amendment Committee of last year, be forwarded to our solicitor, with directions to have it drafted, as soon as possible, and returned to the Executive Committee;

"That the Executive Committee take means to have the Bill so drafted laid on the table of the House of Commons, at the commencement of next session of Parliament;

"That a copy of the Bill so drafted be forwarded without delay by the Executive Committee to the Branch Councils, to the several bodies enumerated in Schedule (A) of the Medical Act, to the Pharmaceutical Society, and the press; so that all parties concerned may have ample opportunity, in the interval between publication of the Draft Bill and next meeting of Parliament, of considering the Bill, and of suggesting such amendments as they may desire;

"That the General Medical Council meet at as early a period as may be necessary next year, to consider the various amendments that may be suggested in the interval, ir order to insert in the Bill such amendments as may meet their approbation."

Having been, since 1860, Chairman of the Medical Acts Amendment Committee, the duty of introducing the subject devolved on him. At first sight, it might seem right again to appoint a Committee on the subject; but the time for doing that was past, inasmuch as a series of amendments had been brought up last year and referred to the Branch Councils. The English Branch Council had replied, that it did not consider further legislation to be called for at present. This, he thought, was not a proper way of dealing with the question: it was not an answer. The great question to be considered was, whether an amended Act was required. In regard to this, he would not press forward his own ideas, but would refer the Council to the opinions expressed in other quarters as to the insufficiency of the present Act; and he would specially call attention to the fact, that there was no uniformity of opinion among legal authorities before whom matters arising out of the Act were brought for decision. In order to prove the necessity of having an amended Act, he referred first to the proceedings in reference to the subject which took place in the Council in 1860, when a Committee was appointed. In 1861, one of the first Acts of the Council was to re-appoint this Committee; and, at the meeting on July 5th in that year, a report had been brought up by him (Dr. Corrigan) in which reference was made to communications received from the National Medical Registration Association, and from numerous associations of medical practitioners in various parts of the country. He would draw special attention to a memorial signed by 1312 medical practitioners, members of numerous associations, as shewing the feeling which at that time prevailed as to the inadequacy of the Medical Act. On July 6, 1861, a resolution was proposed, to refer the report of the Committee to the Executive Committee of the Council, with instructions to correspond with the Branch Councils; and an amendment, that parliamentary solicitors should be consulted with the view of preparing a draft bill: but both motion and amendment were negatived. On May 14, 1862, the Committee was again appointed; and on May 16, a report was presented. On May 19th, the Council resolved, "That the several Reports of the Medical Acts Amendment Committees of 1860, 1861, and the present year, be referred to the Executive Committee, with instructions to consult parliamentary solicitors, with the view of preparing a draft bill, to be transmitted to the respective Branch Councils for their consideration and observations. That such draft bill, with any amendments proposed, be re-transmitted by the respective Branch Councils to the Executive Committee, in time to enable the Executive Committee to have a draft bill ready for being submitted to the General Medical Council at its next meeting." In 1863, the Committee was again appointed, and a report was presented at the meeting of the Council on June 1st. Hence it was evident that the necessity of having an amended Act had been generally admitted, and it had occupied the attention of the Council during the last four years. If the Council did not do something in regard to amendments of the Medical Act, it might be justly accused of having no desire to correct defects, and of being indifferent to the interests of the public. Then, as to the manner in which the Act should be dealt with, he would refer to the resolution which he was proposing, and observe that the bill, in its proposed amended form, could not be regarded as approaching to perfection. Nothing, however, could be done unless there were a framework on which amendments might be based; and it was not intended that any member of the Council should be committed to all the details of the draft bill; but, at the meeting next year, there would have been an opportunity of bringing together and considering all the amendments that could be suggested. Dr. Corrigan then went on to consider some of the details of the proposed bill. The first change proposed was an alteration of the title. The present title "An Act to Regulate the Qualifications of Practitioners in Medicine and Surgery" did not express the intention of the Act; and it was proposed to substitute "A Bill to Amend the Medical Acts." The preamble also, he thought, gave an undue status to unqualified practitioners. The next important point was the introduction of a clause relating to pharmacy. He did not agree with those who held that the Council had no concern with this subject; for it had already dealt with it in its highest sense, as was shewn in the production of a Pharmacopœia, and in the appointment, during the last year, of members of the Council to watch the progress of pharmacy. Further, the last clause of the present Medical Act actually dealt with this subject. The laws regulating pharmacy were very different in the three divisions of the kingdom; and the object was, to bring them together. In England, the College of Physicians had the power of inspecting druggists' shops in London. As to the Apothecaries' Act, it was useless for the correction of abuses in pharmacy: for he believed that any man, however ignorant, might set up a druggist's shop and dispense

edicines. In Ireland, the case was at first sight fferent; for in that country an Act of Parliament evented persons from compounding medicines unss licensed by the Apothecaries' Hall. But this dy had not the means of carrying out this duty. It nsisted of about thirty-three shareholders; and, wever respectable the corporation was, and useful supplying drugs, it was not to be expected that it uld undertake prosecutions. The King and Queen's llege of Physicians had had the right of inspecting uggists' shops, but had relinquished it since the *itish Pharmacopœia* was published. He therefore ared that pharmacy in Ireland was drifting into the me state as that in which it was in England. He lieved that the United Kingdom was the only untry in Europe in which free trade in drugs was rmitted. It had been objected to any attempts to al with the subject by legislative enactments, that ee trade ought not to be impeded. But this conderation should not interfere with the action of the uncil; they should bring the matter before the tice of the Legislature, and if it be there decided that ee trade is proper, the Council would have done the ity of having proposed what it considered right. It ight happen at some time, that an accident might cur to a person of importance, and that a bill for the gulation of pharmacy would be introduced into Parament; and then the Council, if it had done nothing the matter, would be in a very unsatisfactory posion. The Pharmacy Act at present existing did not terfere with the sale of drugs or with prescribing unqualified persons. With regard to the objections ade to the proposed clauses in the bill by the drugsts, he never had known otherwise than that proosals for legislation should be objected to by persons terested. What the druggists asked was, that they ould be allowed to deal with drugs without any roof of being qualified to do so. But the Council uld not desire to impose on them any greater reirictions than were imposed on the medical profesion. Restrictions were placed on the sale of adulrated coffee, of unhealthy meat, etc.; and, in fact, ne only instance in which free trade existed was that which restriction was most required. The drugsts raised similar objections in 1841, when the harmaceutical Act was brought forward; and this easure was only carried through the energy of Jacob ell. What he did single-handed, in 1841, surely ne Council, as a body, ought to be able to bring to a reater state of perfection. How the supervision of harmacy was to be carried out, was a matter which e would not attempt to decide. He then referred to ne proposed amendment of Clause xx of the Act. At resent the clause was permissive; but he thought hat the power, as there given, of withdrawing the reognition of any of the licensing bodies would never e exercised; for there never would be a case in which he Council would be unanimous in making such a epresentation to the Privy Council as would lead to ne adoption of this course. In the amendments it as proposed that the Council should have the power f laying down regulations regarding education and xamination; which, having been approved by the rivy Council, should be obligatory on the bodies numerated in Schedule A. That this was necessary, as evident from the fact that at present the Council ppeared to sanction the lowest possible standard. Ie believed that, up to the present time, the Council ad retrograded rather than advanced, in regard to ducation and examination. The Council had issued, *nter alia*, a recommendation regarding preliminary ducation. Five of the Universities had previously equired proof of general education, and therefore no nerit was due to the Council in regard to them: and he Apothecaries' Companies were in the same category as the Universities; and, as to the other bodies, not one, except the Colleges of Physicians and of Surgeons in London, complied with the recommendation. Several of them stated that the recommendation was carried out "as far as possible." This he objected to, as not a fair way of acting; but the Queen's University in Ireland, of which he was the representative, not only did not comply with the recommendation, but said distinctly that it would not do so. In fact, out of the nineteen examining boards, nine had refused to adopt the recommendation. He did not trust in the efficacy of recommendations; and said that, if even each licensing body agreed to the recommendations of the Council, there was no security that they would not object in the course of the next year. In his opinion, unless a compulsory power of enforcing regulations were given to the Council, it would be in the same state four years hence, as regarded the licensing bodies, as it was at present. With regard to Clause XL, he would observe that the whole profession was expecting some amendment; but of what kind this should be, he was not prepared to say. The only other clause to which he would direct attention was the last, by which it was sought to prevent the sale of patent or secret medicines unless a sworn certificate of its composition were lodged with the Registrar of the General Council. This was nothing more than was done on the Continent. It was not desired to interfere with the sale of patent medicines: but their composition ought to be made known. He hoped that he had been able to satisfy the Council that an amended Act was called for; and thanked them for the patience with which they had listened to the long statement which he, as Chairman of the Medical Acts Amendment Committee, had made.

Dr. APJOHN seconded the motion.

Dr. ANDREW WOOD considered that the Council was indebted to Dr. Corrigan for the trouble he had taken. There could be no doubt that the Medical Act was not efficient; and the Council had been blamed for not doing that which it did not give them the power of doing. The Council ought to, therefore, and must endeavour to obtain an improved Act. After the long deliberations which had taken place, and the trouble which had been taken by the Council, he did not think that the English Branch Council had acted rightly in the manner in which they had dealt with the matter referred to them. The Scottish Branch Council, he thought, had put the question in the easiest form for consideration. Whatever might be the determination as to including pharmacy in the proposed bill, the proposal had awakened attention to the necessity of regulating the sale of drugs. Free trade was a very good thing; but when it implied danger to the public it ought not to be encouraged: and he was sure that before many years the sale of drugs would be regulated by legislation. In Edinburgh, within his memory, nineteen out of twenty surgeons dispensed their medicines in their own surgeries, or, as they were called, "shops"; and, he believed, there were then only two or three chemists' shops in the city. But now, as in England, much of the dispensing and compounding was done by the druggists. There was, therefore, a necessity for regulating pharmacy; but he did not agree with the proposal to introduce regulations concerning it into the Medical Act. The practice of medicine and surgery ought to stand on a different and a higher platform than that of pharmacy; and if a pharmacy clause were inserted in the Act, the pharmaceutists would be wanting to have a representative in the Council; and, perhaps, they would be endeavouring to raise themselves to the rank of medical practitioners. Although the course proposed was objectionable, it might be quite within the power of the Council to represent to Parlia-

ment the necessity of introducing a bill for the regulation of pharmacy. He next referred to the proposed clause for giving the Council power to enforce its recommendations. As long as the Medical Act was in its present form, the task of representing the conduct of the licensing bodies to the Privy Council was too invidious to be carried out; and the Council could not expect to have any influence if its representations were founded on the decision of a mere majority. The duty of the Council should be to consider what recommendations were essential; and any representations that it might make to the Privy Council should be founded on a majority of at least two-thirds of its members. Clause XL was evidently intended to prevent unqualified persons from assuming medical titles, but its object had been defeated principally by the words "*implying* that he is registered." How was the object of the Act to be carried out, if any man could call himself doctor, and so lead the public to think him qualified? It was difficult to amend the defect; but the Council must endeavour to do this; and he did not see how Clause XL could be carried out, unless registration were made compulsory on all qualified practitioners. Some objected that this would be a hardship; but it would only press on a few. He would not attempt to put down quacks by force, for any man might employ any one he pleased; he would, on the contrary, allow quacks every facility, but they should not sail under false colours. Returning to the subject of making registration compulsory, he knew that great objection had been made to it; and it had been urged, that the object of the Act was to give qualified medical men certain privileges and exemptions. But the preamble of the Act indicated more than this; namely, that the Act was not merely for the protection of the practitioner, but also of the public.

Dr. STORRAR thought that no member of the Council would consider the Act perfect in its present state; but this was a very different thing from voting that improvements must be made at the present time; and the reason of this was, the difference of opinion which at present existed. The English Branch Council had not acted as they had done from any desire to be discourteous. The report was sent to them for observations; they did not think it necessary to give all their reasons, but stated merely that they did not think it expedient to engage in fresh legislation. It was true that the Council had received deputations and memorials; but the great grievance of which these complained was the want of power to put down quackery and counterpractice. It would be seen that this arose from a mistaken view of the Act, the object of which was to distinguish qualified persons from unqualified, and to give them certain privileges. He agreed with Dr. Andrew Wood, that the Council could not ask Parliament to suppress quackery; and referred to the absence of attempts to suppress it directly in the clerical and legal practitioners, in which all that was done was to provide means of distinguishing properly qualified persons, and to give them certain privileges. All, therefore, that was required was, that the medical profession should be put in the same position as the legal. Still it had been thought that attempts should be made to satisfy the memorialists; and amendments of Clause XL had been suggested and handed to Mr. Ouvry, the solicitor of the Council. But he was sure that no dispassionate member could say that the efforts of the Council to amend this clause had hitherto been attended with any success. Dr. Corrigan had last year introduced the pharmacy clause—which he (Dr. Storrar) did not think should have been done. The Report was presented in 1863, a short time before the rising of the Council, when there was no time for its discussion; and it was ordered to be remitted to the Branch Councils. The Report having become public, an outcry was raised against the pharmacy clause; and the Branch Council did not think there was any urgent necessity for legislation at the present time. Nothing could certainly be more unsatisfactory than the state of pharmacy in this country; but it would be an unfortunate act of the Council to embroil itself with the druggists. The Council should drop pharmacy, and encourage the Pharmaceutical Society to go on with an independent measure. What he would like to see effected was, that the Colleges of Physicians and Surgeons in each division of the kingdom should agree to give a common license; and then that the Apothecaries' Companies might, with the sanction of the Council, enter into some arrangement with the Pharmaceutical Society to regulate pharmacy. With regard to Clause XX, he admitted the difficulty which the Council had in bringing their power to bear on the licensing bodies. At first sight, the proposed new clause was an improvement; but, on a closer view, he was not very sanguine as to this. How, looking to the proceedings of the last few days, would it be possible for the Council to frame regulations? Supposing that the Council applied to Parliament for a new Act, the first question that would be asked was, whether there was an agreement in opinion on the amendments asked for. No government would act on the representations of a mere majority of the Council; nor could the Council say that there was agreement among the members of the medical profession. He moved as an amendment:

"That looking to the great diversity of opinion which exists in Great Britain, in regard to the objects which it is desirable to obtain by an Amendment of the Medical Acts, it is not at present expedient that the Council should engage in fresh legislation."

Mr. ARNOTT seconded the amendment.

Mr. COOPER thought the profession would be much indebted to Dr. Corrigan for the manner in which he had brought forward the subject.

Dr. ALEXANDER WOOD differed from the opinions of the previous speakers, and wished, therefore, to advise a middle course, which would neither offend the feelings of the Medical Acts Committee nor of the profession. He would have supported Dr. Storrar's amendment, if it had been brought forward at an early period of the sessions of the Council; but, such was the strong opinion as to the necessity of amending the Medical Act, that a Committee on the subject was formed several years ago, and had been reappointed each session; and he could not agree to treat the labours of the Committee in the manner proposed in the amendment. As to differences of opinion, these existed twenty years ago; and they formed, in his opinion, no reason for inaction. The Report was brought forward last year at the end of the session, and went forth from the Council without a *caveat*, although it merely expressed the results of the arduous labours of the Committee, and had not been adopted by the Council. With regard to pharmacy, Dr. Christison would remember the consternation that was produced when Jacob Bell first introduced the Pharmaceutical Bill, and the trouble with which the Act was passed in its present form; and he was sure that the Council had enough to do in dealing with the medical licensing bodies, without taking steps which might lead to the creation of a new power that would give them still more trouble. Then as to Clause XL, was the Council prepared to deal with it? They must take care not to revive a discussion on titles. The Medical Act, before being passed, contained in one of its schedules a column of titles, which might have given rise to much dis-

eement; but, thanks to the energy of Dr. Storrar l others, it had been expunged. And, at the sent time, so great was the confusion in the fession between titles and qualifications, that, hout care, the whole question would be re- ed, which it had been sought to avoid. He ught, however, that the difficulties in amending use XL should be discussed with a view to their ng overcome. Why should the Council direct their icitor to draw up a Bill to be introduced into the use of Commons, and thus give an opportunity for revival of old discussions? The course which he uld propose was, that the Council should take up points on which they could agree, and draw up a rt Bill. He feared lest, if the whole question re again introduced into Parliament, a limitation ght even be placed on the power which the Council eady possessed. Had the Council carried out its sting powers? It was with some pain that he uded to this subject; but it was essential to do so. e of the most distinguished of the medical bodies he College of Surgeons of England—had refused comply with the recommendations of the Council. e matter was discussed in the Council; and what s the result? That the Council had decided not take any steps to enforce its recommendations on e College; and this was principally in consequence the opposition of Dr. Corrigan; who, Dr. Alex- der Wood thought, ought therefore not to com- ain that the medical boards did not comply with e recommendations of the Council. Even if a new edical Act could be obtained, giving the Council wer to enforce its recommendations, he did not ink it would be carried into effect. He was not epared, after the trouble which had been taken by . Corrigan, to support the amendment; but he was t disposed to adopt a proposal which might lead to internecine war. He thought that the Council ould not take up the whole Bill, nor refer it to the anch Councils; but that the principal points re- iring amendment should be taken into considera- n at an early day of the next session of the uncil, so that an agreement might be arrived at in gard to them. At the proper time, he would move amendment to the following effect.

"That the Council, while appreciating the labour d care bestowed by the Medical Acts Amendment mmittee on the heads of a Medical Bill proposed their Report, regret that it is impossible, at this te period of the Session, to enter on the full con- leration of so wide and important a subject;

"That the Council request the Branch Councils, in e interval between this session and the succeeding e, to consider how Clauses XX, XXXI, and XL of e Medical Act could be best amended;

"That the Council resolve to appoint an early day, their meeting next session, for the consideration the whole subject."

Dr. SHARPEY would support the course proposed by r. Alexander Wood. In Dr. Storrar's amendment, e diversity of opinion at present existing had been signed as a reason for not acting. He would in- rm Dr. Corrigan, that the English Branch Council d no desire to disparage the labours of the Medi- l Acts Amendment Committee. The proposal to aft a Bill was unsuited to the present condition of e question, because the opinion of the Council had t been expressed on the amendments suggested. here was one point which had excited much discus- on. Should the Council undertake the regulation pharmacy? It might be that, under the influence the Council, the legislature might make some pro- sion for this, and might, perhaps, place the carry- g out of the measure in the hands of the Council; which case, the pharmaceutists would probably obtain the power of having a representative in the Council. If it were decided that the Council should take up the subject of pharmacy—and Dr. Corrigan had brought forward proofs of the necessity of this—it would be more advisable to deal with the matter by a separate enactment, and not mix it up with the Medical Act. Regarding Clause XL, it had been proposed, among other things, to make registration compulsory on licensed practitioners. But would there be concurrence in this step? Would the Universities consent that their graduates in medicine should not use their titles unless they were registered? Should the Professor of Anatomy at Oxford, or Dr. Daubeny, or Professor Miller of King's College, be debarred from using the title of M.D. unless they were registered as medical practitioners? Again, two years ago, the Council had received suggestions from numerous practitioners regarding the amendment of Clause XL. These had been considered with great care; and it was evident that their tendency was to change the character of the Medical Act—that they aimed at suppressing illegal practice. Now, all would agree that medical practice by unqualified persons was a very great evil. It was an unjust encroachment on the rights of duly qualified men; and was unjust to the public. But it was vain to expect to put it down by direct penal enactment. The legislature would never consent to this; and he (Dr. Sharpey) did not think it desirable or politic to attempt to suppress illegal practice by measures inconsistent with the free institutions of the country. There was much force in Dr. Andrew Wood's remark, that the Council did not know what might be the result of applying to Parliament for a series of amendments to the Medical Act. The Council might be deprived even of the power of regulating the licensing bodies. He could not go altogether against the general voice of the profession; but he was not aware that there had been any general expression of professional opinion. He had great respect for the various associations which had memorialised the Council, and for their suggestions; but they did not represent the whole profession. It had been said that the Council ought to do something; but they should endeavour that this should be good, and expedient, and attainable. He was sure that the clear-sighted men in the associations would see this, if they thoroughly considered the difficulties of the subject.

Dr. LEET made some explanations in reference to the Apothecaries' Hall of Ireland.

Mr. HARGRAVE thought that it was proposed to ask for too much at present in the shape of amendments of the Act; and this opinion was confirmed by the advice which had been given to him by Mr. Napier, the ex-Chancellor of Ireland, who had counselled him not to press for any sweeping measures, but to endeavour to obtain gradual amendments. If proper measures were taken, the government might be induced to take up the matter in harmony with the Council. In 1862, the Council had gone to the ministry in fear and trembling regarding the *Pharmacopœia*; but they had been most favourably received by Sir G. Grey, and had obtained not only what they desired, but also a charter of incorporation, for which they had not asked. The want of power in the Council had been proved by the conduct of the College of Surgeons of England; and he feared to take any steps that might lead to a further diminution of their power. He thought that in the amendments proposed by Dr. Corrigan and the Committee, too much was asked.

Mr. RUMSEY would support the amendment of Dr. Storrar. He would not interfere with pharmacy, because the Council did not contain the necessary ele-

ments for doing so. The two Apothecaries' Companies were medical bodies, and had very little power over the practice of pharmacy. It had been said that, because the Council published a *Pharmacopœia*, it had a right to take pharmacy under its management. So also had the College of Physicians; but this college had relinquished the right; and he saw no reason why the Council should take up this or any other question of medical police, not directly connected with the Act. He was in favour of the objection made by the *pharmaciens* in the country, either that they were the proper persons to regulate their own affairs, or that the government should do it. He did not see how the management of pharmacy could be committed to a council in which the *pharmaciens* were not represented.

Dr. Alderson said that the College of Physicians had not relinquished its power of visiting apothecaries' shops, but had disused it.

Mr. Cooper said that the Apothecaries' Company had the power of visiting, but rarely exercised it.

Dr. Corrigan replied at some length to various remarks made by the previous speakers, and defended the resolution which he had proposed. He concluded by observing that, if the Council refused to act, and parliament took matters into their own hands, there would be danger, either that every workhouse board in the kingdom would follow the example of the Army Board, and institute examinations of their candidates; or that the Belgian system would be introduced. The King of the Belgians had found in his dominions a number of Universities, at variance with each other. He left them to settle their differences; but decreed that no one should hold a public medical appointment who had not passed an examination at a central University which he established in Brussels.

The amendment, on being put to the vote, was negatived by a majority of 13 to 4.

Dr. Alexander Wood then formally proposed, and Dr. Sharpey seconded, the second amendment above referred to.

Dr. Andrew Wood said that this amendment left the Council in the same state as last year. The course which he would be disposed to adopt was, to remit the subject to the Executive Committee, with instructions to have a Draft Bill prepared by a parliamentary solicitor, in reference to Clauses xx, xxxi, and xl; and that, after having been submitted to the Branch Councils, the Bill should be redrafted, and laid before the General Council at its next meeting. He thought that, if an entirely amended Medical Act were applied for, there was danger of losing the power which the Council already possessed. As to pharmacy, its regulation was much required; but this should be done by a special statute. With regard to the enforcing regulations, an excellent amended clause had been drafted; and if the Council agreed that Clauses xx and xl were to be amended, why could not they put their hand to the plough at once?

Mr. Rumsey was not opposed to legislation on pharmacy; but the subject was one of medical police, and beyond the range of the Medical Act.

Dr. Acland said that the regulation of pharmacy might be a question of medical police; but it must be borne in mind that the Council had the regulation of those engaged in practice; and, under the present system, there was a probability of their losing control over the most numerous body of practitioners. A very large proportion of the lower classes were under the charge of persons who had not obtained a licence to practise medicine. His own opinion was, that the Council would be unable to suppress this, because chemists and druggists had the same rights as other unqualified persons.

Dr. Apjohn thought that there was a very unreasonable dread of going before parliament. Unless the Council altered its course, the sooner it dissolved the better; and he was not disposed to put off the consideration of the great question raised by Dr. Corrigan.

Dr. Christison disapproved of any attempt to introduce pharmacy into the Medical Act. The present state of the practice of pharmacy was a disgrace to the country and to the legislature. He hoped, however, that the Council would not meddle with the subject, except by offering its aid and influence to any body which should take up the subject of legislation in regard to pharmacy. And he thought that this could be entrusted to no better persons than the pharmaceutical chemists of the country.

After some observations by Dr. Fleming in favour of the amendment, it was put to the vote, and carried by a majority of 10 to 9.

It was then put as a substantive motion, when Dr. Andrew Wood moved as a further amendment

"That it be remitted to the Executive Committee to have drafted by a Parliamentary Solicitor a Bill having regard chiefly to Clauses xx, xxxi, and xl of the Medical Act; that the Bill so drafted be transmitted confidentially to the Branch Councils for their opinion; that thereafter the Bill be re-drafted, so as to be in a condition to be submitted to the General Medical Council at its next meeting."

After some further discussion, this amendment was lost, and Dr. Alexander Wood's resolution was carried.

Thursday, May 5th.

G. Burrows, M.D., President, in the Chair.

The minutes of the last meeting were read and confirmed.

The Case of Richard Organ. The following letter was read, and ordered to be entered on the minutes.

"Cawood, Selby, Yorkshire, April 25th, 1864.

"*To the General Medical Council of Education and Registration.*

"Gentlemen,—Will you kindly permit me to appear before you to plead my cause for permission to present myself at one of the examining boards.

"I have suffered much from my former misconduct and have, since my name was erased from the *Medical Register*, striven all in my power to redeem the past by attending the lectures and hospital practice required by candidates for examination (having not done so prior to that time, which caused the medical men in this district to be so bitter against me. This feeling, I am happy say, has subsided).

"I have held for some years (and continue) the appointments of medical officer to several clubs and townships, besides having a large midwifery practice. I therefore trust, as I am truly penitent for my former imprudence, you will take my case into your kind consideration, and not compel me to continue in practice unqualified, as I undoubtedly must without your help, and my gratitude for your kindness shall be evinced by my future life.

"Anxiously waiting your reply.

"I am, gentlemen, your obedient servant,

"Richard Organ."

Dr. Alexander Wood was sure that the Council would wish to extend mercy towards penitent offenders in cases where such a course was consistent with duty. But the case of Mr. Organ was one of no common kind. Several years ago, he had been removed from the *Register* in consequence of having been personated at an examination. On this, he carried the case into the Court of Queen's Bench

was at first successful in compelling the Council eplace him on the *Register*. His name, however, removed a second time; and he again applied to Court of Queen's Bench, but this time without ess. Not having gained his object, he now e a submission which could be only regarded as ial; for he appeared to say that, if the Council ld not allow him to be admitted to examination, ould continue to practise in spite of them. He Alexander Wood) would not deprive any man of means of getting his bread; but Mr. Organ had ght his misfortune on himself by his previous luct towards the Council. He proposed:

That the Council decline to accede to the request Mr. Organ."

r. SYME seconded the motion, which was carried.

eport of the Select Committee on Education. Dr. ISTISON presented the following

REPORT.

he Committee appointed on May 3rd, relative to essional education, have to report, that they have fully considered all the points referred to them by Council.

hey understand the object of the Council to be, this report should comprise a statement of all mmendations as to professional education, arising the late discussion in Committee of Council, as hich there appears to be a general agreement in Council, and which may be sent forth this session ecommendations to the several licensing bodies he kingdom, or suggestions to them for informa-

. The Committee trust that they have kept this ct steadily in view in the following recommenda-s:

I.—REGISTRATION.

he Committee recommend under this head, that regulations proposed in the report of the Sub-mittee on Registration (Minutes No. 62, pp. 7 8) be adopted, with a slight change in No. 3 of se regulations; which will then stand as follows:

. "That the registration of medical students be ed under the charge of the Branch Registrars.

. "That each student be only once registered, when he first enrols himself as a medical student.

. "That each licensing body request, from each ool of medicine under its jurisdiction, a list of all dents entering on the study of medicine for the t time at that school, agreeably to the subjoined n."

FORM OF REGISTER OF MEDICAL STUDENTS.

ame.	Age last Birthday.	Prelim. Exam. and Date.	Date of Registration.	Place of Study.

. "That the register at each school be closed hin fifteen days after the commencement of each sion or term.

. "That these lists, as soon as possible thereafter, transmitted, along with the certificates of each dent having passed an arts examination, to the anch Registrar of that division of the kingdom ere the school is situated, and that he from them me an accurate register of medical students of that ision of the kingdom of which he is registrar.

. "That the registers of medical students so pre-red by the registrars, after examination by the eral Branch Councils, be transmitted to the Regis-r of the General Council, who shall, under direction the Executive Committee, print the same in alpha-betical order, and supply a copy of this authorised list to each of the bodies in Schedule (A) to the Medical Act.

7. "That the several licensing bodies be requested, after October 1868, to abstain from examining any candidate for licence or degree, whose name does not appear on the authorised list of medical students.

8. "That the Branch Councils be desired to take means to make these regulations known to the medical students at the various medical schools.

9. "That exceptions allowed by the licensing bodies to any of the preceding regulations as to registration, together with the reasons for such exceptions, be transmitted to the Branch Council of the part of the United Kingdom in which they have been granted."

II.—AGE FOR LICENCE TO PRACTISE.

The Committee, after having taken into consideration Mr. Rumsey's notice of motion—that the earliest age for obtaining any license to practise medicine or surgery, should be twenty-two, recommend that the resolution 17 of the recommendations of Council in 1863, p. 7, be adhered to in the following shape:

1. "That the age of twenty-one be the earliest age at which any professional license shall be obtained; and that the age shall, in all instances, be duly certified."

III.—PROFESSIONAL STUDY.

The Committee have taken into consideration the notices of motion as to professional study, given by Dr. Thomson, Dr. Parkes, and Dr. Storrar, and have come to the following recommendations, in which not only these gentlemen, but likewise every other member of Committee present, have concurred:

1. "That no licence be obtained at an earlier period than after the close of the last winter session of four years of study, after the registration of the candidate as a medical student.

2. "That the course of study required for a licence shall comprehend attendance during not less than four winter sessions, or three winter and two summer sessions, at a recognised medical school; and that evidence shall be produced that the remaining period of the four years has been passed in the acquisition of professional knowledge.

3. "That, in reference specially to Dr. Parkes' notice of motion, as to duration of sessions, and of courses of lectures, the regulation of the duration of sessions, and the extent and duration of courses of lectures and instruction, be left for the present to the several licensing bodies.

4. "That it be recommended to the several licensing bodies, that the courses of instruction required by them should be framed in such a manner as to secure a due share of attention, both to preparatory branches, and to those more strictly connected with the practice of medicine and surgery; and that it be suggested accordingly to these bodies, that their regulations should be such as to prevent attendance upon lectures from interfering with hospital and clinical study.

5. "That, while avoiding for the present all other details, by which this object may be attained, it be recommended, that no subject of lectures be enforced by regulation, to be attended oftener than once.

6. "That the Council intimate, that they will view with approbation any encouragement held out by the licensing bodies to students to prosecute the study of the natural sciences before they engage in studies of a strictly professional character.

7. "That the several licensing bodies be requested to furnish a short statement of the mode in which their examinations are now conducted, whether by written, oral, or practical examination, and of the length of time a candidate is under examination in each, or all of these ways."

IV.—EXAMINATIONS.

The Committee have considered the subject of examinations with peculiar care; which was rendered imperative by the proofs brought before the Council in the late discussion on education, that the examinations of the licensing boards, however conscientiously carried on under the present system, are not always sufficient for their purpose. The subject is one confessedly of much difficulty. The Committee have resolved to recommend:

1. "That the licensing boards be advised to encourage the periodical examination of students at their several classes.

2. "That the final examinations of the licensing boards be so carried on as to be an efficient test of the practical acquaintance of candidates with the several branches of medical knowledge, and especially with the practice of medicine and surgery.

3. "That the professional examination for any licence be divided into two parts; the first embracing the primary or fundamental branches of medicine; and the second the branches directly connected with the practice of medicine and surgery; that the former be not undergone till after the close of the winter session of the second year of professional study; and the latter, or final enamination, not till after the close of the winter session of the fourth year of such study.

4. "That the examination in chemistry, botany, and natural history may be undergone at an earlier period.

5. "That the professional examinations be conducted both in writing and orally; and that they be practical in all branches in which they admit of being made so.

6. "That the professional examinations be held by the several licensing bodies, except in special cases, at stated periods, to be publicly notified.

7. "That returns from the licensing bodies in Schedule (A) be made annually on the 18th of January, and in the subjoined form, to the General Medical Council, stating the number and names of the candidates who have passed their first as well as their second examinations, and the number of those who have been rejected at the first and second examinations respectively; and that the Registrar forward a sufficient number of forms, with a notice for their being returned, in due time."

FORM OF RETURN OF EXAMINATIONS, AND THEIR RESULTS.

PASSED.				REJECTED.	
1st Examination.		2nd Examination.		1st Ex.	2nd Ex.
No.	Name.	No.	Name.	No.	No.

V.—SUPERVISION OF EXAMINATIONS.

So much has been truly said in the late discussions in the Council, as to the duty which lies with the Council to carry out the enactments of the Medical Act relative to the supervision of the examinations of the licensing boards, that the Committee have felt a great desire to recommend some definite course which the Council might at once pursue for establishing such supervision.

They fear, however, that the Medical Act is defective in this respect, inasmuch as it has not contemplated either the great amount of time and labour required to carry on a really effective supervision of the very numerous examinations of the licensing boards of the kingdom, some of which do not meet for examination at the seats of the Branch Councils, or the amount of qualifications and professional position necessary to constitute a staff of efficient visitors of examinations; and, consequently, has omitted to provide the means of remunerating them for their important services. But, notwithstanding this obstacle, the Committee recommend that a trial of visitation be immediately made on such a scale as may be a guide to the Council for further regulations on the subject, at a future meeting. For this end they recommend that the Branch Councils be instructed severally to organise a set of trial visitations on a scale which may enable them to report upon their success, the conditions for efficiency, and the requisite means for rendering them adequately extensive.

VI.—SUGGESTIONS FOR OBTAINING INFORMATION.

To these recommendations, which it seems to them advisable that the Council resolve now to adopt, the Committee think it right to add others, as to which the opinions of the licensing bodies, and of the medical schools connected with them, should be requested in time for the consideration of the Council at its next session, viz.:

1. "Whether, in the opinion of the licensing bodies, the commencement of professional study, by which the duration of it must be regulated, should be held to be only entrance on such study at a recognised medical school?

2. "Whether a "medical school" may be better or otherwise defined than as one where there is an opportunity of studying at a general hospital, containing at least eighty beds for patients, and also a teacher of practical anatomy recognised by a licensing body?

3. "Whether entrance on apprenticeship should be held as another way of constituting the commencement of professional study?

4. "Whether the same privilege be extended to pupilage under a registered practitioner, who has charge of a union workhouse, a dispensary, or an hospital, though destitute of medical or surgical teachers?

5. "Whether any other mode of study may be similarly recognised as the commencement of professional study?

6. "Whether, looking to the great extension of the primary or fundamental sciences of medicine during the last forty years, the subjects embraced in courses of lectures on these sciences may not be better arranged and treated than now; so that they may be made more applicable than they are at present to the practical instruction of medical students, as distinguished from general students?

7. "Whether it be advisable or not, and if advisable, whether, and how, it may be practicable to adopt, in part at least, the principle of *ad eundem* examinations; so that a candidate, who has been satisfactorily examined, in part or completely, for any professional title conveying the right of practice, shall not be subject to re-examination on precisely the same branches by another examining body, before whom he may appear as candidate for the same, or a different, qualifying professional title?

8. "Whether it be advisable and practicable, for the relief of candidates for licences from superfluous examinations, to establish in England, Scotland and Ireland severally, a conjunct examining board, before whom candidates may be subjected to a single series of examinations for the "double qualification" of a physician and surgeon.

9. "Whether it be desirable that the oral and practical parts of the professional examinations should be so conducted as to be open to registered medical practitioners and registered medical students.

astly—In conformity with the notices of motions . Acland, the Committee recommend the Coun- appoint a select Committee, to consider and at the next session of the Council, what are bjects of examination which should be required students prior to commencing the prescribed e of professional education, and what are the sional subjects of examination which should be ed of all candidates before they receive the e to practise medicine, or surgery, or medicine urgery. "R. CHRISTISON, *Chairman*."

the motion of Dr. CHRISTISON, seconded by Dr. EW WOOD, the report was received and ordered entered on the minutes.

nding Order regarding Votes. Dr. CORRIGAN d, and Dr. A. SMITH seconded:

hat the Standing Order, paragraph 12, section Order of Business,' be amended so as to read as s:

That in cases when a division takes place, any ber of the Council may require that the names mbers of the majority and minority be entered e minutes.'"

. ALEXANDER WOOD moved as an amendment, Mr. HARGRAVE seconded:

That Standing Order, paragraph 12, section iii, be ed to the following effect:

That in all cases when a division has taken place, member of the Council may require that the s or numbers of the majority and minority, of those declining to vote, be entered on the tes.'"

e amendment was carried; and having been put as a substantive motion, was agreed to.

oposal regarding Erased Names. Dr. A. SMITH ed:

That the names of persons which have been re- ed from the *Register* by order of the General cal Council, or by the Executive Committee, in dance with the Standing Orders, be printed an- ly, as an Appendix to the *Register*."

e said that the necessity for this was rendered ent by the fact that, last year, Richard Organ had ied to the King and Queen's College of Physicians e admitted to examination; and unless he (Dr. h) had been present, the application would pro- y have been granted.

. CORRIGAN seconded the motion.

. ALEXANDER WOOD said that the Council had ower to publish erased names; and that provision been made for communicating to the examining es the names which had been expunged from the ster.

ne motion, on being put to the vote, was negatived majority of 8 to 3.

moval of Names from the Register. Dr. A. SMITH posed, Dr. ALEXANDER WOOD seconded, and it resolved:

That the Executive Committee be authorised to ve from the *Register* the qualification of any per- who has been deprived of his diploma or licence ny of the bodies in Schedule (A) of the Medical "

That the Executive Committee be authorised to ve from the *Register* the name of any person who been expelled, or deprived of his diploma or ice by any of the bodies in Schedule (A) of the ical Act, provided the said person has not regis- d any other qualification."

That the Standing Order, Chap. VIII, paragraph e amended as follows:

'That, should the Council remove the name of person from the *Register*, under section xxviii or of the Medical Act, due intimation of the same be made to all the bodies enumerated in Schedule (A) to the Act.'"

Length of Speeches. Mr. SYME said that, in carrying on discussions, there were two modes—the simple and concise, and the diffuse. If the time of the Council were of little value, it would be of no consequence which plan was followed; but in present circumstances, the first ought to be adopted. He would be sorry to interfere with free discussion; but he was sure that a quarter of an hour was sufficient for any ordinary occasion. He had provided for extraordinary cases, in which extension of time might be granted by the Council. He moved:

"That no member of the Medical Council shall speak upon any subject for more than a quarter of an hour, without permission of the Council."

Mr. RUMSEY seconded the motion.

Dr. ANDREW WOOD opposed the proposal. It might be carried out if all the members of the Council were as concise as Mr. Syme; but there were many things that could not be said in fifteen minutes. And the discussion itself as to whether extra time should be allowed to any member would in itself involve a loss of time.

After some remarks from Dr. Corrigan, Mr. Hargrave, Dr. Paget, and Dr. Embleton, the motion was put to the vote and negatived.

Mr. SYME required that the numbers of the majority and minority, and of those who declined to vote, be entered on the minutes. The result was: Majority, 11; minority, 6; declined to vote, 5.

Standing Orders. Dr. ANDREW WOOD moved, Dr. EMBLETON seconded, and it was agreed:

"That the various Standing Orders which have been agreed upon during this Session be referred to the Committee on Standing Orders, in order that they may be incorporated with the Standing Orders of the Council, and with instructions to that Committee to number the Orders."

Dr. EMBLETON was appointed Chairman of the Committee on the Standing Orders, in the room of Dr. Christison, resigned.

Requirements of the Irish Poor Law Commissioners. Dr. ALEXANDER WOOD moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That the Council take into consideration the Report of the Committee on the requirements of the Commissioners for administering the Laws for Relief of the Poor in Ireland, deferred from last Session."

Dr. ALEXANDER WOOD moved, and Dr. ANDREW WOOD seconded:

"That, whereas the Commissioners for administering the Laws for the Relief of the Poor in Ireland require a licence in midwifery from candidates for employment under them, the Medical Council requests the President to communicate with the Home Secretary, for the purpose of inducing him to request the Commissioners to receive the certificates of all bodies examining in midwifery, thereby carrying out the reciprocity in practice, which it was one object of the Medical Act to secure."

Dr. ALEXANDER WOOD said that, while most of the bodies in Schedule A examined in midwifery, the Royal College of Surgeons alone was entitled to grant special licences in that department. The Poor Law Commissioners in Ireland had employed towards candidates a degree of compulsion which he did not think just.

Dr. CORRIGAN said that the Home Secretary had no power over the Irish Poor Law Board; inasmuch as this body had, by Act of Parliament, a right to determine what qualifications candidates should possess. The College of Surgeons in Edinburgh gave a certificate in midwifery, although not legally authorised to

do so; and this certificate was received by the Irish Poor Law Board, which had never inquired into its legality.

Dr. ANDREW WOOD said that, if the Council did not interfere, reciprocity of practice could no longer be said to exist. The words "Medicine" and "Surgery" in Clause XXXI of the Act included, and must include, midwifery; and it would be a retrograde step to suppose that a practitioner could not practise midwifery unless he had a special certificate. If the contrary were admitted, then one board only—the College of Surgeons of England—gave qualifications for the practice of midwifery. But the whole system of midwifery licenses was a blot on the profession; and the College of Surgeons would do well to consent to their withdrawal. There might as well be special certificates for lithotomy, etc. The Irish Executive had gone beyond its powers in requiring from candidates qualifications not mentioned in the Medical Act.

After some remarks from Dr. ALEXANDER WOOD, Dr. CORRIGAN, and Mr. COOPER,

Mr. HARGRAVE said that the College of Surgeons of Ireland would not give up their present powers, but would aid other bodies in obtaining similar privileges. The charter of that College gave power to examine and give certificates in midwifery. The Irish Poor Law Board could do as they thought right—they had as much right to institute even a distinct board of examination, as the Army Board or any other body.

Mr. ARNOTT could not agree to the proposal that the College of Surgeons in England should give up its licences in midwifery. In a midwifery institution with which he was connected, there had been found to be no means of determining the qualification of candidates for the office of surgeon accoucheur; and hence the examination in midwifery was instituted. He was surprised, however, that the midwifery licence had been included in Schedule A of the Medical Act. It ought not to have been placed there; because a man whose name was on the *Register* could practise any department of the profession. But this was no reason why there should not be an examination in midwifery; and if boards still required a midwifery certificate, it would be proper to continue to grant it.

Dr. CHRISTISON would ask whether the Irish Poor-law Board required a certificate of legal qualification to practise midwifery, or merely a testimonial of knowledge of that department? All public boards are justified, for the safety of life, in demanding any reasonable amount of evidence of competency for practice. But, as to the granting of formal licences to practise special departments, the Council should do all in their power to put down such a system. If it were right to grant licences in midwifery, a similar course might be adopted with great benefit in regard to medical jurisprudence.

Mr. SYME said, that an application to the Home Secretary would not produce the object desired. The decision of the question must turn on the *Register*. Let the Council refuse to enter some of the midwifery licences, and let the matter be tried, if thought proper, in the law courts.

Dr. ALEXANDER WOOD said that the Irish Poor-law Board had, without doubt, a perfect right to take care that their candidates were duly qualified; and there could be no objection to their requiring evidence of competency to practise midwifery. But they required licences which limited the chance of obtaining employment to the members of those bodies which had secured, by charter, special provision for granting certificates in midwifery. In the entry of medical titles on the *Register*, the Registrar, under the direction of the Executive Committee, had entered a title (the licence in midwifery of the King and Queen's College of Physicians) which the Medical Act did n recognise. This had been done under legal threa but the Council must protect their Registrar, a forbid him to do such an illegal act in future.

The motion was then put to the vote, when the appeared for it, 15; against, 4. It was consequent carried.

Dr. ALEXANDER WOOD required that the names the majority and minority be entered on the minute *Majority*—The President; Dr. Alderson; Mr. Coope Dr. Acland; Dr. Paget; Dr. Embleton; Dr. Storra Dr. Alexander Wood; Dr. Andrew Wood; Dr. Fler ing; Mr. Syme; Dr. Sharpey; Dr. Parkes; Mr. Rur sey; Dr. Christison; Dr. Stokes. *Minority*—D Smith; Mr. Hargrave; Dr. Apjohn; Dr. Corrigan.

Dr. ALEXANDER WOOD moved:

"That the Registrar be instructed not to enter the Register the Licences in Midwifery of the Kir and Queen's College of Physicians in Ireland, or the College of Surgeons of Ireland, inasmuch these qualifications do not appear on Schedule (to the Medical Act."

Dr. WOOD said that the time had come when opportunity should be given of trying in a court law the question raised in this resolution. If t Council were compelled to enter the licences the mentioned, there would be a strong reason for amen ing the Medical Act.

Mr. SYME seconded the motion.

Dr. A. SMITH had not the slightest objection th legal means should be employed; but he would wa the Council against becoming involved in a troubl some course of legislation.

Dr. ANDREW WOOD thought the time had con when the matter ought to be tried fully and fairly a court of law. As long as the matter stood in i present position, injustice was being committed; a one of the objects of the Act—reciprocity—was d feated.

Several other members made some remarks.

Dr. APJOHN proposed as an amendment, and D CORRIGAN seconded:

"That before undertaking to give directions to t Executive Committee to depart from the regulatio under which the *Register* has hitherto been publishe the opinion of Sir Hugh Cairns and Mr. Hobhous referred to in the Report of the Committee on t Requirements of the Poor Law Commissioners, etc., read by the Registrar."

After some further discussion, in which Dr. Aclan Dr. Corrigan, Dr. Paget, Dr. Stokes, Dr. Parke Dr. Quain, Dr. Embleton, Mr. Arnott, Dr. Sharpe and Dr. Alexander Wood took part, the amendme was put to the vote, and lost by a majority of 12 to

Dr. PARKES then moved, and Mr. ARNOTT seconde the following as a second amendment:

"That both as regards future registration, and als the registrations already effected, a case be draw out, without delay, by the Executive Committee an the Solicitor to the Council, and be submitted to th law officers of the Crown, as to the legality of regi tering licences in midwifery which do not appear i Schedule (A) to the Medical Act, and that the Exec tive Committee be authorised so act on the leg opinions thus obtained."

This amendment was carried by a majority of 16 t 3; and, being put to the vote as a substanti motion, was agreed to.

Order of Business. Dr. QUAIN moved:

"That at future meetings of the Council, the fir hour after the chair has been taken each day be a propriated to the consideration of such matters business of the Council as are not likely to call f lengthened debate."

Dr. EMBLETON seconded the motion, which, aft

remarks from Dr. Andrew Wood, Dr. Storrar, Dr. Alexander Wood, was put to the vote and 2 voting for, and 11 against it.

FRIDAY, MAY 6TH.

. BURROWS, M.D., President, in the Chair.

e minutes of the last meeting were read and med.

fessional Education. Dr. CHRISTISON moved, Dr. STORRAR seconded:

hat the standing orders, in regard to the order siness, be suspended, and that the Council pro- to consider the Report of the Select Committee ofessional Education."

e motion was lost; 9 voting for, and 11 st it.

Faculty of Physicians and Surgeons of Glasgow. rrespondence was read, which had taken place een the Poor-law Board, the Guiltcross Union, aculty of Physicians and Surgeons of Glasgow, he Registrar of the General Medical Council, in nce to the question, whether the licence of the lty of Glasgow confers a qualification both in cine and in surgery.

. FLEMING proposed, Dr. ALEXANDER WOOD ded, and it was resolved:

hat in reply to the inquiry made by the Secre- of the Poor-law Board, in regard to the powers rred by the licence of the Faculty of Physicians Surgeons of Glasgow, the Registrar be instructed timate that the question, involving the legal in- etation of a Charter, is one which the Council is ompetent to answer."

les of Medical Officers in the Army. The following r from the Director-General of the Army Medical rtment was read:

"Army Medical Department, April 9, 1864.

Sir,—The President and Fellows of the King and n's College of Physicians in Ireland having applied e Secretary of State for War to have the letters s.' inserted in the *Army List*, after the names of medical officers as may possess the qualification hat body, and Lord De Grey having determined ave the subject referred to the General Medical ncil, with a view of eliciting their opinion as to expediency of recognising such a title as a means istinguishing such licentiates from other legally ified medical practitioners, I shall feel obliged by having the matter so submitted to the General ical Council at their next meeting.

"I have the honour to be, Sir,

"Your most obedient humble servant,

"(Signed) J. B. GIBSON,

"The Secretary, "Director-General.

General Council of Medical Education,

"32, Soho Square, W."

r. CORRIGAN said that, during the last two or e years, several gentlemen possessing the licence he King and Queen's College of Physicians, and some who had licences from boards in London and aburgh, had complained of being placed at a dis- antage in the *Army List*, inasmuch as their titles e omitted, while the M.D. was inserted after the nes of graduates of universities. Two plans had n proposed by Dr. A. Smith and himself (Dr. Cor- n) to the Director-General, either to insert the ers "Phys.," or to insert the titles after the nes as they stood in the *Medical Register*. The ector-General had, in reply, stated that he did not nk it expedient to adopt either of the suggestions, would refer the matter to the Medical Council. e question did not affect the King and Queen's College of Physicians alone, but the licentiates of all the examining boards. He moved:

"That it is the opinion of the General Medical Council that it would not be advisable to insert the letters 'Phys.;' but that it is the opinion of the General Medical Council that the several medical qualifications which army surgeons possess, as inserted in the *Medical Register*, might be entered after their names in the *Army List*."

Dr. A. SMITH seconded the motion.

In the discussion which followed,

Dr. PARKES said that the Director-General was anxious to ascertain what qualifications were inserted in the *Medical Register*, and would be disposed to take them as the legal qualifications. He (Dr. Parkes) believed that the Director-General wished to ascertain whether the Council inserted such a title as "Phys." in the *Register*. If the Council stated this, he believed that all would be done that was required.

The motion, on being put to the vote, was carried without dissent.

The Apothecaries' Hall of Ireland. A long correspondence having been presented regarding the power of the Apothecaries' Hall in Ireland,

Dr. CORRIGAN moved, and Dr. A. SMITH seconded:

"That the letters from the King and Queen's College of Physicians, respecting the licence granted by the Apothecaries' Hall of Ireland, be entered on the minutes."

The "previous question" was moved by Dr. PAGET, seconded by Dr. ACLAND, and agreed to by a majority of 16 to 4.

Report of the Committee on Education. Dr. ALEXANDER WOOD moved, Mr. SYME seconded, and it was resolved by a majority of 15 to 7:

"That the Standing Order, Sect. iii, No. 5, be suspended; and that the Council do now proceed to consider the Report of the Select Committee on education."

Dr. CHRISTISON moved, Dr. STOKES seconded, and it was resolved:

"That Regulation No. 1, Sect. i, of the Report of the Select Committee, be adopted, viz.: 'That the registration of medical students be placed under the charge of the Branch Registrars.'"

Dr. CHRISTISON moved, Dr. STOKES seconded, and it was resolved:

"That Regulation No. 2, Sect. i, be adopted as thus amended, viz.: 'That every student be registered at the commencement of professional study.'"

Dr. CHRISTISON moved the adoption of Regulation No. 3, Sect. I.

Dr. SHARPEY thought there would be trouble in carrying out this recommendation, as it would in some cases (*e. g.* in London) be difficult to determine what schools were under the jurisdiction of a licensing body. He thought it would be better that each medical school should transmit a list of its students to any one of the licensing bodies in the same division of the kingdom; and that the returns should then be sent to the Branch Registrar, so that he might prepare a list therefrom.

Dr. CHRISTISON said that the Council had no direct jurisdiction over the medical schools, but could only reach them through the licensing bodies. As to the risk of students being registered twice, he did not think there was much danger of this, with all the appendages that would be required to each name.

The PRESIDENT said that, under the proposed recommendation, each of the licensing bodies in England would require to apply to all the medical schools; and hence the Registrar would have several lists, in which the same name would be repeated again and again. As it was of much importance to have the cooperation of the medical schools, he thought that

they should be invited to send in their lists to the Registrar.

Dr. ALEXANDER WOOD suggested that medical students should be required to appear before the Registrar. This would, however, be difficult in some cases; but the difficulty might be met either by appointing deputy registrars, or by requiring from each student satisfactory evidence of having entered the medical profession. The necessity for this would arise, if instruction otherwise than at a medical school should be recognised.

Mr. ARNOTT thought that the present machinery of regulation of students by the licensing bodies was sufficient.

After some further remarks from Dr. Sharpey, Dr. Andrew Wood, and Mr. Cooper, the resolution was proposed in the following form by Dr. CHRISTISON, seconded by Dr. STOKES, and carried:

"That Regulation No. 3, Sect. i, be adopted, as thus amended; viz., 'That the several licensing bodies be requested to furnish to the Branch Registrars, at the beginning of January annually, a list of students who have been registered for the first time during the preceding year, according to the subjoined form.'"

FORM OF REGISTER OF MEDICAL STUDENTS.

Name.	Age last Birthday.	Prelim. Exam. and Date.	Date of Registration.	Place of Study.

Dr. CHRISTISON moved, Dr. STOKES seconded, and it was resolved:

"That Regulation No. 4, Sect. i, be adopted as thus amended; viz., 'That the Register of each licensing body be closed within fifteen days after the commencement of each session or term; and that Regulations 4 and 5 be transposed.'"

It was moved by Dr. CHRISTISON, seconded by Mr. ARNOTT, and resolved:

"That Regulation No. 5, Sect. i, be adopted as thus amended; viz., 'That from the lists of the licensing bodies each Branch Registrar shall frame an accurate register of medical students of the division of the United Kingdom of which he is Registrar.'"

Dr. CHRISTISON moved, Mr. ARNOTT seconded, and it was agreed:

"That Regulation No. 6, Sect. i, be adopted as thus amended; viz., 'That the registers of medical students so prepared by the Registrars, after examination by the several Branch Councils, be transmitted to the Registrar of the General Council, who shall, under direction of the Executive Committee, prepare and print an alphabetical list of all registered students, and supply a copy of this authorised list to each of the bodies in Schedule (A) to the Medical Act.'"

Dr. CHRISTISON moved, Dr. STOKES seconded, and it was resolved:

"That Regulation No. 7, Sect. i, be adopted as thus amended; viz., 'That the several licensing bodies be requested, after October 1868, to abstain from examining any candidate for licence or degree, whose name does not appear on the authorised list of medical students, as having passed the preliminary examination in arts, or whose name is not already on the *Medical Register*.'"

Dr. CHRISTISON moved, Dr. STOKES seconded, and it was agreed:

"That Regulation No. 8, Sect. i, be adopted, viz.: 'That the Branch Council be desired to take means to make these Regulations known to the medi students at the various medical schools.'"

Dr. CHRISTISON moved, Dr. STOKES seconded, a it was agreed:

"That Regulation No. 9, Sect. i, be adopted as tl amended, viz.: 'That exceptions allowed by t licensing bodies to any of the preceding Regulati as to registration, together with the reasons for su exceptions, be transmitted in a separate list, to t Branch Council of the part of the United Kingd in which they have been granted.'"

Dr. CHRISTISON moved, and Dr. STOKES seconde

"That Regulation No. 1, Sect. ii, be adopted, vi 'That the age of 21 be the earliest age at which a professional licence shall be obtained; and that t age shall, in all instances be duly certified.'"

Dr. CHRISTISON said that the question of age h been very carefully considered by the Council, w had long ago, by a majority, fixed on 21. One reas which weighed much with himself and his colleagu was, that he had found in the University of Edinbur that a larger proportion of the best of the candidat were found at the age of 21 than at other ages.

Mr. RUMSEY said that the reasoning in Dr. Chris son's last statement might equally be applied to low ages. He had thought that it had been a settl opinion in the Council that 21 was the best minimu age for entering the profession; and he was gratifi to find that there had been a difference of opinio The opinions of the greatest medical reformers h for many years been in favour of an increased ag and the age of 22 had been introduced into seve of the medical bills. Not only was the idea not ne but in some of the licensing boards, such as the Co lege of Surgeons of England, the age of 22 had be that fixed on as the lowest at which a diploma cou be obtained. But an alteration was made, on the pl that the public services demanded a reduction of ag The Poor-law Commissioners had, in introducing new system, said that if the College of Surgeons wou not meet their requirements, other bodies would so; and hence the College had reduced its standa age, that the pecuniary competition for offices und the Poor-law was now abolished. The Irish Poor-la Board required their candidates to have attained th age of 23; and he had good authority for believing th the English Board was willing to raise the standard age, but was embarrassed by the Act of Parliame and by the regulations of the Medical Council. Ho was it possible for most students to get through th preliminary examination and the subjects of profe sional education at a lower age than that of 22? H would remind the Council of the comparison made l the President between the culture of the mind ar the tillage of the soil. It was impossible in eith case to force growth, without at the same time wea ening. He did not propose that a sudden chan should be made; but that after 1868 candidat should be required to be 22 years of age, It had be objected that, if this were decided on, there would n be sufficient candidates for the medical service of th army. But let this be made attractive, and the would be no deficiency. Again, the necessity for i creasing the age was shewn by the state of the pr fession in large towns. He protested against th principle that the narrow pecuniary means of studen were to limit the requirements of the Council. H moved as an amendment:

"That Regulation No. 1, Sec. ii, be adopted wit the addition, 'That after the year 1868, the earlie age at which any professional license shall be obtaine be 21.'"

Mr. HARGRAVE seconded the amendment.

Dr. STOKES would agree with much that had be said by Mr. Rumsey; but the question had alread

ery fully discussed. The Committee had adopted e of legal majority. He did not think there was lvantage in students being compelled to remain hospitals and attending lectures until they were 23 years of age; on the contrary, there was a of education which would be better conducted he student had been released from the dread of nations. Among the other advantages of allow- e licence to be obtained at the age of 21, would opportunity which it afforded for travelling, siting the foreign hospitals and medical schools. ouncil had nothing to do with the requirements Irish Poor-law Commissioners, or any other s.

PAGET supported Mr. Rumsey's amendment. ddition of twelve months to the period of medi- dy would solve many difficulties in dealing both eneral and with professional education.

amendment, on being put to the vote, was lost; ing for it, 7 against it, and 5 declining to vote. riginal motion was then carried.

the motion of Dr. CHRISTISON, seconded by Dr. s, the further consideration of the Report was ned.

as then agreed that the standing orders should pended, and that the Council should meet on day at 12 instead of 2 o'clock.

cutive Committee. The Council now proceeded lot for four members to form, with the Presi- the Executive Committee. Mr. Arnott, Dr. d, Dr. Sharpey, and Dr. Quain, were elected.

Council met at 12 o'clock on Saturday. A pro- to discuss the remainder of the Report of the Com- e on Education was negatived; and ultimately resolved that the Report should "be forwarded various bodies in Schedule A, with a letter the Registrar to the effect that the Report is the consideration of the Council, and calling attention to the suggestions of the Report, and ing their observations thereon; also, distinguish- he resolutions which have been adopted by the il from those which have not yet been con- d; and that it be referred to the Executive ittee to carry this resolution into effect." Va- resolutions were passed, and business transacted; he Council terminated its seventh session at a after six o'clock. Want of space compels us to a fuller report of the day's proceedings.

HILIS IN THE ARMY AND NAVY. Lord Hart- n, a few nights ago, spoke as follows on this r. "The subject adverted to by his hon. friend J. Trelawny) was one of great importance, but ected the navy as well as the army, and ought be partially dealt with. It had received the deration both of his noble friend (Lord C. Paget) imself, and later in the session it was his noble l's intention to propose the appointment either committee or commission to inquire into the ion.

OTOGRAPHS BY ARTIFICIAL LIGHT. At the So- of Arts, Dr. Crace Calvert called attention to netal magnesium, exhibited specimens of wire from it, and showed the brilliant light which mbustion affords. This light is so intense, and sses to so great a degree the qualities of sun- that photographs can readily be taken of objects inated by it. At the conclusion of the lecture al successful photographs were taken in thirty ds by Mr. Claudet of Theed's bust of the Prince ort in the anteroom of the society's lecture-hall, rst ever taken in London by means of this illu- ting agent.

Medical News.

UNIVERSITY OF ST. ANDREWS. List of candidates who obtained the degree of M.D. on April 29, 1864.

Charsley, W. P., M.R.C.S.L., Principal Civil Medical Officer, Ceylon
Fenton, John, L.R.C.P.E., F.R.C.S., L.S.A., Liverpool
Irwin, Wm. Nassau, L.R.C.S.I., L.R.C.P.L., Dip. Mid., Monaghan, Ireland
Kelly, Walter McD., L.R.C.S.Edin., L.S.A., Crook, Durham
Lush, John Alfred, M.R.C.S.E., L.S.A., Salisbury
Parker, Wm., L.F.P.S., L.S.A., Bermondsey
Sankey, Wm., M.R.C.S.E., L.S.A., Sutton Valence, Kent
Smith, J. Sydney, M.R.C.S.E., L.M., L.S.A., Tiverton
Walsh, James, M.R.C.S.E., M.R.C.P.E., L.M.I., Staff-Surgeon, Limerick
Wilson, Thomas, M.R.C.S.E., L.S.A., Hull

APOTHECARIES' HALL. On May 5th, the following Licentiate was admitted:—

Knott, Thomas Henry, Guy's Hospital

At the same Court, the following passed the first examination:—

Taylor, James, Anderson's University, Glasgow

As an Assistant:—

Evans, John, Cardiff

BIRTH.

CURRY. On May 11th, at East Rainton, the wife of *William Curry, Esq., of a son.

MARRIAGES.

SLYMAN—POLLARD. On May 4th, at St. Budeaux, *William D. Slyman, Esq., Wellington Road, London, to Susan, eldest daughter of Tobias Pollard, Esq., of West Whitleigh, Devon.

STEPHENSON—DEWHURST. On April 28th, at St. John's Church, Blackburn, W. H. Stephenson, M.D., to Mary Elizabeth, second and youngest daughter of James Dewhurst, Esq., Blackburn.

MURDER BY A LUNATIC. Colney Hatch is unfortunate. The papers this week report a case of murder of one lunatic there by another. The inquest is not yet completed.

THE COURT OF COMMON COUNCIL have made a grant of fifty guineas to the funds of the Great Northern Hospital; and of two hundred guineas to the City of London Hospital for Diseases of the Chest.

PISCICULTURE. During the past season, there have been put into the Thames 7000 salmon, 40,000 trout, 2000 grayling, and 3000 char, which are found to be in a thriving condition. All persons are allowed to angle in the waters.

A MEDICAL CAPTAIN OF VOLUNTEERS. We notice in Friday's *Gazette* that Lord Lyttelton, the Lord Lieutenant of Worcestershire, has appointed one of our earliest associates, Mr. F. Davies of Pershore, to be captain of the 10th Company of the Worcestershire Rifle Volunteers. There are, we believe, but very few instances in which country general practitioners have been appointed captains of volunteers; and the fact now recorded may be regarded as a great personal compliment paid to Mr. (Capt.) Davies.

IRISH POOR-LAW OFFICERS. In the House of Commons, Mr. M'Evoy lately moved the following resolution. "That her Majesty's Government should now adopt the recommendation of the Select Committee of 1858, which 'recommended her Majesty's Government to take into consideration the claims of Ireland to a grant of the half-cost of medical officers in unions, with the view of providing for the same in future, as is now the practice in England and Scotland.'" The resolution, however, was opposed, and lost.

The Royal Society. Sir Charles Locock, Dr. Jennner, Dr. Brinton, Dr. Cobbold, and Mr. Flower have been recommended by the Council of the Royal Society for election to the Fellowship.

The Outrage upon Dr. Rowe. The two men who committed the brutal outrage on Dr. Rowe of Liverpool have been committed to take their trial at the assizes charged with an assault with intent to do bodily harm. Dr. Rowe's appearance in court showed that he was still suffering from the effects of the injuries inflicted on him. He was very weak, and was obliged to use crutches.

University of Cambridge. The examinations for medical and surgical degrees will commence on Monday, the 30th of May, at 9 A.M. in the Arts' Schools. Candidates for the degree of M.B., intending to offer themselves for examination, are required to signify the same to the Regius Professor of Physic on or before the 16th of May, specifying whether they offer themselves for the first or second examination, and to send at the same time their certificates.

The New Morgue in Paris has just been completed. It has three large gates, which open to a hall. At the bottom, is the room in which dead bodies are exposed. This room is separated from the hall by a long window with inside curtains, which may be drawn when necessary. There are twelve tables of black marble, and the room is lighted from the ceiling. There is a plentiful supply of water, and the ventilation is perfect. There are inscriptions on the walls, informing the public that there is no charge for a body claimed. A photographic apparatus is likewise to be found there, by which the likeness of the unclaimed bodies is preserved.

The Trial of La Pommerais, a French physician, for murder, is exciting great interest amongst the medical experts at Paris as well as with the public. Dr. Tardieu made the *post mortem* examination. He affirms that all the organs are, to appearance, sound; and that the woman, the widow De Pauw, did not die from the results of any accident or disease of the heart, etc. Drs. Tardieu and Roussin declare that she died from poison. The matter vomited by De Pauw, given to animals, produced the same symptoms as those observed in De Pauw, and killed the animals. The poison is supposed to be digitaline, of which substance three *grammes* were traced into La Pommerais' possession, and only fifteen *centigrammes* remain. The indictment says, he does not tell us to whom he gave the digitaline, and besides, "he did not employ it in his practice; for homœopathic medicine, practised by him, does not recognise this drug, and, at all events, only employs it in the minutest possible quantities."

Odontological Society. The ordinary monthly meeting of the Odontological Society was held on May 2nd, at Soho Square; Edward Saunders, Esq., President, in the chair. Models of remarkable cases were presented by Messrs. Ibbetson, Cartwright, Hulme, Fox, and Brunell. An improved "bite" was sent by Mr. Balkwill of Plymouth; and Mr. Cattlin said he would test it, and report upon it at a future meeting. Mr. Kirby said he had used a somewhat similar instrument for two or three years, and had found it to answer perfectly. A paper was read by Mr. Cartwright, entitled Reflections on the Cause and Treatment of some Forms of Irregularity. He defined irregularity as depending on the want of space in the bone of the jaw, and not so much on the teeth. At the close of a very elaborate paper, he said his object was to draw the attention of the Society to the notion that it was next to heresy to extract teeth for the cure of irregularity, and to urge them not to accept that proposition without due consideration; above all, not to assist in propagating a qu tionable theory by assenting to the idea that temporary teeth had to do with the eventual size s shape of the jaw, and that their removal was a sou of contraction, or that it was bad practice to sa fice permanent teeth in order to make room for regular placement of the rest. The science of den surgery had suffered by the ill-judged way in wh the term "contraction" was freely paraded; and old, correct, and honest practice had been unjus questioned by the introduction of an idea which w in its working, not successful when weighed in scale of experience. Mr. Cartwright illustrated paper by a large number of models and drawin Mr. Ballard said he attributed a great deal of deformity existing in the upper and under jaws children to the early acquired habit of thumb-sucki and tongue-sucking. He said the habit not o caused the irregularities in the jaws; but a seriously affected the health of the patient; in instance that had come under his notice, causi death. The further discussion of the paper was journed until the next meeting.

Manslaughter by an Herbalist. An inqu was last week held at Limehouse, on W. Proby, a 15 years. At the beginning of March the decea was taken ill, and his father called in Mr. Steve who held himself forth as a medical practitioner. said that the boy was suffering from fever, and p scribed a powder and some pills. The patient worse and Dr. Cumming was summoned. He s that the boy had a diseased hip, but the father p ferred the treatment of Mr. Stevens, who is a herb list. After enduring great agony in the hip the b died, and it was now conclusively shown that Steve was grossly ignorant of the case, and that he h given some very extraordinary medicine. Mr. Ga found all the internal organs healthy. The intestin were injected with blood, the left hip-joint had s fered from inflammation of some duration, and t cartilages of the joint had been absorbed. Deceas had apparently died from exhaustion, brought on great pain, consequent on overlooked and neglect disease of the hip-joint. Dr. Letheby stated that t stomach was greatly inflamed. Upon tasting so of the medicine, he discovered that it was principa composed of cayenne pepper. Both of the medi gentlemen proved that this mixture had produc great irritation and pain, causing excessive vomiti and exhaustion, and that this, together with t acute pain of the neglected hip, had produced deat Dr. Coffin asserted that the mixture of cayenne pep was the proper one to be given. The jury returne verdict of manslaughter against Stevens, who w committed to take his trial, bail being accepted.

A New Parasite. The large water-tanks of t hothouses at the Garden of Plants are at prese peopled with a race of obstinate enemies to plan which the greatest care and caution has as yet be unable to extirpate. These enemies are the *oscilla utriculata*, a sort of cryptogamous plant of wonder fecundity, which was hitherto only known to thri in hot mineral waters; it seems, however, that it gro and multiplies admirably in any water of a sufficie temperature. Its shape is somewhat like that of small mushroom with its stalk turned upwards. U told generations are produced in the course of twent four hours; a few minutes are quite sufficient infect the water of a tank. The numerous red fi which people the reservoirs of the hothouses, a purge the water of all noxious principles, seem to powerless against this new invader. When the osc laria has exhausted its whole reproductive power (

ing must have an end), it suddenly joins its , whereby a fibrous sort of film, or rather sheet, ed, which assumes the appearance of felt, then becomes black, and increases in weight by naccountable process, until it sinks to the bot- the tank. This looks as if the plant were but in this dormant state it sticks to and en- the roots of the aquatic plants it finds, and s them so as soon to kill them. Another on is still to come; after doing as much mis- possible under water, the sheet of felt again s sufficient lightness to return to the surface; s its blackness, becomes green again, then es once more into a thousand little individual ia, which recommence the sort of life already ed above. No remedy has hitherto been found these marauders that have found their way e reservoirs by some unaccountable accident; quire a temperature of from 40 to 75 degrees rade (104 to 167 Fahr.) for their existence. ight therefore be got rid of by lowering the ature; but that would injure the valuable as well.

YING WITHOUT A CERTIFICATE. PHIPPS, *v* HOUSE. This case raised a question on a ion of a sexton for burying a dead body with- roper certificate of death. The sexton was in bit of burying stillborn children upon a note he doctor, and in this instance, he dug the and, understanding that it was the case of a n child, he left instructions with his sister, a ne years of age, that when the coffin was t with the "note" she should put it into the and cover it up. The coffin was brought in e of the sexton, with a paper, which the girl ed to be the note referred to, and she accord- uried the child. It turned out that the paper as a certificate of the doctor that the child was prematurely and breathed only a few minutes, ere was no certificate of the register of death, l the sexton give due notice of the death. Up- se facts the magistrates convicted the sexton minal penalty for burying without a certificate thout notice to the registrar, and he now ap- against the conviction. The Lord Chief Jus- id it was not necessary for the court to decide er the Act applied to stillborn children or not. this case the sexton clearly was liable to be ted. Beyond all doubt, just after the burial, ame aware by the doctor's note that the child rn alive, and he had not then given due notice registrar. For that he had been rightly con- , and therefore the appeal must be dismissed.

LONGEVITY OF PHILOSOPHERS. An unusual t of healthy longevity is found among philoso- —whether mathematicians, naturalists, or spe- e students. Such things have been heard of fes in those serene fields of thought; but the e of many philosophers is at this moment an r to their vocation. Peter Barlow was, when ely died at 82, the same Peter Barlow that he en to two generations of friends and disciples. vid Brewster is still active and occupied at the age. The late Mr. Tooke did not puzzle his about the currency too much to be still up to bject at 86. Sir Roderick Murchison is past d so is Sir J. Herschel. Literature ought to he same operation as science; but it seems to nore room for agitations and anxieties. Jacob n was a very perfect example of the philosophic ty which a literary career can yield; and he to 78. There is something remarkable in the ity of literary women in modern times, even if k not beyond our own country. Mrs. Piozzi and Mrs. Delaney perhaps scarcely enter within the conditions; and the still lamented Jane Austen was under an early doom from consumption; but Miss Edgeworth was above 80 when she died; Joanna and Agnes Baillie were older still; and Mrs. Trollope died the other day at 84. The artistis who have departed lately have been old. Biot was 87, and Vernet 74. Our Mulready was 77, and Cockerell, the architect, was 73. (*Once a Week.*)

ST. ANDREW'S UNIVERSITY GRADUATES' DINNER. The graduates of the University of St. Andrew, to the number of nearly one hundred, dined together at the London Tavern on Tuesday, the 3rd inst. The guests included Lord Campbell; Dr. Brady, M.P.; Mr. Alderman Sidney, M.P.; Dr. Allen Thomson; Mr. Robert Chambers; Mr. Mandy; Col. Ogilvie; Mr. Glaisher, F.R.S.; Mr. Erasmus Wilson, F.R.S.; Professor Gamgee; Mr. J. Knight; Mr. G. Clarkson Stanfield; Mr. Winwood Reade; Dr. Gardiner Hill; Mr. Clarke; etc. Dr. Richardson occupied the chair. Among the provincial graduates, we noticed Dr. Day of Stafford; Dr. West of Alford; Dr. Ogden Fletcher and Dr. Shepherd Fletcher of Manchester; Dr. Skinner of Liverpool; Dr. Davies of Stafford; etc. The toast of the evening, "Success to the University of St. Andrew," was proposed by the chairman with much eloquence and feeling. He reminded his fellow graduates in graphic phrases that, among the great men whose names were written in the roll of the University, and who had made their mark in the history of the nation, were to be found Cardinal Beaton, Arthur Melville, John Knox (rough perhaps, and rugged, but towering above his fellows), Thomas Chalmers, Lord Chancellor Campbell, J. Napier (the inventor of logarithms), Adam Ferguson, Lord Elgin (whose name is identified with the Elgin marbles), Lord Erskine, etc. Among medical men, he noticed as especially worthy of honour, Arbuthnot and the great Jenner, almost the greatest benefactor of his race. He lauded the old University for the liberality of its principles and the high-class character of its examinations, and dwelt with special stress on the need of such an institution, where, after a full and fair test, degrees were granted to men of position, although they had not resided in the University. The speech and the toast were enthusiastically cheered. The chairman then presented a large richly carved cabinet by Rogers, in which was a handsomely bound and illustrated edition of Cuvier's *Regne Animal*, offered by 158 graduates, to Dr. Day, of St. Mary Church, Torquay, the late eminent Chandos Professor at the University, in token of their admiration of his labours in literature, science, and medicine, and in special recognition of the services he had rendered to the University during his fourteen years of office. He deeply regretted that Dr. Day's ill-health made it impossible for him to attend; he spoke in high terms of Dr. Day's work in the cause of the profession and the public, and trusted that this token of the high esteem in which he is held by the graduates would be a lasting and ever-increasing source of gratification to him. "Health and long life to Dr. Day" was drunk by the company with great enthusiasm. Dr. Day of Stafford received the testimonial for his worthy relative, in a speech marked no less by the elegance of its diction than by its manly good taste. The usual loyal toasts were warmly received. "The Army, Navy, and Volunteers," was responded to by Colonel Ogilvie; and "The Houses of Parliament", by Lord Campbell and Dr. Brady, M.P. "The Chairman" was proposed by Dr. Day. "The Medical Council of Education", proposed by Dr. Dobell, was responded to by Dr. Allen Thomson. "Success to Literature" was responded

to by Mr. Robert Chambers. "The Fine Arts", proposed by Mr. R. Chambers, was responded to by Mr. G. Clarkson Stanfield. Dr. Semple proposed "Science and the Learned Professions", which was responded to by Mr. Glaisher. "The Bar" was proposed by Dr. Edmunds, and responded to by Mr. Knight. "The Vice-Chairmen and Committee" was proposed by Mr. Erasmus Wilson, and responded to by Dr. Paul. And "The Ladies" was proposed by Dr. Sedgwick, and responded to by Mr. Winwood Reade. Mr. Land, Mr. Kennedy (the Scottish vocalist), and Miss Eyles, added greatly to the pleasure of the evening. This, the first dinner of the graduates of the University of St. Andrew, the forerunner, we hope, of many more, was successful in every way. The arrangements were excellent; and the graduates thoroughly appreciated the opportunity of cultivating brotherly good feeling.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Statistical.—Pathological.

THURSDAY. Harveian Society of London, 8 P.M. Discussion "On Carbuncle and Boil."—Zoological.—Royal.—Chemical.

FRIDAY. Royal Institution.

SATURDAY. Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, *37, Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

VILLAGE HOSPITALS.—In the Report of a Village Hospital, which has been forwarded to us, we find, amongst the list of the donors and subscribers, the names of the two medical officers of the hospital; their donation being represented not by money but by "attendance and medicine." We should be curious to learn the money value which, in their opinion, the two articles, "attendance and medicine" supplied by them, represent.

CONVALESCENT WARDS.—SIR: In your number for April 30th, you report the establishment of convalescent wards in the Parisian hospitals; and you say, "an example well worthy of being followed in our own hospitals." You might have said that the Parisians had followed the example set them in this country. At St. George's Hospital, convalescent wards have been in use for the last three or four years, with great advantage to the patients. Unfortunately, Miss Nightingale advises against such wards; and I hear (I hope it is not true) that the authorities of the new hospital at Winchester have followed her advice, and decided against convalescent wards. This is, indeed, a sad retrogression in sanitary affairs. I am, etc., MELIORA.

WE must again apologise to our correspondents for deferri insertion of their letters.

RE-VACCINATION.—SIR: Will you allow me, in reply to Mr. T. son's letter on this subject, to say that, having some month in consequence of an epidemic of small-pox, re-vaccinated a ber of adults, on the presentation of my account to the Bo Guardians, a demur was made by the clerk to the Board t ment being allowed for either re-vaccinations or even for th cinations of adults, as he thought such cases were not co plated by the Vaccination Acts. As the number of re-vacc cases on my list was considerable, a letter was written b with the concurrence of the Guardians, to ask the opinion Poor-Law Board on the questions.

I subjoin their reply, which seems to me quite conclusi must add, that I believe the demur made by the clerk to hav made in good faith; and that neither that gentleman Guardians acted unfairly in the matter.

I am, etc., SAMUEL DREW, M.D.,
Medical Officer of the Union of Wortley, York

"The [Poor-Law] Board are of opinion that, according terms of the contract for vaccination which the Guardians entered into with Dr. Drew, he is entitled to be paid the sp fee for every person resident in the union who has been su fully vaccinated by him, whose name is entered in the r provided by the Guardians.

"There is no limitation as to age, nor is it material whet not the persons have been previously vaccinated, if the ope on the second occasion has been successful."

GARIBALDI'S DISMISSAL.—Pray insert the following excelle from the *Examiner*, to amuse your readers. I am, etc., F

"The idea is stolen bodily from Beaumarchais' *Barb Seville*. Mr. Gladstone playing Figaro; Garibaldi, Bazile Fergusson, Bartholo. Here is the plagiarised scene:—

"*Bartholo*—Mais quel mal vous a donc pris si subitement

"*Bazile* (en colère) —Je ne vous entends pas.

"*Le Comte*—Oui: Monsieur vous demande ce que vous faire ici, dans l'état d'indisposition où vous êtes?

"*Figaro*—Il est pâle comme un mort!

"*Bazile*—Ah! je comprends....

"*Le Comte*—Allez vous coucher, mon cher Bazile: vous pas bien, et vous nous faites mourir de frayeur. Allez vous co

"*Figaro*—Il a la physionomie toute renversée. Allez coucher.

"*Bartholo*—D'honneur, il sent la fièvre d'une lieue. Alle coucher.

"*Rosine*—Pourquoi donc êtes-vous sorti? On dit que c gagne. Allez vous coucher.

"*Bazile* (au dernier étonnement)—Que j'aille me coucher!

"*Tous les Acteurs ensemble*—Eh! sans doute.

"*Bazile* (les regardant tous)—En effet, messieurs, je croi je ne ferai pas mal de me retirer; je sens que je ne suis p dans mon assiette ordinaire."

COMMUNICATIONS have been received from:—THE REGI OF THE MEDICAL COUNCIL; Mr. WM. H. MORRIS; Mr. J R. LANE; Mr. LOWNDES; Mr. F. MASON; THE SECRETARY O ODONTOLOGICAL SOCIETY; Dr. THOMAS MAYO; THE HON SECRETARY OF THE HARVEIAN SOCIETY OF LONDON; PROF BENNETT; Dr. H. MARSHALL; Dr. CHEVALLIER; Dr. ED W. MURPHY; Mr. E. H. COLEMAN; Mr. I. H. HARRISON; SECRETARY OF THE UNIVERSITY OF ST. ANDREWS; Mr. WI BOWMAN; Mr. T. M. STONE; Dr. ROUTH; Dr. HUMPHRY; M ALLISON; Mr. W. CURRY; and Dr. J. G. DAVEY.

BOOKS RECEIVED.

1. Lines of Demarcation between Man, Gorilla, and Macaque G. B. Halford, M.D. Melbourne: 1864.
2. The Sixteenth Annual Report of the Manchester Medico-Et Association. Manchester: 1864.
3. A Treatise on Pharmacy. By Edward Parrish. Third ed Philadelphia: 1864.
4. The Prescriber's Pharmacopœia. By A Practising Phys Fifth edition. London: 1864.
5. A Woman's Example: and a Nation's Work. A Tribute to rence Nightingale. London: 1864.
6. Transactions of the Obstetrical Society of London. Vol. v, fo year 1863. London: 1864.
7. A Voice from Derby to Bedlam. London: 1864.
8. Woman, her Destiny and Maternal Relations. A Lecture Mrs. Lydia F. Fowler, M.D. London: 1864.
9. Glaucoma, and its Cure by Iridectomy. By J. S. Wells. don: 1864.
10. New Observations upon the Structure and Formation of Ce Nervous Centres, etc. By Lionel S. Beale, M.B. London:
11. Treatment of Diseases of the Skin. By Dr. W. Frazer. don: 1864.
12. Manual of Instructions for the Guidance of Army-Surge Testing the Range and Quality of Vision, etc. By D Inspector-General T. Longmore. London: 1864.
13. Statistical Tables of Patients under Treatment in the War St. Bartholomew's Hospital during 1863. By G. N. Edw M.D., and A. Willett. London: 1864.
14. Ueber Urämie. Von Dr. Ph. Munk.

Original Communications.

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., Spilsby, Lincolnshire.

[*Continued from page* 529.]

Prognosis. The diphtheritic complication manifests itself only during the extensive prevalence of the miasmatic order of zymotic diseases. Extensive prevalence of such diseases is almost invariably attended by great mortality: hence, the presence of the diphtheritic sign is, by a defective process of ratiocination, supposed to have a direct connection with fatal consequences, and is always looked upon as a ground for unfavourable prognosis. Notwithstanding the weakness of the logic by which the conclusion is arrived at, it may for practical purposes be considered sufficiently satisfactory and safe. It is, however, only that kind of questionable safety which is had recourse to by those who, not willing to engage in active scientific warfare, are content to err on the safe side. As in diagnosis, so in prognosis, it is far more satisfactory to analyse each particular case, and ground our opinion upon the indications derived from the formation and upon those derived from the general symptoms, separately and collectively. If we except the fear of septicæmia, supposed in some cases to be brought about by the absorption of putrid matter, almost the sole danger from the presence of the formation is mechanical; and when it appears in the larynx, or shows a disposition to spread into that tube from above, it must ever inspire us with unpleasant forebodings. "The least laryngeal quality in the respiration heard at the bedside is suggestive of danger" (Aitken). Our prognosis, to be derived from the general symptoms, must be grounded on a great diversity of conditions and circumstances. In every case we must take into account: 1. The *nature* of the general disease; 2. The *variety* or *type*; and 3. The condition of the patient, not only with regard to age and the general hygiene of his surroundings, but more especially as to the presence of blood-taint, scrofulous, syphilitic, and the like, which, other things being equal, furnishes a very important item in the calculation of chances for or against recovery. The fact that great prevalence of miasmatic diseases is almost invariably attended, as before observed, by great mortality, requires us during such epidemics to be ever on our guard on the subject of prognosis. We cannot too closely watch our patient; and any symptom or series of symptoms appearing indicative of tendency to death, by either of the well known modes, ought at once to be recognised, and their terrible importance duly appreciated. Symptoms significant of irregularity or of want of power in the heart's action are especially to be looked for—nay anticipated. "An extremely rapid and feeble pulse is of grave import; a very infrequent pulse is of fatal significance," says Dr. Jenner. *Albuminuria,* when present to any extent, must always be esteemed an unfavourable complication; it is, however, highly desirable to ascertain, if possible, whether the presence of albumen depends on merely an altered condition of the blood, or upon granular degeneration of the kidney; for the latter state of things not only renders an individual more amenable to the influence of morbid impressions, but, the excretory power of such an important eliminatory organ as the kidney being impaired, greatly diminishes the chances of recovery. In this investigation the microscope becomes our chief aid. A terrible complication—œdema of the glottis—is generally supposed to have an especial connection with albuminous urine. In short, it will almost invariably be found that the general symptoms, when alarming enough to demand an unfavourable prognosis, indicate an abnormal (poisoned?) state of the blood; and it is the symptoms of death beginning with that fluid upon which, for prognostic purposes, we must especially rely—a pathological condition which has been most ably described under the name necræmia, by Dr. C. J. B. Williams, in his *Principles of Medicine* (page 464.)

Etiology. The zymotic theory of the origin of diseases supposes each specific disease to have as its cause a specific though non-cognisable agent; and these agents have received different names according to that of the disease they induce. Diphtheria is thus referred to a peculiar *zumê* called diphtherine. When diseases admit of isolation and close definition, this doctrine of cause and effect answers sufficiently well; but when we attempt to apply it to such an ill-defined affection as diphtheria, we encounter much that is antagonistic to its reception. In the first place, we should expect to find a single cause to be attended with some approach to uniformity, with regard to its concomitants and associations; and in the second place, we should look for similarity of effect as the result of identity of cause. No one can for a moment doubt but that each of these conditions lacks fulfilment in the case of the disease under consideration. We find diphtheritic affections to occur under every possible variety of climatic and telluric condition, with faultless as with the most faulty sanitary arrangements—in the open healthy districts of the country equally with the close, badly ventilated purlieus of the town—in localities the most opposite in every way, and answering to every description. Then, as to the effect, it is made up of one constant uniform element—the local symptom—which, it is fair to presume, is the result of a constant uniform cause, together with an inconstant very variable element—the general symptoms—which, it is equally fair to presume, are the result of a multitude and diversity of causes. If this be so, then we have grounds for believing that the cause of the constant is not identical with the cause of the inconstant element; in other words, that the cause of the formation is not one and the same as the cause of the various general diseases, considered either collectively or individually, with which it is seen to be associated.

Having said thus much in opposition to the theory that would connect such a diversity of phenomena as occur in diphtheritic cases with a single cause, let us now consider the subject as under the other headings; let us separate our idea of the so-called disease diphtheria into two elements, and examine the question of etiology, firstly, with regard to the formation, and, secondly, to the general symptoms. By so doing, I hope we shall encounter nothing irreconcilable, but much that admits of harmonious generalisation. Having previously attempted to show that the formation is a substance *sui generis,* and totally different from any of the usual morbid products of the body; that it appears only on such parts as are exposed to the action of the air; that it requires such parts to be undergoing pathological change; and that, when connected with general symptoms, it often appears before the development of such symptoms—I think it reasonable to infer the *ultima causa* of the phenomenon to be atmospheric, proceeding from without rather than from within. So much as to whence the agent comes; but what it is at present, neither chemistry nor microscopy has enabled us incontrovertibly to determine. The atmosphere and morbid

condition of parts exposed furnish two factors; but what the *tertium quid* is, must be left, I fear, quite as much to analogy and inference, as to actual demonstration. The statement previously put forth that "the microscope seldom or never discloses vegetable or other growths," though supported by the highest authorities, must be taken only for what it is worth—it simply supports a negation. There are not a few, who hold the contrary opinion; and in their behalf it must be remembered that, as "there are more things in heaven and earth than are dreamt of in your philosophy," so, doubtless, there are more things organic and inorganic, in and around us, than can in the present state of science be detected by the highest powers of the microscopist, or the most subtle tests of the chemist; and inability to discover microcosms, especially epiphytes, can scarcely as yet, ever be adduced as proof of absence. "It is not to be hastily concluded that a disease is non-parasitic, because a fungus has not been detected in the part where it was suspected to exist. The minuteness of the sporules, and the care required in the investigation, sufficiently explain the very various opinions which have prevailed on the nature of parasitic lesions." (Aitken.) But, in addition to this, we have direct evidence of some of our most trustworthy observers, in whose hands the microscope has been successful in revealing growths in and about the diphtheritic substance. Dr. Carpenter, in the last edition of his work (1863) on the *Microscope and its Revelations*, says: "There are various diseased conditions of the human skin and mucous membrane, in which there is a combination of fungoid vegetation and morbid growth of the animal tissues; this is the case, for example, with the tinea favosa, a disease of the scalp in which yellow crusts are formed, that consist almost entirely of mycelium, receptacles, and sporules of a fungus; and the like is true also of those white patches (aphtha) on the lining membrane of the mouth of infants, which are known as thrush, and *of the exudation of false membrane in the disease termed diphtheria*"; and he goes on: "In these and similar cases, two opinions are entertained as to the relation of the fungi to the diseases in which they present themselves; some maintaining that their presence is the essential condition of these diseases which originate in the introduction of the vegetable germs, and others considering their presence to be secondary to some morbid alteration of the parts wherein the fungi appear, which alteration favours their development. The first of these doctrines derives a strong support from the fact, that the diseases in question may be communicated to healthy individuals through the introduction of the germs by inoculation; while the second is rather consistent with general analogy, and especially with what is known of the condition under which the various kinds of fungoid blights develope themselves in or upon growing plants." Taking, then, all things into consideration, the external position and atmospheric origin of the production, the many points of analogy between it and the products of aphthous and other known parasitic affections, the fact of the great prevalence of parasitic affections in brutes as well as in man, contemporaneously with the diphtheritic epidemic, and, added to these, the heavy weight of Dr. Carpenter's opinion and of those who hold with him, I think it will be conceded that the *balance* of evidence is, notwithstanding the inability of microscopists uniformly to establish it, in favour of those who believe the origin of the formation to be due to the presence of living organisms.

An inquiry into the etiology of the general symptoms, involving as it does an inquiry into that of zymotic diseases generally, is, at the same time, one of the most interesting and difficult subjects of medical study, and one which in the present state of our knowledge can be but imperfectly carried out. That such diseases have specific causes, and that the causal agents, whatever else they may be, are something more than the offspring of bad sanitary arrangements (however much their development and growth may be favoured thereby), is, I believe, generally received; but what they are either as to form or nature, is a problem still *sub judice*. Reasoning from what we know to be the case with small-pox, cow-pox, glanders, hydrophobia, syphilis, and other inoculable diseases, it is perhaps most in accordance with analogy to suppose the origin of zymotic diseases to be dependent on the presence of certain organic principles; but what these principles actually are, in what state they exist (some fixed, others volatile, some both), in what manner they act so as to bring about their effects, are points which science has not as yet enabled us, satisfactorily, to determine (Dr. Herbert Barker); and, as my object is rather to bring forth a particular theory of the nature of diphtheria, and to reconcile it with experience, than to discourse on the etiology of diseases generally, I need not further discuss the subject. All I require is, that the different general diseases which during a diphtheritic epidemic present themselves in connection with the local sign, shall be considered as subservient to a like etiology as when occurring without such complication.

The summary, then, of what has been written on the subject of etiology amounts to this; that, as there are two distinct elements in a diphtheritic case, so are there two distinct causes; and that, in all probability, the origin of the external formation is due to the presence of living organisms, and of the general disease to certain zymotic principles. Before quitting the subject, it may be as well to venture a thought or two on the mutual relation and interdependence of these two exciting causes, which by their composite action produce, what is considered by many to be a specific disease. Two ideas are inseparably (in my mind) connected with the presence of these microscopic growths; 1. That their very starting in active life is the result of the presence of a particular exciting cause; and 2. That, when vitalised, they have a design to fulfil. To apply these ideas to the case under consideration: May not the presence of these zymotic principles in the atmosphere, when existing to an unusual amount, the evidence of which must be judged by the extent of the prevalence and malignancy of their effects—the specific diseases, be the particular excitor into life of these living organisms? And, on the other hand, may not the design these organisms are intended to carry out, be the changing the state of, and thus rendering innocuous, these terribly baneful principles? If this be so, we have but another example of that beautiful system of balance and counterpoise so every where manifest in the world of nature; but, as in the moral world, so in the physical, there is no unmixed good; in the bringing about of these states of equilibrium, certain supplemental or marginal effects are permitted, often detrimental to mankind. Thus, in the beautiful readjustment of meteorological derangement, man sees only the incidental effect—the inclement season, the drought or long continued wet; in the fearful grandeur of the thunder-storm, he loses sight of the marvellous restoration of electrical disturbance, and thinks only of the incidental damage done to man and beast. Or, to take a more homely simile, in the garden he recognises only the trifling mischief of the small bird, and forgets its necessity as an antidote to the still greater ravages committed by insect life; so, in the case of the disease before us, we discern not the mighty good these microcosms effect in destroying pestilential ex-

ors, and think only of the *blight* they are incidentally permitted to fix on us. But further, according modern view, these *principles* not only exist exterly (epidemic and endemic), but also are reproduced and emitted from, bodies undergoing disease (contious.) In epidemic sore-throat (and the same probly holds good of several other diseases, for "a more less sore throat is a constant concomitant of all e acute specific diseases"), the pharyngeal region pears to be the site of the local symptoms; here it that pathological change is going on in contact th the air, and hence it is that we should expect contia to be emitted. The same reasoning applies to e laryngeal region in croupal cases. Now, where e carcase is, there will the vultures be gathered tother; and thus, not content with neutralising poious matters external to us, these organisms, in edience to a splendidly designed scheme, seem, as it re, actually to descend upon the parts whence these isons would be scattered broadcast, and kill them the bud. Speculations such as these may be idle d need corroboration, still I hope they are not altother irrelevant or useless; for, if we are enabled to k from these supplemental effects, these lesser ils, patent to the eye of sense, to the higher order harmony to be seen only by the mental eye of ought, we are induced to temper our sorrow with atitude; and, while deploring and bearing as patntly as possible the trials and afflictions permitted vex us here below, our faith is strengthened in, y, we are even allowed to enjoy a foreshadowing of, at condition of perfection which shall one day be vealed to us.

Contagion. Perhaps there is no subject in connecon with diphtheria so unsettled and unsatisfactory that of contagion. By some the disease is believed be eminently contagious; by others, to a limited ext; by others, again, not at all. By adopting the specific disease theory, some of these views must necessay be wrong; by adopting the theory hoped to be subituted, they all may possibly be right. The contaousness of the local sign is not, so far as I am vare, supported by a single fact which cannot quite readily be placed to the score of its undoubtedly idemic character. Capability of inoculation, in retonneau's sense of the term, is, I believe, genelly discarded. That the substance, if placed in ntact with a part of the body undergoing disease, ight help to bring about the production of a like orbid product, admits of easy comprehension; but at it could induce anything like a disease of the neral system, we have certainly no evidence to lead to suppose. The contagiousness of the general sease is often so intermingled with, and bears ich a direct proportion to, its epidemic character, to be not always readily made out. We may ot be able satisfactorily to diagnose such general sease, owing to the absence of positive signs; still, nowing the fact of extensive epidemic prevalence eing invariably associated with more or less congious properties, we have grounds for considering ch diseases always, to a greater or less degree, congious. I would suggest, then, that the contagiousess or not of a diphtheric case depends mainly on e contagiousness or not of the general disease; and, nowing such diseases to be most various, we can, by dopting this view, understand how any particular se may have this property to a great degree, ightly, or not at all. I am glad to be strengthened this opinion by Daviot, who concludes a masterly mmary on the subject of contagion as follows: "I epeat the proposition which seems to me to reconcile nflicting opinions, that we cannot regard pharyneal diphtherite as contagious when it exists alone nd independent of all eruptive fevers; but I think that, when it is complicated with those evidently contagious affections, it may become so, but in an indirect manner." (*Syden. Soc. Memoirs*, p. 361.)

[*To be continued.*]

ON IMPETIGO CONTAGIOSA, OR PORRIGO.

By W. Tilbury Fox, M.D.Lond., Physician to the Farringdon General Dispensary.

[*Continued from page* 496.]

III. Our third query was this: Does vaccination give rise to impetigo contagiosa? and, if so, in what manner? The solution of this question, of course, supplies the positive answer of the first question—viz., the nature of the disease.

We must consider the following features of the disease.

1. The special aspect of the eruption—the depressed centre, the consecutive crop, the purulent contents (their aplastic character), the isolation of the spots, etc.

2. The character of the subject attacked is that produced by the action of bad hygiene and low social position.

3. The peculiar obstinacy of the disease.

4. The tendency to the occurrence of unhealthy inflammation.

5. The peculiar dull red tint about the circumference of the sore; the same tint forming an almost diagnostic feature in the healing of the part after convalescence.

6. The adherent character of the scab.

7. The implication oftentimes of the mucous surfaces, which take on an unhealthy inflammation.

8. The contagious and inoculable character of the disease.

9. Its frequent occurrence after vaccination.

10. The links between apparent modifications of vaccinia and impetigo contagiosa.

Will it satisfy the requirements of the above propositions, to regard the disease as a form of impetigo developed in a strumous subject? We may be certain of one thing; that it is a *specific* inflammation, dependent upon a *specific* cause; and that *specificity* resides in, or is possessed by, the contents of the pustules. Now the history of scrofulous inflammation does not warrant us in saying that a scrofulous form of skin-inflammation is contagious. We are led to believe that there exists an intimate relation between impetigo contagiosa and vaccinia, from many data; not only from those already adduced—viz., the frequent occurrence of the disease after vaccination, and the similarity between it and "bastard vaccinia"—but also from the fact that impetigo contagiosa possesses spots oftentimes exactly resembling vaccinia, and yet occurs in such a way and at such times as to preclude altogether the idea of direct connexion with any such cause. Assuredly, the best description that one could give of some of these cases, would be to state them as instances of ordinary impetigo modified by the vaccine virus—a compound affair, in which there are complete and intimate connexion, mutual action, and subsequent modification. A strumous form of inflammation (impetigo) modifies vaccinia, and the umbilicated pustule breaks out into unhealthy superficial ulceration. Most decidedly, a good many cases start from the period of vaccination; and indeed, in adult life, the disease may frequently be traced to direct contagion with children.

The contagiousness, the specific character, the possibility and probability of tracing the origin of the disease to vaccination, are arguments that well de-

serve attention. Vaccination has now become an universal practice; and it becomes a most important question, What, if any, is and has been the modifying influence of the universal practice of vaccination upon existing disease?

This much is true, as Dr. Ross endeavours to show in his paper in the *Lancet*, February 14th, 1857; that "there are various forms of eruptive disease consecutive to and caused by vaccination"; and this gentleman added, that they "are subordinate to the specific laws of vaccination, and are evidences of the complete impregnation of the system". Their type is vesicular; the size of the vesicles varies from that of a millet-seed to that of a crown-piece, "and looking as if one vesicle were contained within another". An usual size "was that of the cowpock at the eighth day, being a vesicle with a central depression and circumferential redness". Dr. Ross thinks that the virus oftentimes remains in the system for a time, and that its activity does not always cease with the process of desiccation; these secondary eruptions show themselves on the fifth, tenth, or fifteenth day, and rarely continue more than a few days. He sums up thus: "Vaccinia, under certain circumstances, is followed by a secondary eruption, special in nature, though various in forms, which observes fixed periods of evolution, and is an integral part of the original affection." Now, I think it will be granted that there is a great deal of truth in Dr. Ross's remarks.

In the French Academy, some interesting discussions have lately taken place with reference to the relation and nature of the vaccine virus, and the various modifications of eruption resulting from its action. It would appear that an erythematous disease of the horse, constituting one variety of the *grease*, is capable of giving rise in the cow to the cowpox; at any rate, there is an erythemato-pustular and ulcerative disease in the horse, which may give rise to cowpox; and many leading authorities think that the vaccine virus may show itself in different cases under different aspects, some of which certainly resemble the instances in man called bastard vaccinia, which in its turn is allied, if not identical, with impetigo contagiosa. In the January issue of the *British and Foreign Medico-Chirurgical Review*, p. 258, the subject is further referred to in a short summary head "On the Origin of Cowpox and the Nature of the Vaccine Virus", quoted from the *Gazette Médicale de Paris* for November and December 1863. It appears that M. Bouley has produced a vaccine pustule "by inoculating with matter taken from the vesicles of an aphthous stomatitis occurring in a horse". The udder of a cow, inoculated from the pustule, produced vaccine vesicles, whose contents were used to successfully vaccinate several children. Hence the inference before expressed. It further appears that Dr. Auzias Turenne and M. Mathieu have carried out successfully a series of inoculations of animals with matter taken from a horse, on whose body and mouth pustules were discovered; a second horse was vaccinated from this animal; the vulva of a cow and the ear of a bull were "done"; the result being the production of a magnificent cowpox. The matter obtained from the bull was used to vaccinate a zebra, a Javanese mare, a Siamese horse, and a Shetland mare, with like results. M. Depaul stated as his convictions, that: 1. Vaccine virus has no separate existence; 2. It is identical in nature with the variolous poison; 3. Equine and bovine species are subject to a disease like to the human variola; 4. Also other animals—*ex.*, pigs, sheep, goats, dogs, etc.; 5. Circumstances are the same in character; 6. The variola may be sporadic or epidemic; 7. The disease may be transmitted from the horse to the cow, or *vice versâ*; 8. From the cow to man, and probably from the horse to man; 9. From man to the cow, the horse, and other animals; 10. The *maladie aphtheuse* of animals is variolous. Other conclusions, following from some of the foregoing, are omitted.

The facts mentioned are novel to many, no doubt, and of great importance. They show certainly that variola and vaccinia assume unwonted garbs at times, and they justify us in our inquiry as to the vaccinal nature of impetigo contagiosa and the influence of the vaccine virus upon already existing disease. I have no pet idea to cherish, no hobby to tempt me unconsciously to bend facts into any desired direction.

We may learn somewhat from the negative side of the question. Is it at all likely that vaccination is merely the exciting cause of impetigo contagiosa? It would appear not; for there is no known disease to which it is comparable upon this view of the question—not pemphigus, not ecthyma, not rupia, not eczema, remembering only its contagious quality.

Then, does vaccination introduce any special poison into the system, other than itself? The same line of argument applies. It is not syphilis. Struma is not so transmitted. Erysipelas would not preserve the type so fully and fairly.

All its external characters ally it closely to vaccinia; viz., the results of inoculation; the aspect of the pustules (external and internal); the contagious quality; the seat of the disease; its general symptoms; its associations, and the like. But then there are marked minor differences; and we are forced to the ultimate conclusion, either that the disease is a mere modification of vaccinia, or that it is a mixed disease. Of course, this turns upon the fact of the interpretation of the physical appearances resembling vaccinia being correct. This has been settled before in the affirmative. Clinically, we notice the following points.

1. Some spots exactly resemble vaccinia in outward aspect and pathological behaviour.
2. The disease follows directly in the tail of vaccinia.
3. Sometimes we have spots on the head presenting the *aspect* of impetigo; and others on the general surface, of typical vaccinal character.
4. In the face, the disease may resemble eczema impetiginodes, in conjunction with characteristic appearances elsewhere; but the former may be the sole disease, and be produced from the typical disease.

Hence we may allow the existence of two degrees; one in which the vaccinal, and the other, the impetiginous character predominates, with an intermediate stage. The former is typified by bastard vaccinia; the latter by the abortive forms, so to speak, seen in some members of families in whom the disease prevails; while the ordinary forms represent the remaining or more common class. It does not seem possible to explain the contagious nature of the disease in any other way, in unison with the teaching of its course and behaviour. If it were vaccinia only, why, after a thorough impregnation of the system—in other words, when the vaccination has "taken well"—should a free eruption take place, each spot of which tends to break out into superficial ulceration? What is the condition which makes such an impression upon the secondary vaccinia? Its associations would certainly make us seek for it in an impetiginous tendency.

The conclusion then, to which facts seem to point, would be this: In the present state of our knowledge, to define clearly typical vaccinia, and to include under the head of impetigo contagiosa or true porrigo cases of bastard vaccinia, and the other instances of disease which have been described in these remarks as impetigo contagiosa; and to recognise the latter as chiefly a mixed disease, in which the vaccine virus is modified by, or rather modifies, an impetiginous

ondition of body; the mixed disease or impetigo ontagiosa (or porrigo contagiosa), possessing now he vaccinal, now the impetiginous phase in excess, at ther times both in a tolerably equal degree. In some f the cases, we are unable to trace the influence of vaccination or of the vaccine virus; and then, at the first lush of the matter, we should feel inclined to look pon the disease as simply impetigo breaking out into state of unhealthy (strumous) inflammation and ulceration; but then, as difficulties present themselves in he specific (contagious and inoculable) character of he disease, the depressed centre and the aspect of he contents of the pustules, among other things; nd, seeing the close relationship of vaccine and varila, it does not necessarily follow that the disease ould not be traced through the power of contagion, ack to vaccination, or the action of its virus as a tarting point.

Syphilis has a well known influence and modifying power over other diseases, and is perhaps the best example of the kind that could be adduced—but not the only one. Why may not vaccinia also have a like action? Certainly it has a profound influence over the system, and Dr. Ross uttered no doubt a truism of some moment, when he wrote that the activity of the virus did not cease with desiccation. At this stage of the argument, we must necessarily ask ourselves, what then becomes of the vast amount of virus obtained from all quarters, and introduced into, and spread abroad among the human species by the process of vaccination? for we must admit, that the activity of the virus does not wholly cease with desiccation in vaccinia.

The view which I have illustrated in these remarks is by no means closed to innovation. In attempting a solution of the matter of impetigo contagiosa, the conclusions have been necessarily arrived at by a process of strict logic, it is hoped, and from premises which are the correct interpretations of our present stock of facts. Of course, at first sight, the usefulness of Jenner's great work would appear to be assailed; but such an idea can only be entertained as the result of very imperfect thought. The vaccination of a healthy subject, with good and true lymph, must remain the great godsend it ever has been; but, like all other parts of the great machinery of civilisation, it has become associated with a certain degree of alloy which gives rise to deviation from its original purity; and surely the investigation of the subject (imperfectly sketched now), can only tend to the more full perfection of vaccination. Indeed, by it, we shall be enabled to decide what cases, what character of lymph, and what source are to be chosen in the operation. I repudiate then, emphatically, the opinion that the discussion of the subject has been made upon insufficient data, or that it is likely to impair the utility of Jenner's great discovery. Nor is the idea that old prejudices are likely to be thereby fostered and strengthened, worthy of notice. These are much more likely to be annihilated by that free criticism which removes the errors of past doings, and filters out the truth.

[*To be continued.*]

Vaccination. A deputation of the Epidemiological Society, consisting of Dr. Milroy (president), Dr. Waller Lewis, Dr. Mackay, R.N., Dr. Francis Bowen, Dr. Camps, and Mr. J. N. Radcliffe (honorary secretary), had an interview with the Lord President of the Council and Vice-President, on Friday the 12th inst., and submitted to them a report on small-pox and vaccination. They recommend "That the Council should at once take steps to press upon Her Majesty's Government the very urgent necessity of amending the vaccination laws."

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, March 28th, 1864.

R. Greenhalgh, M.D., President, in the Chair.

INDIGESTION IN EARLY PHTHISIS.

BY E. SYMES THOMPSON, M.D.

The author observed that indigestion in phthisis was regarded by some as a part of the malady dependent on impure blood; by others, as but a casual complication, tending, by its depressing influence, to the production of tubercle. In fifty cases of undoubted consumption, tabulated with a view to this inquiry, dyspeptic symptoms were found to exist at the commencement in about one-half. In one-fourth, the disease seemed to follow inflammation of the lungs or of the pleura. Cough was the first symptom noticed in one-fourth; and shortness of breath in about one-eighth of the cases. Hæmoptysis, though frequently an early symptom, was rarely the first.

Without referring to the derangements of the later stages of phthisis, except to state that those who early suffer most from dyspepsia are subsequently prone to diarrhœa, the author passed to the consideration of the first variety of indigestion—especially common in hereditary cases—in which the general feebleness of the digestive functions is traceable to a want of constitutional vigour. The food is slowly digested, produces a sense of fulness and pain in the epigastrium, and between the shoulder-blades. The gastric juice may be copious; but it is too weak to perform its function: hence arise waterbrash and sour eructations, or the secretion is diminished; the mucous coat becomes dry and abraded; and the red glazy tongue, flushed face, and epigastric oppression, afford evidence of the diseased condition. In these cases, the feeble organ must not be overcharged; by diluting the food, we may hasten its passage through the pylorus. Milk is the simplest diet; and, when mixed with lime-water, passes uncoagulated through the stomach. But when the digestive power of the small intestine is deficient, animal food, which is the longer retained and more completely digested in the stomach, should be preferred to vegetables, and fat must be interdicted. Where solid food can be borne, a little nicely cooked meat, with aërated bread toasted, may be taken in the morning, when the stomach is most vigorous. Stimulants should only be given when they help digestion. Nauseating physic, violent exercise, cold, and anxiety, must be avoided; but gentle out-door exercise, cold or tepid sponging, with friction of the skin, encouraged. The good effect of active occupation of the mind and body, though acknowledged in ordinary dyspepsia, is often disregarded in consumption. Food is best taken in small quantities at frequent intervals; for it has been shewn by Dr. Edward Smith, in his recent Lettsomian lectures, that the pulse rises often ten or twenty beats after a full meal; but when nourishment is taken in small quantities throughout the day, it is far more equable. Allusion was then made to a paper read before the Royal Medical and Chirurgical Society in 1861, in which Dr. Symes Thompson had shewn the great importance of keeping the pulse at a low and even standard, and the influence of ozone, compared with digitalis and other sedatives. If acidity of stomach exist, it is due, not to an excess of gastric juice, but to a deficiency in its solvent principles, the mineral acids given at meal times relieve it, alkalies being prescribed in the intervals. Pepsine

or rennet wine, when given with the acid, the quantity of food being at the same time limited, are similarly helpful, by setting on foot the changes in the conversion of food which the gastric juice is then able to complete.

The second form of phthisical dyspepsia, usually characterised at the outset by frontal headache, is not directly referrible to an error in diet; but is dependent on unhealthy blood. The poison, like that of gout, seems gradually to accumulate, and gives rise to periodic attacks of sickness, followed by relief. The nausea and violent retching depend, as in sea-sickness, on a cerebral cause; and afford no evidence of stomach disease, but merely of reflex irritation. As the blood fails to supply the proper materials for healthy digestion, the appetite is lost, food is not absorbed, the tongue becomes furred, and all the secretions and excretions diminished; there is a feeling of melancholia and general *malaise*, which is often termed "biliousness", and constipation. The skin is dry, harsh, and inactive; and the urine is of low specific gravity. If this condition be allowed to continue, the morbid elements will soon be eliminated from the blood, and tubercle will be deposited in the lungs. The relief now afforded to the feelings of the patient on the establishment of sweating and expectoration is very great; the unnatural activity of the destructive processes gives rise to a sense of active vitality; and, in the place of general despondency dependent on retention of bile, urea, etc., from torpor of all the secretions, undue hopefulness and vivacity occur. Little can be accomplished in these cases by regulation of the diet alone; the main indication is to prevent, by eliminative treatment, the establishment of active lung-disease. We may begin with an emetic, with a mercurial and a morning aperient; aloes, in the form of a pill or compound decoction, is the best purgative. The good effect of the mercury, which it is rarely necessary to repeat, may be maintained by the persevering use of taraxacum with sarsaparilla. Sal ammoniac, with or without the tincture of the sesquichloride of iron (as suggested by the author's late father), seems well calculated to obviate hepatic congestion, and correct the condition of blood which characterises such cases. Where the catamenia are absent or scanty, Griffith's iron mixture may be given with the decoction of aloes. It is often most satisfactory to see the dyspeptic symptoms yield under such treatment, and the indications of pulmonary phthisis pass away with them. The diet must at the same time be simple; milk and soda-water taking the place of beer, spirits, and coffee, for alcohol checks metamorphosis; but when we wish to encourage change, water is much better. Hence, the hydropathic system, or the hot-air bath, which calls forth to the full the eliminating power of the skin, may be serviceable. Yeast has been given with a view to check the malassimilation by which tubercular conditions affect the blood; and seems favourably to influence digestion, when the saccharine and farinaceous elements of the food are imperfectly disposed of. Its curative power in typhoid fever, erysipelas, and carbuncle, has long been recognised; and its power of diminishing purulent secretion is considerable. Dr. Thompson had lately found remarkable benefit from its use in two or three cases of excessive expectoration, when administered in tablespoonful doses three or four times a day. The power of yeast out of the body is limited to the conversion of grape sugar into alcohol and carbonic acid. Wine and spirits check secretion. Can the alcohol producing power of yeast account for its influence on the blood?

There is a third class of cases, the converse of that last described, in which there is no evidence of disordered digestion until tubercle is deposited in the lung and cough established. If now a fit of coughing occur soon after a meal, the contents of the stomach are rejected. This reflex vomiting being dependent on an abiding cause, is persistent, unlike that arising from the passage of a gall-stone or renal calculus; and is induced by the presence of unsuitable food, by a mental shock, or even a change of posture. Sometimes there is only dry retching; but more often the movement of the stomach leads to secretion from its coats, and a sour fluid is ejected. The gastric juice may be poured out in consequence of reflex irritation without the occurrence of vomiting; and thus the digestive power is weakened, and the food is received by an exhausted organ, where it remains undigested, and, by its irritation, may lead to superficial ulceration. Thus, the lung-disease becomes of secondary importance to the stomach derangement which it has caused. To quiet the cough, allay the retching, and tranquillise the nervous system, hydrocyanic acid should be given, with or without morphia; and where the gastric juice is constantly poured out and unduly acid, carbonate of potash or soda, or liquor potassæ, may be added. At the Hospital for Consumption at Brompton, the mistura gentianæ alkalina, which consists of carbonate of soda, with prussic acid, in infusion of gentian, is largely and successfully given in such cases. Bismuth, prepared chalk and lime-water, are valuable remedies; but where the cough is very severe and paroxysmal, the inhalation of a few drops of chloroform is most successful. The bromide of ammonium has been used with advantage in some cases. The diet should be light, and given at short intervals. Farinaceous foods, which are changed to sugar and then to acetic acid, and oily matters, whence the acrid fatty acids are developed, must be avoided when acidity of stomach is present. In atonic cases, meat is often digested better than slops or pappy food. In broth, when the fluid portion is absorbed, the nutritious part is often too soft and concentrated to excite the healthy action of the stomach. Tea and other hot fluids are apt to produce a sodden state of stomach, and give rise to flatulence, waterbrash, etc. It is rare to find sarcinæ in consumptive cases.

Where phthisis originates in disorder of the lacteal and lymphatic systems, direct evidence of indigestion may be wanting; but the body wastes, and it is evident that there is some fault in the blood-forming apparatus. A microscopic examination of the blood may aid in determining where the diseased action originates; a paucity of red and excess of white corpuscles indicates that the chyle transforming force is deranged; that there is either a deficient supply of "raw material", or the machinery needs cleansing or partial renewal.

In the treatment of these cases, our main reliance must be placed on cod-liver oil, which, if it cannot be taken alone, in combination with an acid, bitter mixture, or in the form of emulsion with liquor potassæ, must be endermically introduced; by combining with the albuminous elements of the chyme, it feeds the blood with healthy chyle-granules, stimulates the capillary system, and invigorates all the functions of the body. Animal oils must be regarded as food; and if omitted in any case, cream, *pâtés de foies gras*, or other digestible oleaginous material, should be substituted. Mild chalybeates, as steel wine, or the reduced iron of the *British Pharmacopœia*, may help in building up the red corpuscles.

The author alluded to a number of cases, one of which was detailed, in which a peculiar form of dyspepsia seems consequent on the frequent administration of small doses of mercury. A case in which symptoms of intestinal obstruction, and another in which gastric derangements alternated with lung-

disease, followed; and the paper concluded with the observation that, while there is hardly a disorder that calls for more tact and judgment in the practitioner, there is none in which a familiarity with physiological chemistry is more important.

Dr. Sydney Jones asked, if the author had found a special dislike to fat exhibited by phthisical patients?

Dr. Leared mentioned that such patients often had a peculiar partiality for fish, sole especially. He did not believe in the efficacy of pepsine; five grains of it was only capable of dissolving twenty grains of albumen; being dead animal matter, it could not, as had been suggested, act as a ferment. Dr. de Jongh's cod-liver oil agreed better with some patients than ordinary oil, which was extracted, by the aid of heat and pressure, from fresh livers. De Jongh's oil consisted entirely of oleine, the indigestible margarin remaining behind in the unpressed livers.

Dr. Morell Mackenzie, after alluding to the fact that seventy-seven per cent. of phthisical patients disliked fat, observed that it was useless to give such persons cod-liver oil; it might fatten them, but could not cure the disease. He considered it much more important to attend to the constitution of the patients, than to rely on the ever-changing facts of chemistry in the treatment of disease.

Dr. Althaus alluded to the waters of Weisenberg in the canton of Berne, and of Libbelspringer in Prussia, which were regarded as almost specific in their effects on phthisical dyspepsia. He wished to know if the bicarbonate of lime which these waters contain, had been employed in these cases, and with what success.

The President mentioned that M. Trousseau of Paris looked upon hydrochloric acid as almost a specific. He (the President) had found charcoal most useful in removing fœtor from the breath.

Dr. Day inquired, whether the Turkish bath, by hastening the circulation, was not dangerous, and apt to produce hæmoptysis?

Dr. Leared had found it useful, not only in preventing night-sweats; but also, by promoting the cutaneous circulation, it checked hæmoptysis. He had used the Turkish bath in a case in which this symptom had been very troublesome; during the whole ten months while the treatment was continued, there was no return of spitting of blood.

Dr. Thompson, in reply to the various questions, observed that the dislike exhibited by consumptive patients for fat, contrasted curiously with the fondness of emphysematous persons for it. The blood, in the one case, was over oxidised, and in the other inadequately supplied with oxygen. Not only was a partiality for soles often exhibited; but oysters were specially appreciated by the phthisical. He mentioned that his father (Dr. Theophilus Thompson) had frequently used oleine extracted from various oils; but had not been so well satisfied with its effects, even when employed as an inunction, as with the oil itself. He had often used endermically, the neat's-foot oil with iodine, with good effect. Dr. S. Thompson had not found De Jongh's oil agree so well as that prepared from fresh livers; nor was he aware of any experiments or observations exhibiting the superiority of the putrid over the freshly prepared oil. De Jongh's was not the only oil made without pressure, which (he agreed with Dr. Leared) was injurious to the purity and utility of the preparation. He was astonished to hear, in the present day, that this oil did nothing more than put fat on the outside of patients. It had been shewn to increase the number of red corpuscles; and he appealed to the experience of every Fellow, whether it did not in many ways alleviate where it did not cure disease. He had not tried the bicarbonate of lime; but, from analogy with similar salts, would expect benefit from its use. Hydrochloric acid was often useful, and might be given at meal-times when alkalies were indicated; the latter being prescribed in the intervals between meals.

OBSTETRICAL SOCIETY OF LONDON.

March 2nd, 1864.

H. Oldham, M.D., Vice-President, in the Chair.

Seven gentlemen were elected Fellows of the Society.

Monstrosity. Dr. Hicks read a report on two cases of monstrosity exhibited by himself and Dr. Gervis at a former meeting of the Society.

Fatal Umbilical Hæmorrhage in an Infant. Dr. Graily Hewitt related the particulars of a case of hæmorrhage from the umbilicus. The mother, a weak, ill-nourished individual, was delivered of a female child at about the eighth month, in the British Lying-in Hospital. She had previously lost a child, a few days old, from bleeding at the mouth, ears, and rectum. At birth, the infant was weakly and the circulation languid; moreover, in the course of a few hours the child became jaundiced. The second day after birth a very slight appearance of blood was noticed at the insertion of the cord. On the third day hæmorrhage set in, and, when the child was seen by Dr. Graily Hewitt had lasted for upwards of an hour. The child was excessively pale, and moribund. Further loss of blood was prevented by application of a ligature *en masse*, but the infant died about an hour afterwards. The blood exuded as from a sponge, at the junction between the cord and the abdominal wall. *Post mortem* examination showed great congestion of the liver, and slight hæmorrhagic effusion into the peritoneal cavity. There was no ulceration of the stump of the cord inwards through the abdominal wall.

Dr. Graily Hewitt alluded to a series of cases of this affection published by Grandidier. In a large proportion of them jaundice was observed, as in the above case; and in a few the existence of a hæmorrhagic diathesis was well marked. The treatment carried out in the above case had been found most successful in the hands of others—namely, the use of the ligature *en masse*. The mortality from this affection had been found to be very high—namely, eighty-three and a half per cent.

EIGHT ADDITIONAL CASES OF OVARIOTOMY.

BY W. TYLER SMITH, M.D.

The notes of twelve cases had already been presented to the Society (see Journal, July 12th, 1862.)

Case xiii. *Multilocular Tumour of the Right Ovary: Operation: Recovery.* E. H., aged 33, unmarried, had a tumour whose growth had been rapid. The abdomen was forty-two inches in circumference. An operation was performed June 16th, 1862; the incision being four inches long. The tumour was composed of two principal cysts, full of purulent matter. The cysts were tapped first. The pedicle was secured by silk, divided, and allowed to drop into the pelvis. Tympanitis and sickness were severe on the third day, but were relieved by calomel, turpentine, etc., iced water, and milk. In October following she was quite well.

Case xiv. *Multilocular Tumour of Right Ovary: Ovariotomy: Recovery.* Mrs. B., aged 54, weak and emaciated, formerly resident in the West Indies, was of great size. The operation was performed October 13th, 1862, under chloroform. There were extensive adhesions on the right side; and numerous cysts with gelatinous contents. A large incision was made; and

the pedicle was allowed to drop into the pelvis. The wound healed by the first intention. Her convalescence was tedious. Large doses of opium, to which she had been accustomed, were necessary. She was now in better health than she had been for years.

Case xv. *Multilocular Tumour of Left Ovary: Operation: Recovery.* E. B., aged 32, much emaciated, measured forty-two inches round. The operation was performed in the usual way, under chloroform, and the pedicle was returned into the pelvis. At night she had an enema with laudanum—the only medicine given. She took stimulants early. Excellent recovery followed in less than a month.

Case xvi. *Multilocular Tumour of Left Ovary: Operation: Recovery from Operation: Death three weeks afterwards from Bronchitis.* The patient's general health was bad; she was subject to bronchitis. The operation was performed on April 15th, 1863. There were strong adhesions on the left side. The pedicle was returned into the pelvis. At the end of a fortnight she sat up daily. She was removed on May 5th, at her own request, to the hospital. She ate a good breakfast on May 6th, but died almost suddenly late on the same day. There were extensive emphysema of both lungs, and thickening of the bronchial tubes. The pedicle and ligature were enclosed in a sac formed by coagulable lymph.

Case xvii. *Multilocular Cyst of Left Ovary; Operation: Recovery.* Mrs. B., aged 43, had noticed an enlargement of the abdomen for six years. The operation was performed June 26th. The tumour consisted of one large cyst, with gelatinous contents; the adhesions were considerable. The pedicle was treated as in the foregoing cases. She left for the country on July 30th.

Case xviii. *Multilocular Cyst of Left Ovary: Operation: Recovery.* The tumour had been growing for eighteen months. The abdomen measured forty-six inches. The tumour was very adherent. To a small vessel of intestine wounded in separating the adhesions, a metallic ligature was applied. The pedicle was treated as above. No bad symptoms followed.

Case xix. *Multilocular Colloid Tumour of the Left Ovary: Operation: Death on the sixth day.* Miss S., aged 58, had a tumour which had been growing a year. She had been tapped a month previously. Tapping now again necessary; and a fortnight afterwards, the tumour having again filled, ovariotomy was decided on. Many adhesions were present. The tumour was made up of large masses of colloid. The pedicle was very small. Some hæmorrhage occurred from tearing the pedicle, and it was secured with great difficulty. The patient rallied after becoming very exhausted, and took food well. On the fifth day bad symptoms set in; and death occurred on the following day.

Case xx. *Multilocular Tumour of Left Ovary: Operation: Recovery.* Miss M., aged 39, had had a tumour growing two years. She was much emaciated from bronchitis. Perfect recovery followed the operation, which was performed in the usual way. She is now in excellent health.

Besides these cases, Dr. Tyler Smith related the following.

Ascites with Malignant Tumour, supposed to be Ovarian: Operation: Death. The patient, aged 43, had had thirteen children, the youngest being fifteen months old. She had gradually increased in size since the birth of this child. She measured forty-eight inches round. There was unusual pain. The pulse was good; she was not much emaciated; her complexion was not like that seen in malignant disease; there was considerable œdema of the abdominal walls. A tumour, believed to be ovarian, was felt through ascitic fluid on the left side. An incision being made, a tumour was found firmly adherent to the abdominal walls. It was removed, as also the ascitic fluid. Other tumours of malignant character were then found, connected with intestines and other structures. The patient never rallied. Death occurred four hours afterwards. Numerous cancerous tumours were found in the omentum, etc. The ovaries were diseased, but small.

The author remarked, that of the 20 cases 16 had recovered, or 80 per cent.; that is, excluding Case 16, in which death occurred from bronchitis three weeks after operation; including this case, the cures were 75 per cent. He had now returned the pedicle into the pelvis in 10 cases, and with most satisfactory results. In all the poor women operated upon the disease incapacitated them from work; in the others, the operation could not have been delayed without risk to life.

The President considered that in cases of doubtful diagnosis the operation of tapping was advisable, as preliminary to the other operation.

Dr. Tyler Smith thought that in the case alluded to by the President no positive information would have been obtained by tapping. The diagnosis was extremely difficult in some cases. In the particular instance in question there was extreme œdema of the abdominal walls, and he thought it probable that such œdema might be found in other cases to be associated, as it was in this case, with malignant disease. In answer to a question from Mr. Cumberbatch, Dr. Tyler Smith stated that he preferred non-metallic ligatures for securing the pedicle.

Mr. Spencer Wells said that the question raised by Dr. Tyler Smith as to the mode of securing the pedicle was one of the most important which could be considered by the Society. He had followed Dr. Tyler Smith's practice in five cases. From the first no conclusion could be drawn, as the patient would probably have died had the pedicle been secured in any other manner. Two of the other four had recovered more quickly than they probably could have done under any other proceeding, although in both there was more evidence of sthenic peritonitis than was often seen where the clamp was used. In two other cases the patients died of diffuse peritonitis, and he (Mr. Wells) thought they might have done better if the clamp had been used. In one no *post mortem* examination could be made. In the other, the ligature and the tissue it enclosed were surrounded by a sort of capsule formed by two coils of small intestine adhering together and to the pedicle by recent lymph. It was a matter of some doubt whether such a condition might lead eventually to intestinal obstruction, and be more objectionable than the adhesion to the abdominal wall which followed the clamp. His (Mr. Wells's) own impression of the three modes of dealing with the pedicle was, that when the pedicle was long the clamp was the safest and best mode; but that when the pedicle was short, it was better to cut off the ligatures short, and return the tied pedicle, than to leave the ends of the ligature hanging out through the abdominal wall. In reference to the question of the diagnosis of cancer, he had never met with a case of cancer in the abdomen which had not been diagnosed without operation. The diagnosis of cancer of the peritoneum was not difficult. In one case cancer of the right kidney was easily recognised, and was found after death to weigh seventeen pounds. In two other cases of cancer of the ovary—one of the left ovary and one of both ovaries, with a large quantity of ascitic fluid—the diagnosis was easily made out after the preliminary tapping suggested by the President, and was proved to be correct after the death of the patient. In neither of these cases was there much œdema of

abdominal wall, and he (Mr. Wells) differed completely from Dr. Tyler Smith in his opinion that this ema could assist us in making out whether an abninal tumour was innocent or malignant.

Dr. Graily Hewitt mentioned a case in which he l observed very extensive œdema of the abdominal ietes, together with great œdema of the lower exmities, and in which the abdominal tumour preit, and which reached above the umbilicus, was stituted by the urinary bladder enormously disded with urine. It was evident, therefore, that ema of the abdominal walls could not be depended as a sign of malignant disease.

Dr. J. Braxton Hicks wished to ask Dr. Tyler ith whether he had found any subsequent untord result from the dropping in of the ligature. though this practice had been shown by the results be apparently unattended with danger, and possed many advantages, still the ligature had possibly be accounted for at some future day. He conlered the perfection of ovariotomy would be nearly ined by doing without any ligature at all. He beved it would be possible, by firmly compressing the dicle for an inch or so by a serrated clamp or some ch apparatus, to condense the tissues so firmly as completely prevent bleeding. The pedicle could en be dropped into the pelvis. He threw out this ggestion, because he had found in examining tissues ter the use of the *écraseur* that it was nearly impossle to unravel them; and he thought if the width the compressor were increased, no bleeding would sult.

In reply, Dr. Tyler Smith stated that he had ery reason to be satisfied with the results of the an of dropping the pedicle into the pelvis after curing it by ligature, and he could with confidence commend it as being probably safer and certainly ore convenient than the other plan. He should be ry glad to have an instrument such as that sugested by Dr. Hicks for dividing the pedicle, if it uld be relied on for preventing hæmorrhage.

Westminster Hospital Medical School. On hursday, the 12th instant, the prizes in the classes the Westminster Hospital Medical School were disibuted by the Very Rev. the Dean of Westminster, s follows. *Summer Session*, 1863.—*Practical Chemistry*: Mr. G. P. Bate, prize (surgical instruments). *Materia Medica*: Mr. G. P. Bate, prize (surgical instruments); Mr. R. Bugden, certificate. *Botany*: Mr. R. Bugden, certificate. *Forensic Medicine*: Mr. George E. L. Pearse, certificate. *Midwifery*: Mr. G. P. Bate, prize (surgical instruments); Mr. G. E. L. Pearse and Mr. Ralph Burnham, certificates. *Winter Session*, 1863-64.—*Anatomy*: Mr. G. P. Bate, prize (surgical instruments); Mr. R. Bugden, certificate; Mr. Brooks, and Mr. W. Moore, honourable mention. *Chemistry*: Mr. J. C. F. M'Donald, prize (Scott's and Tennyson's poems); Mr. W. Moore, and Mr. W. C. Watson, certificates. *Physiology*: Mr. G. P. Bate, prize (surgical instruments); Mr. J. C. F. M'Donald, certificate. *Medicine*: Mr. W. Yates, prize (Bible); Mr. E. L. Pearse, prize (Scott's poems). *Surgery*: Mr. R. Burnham, prize (Staunton's Shakespeare and Longfellow's poems); Mr. G. E. L. Pearse, certificate; Mr. C. St. Aubyn Hawken, honourable mention. *Clinical Medicine*: Mr. G. E. L. Pearse, certificate. *Clinical Surgery*: Mr. C. St. Aubyn Hawken, certificate. *Dental Surgery*: Mr. G. P. Bate, prize (dental instruments); Mr. Oakman, certificate. *Chadwick Prize*: Mr. G. E. L. Pearse (Lowe's Ferns, Tennyson's poems, and surgical instruments). *Proctor's Prizes*: Mr. C. St. Aubyn Hawken and Mr. R. Burnham.

British Medical Journal.

SATURDAY, MAY 21st, 1864.

OUR MEDICAL PRESS.

The *Medical Times and Gazette* bears in the profession a character of respectability and feebleness. We regret to say that it is in a fair way to be rid of the former of these qualities. The language which is ascribed to a well-known piscatorial depôt in the East End of London is not the language of respectable people; if, therefore, a journal indulges therein, it so far ceases to be respectable. Now, *à propos* of the British Medical Journal, the *Medical Times and Gazette* has of late been prodigal in the use of the aforesaid fishy vernacular; and for no other reason, that we can imagine, than because the reforming principles advocated by us have manifestly found a response amongst a large body of the profession. We have been successful.

Now, we are always thankful for even the smallest crumbs of instruction, and, we trust, are open to reasonable conviction. Why, then, do not those who object to our views argue them down, if they can, instead of attempting the old but very vain method of extinguishing them by unpolite, violent, and impertinent language? We will gladly learn even from the feeblest of instructors; but what instruction can be reaped from him whose only weapon is the language of abuse? The *Medical Times and Gazette*, it would appear, thinks it a part of its mission to wrap itself up in the rags of a worn-out conservatism, and to improve away the heathenism of the British Medical Journal. Incapable itself of competing with the many evils which infest our profession, it resolves that no one else shall do so, confining the exercise of its faculties to the abuse of those who are striving to put them down. Week after week, barren of all original conceptions, it has played upon this one string with what we might fairly call the vigour of envy.

A short time ago, we praised our Birkenhead brethren for refusing to work without pay; and for this reason, because to us there is no demonstration more clear than that gratuitous medical services are the bane and degradation of our profession. Thereupon up started the *Medical Times and Gazette*, and, with unctuous phraseology and high sounding-board verbosity, wearing a broad phylactery, and casting round pharisaical eyes, it thus spoke: "Tradesmanlike, unprofessional, and barbarous" is the conduct of the Birkenhead doctors—"a shocking scandal, an abominable scandal". The British Medical Journal is "the apostle of inhumanity"; "cold-blooded and degrading is its teaching", not to be "accepted

without loathing"; "abominable are its sentiments". Such was the language with which our self-satisfied contemporary's exhortations were piously larded on that occasion. Bitter, no doubt, to his feelings was the fact that, in consequence of our arguments, and in accordance with our advice, steps had been actually taken in Liverpool to provide in future for the proper payment of the doctor who is called to pauper cases of emergency.

Another week, we incidentally remarked that lecturers in London lectured for practice, and not for science. Whereupon, watchful of the medical morals of the day, out jumps our self-appointed monitor, and thus delivers himself: In the BRITISH MEDICAL JOURNAL is published "strange confusion of thought, abominable taste, and low mercenary tone". Again, there are "two pearls" (though our lucid cotemporary does not make it very clear what they are) "which the 'organ' of the British Medical Association, like a certain beast, would trample under foot." Surely this is hardly polite language—we mean, the language of gentlemen. And all this, too, because we spoke the simple truth! "Audacity, uncourteous, offensive, low, discourteous"—such are the editor's answers to our arguments.

Again, a few criticisms we ventured on an *Ophthalmic Review* are termed by the *Medical Times and Gazette* "railing at a man for lauding the Germans". Were we wrong when we spoke of the "feebleness" of the *Medical Times and Gazette?* What is "railing", but the argument of the feebler sex?

And, that there may be no mistake about the matter, we will repeat it again, that lecturers in London lecture either for practice or for pay, and not for science. But, as Dr. Beale's name has been here introduced by that journal, we will, in justice to that gentleman, say that, in asking if three medical lecturers could be found in London who lectured for science's sake, we distinctly had in view the name of Dr. Beale as one who did so lecture, and who was a glaring exception, proving the rule.

It is high time, indeed, that all the pretentious fallacies with which the *Medical Times and Gazette* and his like attempt to blind the profession and themselves were done away with. Let us learn the good sense to call things by their right names; and then we shall make a step towards putting our profession in its true position with the public. Let us strip off the lion's skin from the braying animal. Let us call *gratuitous medical services* what they really are—a system of medical advertising. When we get up medical schools, not because medical schools are wanted, but because medical men want students to lecture to, let us have the courage to say that lecturers lecture for practice, and not for science. See to what a pass all this false pretence of self-sacrifice and devotion to science has brought our profession! What think and say the public of our vaunted gratuitous medical services? Was there ever a time when our profession had so little influence in society? Was there ever a time when it was more lowly estimated? Why are we every where treated contemptuously? Why do our Poor-law brethren suffer so shamefully? Why are there groans and complaints, never ceasing, from the army and the navy medical officers? Why does all the world take delight in girding at us? The most contemptible railway meeting in the kingdom finds its notice in the *Times;* but for fourteen days the *élite* of our profession meet together in solemn conclave to carry out functions given them under Act of Parliament, and not a line in that journal records the fact! The House of Commons and the Home Office notoriously shun matters medical as if they were poison. The Horse Guards hates the sound of the doctor's name—"another medical squabble". Need we say how the governors of hospitals too often feel towards, and how they treat, their "gratuitous-serving" officers? Well, our honest wish and endeavour is to attempt to raise the profession out of this low estate in which it lies bleeding. We see, or think to see, where lie the evils which have brought it to this pass, and would remedy them: and the assistance we obtain from an enlightened medical press is not fair argument, honest refutation, calm exposition, but an exacerbation of the above delicate editorial expressions!

It really would appear as if Truth were a light which the eyes of our medical editors cannot bear, or which dazzles their understandings. Here, alas! is another of our class—the *Medical Circular*—which appears envious to rival the *Medical Times and Gazette*. Some weeks ago, we innocently stated a positive fact: that the regulations of the Society of Apothecaries were not in accordance with the recommendations of the Medical Council. This statement was met by the *Medical Circular*, not with any disproof, but simply with abusive language. The statement was said to be "positively erroneous", a "wilful exaggeration", a "positive misstatement", "calculated, or perhaps intended, to mislead the readers." Now, we put it to the profession, is this the language which courtesy and an honourable sentiment would dictate, even if our statement had been incorrect? What becomes of the real honour and dignity of the profession, of which medical editors are so delighted and so apt to warble, in the hands of those who thus misrepresent it? But what is to be said of such language when applied to a statement which is accurately true, and which, doubtless, the editor of the *Medical Circular* has by this time learnt to be accurately true?

We deeply regret, for the sake of the profession and, above all, for the credit of medical journalism to have to record such things as these. Our wish is that the courtesy which should distinguish the inter

ourse of gentlemen and of professional brethren ould be maintained in the medical press; and there- re is it that we hold up to reprobation a disrepute- le system, the practice of which is absolutely forbid- en in all decent society. We sincerely trust, for its wn credit, that the *Medical Circular* will make the nly atonement now in its power—viz., will apologise o this JOURNAL for thus transgressing the laws of ropriety—for having accused us of making "positive misstatements, wilful exaggerations, perhaps intended to mislead the readers," etc., when we were imply stating a positive fact, and what, as we have aid, we have no doubt the *Medical Circular* has by his time learnt to be a positive fact.

WHY DID GARIBALDI LEAVE ENGLAND?

THE unfortunate public discussions which still continue touching the departure of Garibaldi from England have fully confirmed the views originally expressed in this JOURNAL upon the medical aspects of the subject. Our profession (as we then stated) has been placed in a wrong position in reference to this matter; and evidently in consequence of a departure from the ordinary rules of medical etiquette. Of course, we have to deal with the matter solely in its medical aspects; but we are perfectly ready to admit that common sense dictated the departure of Garibaldi at the time when he left the country.

We need hardly tell our readers, that Mr. Fergusson's name has been again and again brought before the public in reference to the letter which he wrote concerning Garibaldi's health; and that the opinion therein given has been freely canvassed.

It is, of course, of importance, that the medical opinion of any man holding a high position amongst us should pass unquestioned, because the character of the whole profession is more or less concerned in the correctness of that opinion. It, therefore, becomes our duty to inquire why the medical opinion given in this case has been thus questioned.

Now, we do not hesitate to say, that whatever has occurred disagreeable to the profession in this matter has been brought about solely through a neglect of the ordinary rules of etiquette established by the profession. Mr. Fergusson is in attendance on Garibaldi; and in attendance also upon Garibaldi is Dr. Basile, his intimate friend and personal medical attendant. Now, we will not stop to inquire whether a rigid adherence to high professional etiquette would not have required that Mr. Partridge should have been summoned, in the first instance, to attend the consultation with Mr. Fergusson; but we will follow the subsequent steps of the proceeding. Mr. Fergusson issues a first report, describing the condition of Garibaldi's limb, etc. In the *Times* of April 18, appears a letter from Mr. Partridge informing the public

"That Garibaldi's visit to this country is quite unconnected with any seeking or necessity for medical or surgical opinion or treatment." "The general looks and declares himself to be in excellent condition."

In the very next day's *Times*, Mr. Fergusson publishes a medical opinion (without any previous consultation with his colleague in the case, Dr. Basile) to the effect, that Garibaldi's health is not equal to the journeys cut out for him. To this announcement, Dr. Basile, in the journals of the following day, gives a flat contradiction.

The public, therefore, and naturally enough, do not accept Mr. Fergusson's opinion as final and unanswerable, but draw their own conclusions as to the value to be attached to the opposite opinions of the medical attendants. Of course, the criticisms of the medical opinion by the public naturally, more or less, affect the whole profession; and, in so far as the opinion is defective, the profession suffers.

Now, had the rules of etiquette been properly followed in this case, our profession could not have suffered; and no possible doubts would have been raised by the public, in reference to the medical opinion which might then have been given. If Mr. Fergusson, for example, had consulted with Dr. Basile, as he manifestly ought to have done, before issuing his opinion, their differences would have been at once apparent; and, of course, under such circumstances—and especially in a matter of so great public interest—other medical men would have been called into the consultation. Need we add that, if this plain and proper course had been pursued, the ordinary attention shewn to Dr. Basile which he had a right to demand from Mr. Fergusson—that if the names of Dr. Watson, Dr. Williams, and other heads of the profession, had been appended to the results of a solemn consultation so held—the public at large would have accepted the decision without question, and our profession would not have been injured by the canvassing of the opinion of any gentleman occupying a prominent position in it.

Truly, we may say, that our profession has been unlucky in its dealings with Garibaldi. Even since these lines were written, we find another letter in the public prints from Colonel Chambers, in which he speaks of the boils on Garibaldi's arm. Mr. Fergusson, in the *Times*, says that he saw Garibaldi on April 23rd, just before he left London.

"The general," he writes, "declared himself as well as he had ever been since he arrived in England; but on close inquiry admitted fatigue both of body and mind, etc." "Your grace will be sorry to learn that he has lately suffered from boils on his left forearm, one of which alone might have made another man give up all his ordinary occupations for a time."

Colonel Chambers, in the letter referred to, speaks as follows of these boils.

"On the evening of the 22nd, I saw the boils on the general's arm; I considered them trifling. On the 23rd, about 5 P.M., he was pulling bow-oar in a four-oared boat, at Cliefden, for at least an hour, and

the observation made to me by Signor Guerzoni was, 'Look at the sick man; see, how ill he looks!' General Garibaldi appeared to be enjoying himself very much. The 23rd of April is the date of Mr. Fergusson's last letter to the Duke of Sutherland respecting the health of General Garibaldi."

Of course, Mr. Fergusson's report must be taken before Colonel Chambers's in such a case; but we are satisfied the profession will agree with us, that all this unseemly contradiction would have been spared to the profession had the ordinary rules of etiquette not been transgressed.

A NON-REGISTERED PRACTITIONER.

Any man or woman in this country, registered or unregistered, may practise medicine or surgery with impunity, provided he does not maim or kill his patient; and, in the matter of malpraxis, the advantage, in the eyes of judge and jury, is invariably on the side of the non-registered quack. Should a medical man, accused of unskilfulness, fall into the hands of a jury, ten to one the case will go hard against him; but let a quack kill his man, and the jury will pity and absolve him, and the public cheer the acquittal. On the 11th inst., a man—a "quack doctor"—is charged with manslaughter, that he had

"Undertaken to act as a medical practitioner, and had prescribed for the deceased in that capacity; but that he had caused his death by negligently and ignorantly administering improper medicines to him."

The accused was an agent for the sale of the pills of the ominous-named Dr. Coffin. Cayenne pepper seems to have been the chief medicine given in the case.

"Dr. Letheby said that Cayenne pepper was used to a considerable extent among the lower orders, and that it was considered a remedy for various diseases. He added, however, that he derived this knowledge from the fact of five inquests having taken place at the London Hospital, where the deaths arose from poisoning by lobelia and Cayenne pepper."

We need hardly say that "the jury immediately returned a verdict of not guilty", and that the public shouted "applause, which was repressed".

Mr. Justice Williams's words in summing up are worth putting on record.

"It was very important it should be known that any person who undertook to act in the capacity of a medical man, and prescribed for another in that capacity, was bound to exercise a reasonable amount of skill and knowledge; and that, if death resulted from his gross ignorance or negligence, he was criminally responsible. *In the eye of the law, it made no difference whether the party was a regular medical practitioner or not; and the only question for the jury, in a case like the present, was whether the death was the result of gross negligence or ignorance.*"

La Pommerais, the homœopathic doctor, has been convicted of the murder of Madame De Pauw, and sentenced to death. The evidence of his guilt seems conclusive. The report of the expert, M. Tardieu, remarkable, and a model of what such a repo should be, and brings the force of science to bea strongly in favour of the guilt of the prisoner. Digi taline was, in all probability, the instrument used i the commission of the murder. Animals were de stroyed by the administration of an extract of th matters vomited by De Pauw before her death these matters having been collected from the floor o the room. The animals died exhibiting the sam symptoms as those from which De Pauw fatally suf fered. Also extracts made from the viscera of D Pauw produced similar symptoms in animals. Th possession of digitaline was traced into the hands o La Pommerais. The absence of all mineral poison was clearly proved in the viscera of De Pauw and i the vomited matters; and it was also shown tha none of the internal organs or external parts showe any signs of violence or of disease. There was therefore, demonstrated to be in this case absence o any of the ordinary signs of disease such as destroy life; and there was positive proof that De Pauw had vomited some highly poisonous matters of a vegetable nature. The conclusion, therefore, that she wa poisoned, was inevitable.

Mr. Paget is about, we understand, to resign the office of Examiner in Surgery to the Army Medica Department; and, it is said, will be replaced by Mr Prescott Hewett.

The twelfth anniversary dinner of the Royal Medical Benevolent College took place at Willis's Rooms on Saturday last. The chair was occupied by Sir Charles Locock; and there were present about one hundred and forty gentlemen, including, besides numerous members of the medical profession, the Master of the Temple, Sir Walter Stirling, Mr. Du Pré, M.P., Mr. Angerstein, M.P., Mr. Lyall, M.P., the Rev. Dr. Thornton, Colonel Palmer, Mr. W. Gilpin, Colonel Walker, etc. Everything passed off well; and the attendance was, we believe, the greater from the fact of a member of the medical profession so eminent as Sir Charles Locock being in the chair, which had on most if not all previous similar occasions been occupied by laymen. The collection made during the evening amounted to above £1100. In responding for the army, Colonel Walker made some remarks on the dissatisfaction which, he had heard, was felt with its medical service. He thought the present proceedings of the authorities a very short-sighted policy; and trusted that the government would do justice to the army medical officers. Such observations from a combatant officer, shew that it is not in our profession alone that the sense of injustice towards the medical officers of the public services is felt.

The Medical Council.

REPORT OF PROCEEDINGS, April 1864.

Saturday, May 7th.

The Council met this day at 12 o'clock; Mr. Arnott, in the absence of the President, in the Chair.

The minutes of the last meeting were read and confirmed.

The Apothecaries' Hall in Ireland. A letter from the King and Queen's College of Physicians, respecting the licence granted by the Apothecaries' Hall of Ireland, accompanied by other voluminous correspondence on the subject, was read.

Dr. A. Smith moved, and Dr. Corrigan seconded:

"That the letter from the King and Queen's College of Physicians, respecting the licence granted by the Apothecaries' Hall of Ireland, along with the letters Nos. 2 and 3, referred to in that letter, be entered on the minutes."

The motion was supported by Dr. Andrew Wood; but was objected to by Dr. Leet, Dr. Storrar, Dr. Thomson, and other members, principally on the ground that the Council had already decided that the Licentiates of the Irish Apothecaries' Company were entitled to practise medicine in Great Britain and Ireland. The motion for the insertion of the correspondence having been put to the vote, the numbers for and against were equal. The Chairman declared the motion not carried, and declined to give his casting vote. Some discussion then took place as to whether the President under such circumstances was obliged to give a casting vote; and Dr. Andrew Wood expressed his intention of bringing forward a motion on the subject at a later period of the proceedings.

Dr. Storrar required that the numbers of those who voted for and against the motion, and of those who did not vote, be entered on the minutes. The numbers were:—for, 6; against, 6; declined to vote, 1.

Dr. A. Smith then moved, and Dr. Corrigan seconded:

"That when the General Medical Council expressed its opinion, in the resolution of the 2nd June, 1863, 'that registered licentiates of the Apothecaries' Company of Dublin are, as apothecaries, entitled to practise medicine in Great Britain and Ireland', it did not intend to convey that the licence of the Apothecaries' Company of Ireland should be considered for the public service as a medical qualification to be recognised as equivalent to a degree in medicine, or to a licence from a College of Physicians; or to express an opinion on the claim of the Apothecaries' Hall of Ireland to give a licence in medicine, the question being one involving the legal interpretation of an Act of Parliament, which the Council is not competent to decide."

Dr. Storrar moved, and Dr. Acland seconded, the "previous question".

Dr. Stokes said that, in consequence of the proceeding of the Council in 1863, the War Office had recognised the license of the Apothecaries' Hall of Ireland as a qualification for candidates for the medical service of the army.

Dr. Corrigan said that he did not ask the Council to rescind the resolution of last year, but to explain what it meant. At present, licentiates of the Apothecaries' Hall of Ireland were placed on the same footing as the graduates of Universities: and, to make greater confusion, an opinion had been given since the last meeting of the Council, that they were not qualified to practise medicine. Since last year, the Apothecaries of Dublin had introduced into their licence the phrase "to practise medicine". The resolution of 1863 seemed to express a legal opinion; and if it had misled, it ought to be explained. The function of the Apothecaries' Hall of Ireland was the trade in drugs—a duty which it performed in an admirable manner; but not to give licences in medicine.

Dr. Leet said that the army warrant did not specify any class of practitioners, but merely required that candidates should possess qualifications to practise medicine and surgery. As to the argument that the Irish Apothecaries' Hall was a trading company, it applied equally well to the Apothecaries' Society of London. Moreover, a sound knowledge of pharmacy rendered a man the more fit for the medical service of the army, He would remind the Council of an opinion expressed on a previous day by Dr. Corrigan, in which he agreed; that the important point to be ascertained was, what a man knew, and not where he had learned it.

Dr. Andrew Wood thought the Council had done wrong last year in giving what was in fact a legal opinion. The Apothecaries' Hall of Ireland ought not to insert in their licence a word which was not in their charter. The Council should shew that it did not wish to give to the licensing bodies any powers, which were not already possessed by them.

Dr. Acland and Dr. A. Smith made some remarks; after which, the "previous question" was put to the vote, and carried by a majority of 8 to 6.

Dr. Burrows now took the Chair as President.

The President's Casting Vote. Dr. Andrew Wood proposed, and Dr. Embleton seconded:

"That the Executive Committee be directed to take the opinion of counsel on the question, whether or not, in the case of an equality of votes upon a division, the President or Chairman of the Council for the time being is bound to decide the matter in hand by giving his casting vote."

The motion was agreed to.

Catholic University of Ireland. A reply to the letter addressed to this body (see Journal, May 7, p. 504) was read. In it the Secretary stated that he was "directed by the Rector and Council of this University to say, that they were not aware that the General Medical Council was in any way bound by Act of Parliament or otherwise not to recognise the examinations of other than chartered or incorporated educational bodies. The University believed and still believes that the Council was at liberty to admit the preliminary examinations of any public body of recognised literary and scientific merit. Being aware that the Council possesses no coercive power for enforcing its regulations regarding general studies, the Rector and Council of this University were of opinion that they were acting in conformity with the wishes of the Council and with the Act of Parliament in offering their aid to carry out the enlightened views of the General Medical Council, with respect to the general education of Catholic medical students."

Dr. Andrew Wood moved, Dr. Storrar seconded, and it was resolved:

"That the Registrar be directed to inform the Catholic University of Ireland, that the Council cannot acknowledge its entrance examination, as long as it has no Charter of Incorporation."

Dr. Andrew Wood observed, that it was solely on account of the want of a charter or other act of incorporation, that the desire of the Catholic University could not be complied with. Its scheme of study and examination, as submitted to the Council, was one to which no objection could be made.

Regulation of Pharmacy. Dr. ANDREW WOOD proposed a motion of which notice had been given by Dr. Christison, who had been obliged to return to Edinburgh; viz.:

"That a memorial be presented to the Secretary of State for the Home Department, praying that the Government will introduce a Bill into Parliament for regulating the practice of pharmacy in the British dominions; the administration of the Act, in case the Bill pass into law, to be entrusted to a Board consisting of the pharmaceutic chemists of the United Kingdom."

It was very important that the Council should do something in regard to the pharmacy question. During the discussion on the amendments of the Medical Act, it was evidently the general feeling of the Council that the sale of drugs should be put under some kind of legal management. Most of the members were, he believed, opposed to the introduction of a pharmacy clause into the Medical Act; nevertheless, the Council was much indebted to Dr. Corrigan for having brought the subject forward. Although he proposed the resolution, he thought that the latter clause of it, pointing out to whom the administration of the Act should be entrusted, was objectionable, as it referred to a matter beyond the province of the Council. The Council should point out to Parliament the necessity for the regulation of pharmacy; but it should be left to the Government to decide how the means must be carried out.

Dr. EMBLETON seconded the motion.

Dr. CORRIGAN proposed as an amendment:

"That a communication be addressed to the Secretary of State for the Home Department, drawing his attention to the present defective state of the law regarding the practice of pharmacy, under which any person, however ignorant, may undertake it; and expressing the opinion of the General Medical Council, that some legislative enactment is urgently called for, to ensure competency in persons keeping open shops for dispensing medicines and for the compounding of physicians' and surgeons' prescriptions."

He objected especially to the concluding part of Dr. Christison's proposal. If the carrying out of the Act were entrusted to the pharmaceutic chemists, they would be forming another corporation and would be perhaps raising themselves into the rank of medical practitioners; and the competition thereby excited might prove seriously detrimental to the Apothecaries' Company.

Dr. QUAIN seconded the amendment. Dr. ANDREW WOOD, by leave, withdrew his resolution; whereupon the amendment was put as a substantive motion and carried.

Army and Navy Medical Examinations. Dr. APJOHN moved:

"That the Army and Navy Medical Boards be requested to furnish the Medical Council annually with information on the following points:—*a*. The total number of candidates for medical commissions who have presented themselves for examination. *b*. The number of those who passed, and of those who did not pass, the examinations of such boards, distinguishing the number of successful and of unsuccessful candidates under the respective heads of the several licensing bodies mentioned in Schedule (A) to the Medical Act, and specifying their qualifications, medical and surgical, and whether they had failed in medicine or surgery. *c*. The general nature and scope of the examinations conducted by the said boards, together with a list of the questions proposed by the examiners."

He said that his object was to shew the results of sent examinations of the licensing boards.

Dr. CORRIGAN seconded the motion.

Dr. ALDERSON thought that the second proposal, carried out, would be the means of bringing unc served censure on some of the licensing boards.

Mr. ARNOTT said that many presented themselv to the Army and Navy Boards with double qualific tions; and it would be important to know wheth they were rejected in medicine or in surgery. I believed that the tendency of the returns would to effect an improvement in the examinations of t licensing boards.

After some remarks from the PRESIDENT and D CORRIGAN, the motion was carried.

Registration of British Practitioners in Foreign Cou tries. A letter was read from Mr. JOHN GASON, gentleman residing in Rome, wherein he suggested

"1. That the General Council take into consider tion the advisability of calling the attention of H Majesty's Government to the justice of placing thos medical men residing abroad, who conform to th laws of their country, on the same footing as medic men residing in the United Kingdom. 2. That re gisters be supplied to Her Majesty's ministers an consuls, for the furtherance of that object."

Dr. ANDREW WOOD proposed, Dr. EMBLETON se conded, and it was resolved:

"That the Registrar be directed to write to Mr Gason, informing him that the Medical Council hav no power to comply with his proposals."

Recovery from Apparent Death by Drowning. A lette was read from the Secretary of the Royal Nationa Life Boat Institution, enclosing circulars, copies o which were being circulated amongst members o the medical profession, with the view of eliciting their opinions on the relative merits of the plans o Dr. Marshall Hall and Dr. Silvester, for the restora tion of the apparently dead from drowning; and asking that the same might be laid before the Gene ral Medical Council, with the view to their obliging the Society with their opinion on the subject.

Dr. ANDREW WOOD moved, Dr. EMBLETON seconded and it was resolved:

"That the Registrar be directed to write to the National Life Boat Institution, acknowledging their communication, and stating that the question proposed in it does not come within the sphere of the duties of the Council."

Uncertified Deaths. The following letter was read from Mr. J. I. Riches, the Assistant-Clerk of the parish of Bermondsey.

"Vestry Offices, Maltby Street, S.E.,
October 27th, 1863.

"GENTLEMEN,—I am directed by the vestry of this parish to call your attention to the number of deaths which are registered in this district 'Uncertified', to apprise you that they have reason to believe that the persons who attend the cases during illness are unregistered and unqualified practitioners, and to express a hope that you will direct inquiry to be made into the circumstances, with the view of remedying such an unsatisfactory proceeding, and also of protecting the public against unqualified practitioners.

"I am, gentlemen,
"Your most obedient servant,
"J. I. RICHES, *Assistant Clerk.*"

It was moved by Dr. ANDREW WOOD, seconded by Dr. EMBLETON, and agreed to:

"That the Registrar be requested to write to Mr. J. I. Riches, and to state that the matter referred to in his letter to the Medical Council does not lie within the province of the Council."

Report of the Finance Committee. Dr. SHARPEY read the following Report.

"The Finance Committee beg leave to present, in

e table subjoined, a statement of the estimated and ual income and expenditure of the year 1863; also estimate of the income from ordinary sources, and the expenditure, as far as the Committee are able judge, for the year 1864. Appended is a statement the *Pharmacopœia* account, exhibiting the expense urred in the preparation and publication of the itish *Pharmacopœia*, from the commencement of the dertaking up to April 19th, 1864, except some incintal charges, estimated not to exceed £10; also e number of copies printed, and the present state the sale of the work, with the proceeds of the sale to the same date.

"The sums advanced in former years on account of e *Pharmacopœia* have been included in the annual counts laid before parliament, and defrayed, along th the ordinary expenses of those years, by a perntage rate on the income of the three Branch Couns, as directed by the Medical Act. The Committee commend that, when all the expenses of the publition shall have been defrayed out of the proceeds the sale of the work, the surplus be reserved for vestment as a special fund, available for the purses of the *Pharmacopœia*.

"The Committee further recommend that £50 be esented to Dr. Garrod in acknowledgment of spel services rendered in the publication of the *Pharacopœia*, which were undertaken by him at the reiest of the Executive Committee; also that gratuies be given of £30 to Mr. Bell and £20 to Mr. Roope, e clerks, for extra trouble and efficient service in nducting the sale, by which the charge for pubhers' commission is saved to the Council.

"The Committee have examined into Messrs. Spotswoode's account referred to them by the Council. appears that in February 1862, Messrs. Spottisoode laid in a stock of new type and the requisite pply of paper for the work, by direction of the *Pharacopœia* Committee, on the understanding that the inting would be immediately proceeded with; but at in consequence of the delay which subsequently ok place these materials lay long unemployed. essrs. Spottiswoode estimate at £75 their loss occaoned thereby, and also from the printing being derred to the busy season of 1863, instead of being ne in the summer, as expected. They do not press is charge as a claim, but submit it for equitable nsideration, and the Committee recommend that it ould be paid. With regard to an extra claim for nding, submitted by Messrs. Spottiswoode, the ommittee regret that, after giving it their careful nsideration, they do not feel themselves justified in commending that it should be allowed.

"In conclusion, the Committee recommend that two embers of the Executive Committee be annually ppointed to audit the accounts of the General Coun-l. "W. SHARPEY, *Chairman*."

[Subjoined are extracts containing the most imrtant parts of the statements referred to in the port.]

Actual Income for the Year 1863.

	£	s.	d.	£	s.	d.
Fees received by—						
Branch Council for England	2729	10	0			
" " Scotland	824	10	0			
" " Ireland	832	15	0			
				4386	15	0
Dividends received by—						
Branch Council for England	609	0	0			
" " Scotland	74	1	10			
" " Ireland	69	17	4			
				752	19	2
Sale of Registers				317	14	0
Penalties				9	13	5
				5467	1	7

Actual Expenditure for the Year 1863.

	£	s.	d.	£	s.	d.
Expenses of—						
General Council				*3338	9	11
Branch Council for England	†660	11	4			
" " Scotland	259	2	3			
" " Ireland	290	14	1			
				1210	7	8
				4549	7	7
Balance in favour of Medical Council				917	14	0
				5467	1	7

British Pharmacopœia.—Statement.

EXPENDITURE.	£	s.	d.	£	s.	d.
Paper, Printing, and Binding 13,000 copies, 8vo., and 15,000 copies, 32mo.				2049	2	6
Meeting of General Council, October 28th, 1862, on account of the Pharmacopœia				406	7	0
Amounts voted by the General Council, on account of the Pharmacopœia	1600	0	0			
Dr. Apjohn	94	10	0			
Dr. Maclagan	154	7	0			
London Secretary	150	0	0			
Edinburgh Secretary	100	0	0			
Dublin Secretary	100	0	0			
London Editor	75	0	0			
Edinburgh Editor	50	0	0			
Dublin Editor	50	0	0			
Subcommittees, £500 each	1500	0	0			
				3873	17	0
				6329	6	6
Deduct Balance returned by Dr. Garrod				100	0	1
				6229	6	5
INCOME.						
Produce of 8vo. edition				4469	3	0
Produce of 32mo. edition				553	11	0
				5022	14	0
Balance				1206	12	5
				6229	6	5

Dr. SHARPEY moved, and Dr. ALDERSON seconded, the adoption of the report, which was agreed to.

Dr. SHARPEY then moved, and Dr. ALDERSON seconded, the following resolutions, which were carried unanimously without discussion.

"That £50 be presented to Dr. Garrod, in acknowledgment of special services rendered in the publication of the *Pharmacopœia*, at the request of the Executive Committee."

"That gratuities be given, of £30 to Mr. Bell, and £20 to Mr. Roope, the clerks, for extra trouble and efficient service in conducting the sale of the *Pharmacopœia*."

"That Messrs. Spottiswoode's extra claim of £75 be allowed and paid." [Dr. Sharpey explained that the disallowance of the extra claim for binding, made by Messrs. Spottiswoode and Company, was founded solely on a technical objection, and was not intended to cast any reflection on the conduct of the firm.]

"That two members of the Executive Committee be annually appointed to audit the accounts of the Council."

The Report on Medical Education. Dr. ANDREW WOOD moved, and Dr. EMBLETON seconded:

"That the Council now proceed further to consider the report of the Select Committee on education."

Dr. ACLAND moved as an amendment:

"That in the absence of the chairman of the Educational Committee (Dr. Christison), of the representative of the University of Edinburgh (Mr. Syme), of the representative of the University of Cambridge (Dr. Paget), and at the twelfth day of the session of the Council, it is inexpedient to enter upon the con-

* This includes £160:11:6 for printing two thousand copies of the *Register*, to be supplied to Her Majesty's Government.

† This increase is on account of £200 of the registrar's salary being now charged to the Branch Council for England.

sideration of the details of professional study and examination; but instead thereof—

"That a Committee be appointed to draw up and report to the Council of 1865, what are the subjects of examination which should be required of all students prior to their prescribed course of professional study;

"That a Committee be appointed to draw up in detail a scheme of the scientific and professional subjects of which knowledge should, in the judgment of the Medical Council, be required from every person before he receives a diploma or qualification testifying that he possesses the requisite knowledge and skill for the efficient practice of his profession; and that the Committee report at the next meeting of the Medical Council;

"That a Committee be appointed to report in detail at the commencement of the next session of Council, as to the best mode of organising an efficient inspection of all examinations conducted by the several licensing bodies, in conformity with Sect. XVIII of the Medical Act;

"That the Committees (if appointed) be requested to correspond with each other, to obtain information from such persons unconnected with the Council as they may see fit, and to prepare in type, in such form as may be agreed on with the Registrar, their respective reports, if possible, before Easter of 1865, or at an earlier period if required by the President."

He had more than once endeavoured to call the attention of the Council to the only way of bringing the matter to a satisfactory conclusion. When Dr. Storrar took up the subject of professional education, he adopted a definite course of bringing forward each resolution in order; and this course, if followed, would probably have brought the matter to a successful issue. And, notwithstanding any objections that might be made, he thought that a great merit of the former series of recommendations, the discussion of which was interrupted, lay in their definiteness. Dr. Storrar's plan, however, had been departed from; and a most ample discussion of the whole subject had been elicited. Did not this shew that time was required for reflection before adopting a new code, with some of the provisions of which he agreed, while he dissented from others? With regard to the first of the resolutions which he proposed, he assigned 1865 as the time for making the report; because, as had been shewn in the discussion, the question was a very difficult one, as to what scientific subjects should be included in the preliminary examination. He had found the subject a difficult one to deal with at Oxford; he had there endeavoured to make improvements in scientific education—but no one there could determine which subjects should be imported into the curriculum and which should be omitted. In the next resolution, he had used the simple words of the Medical Act in preference to expressions which it might be difficult to define. Some years ago, he had at Oxford required from candidates a knowledge of diseases of women and children and of the principles of surgery; but had been called to account for demanding this, on the ground that it was foreign to the medical degrees conferred by the University. The question as to what was to be demanded was in such a confused condition, that he really did not know what to put into his examination papers, lest he should require from candidates too much surgery, or chemistry, or botany. The Council would have, at some time, to follow the example of the University of London, and determine the extent of knowledge required in regard to certain subjects. It was not right that a candidate for a simple qualification to practise should be rejected on minutiæ demanded from those seeking the higher degrees. Then, as to Clause XVIII, if any one would examine into the power given thereby to the Council, and the means of efficiently carrying it out, it would be found that it would not be possible to carry it into effect without careful inquiry. If the Council decided to undertake any system of inspection, it ought, in justice to the licensing bodies which had discharged their duties, to come to a conclusion as to the plan of examination, and the minimum qualification to be required. He believed it would be most useful to the public, and fair both to the present and absent members of the Council, to endeavour to obtain reports on the various subjects referred to in his amendment.

Dr. STOKES seconded the amendment.

Dr. ANDREW WOOD said that a Committee had been formed, for the purpose of laying something tangible before the Council, so that some progress might be made. He feared, however, that the Council would not be able to do as he would have wished; but he entreated the members to pause before shelving the subject for another year. The suggestions in the report, for obtaining information on various points, would also be shelved by the course proposed by Dr. Acland. He believed that Dr. Christison himself would be astonished and vexed that the Council did not proceed with the discussion of the report; and Dr. Acland must take the responsibility of the delay. He did not say that the Council would assent to all the recommendations; but in many points they might agree. And if these were agreed to, as far as might be possible, he was quite prepared to vote for the Committees proposed by Dr. Acland. He would rather sit a day or two longer in the Council than not come to some agreement on the report.

Dr. CORRIGAN would vote against both the resolution and the amendment. He would be well pleased to go on with the discussion of the report; but there were still more than nineteen propositions to be considered.

Dr. A. SMITH thought that the discussion should go on as far as possible.

After some observations in reply from Dr. Acland, the amendment was put to the vote and lost; 4 voting for and 8 against it. The original motion was also lost, the numbers being, for, 5; against, 7.

Letters from the Bodies mentioned in Schedule A. Dr. ANDREW WOOD proposed, Dr. A. SMITH seconded, and it was resolved:

"That the various letters from the bodies mentioned in Schedule A of the Medical Act, explanatory of their regulations, which have already been printed in proof, be laid on the table of the Council, and entered on the minutes."

Returns from the Licensing Bodies. Dr. EMBLETON presented the following report of the Committee on the returns from the licensing bodies:

"The Council having direced that the table of returns under the 23rd Recommendation of the Council, viz:—'That returns from the licensing bodies in Schedule (A) be made annually on January 1st, and in the subjoined form, to the General Medical Council, stating the number and names of the candidates who have passed their first as well as their second examinations, and the number of those who have been rejected at the first and second examinations respectively; and that the Registrar forward a sufficient number of forms, with a notice for their being returned, in due time,' shall be the only table at present prepared by the Committee on account of the revision and alteration of the recommendations of the Council on medical education, your Committee beg to lay that table, with an explanatory note appended, before the Council.

"D. EMBLETON, *Chairman.*"

Table of Returns under Recommendation 23.

ensing Bodies.	PASSED.		REJECTED.	
	1st Ex.	2nd Ex.	1st Ex.	2nd Ex.
ll. Phys., London	73	74	17	20
il. Phys., Edin...	151	146	22	14
Coll. Phys., Irel.	..	66	..	17
ll. Surg., Eng. ..	465	495	128	55
ll. Surg., Edin...	142	121	34	11
hys. Surg., Glasg.	17	76	2	25
ll. Surg., Ireland	138	138	36	36
poth., London..	323	305	34	8
. Hall, Dublin ..	23	20	5	3
r. of Oxford	3	..	1	..
Cambridge	4	5	..	..
Durham ..	..	..	..	..
*London....	21	24	16	..
Edinburgh	(1st) 67	..	(1st) 32	..
	(2nd) 82	(3rd) 82	(2nd) 6	(3rd) 2
Aberdeen	(1st) 39	..	(1st) 3	..
	(2nd) 37	(3rd) 32	(2nd) 11	(3rd) 9
Glasgow ..	59	70	12	8
St. Andrews	10	..	1	..
Dublin	12	37	2	8
's Univ., Ireland	42	26	13	8
	1708	1687	375	224

By the regulations of the University of London *Calendar*, 1864, page 106), the first examination he degree of M.B. includes four subjects, viz.: omy, Physiology, Materia Medica and Pharmacal Chemistry, and Organic Chemistry; but candates for this examination are permitted to defer subject of physiology to a following year. The headed "Entire" contains the names of those rgraduates who elected to pass the examination ll four subjects at once in 1863. That headed clusive of Physiology" contains the names of those elected to be examined in three subjects in 1863, to defer the fourth, viz.: Physiology, to a future That headed "Physiology only" contains the es of those who, having elected to pass in a foryear in three subjects, passed in 1863 in Physi-.]

nding Orders. Dr. EMBLETON presented the re- of the Committee appointed to revise the standrders. The Committee on the standing orders regulations having arranged and numbered them, them before the Council, and recommended that be printed. An alteration had been made in the le of travelling expenses," substituting for Leeds 4:0, and Worcester £4:4:0, the following: Chelam £4:4:0, and Southampton £2:2:0.

was moved by Dr. EMBLETON, seconded by Dr. HN, and agreed to:

That the report of the Committee on the standing rs be received and adopted."

e *"Previous Question."* Dr. A. SMITH moved, Dr. CORRIGAN seconded:

That the decision on the resolution moved by Dr. h, and seconded by Dr. Corrigan, in the early of this day, was informal; inasmuch as the 'previ question' was put without the amendments on resolution being permitted to be considered."

e motion was negatived.

e *Pharmacopœia Committee.* Dr. SHARPEY moved, AQUILLA SMITH seconded, and it was re-d:

That the *Pharmacopœia* Committee be authorised aw on the Treasurers, to an extent not exceeding for expenses which may be incurred in carrying he objects of its appointment."

timonial to Dr. Hawkins. Dr. SHARPEY moved: That the cordial thanks of the Council be ten- to Dr. Hawkins, for the unremitting care and tion he has bestowed on the business of the Council for the five years he has discharged the duties of Secretary; and that £105 be now presented to him in acknowledgment of the sense which the Council entertains of his valuable services."

The work which Dr. Hawkins had done during the meeting of the Council was a very small part of his entire work. For five years he had devoted his attention to the duties required of him as Registrar and Secretary, and for some time these duties had been very arduous.

Dr. STORRAR seconded the resolution with great pleasure. He had not voted for Dr. Hawkins' election; but had, on his being appointed, determined to cooperate with him in every way in his power; and he had found him a most excellent officer.

Dr. ANDREW WOOD, as a chairman of the Business Committee, had been constantly brought into contact with Dr. Hawkins; and he would say that no one except the possessor of a clear head and business habits could so satisfactorily perform his duties.

Dr. CORRIGAN cordially approved of the proposal that had been made.

The PRESIDENT said that, before his election to the chair, he had been treasurer and a member of the Executive Committee; and had had opportunities of observing the zeal and the able manner with which Dr. Hawkins performed his duties. If by any misfortune the Council should be deprived of his services, it would be difficult to replace him.

The motion was carried unanimously.

Dr. HAWKINS said that nothing could be more pleasing to him than such a resolution; and it gratified him much to be able to fulfil his duties to the satisfaction of the Council.

Report of the Committee on Education. Dr. ACLAND moved, Dr. ANDREW WOOD seconded, and it was resolved:

"That the report of the Select Committee on education be forwarded to the various bodies in Schedule (A), with a letter from the Registrar, to the effect that the report is under the consideration of the Council, and calling their attention to the suggestions of the report, and soliciting their observations thereon; also, distinguishing the resolutions which have been adopted by the Council from those which have not yet been considered; and that it be referred to the Executive Committee to carry this resolution into effect."

The standing order as to the hour of adjournment was suspended.

The Executive Committee. Dr. ANDREW WOOD moved, Dr. A. SMITH seconded, and it was resolved:

"That the powers and duties delegated to the Executive Committee, in accordance with Sect. IX of the Medical Act, shall be vested in the Committee until the next meeting of the General Medical Council."

Votes of Thanks, etc. It was moved by Dr. ANDREW WOOD, seconded by Dr. AQUILLA SMITH, and agreed to:

"That the thanks of the Council are due, and are hereby tendered, to the treasurers, Dr. Sharpey and Dr. Quain, for their important services."

Dr. ANDREW WOOD moved, Dr. AQUILLA SMITH seconded, and it was resolved:

"That the thanks of the Council are eminently due, and are hereby offered, to the Royal College of Physicians of London, for their obliging and courteous accommodation during the present session of the Medical Council."

Dr. ANDREW WOOD moved, Dr. AQUILLA SMITH seconded, and it was agreed:

"That a gratuity of fifteen guineas be given to the resident officials of the College of Physicians, for services rendered to the Council."

It was moved by Dr. A. Smith, seconded by Dr. Andrew Wood, and resolved:

"That a gratuity of ten guineas be given to Mr. Bell, and the same to Mr. Roope, the clerks, in consideration of their extra services during the present lengthened session of the General Medical Council."

Dr. Andrew Wood moved, Mr. Arnott seconded, and it was agreed:

"That the thanks of the Council are cordially tendered to the President for his kind, courteous, and efficient services during the present session of the General Medical Council."

The minutes of the meeting were then read and confirmed; and the seventh session of the Medical Council, having lasted twelve days, came to an end.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East Anglian. [Annual.]	Guildhall, Bury St. Edmunds.	Friday, June 17th, 2 P.M.

SOUTH MIDLAND BRANCH.

The Annual Meeting of the South Midland Branch will be held at Woburn on Thursday, the 23rd of June, at 1 P.M.; H. Veasey, Esq., President.

Gentlemen intending to read papers or cases are requested to forward the titles of same to Dr. Bryan, Northampton, not later than the 9th of June.

John M. Bryan, M.D., *Secretary.*

Correspondence.

IRIDECTOMY.

Letter from William Bowman, Esq., F.R.S.

Sir,—Ere the present discussion on iridectomy closes, a few words remain to be said. I refer to points raised in Mr. Dixon's letters, and which ought not to be left doubtful.

1. As to *the scientific points* (*ante* p. 376).

a. That form of cupping of the optic nerve which depends on, and indicates, glaucomatous intraocular pressure, has precisely definable characters, enabling us at once to distinguish it from the depressions of other kinds, as, for example, the slight occasional sinking in of the optic disc when the nerve-tissue has become atrophied; and what is called the physiological cup, which is a variety in the form of the disc implying no disease. These characters have been much studied abroad, as well as here; and I have already referred to them (*ante* p. 105) as among our most valuable aids to diagnosis. When, therefore, "cupping of the optic disc" is spoken of as one of the indications for iridectomy, it is the glaucomatous cupping that is intended, and not any other. Mr. Dixon declines to admit this distinction; thus virtually refusing to accept the o thalmoscopic pathognomonic sign of glaucoma, enabling us to understand his non-recognition of disease under some of its commoner forms.

b. Mr. Dixon argues that cupping cannot be du intraocular pressure, if the lens and iris are pressed forwards—a condition, he says, "which co hardly fail to be the result of any eccentric fo acting upon the walls of the eyeball with power ficient to compress the very tissue of the optic ne backwards into its sheath." This is, as before, put an erroneous conception of his own mind in place of observation of facts. There are many stances of glaucoma—especially simple glauco and in myopic eyes—in which intraocular press and its effect, glaucomatous cupping, co-exist wit normal position of the lens and iris. And, indeed is plain, from physical laws, and from the anatom arrangements of the parts, that there is no su fancied necessity for the forcing forward of th structures in all cases of intraocular pressure. source of augmented pressure within the corn sclerotic capsule, whatever its nature or seat, n act on the anterior chamber as well as on the vitre humour, without necessary displacement of the str tures that intervene. Conversely, there are very merous examples in which the lens and iris are naturally advanced, where there is no augmen tension, no glaucomatous affection whatever.

Mr. Dixon refers us to "cases mentioned by hims at a much earlier stage of the glaucoma controver in which, while the optic nerve examined with ophthalmoscope presented a depressed extremity, t lens and iris were not pressed forwards." (*Ante* 376.) In the second edition of his *Guide*, publish in 1859, p. 249, *note*, he says: "Surely any int ocular pressure, sufficient to thrust the fixed fibres the optic nerve backwards into their sheath, must *fortiori*, thrust the moveable lens and iris forwa against the cornea; and yet, in the most strong marked case of concave optic nerve I have ever se the iris deviated little, if at all, from the verti plane. These cases of cupped optic nerve appear me to depend upon atrophy and consequent shri ing of the nervous tissue, quite unconnected with a mechanical pressure applied to it." And, at p. of the same work, he writes: "The sequence morbid changes seems to be as follows. First, in t retina and choroid, going on, perhaps, to serous ef sion between these two coats, which causes t bulging forwards of the lens and iris, by pressi from behind upon the vitreous body. Then, cong tion and inflammation of the iris and cornea. A last of all, opacity of the lens, as a consequence of deranged nutrition."

He says (*ante* p. 108) that "an author's opini should be judged of from his latest publication"; refers to his essay in Holmes's *Surgery*, published 1861, for his present views. I find there (p. 850) t above "sequence of morbid changes" ascribed chronic glaucoma. How completely erroneous it I need not here stop to demonstrate. He also cords (in Holmes, p. 786, *note*), "the most rema able instance of the concave optic nerve that has e come under his observation; the irides were vertic each optic nerve was concave to such an extent as had never before witnessed—the white margin of t nerve standing out in relief, like the edge of a c over which the central artery and vein passed, wit very marked and abrupt curve." The *ocular tensi* as estimated by touch, a cardinal element in the d gnosis, is not even alluded to. The case was a parently one of simple non-inflammatory glaucon He then argues (p. 787) for "the probability that

ases the indentation is due to atrophy and con-ent shrinking of the nerve-tubules."

ll this he has hardly correctly described (*ante* page , as "combating the notion that cupping of the c nerve formed, *per se*, a distinctive sign of intra-ar pressure." It is rather combating the notion the sign of cupping has any diagnostic value tever; it is confusing the incontestable and well ked distinctions between the different varieties ipping, and attributing them all to mere wasting ie nerve-tissue.

Mr. Dixon's references to Von Gräfe's views (both p. 376, and in his two publications just quoted a) show that that author's opinions have not been ll apprehended by him; as could be conclusively ed, were it worth while to prosecute such a point tail.

Nor has Mr. Dixon even yet quite understood meaning as to "hardness of the eyeball in cases evere iritis, keratitis, and other mixed forms of mmation." He makes me deny that such cases net with (*ante* p. 376). But, on the contrary, I all along stated, in the most precise terms, that ness does occur, under certain circumstances, in course of such inflammations; and my statement been that, when hardness does so attend them, condition has to be watched with solicitude; e, if considerable, or persistent, it indicates the ssity of local surgical relief, though not always by ctomy. (See *ante* p. 325.)

As to the charges of recklessness, ignorance, heart-ess, and unworthy motives, brought by Mr. Dixon ist some of those who have promoted the treatment aucoma by iridectomy in England—charges which, ng from such a quarter, and not having been drawn on a remonstrance some time ago privately essed to him, cannot be allowed to remain on d with their true character unexposed. Had proceeded from a little known or anonymous r, the good sense and right feeling of our pro-n might, indeed, have rendered it unnecessary tice them at all.

at there may be no mistake as to their serious re, I shall here reproduce them in his own words. RISH MEDICAL JOURNAL, Dec. 26th, 1863; Jan. and 23rd, 1864.)

My name is associated with the names of several ent ophthalmic surgeons of the present day, of n the writer of the article says, 'Their opinion is iedly adverse to the operation of iridectomy *as esent practised.*' If the writer, instead of the ge I have marked in italics, had employed the s '*as at present abused*', I should probably have maintained silence; but *while I deplore the reck-anner in which iridectomy is so often resorted to,*

"The manner in which iridectomy was first ght under the notice of the profession, without attempt towards a rational explanation of its n; *the hasty way in which it was taken up by the erienced and misinformed; the gross mistakes and quent ruin of eyes that resulted from it;* all this led me, as I happened to be publishing just at ery time of this *furore*" [viz., in the spring of "to raise a warning voice against the hasty ice of an operation requiring for its safe per-nce great care and skill, and the indications for n, in the absence of all rational explanation of *odus operandi*, could hardly be appreciated by who were in such a hurry to practise it. My work was specially intended for those com-ing the study of the eye; and *for their benefit*, I ioned some of the instances in which *I had* n iridectomy to be followed by the *most disastrous* s; and I might have cited many more, had my been simply to decry the new invention. Some time after" [viz., in August 1860] "my friend Mr. Wilde wrote to ask my opinion of the operation, and still anxious to protest against *the reckless way* in which it *was being performed*, I stated what I had seen of its disastrous results. (*Dublin Hospital Gazette*, Sept. 1, 1860.)"

Sir W. R. Wilde's review, entitled "Medical Epidemics—Glaucoma and Iridectomy", appeared in the *Dublin Quarterly Journal of Medicine* for August 1860. In this, amid many allusions to various forms of quackery, he stated his object to be "to arrest the spread of the glaucoma epidemic in England" (p. 88); and running full tilt against the whole array of facts and arguments on which iridectomy then rested, and not having himself tried iridectomy, it was natural that he should put forward as a chief *cheval de bataille*, the strong adverse testimony, publicly given fifteen months before, of "Mr. Dixon, senior surgeon to the London Ophthalmic Hospital, and a thoroughly honest practical man," who had tried iridectomy "in a series of carefully selected and well marked cases" of three classes, and *had found it signally fail in all*, for not even in the acute cases was sight restored ("nor in the third class was sight restored")—of which more anon.

It was *à propos* of this review that Mr. Dixon wrote to Sir William, as referred to by himself above. In that letter (*Dublin Hospital Gazette*, Sept. 1st, 1860), while accusing other operators of recklessness, abuse of the operation, etc., he so far modifies his previous bad opinion of its results, as to give an assent to iridectomy in cases of acute glaucoma, but only *where the previous evacuation of the aqueous humour through a large corneal opening had afforded only temporary benefit, and the acute symptoms had returned.* He had then, in acute glaucoma, "*often found it unnecessary to interfere with the iris.*" This was the extent of his admissions in August 1860, after three years' successful experience in the hands of others, and largely at his own hospital.

Again, Mr. Dixon says: "What I, in plainer terms, asserted as to the *reckless proceedings* of some of the *over-hasty iridectomists;* and I can no more excuse 'young enthusiasts' who, *without manual skill or previous operative experience, undertake iridectomy as a means of notoriety*, than I could pardon an older surgeon, should he habitually operate on cases which were either not threatened with glaucoma at all, or were already in a hopeless condition of confirmed glaucomatous blindness. This is just the question which the public and the lookers-on of the profession are at present so anxious about, and which, in fact, has given rise to the present iridectomy controversy. Sufferers from failing sight exclaim: '*We want, if possible, to save our eyes, not to offer them up as subjects for needless operations.' They say to the surgeon, as the frogs in the fable said to the boys—Though sport to you, this is death to us.*'" (*Ante* pp. 80-1.)

I regard these injurious charges as altogether unjust and unmerited, and, in fact, as having no other foundation than Mr. Dixon's own misapprehension of the nature of the cases which he may have heard of or seen in the practice of others; a misapprehension springing from his strong original bias against the new treatment, and from his having failed to master its principles, or the new accessions to our knowledge of glaucoma. He has seen everything through the gloom of dislike. His acceptance of the new views has been tardy, reluctant, and partial. I would it had been otherwise; and that his influence had been given towards the furtherance, rather than the retardation, of progress.

Mr. Dixon at first seemed to think the proposal of iridectomy absurd. His first account of the treat-

ment (in his second edition, 1859) is altogether adverse to it. He only allowed that it relieved pain and inflammation by the evacuation of the aqueous humour. He even thought it so dangerous, that he was induced to suppress mention of his real good results in some of the acute cases in which he had experimentally tried it. Instead of writing, "*nor was sight completely restored,*" *as he now says he might more fitly have written,* he considered it his duty to write, "*nor was sight restored*"—*a totally different statement.* I could not have ventured to say this, except on his own express authority (*ante* p. 108). The passage in his second edition (1859, p. 251), and his own recent comment upon it (January 1864, *ante* p. 108), are as follow.

1859. "For myself, I may state that, although I could not recognise as sound the theory upon which the operation was brought forward as a cure for glaucoma, I tried it in a series of carefully selected and well marked cases of the following forms of disease—'amaurosis with excavated optic nerve', as Gräfe has termed a peculiar morbid condition; chronic glaucoma, where the lens had not yet lost its transparency; and in cases of acute glaucoma, characterised by sudden impairment of sight, rapidly followed by inflammation of the eyeball, dilated and fixed pupil, severe neuralgia, and total loss of vision. In neither of the first two classes did I find—nor had I expected to find—any improvement to result. Nor in the third class was sight restored; but the inflammation seemed to be arrested, and the neuralgia was either very much lessened or it wholly ceased. I cannot, however, attribute this result to the removal of a portion of iris; but mainly to the evacuation of the aqueous humour through the large corneal wound."

1864. "An author's opinion on any given subject should be judged of from his latest publication; and if our friend, the 'Country Surgeon', had referred to my essay on Diseases of the Eye in Holmes's *System of Surgery* (vol. ii, p. 855, 1861), he would have found that, in relating my own experience of iridectomy in acute glaucoma, I said, 'As regards vision, the results have varied; in some cases, the improvement has been very great.' I might have used a still stronger expression in reference to the favourable results of the more successful cases; just as, in the passage which the 'Country Surgeon' quotes from my earlier work (1859), 'Nor in the third class (cases of acute glaucoma) was sight restored,' I might more fitly have written 'completely restored'. But most exaggerated accounts had been given of the success of iridectomy as a cure for glaucoma, before the necessary time had elapsed for testing the real value of the operation, and its applicability to certain cases, that I laid most stress on the abuses of the operation, and rather understated than overstated the benefits which, in my own practice, I had seen to follow its performance."

But a very cursory examination of the second edition of his work in 1859; of a case of his in the *Medical Times and Gazette,* August 25th, 1860, p. 196; of his article in Holmes in 1861 (for the most part a *rechauffé* of his second edition); and of the opinions which he has put forward in his recent letters to yourself,—will suffice to show the extremely slow and halting manner in which he has acquainted himself with recent discoveries as to the diagnosis and pathology of the disease; and even that he does not yet recognise as glaucomatous a large and important class of these affections. He ignores the diagnostic points which the rest of the world admits. Hence he has interpreted amiss, and in a sense adverse to the integrity and ability of some of his colleagues, much of what he has seen or heard of in their practice; and this, in one of his high position and honourable racter, is indeed much to be deplored.

I made an admission in a former letter (*ant* 54), which, I should have thought, hardly admitt misconstruction, and which I do not in any sens tract. But I must now state without any res tion, that having been very conversant with the ject from the first, I have not myself seen or hea anything whatever to justify these charges of lessness, ignorance, and cruel disregard of the feel of humanity, on the part of any operators—anyt to warrant the remark as to "young enthusi without manual skill or previous operative experi undertaking iridectomy as a means of notoriety. fully believe that those who have accepted this treatment, and those who have not, have been influenced by motives worthy of their honou calling.

I desire to add, that I have adverted in the pre letter to Mr. Dixon's imperfect acquaintance the modern views of glaucoma, not to blame hi errors of opinion on matters of science, but onl the way of defence against attack, and in orde render evident to all his incompetency as a wit on this particular subject, when he was not only ceiving in his own mind, but publishing and iterating, harsh and even cruel inculpations of conduct and motives of some of his associates—i pations wanting in the preciseness which would admitted of categorical denials, yet so couched appear to be directed indefinitely against any of t who were known to have practised iridectomy.

The individual testimony I have now given ma may not be supported by that of others who have opportunities, in various degrees, of forming co sions on the subject. I can only speak for my and of what has fallen within my own range of servation. I believe, however, that no single pe among my colleagues at Moorfields sympathises Mr. Dixon in the aspersions which he has no different times within five years, been casting on fair fame of our profession. The occasion seem be one when additional testimony from them others would hardly be superfluous.

Meanwhile, few things would give me greater sure than to find Mr. Dixon, on further examina spontaneously withdrawing imputations which, I sure, cannot be sustained, and which, until he self retracts them, must still, perhaps, however wi and truthfully they may be repelled, leave some upon our character as surgeons in Great Britain.

And now, sir, reviewing for a moment the re controversy in your pages, let me thank you having originated it; for it appears to have much needed. I think you have done an impor subject essential service by inviting attention t It is, indeed, one of the most important in thalmology, and so eminently one which should terest practical men, that much of human happi or misery depends on its right or wrong apprecia by that very large class of practitioners on whon the first instance, the responsibility generally res advising in cases of failing sight, from what cause arising.

And their responsibility in regard to this disea not an ordinary one, on account of its peculiar t for many affections, grave and threatening at aspect—as, for example, various inflammations cataract—do not terminate of themselves, if treated or badly treated, in blindness that cann recovered from; and some others would so end, in spite of the most skilful treatment. In s therefore, a want of knowledge on the part of who first sees the patient is less disastrous. But otherwise with glaucoma. This, as it proceeds, n

no tendency to a favourable termination; nor it subside of itself, leaving the sight simply imct, but capable of being eventually restored. comatous diseases, as they advance, more and destroy, rather than obscure, the vision. If eated, or treated by remedies which do not profit, lead by various degrees to blindness, from which is then *no recovery*.

ow thankful, therefore, should we be that their acters have been discriminated, their diagnosis comparatively easy; and, above all, that the as of an eminent man has given us a method of olling that hardness of the eyeball which constiheir element of danger.

ow much is it to be wished that practitioners at should have their attention awakened to the ction of these diseases, so that in each instance ay at least be considered in time whether the dy be applicable or not. How desirable, partily, that all those who devote themselves in any ial degree to ophthalmic practice should study adopt this treatment, and take their part in ing out the details of its efficacy. Some of these perchance prove themselves competent to pro- further progress hereafter, possibly to devise thing different from iridectomy, and better. btless, we do not yet know all, either of the re of glaucoma, or the mode of action of iridecy; and improvements are still to be striven for expected. But, meanwhile, it seems much to be ed that, at all events, ophthalmic surgeons should ter the diagnosis, and experimentally test and y the remedy we already possess.

am painfully aware, indeed, of the inherent and voidable difficulties of the subject of glaucoma, of the special anxiety under which the operation ts relief must be occasionally undertaken. Cases ent themselves at every stage, and, of course, er a great variety of conditions and complicas, in some of which we cannot promise with abso- certainty the recovery or even the maintenance ight; and the perplexity and hesitation of the ent, originating, perhaps, in the natural dread of operation whatever, are not diminished when he s that the remedy recommended by one adviser is ngly condemned by another, whose opinion he ls in equal estimation.

have from the first done my best to make the edy widely known, and to explain what seemed to to be misconceptions regarding both the operation the disease. If, in recent letters, written amid ssing occupations, I have given a moment's unessary pain to any one, I again express my regret. ope, however, that my words, fairly understood, not be regarded as wanting in courtesy towards fellow-worker. There still remain many ques- is respecting glaucoma on which future research y be expended with advantage. The field is open, inquiries difficult; and a charitable construction he conduct and motives of each other is surely inbent on us all. I am, etc.,

W. Bowman.

5, Clifford Street, May 6th, 1864.

PAYMENT FOR RE-VACCINATION.

Letter from T. Jackson, Esq.

Sir,—You will allow me to remark on your kind l well meant appendings to my letter on Re-vacation in the Journal of April 30th, that to yield points in question (even as to the payment for vices rendered) so readily as you advise, is not the y, I take it, to obtain our just rights. Because opinion of an eminent counsel is given in favour of isolated questions, I do not feel quite certain that such is the correct view of the law on the subject; at all events, it will bear discussion.

The Privy Council—a power of no mean authority—issue regulations and instructions for our guidance; these are plain, explicit, and easily understood. The original Act may not even mention re-vaccination; but the Privy Council have the power to make what regulations they deem necessary to produce the desired results contemplated by the Act; and we, as vaccinators, are bound, in due submission to their law, to obey.

It cannot be assigned as a reason against this Act of the Council, that it is not consonant with the original Act of Parliament, when it is plainly but an extension; a more complete carrying out of the express intention of the legislature; viz., the full prevention of small-pox.

The Privy Council not merely advise, they order (and it seems clear to me that they have the power, or they would not so exercise it), and require from Guardians that their contracts with their vaccinators shall be made in conformity with their rules. If public bodies set at defiance orders issued by such an authority, it becomes a matter of no slight moment—a licence taken not even reputable, and which must yield its result.

The Sculcoates Board, in my case, do not advise me to ignore these orders of the Privy Council; they even write me, "The directions of the Privy Council you refer to, you acted very properly in obeying"; yet, to be more than inconsistent, they themselves treat them as powerless. I am further warned by the Board, that the Privy Council have no power to order the payment of moneys out of the poor-rate, highway-rate, or any other rate; that can only be done by Act of Parliament, and there is no Act of Parliament authorising or directing guardians to pay for repeated vaccinations. Doubtless, this is quite correct; but I will remark that the Privy Council do not pretend to order payment out of any rate, poor or otherwise, but they do order, most emphatically, guardians to make the necessary provision for carrying out their rules; and I cannot imagine that they will be allowed to be violated with impunity.

Through the kindness of a medical brother, I am favoured with the practice of another union, and in which a proper and full provision is framed in obedience to the before mentioned orders of the Privy Council. I have also received a letter from the Poor-law Board, Whitehall, informing me that the subject will receive their attention. I am, etc.,

T. Jackson.

Welton, near Brough, East Yorkshire, May, 1864.

PAYMENT OF SURGEONS IN CHARGE OF TROOPS.

Letter from Henry Terry, jun., Esq.

Sir,—I am very sorry to have so greatly offended your two anonymous correspondents by my letter in the Journal of March 26th; and I do not think that it is fairly open to the construction which they have put upon it. My sole object in writing was to defend the Army Medical Department from one or two of the many charges which have been brought against it in various publications. I did not desire or pretend to defend the entire system, as "Fortis est Veritas" seems to imagine; and my acquaintance with these matters is not either slender or temporary, for I may say that I have had medical charge of troops on very many occasions for about twenty years past. I am perfectly aware that there may be grievances affecting military surgeons which do not concern me

as a civil surgeon. Several of these he has enumerated in his letter to you; and, of course, I have no wish to contradict him, not being in a position to do so. I imagine, therefore, that, on the whole, "Fortis est Veritas" and myself do not disagree in any important point; and, I trust, if he favour me with a reply to this note, he will not conceal his name.

"A Civil Surgeon" complains of the rate of pay to private practitioners in charge of troops. Whilst he is substantially correct in his statement, I do not consider that he has stated the whole truth; for instance, first, he does not state that women and children are included in the contract; whilst, in a large detachment, women add considerably to the total amount; and while I know of several "civil surgeons" who attend and provide medicine for clubs, whose members are scattered over a large district, at 2s. 6d. or 3s. per head, I think we need not grumble at the 6s. 6d. or 8s. 8d, per head, for attending at a military hospital, where the patients are collected together and under strict military discipline (or 4s. 4d. to 6s. 6d. without medicine. I do not remember ever hearing any complaint on this matter previously. Secondly; in most towns promising recruits, various recruiting parties are stationed; and I believe the examination of recruits invariably falls to the lot of the surgeon "in charge of troops." I do not defend all the regulations in force affecting the medical examination of recruits—indeed, I complain of many of them; but it is undeniable that, in many towns, a considerable amount of money is paid to "civil surgeons" in charge from this source, and with but little trouble to him. On the whole, therefore, I think "A Civil Surgeon" has not much to complain of; but if he differ from me, or thinks that any alteration for the better can be brought about by practicable means, and will kindly communicate with me privately, I shall be too happy to co-operate with him.

I am, etc., H. Terry, jun.

Northampton, April 13th, 1864.

HEMIPLEGIA ON THE RIGHT SIDE, WITH LOSS OF SPEECH.

Letter from J. Hughlings Jackson, M.D.

Sir,—The case reported in the last number of the British Medical Journal by Dr. Ransome, and commented on by Dr. Fletcher, is one of very great interest. I have noticed that, when defect of speech occurs with hemiplegia, the hemiplegia is, so far as my experience goes, invariably on the right side. Dr. Fletcher's case is another instance of this. I have now seen thirty-one patients who have these two curiously associated symptoms; and, as about half of them have valvular disease of the heart, it seems plausible that plugging of the left middle cerebral artery is a frequent cause of the two symptoms when they occur together *suddenly*, as they did in Dr. Fletcher's patient, and in all my cases. This artery supplies the left corpus striatum—hence the paralysis of the limbs on the right side; and part of the left hemisphere—hence, I suppose, the mental defect. I say *left* advisedly, as I know of very few cases on record of loss of speech from plugging of the *right* middle cerebral artery, as proved *post mortem*; nor have I met, amongst my patients at the Hospital for Epilepsy and Paralysis, a single case of hemiplegia on the *left* side in which there was defect of speech.

M. Broca believes that disease of the brain *on the left side only* produces loss of speech; and, if I were to judge from the cases under my own care, I should think so too. My friend Dr. Haydon of Bovey Tracey has, however, given me particulars of a c in which the hemiplegia was on the left side, in cating, of course, disease of the right side of brain; and a similar case has been mentioned to by my friend Mr. F. M. Corner of Poplar. Yet, mitting that disease on the right side *may* cause l of speech, there is something singular in the mu greater frequency of the disease on the left side the brain when speech is lost. I write this letter a great measure to draw attention to this singulari in order to try to induce members of the Brit Medical Association to look up cases of hemiple with loss of speech, in order to see if there be something more than a coincidence in the one-sid ness of the cases I have had under my care. T admitted fact that a vegetation, detached from of the valves of the heart, is more likely to get i the left than into the right carotid, will certainly account for a run of thirty-one cases. Then, too, cording to the cases recorded in the case-books Dr. Brown-Séquard, my late colleague, at the H pital for Epilepsy and Paralysis before I was tached to it, taking all cases of hemiplegia togeth the paralysis is oftener on the left than on the rig side.

I think that I can shew by records of numero cases that when, in severe epileptiform seizures, co vulsions affect the right side of the body, there after the paroxysm, greater mental defect, and greater loss of speech, than when the left side is co vulsed. In the former—temporary spasm of t branches of the left middle cerebral artery—there a the symptoms faintly marked, which are, as it wer more permanently written down in the defect speech and hemiplegia which follow complete bloc ing up of the artery. Indeed, I think there are goo reasons for believing that epileptiform seizures a due not to general spasm of the blood-vessels of t brain, but to spasm in certain definite arterial r gions, or possibly in regions mapped out by vas motor nerves. I have observed several cases of chron epileptiform seizures which seemed to have ha their origin in an attack of embolism of one of t middle cerebral arteries. Chorea has a suspicio resemblance to such cases; and I think it will b found, clinically, that when chorea affects the rig side only, the mind and speech are worse than whe it affects the left. This is, I think, the rule; but have seen several exceptions; and I am now a tending at the London Hospital two cases in whic with chorea on the left side, speech is considerabl affected.

M. Broca points out a particular part of the brai where, he believes, the faculty of speech resides; bu I can only surmise that it is in some part of th brain supplied by the left middle cerebral artery. O course, a clot or a tumour in this region would pr duce the same results as plugging of the artery whic supplies it with blood.

I may briefly say, that by defect of speech I mean not difficulty of articulation, but want of brain-powe either to form ideas or to find words. In Dr. Fletcher' case, the patient could on the second day put out he tongue, but she could not speak until the fifth. Dr Ransome, in his report, uses sometimes the wor "articulation", sometimes the word "speech"; but suppose he considers the defect to have been a menta one, and not a mere paralysis of the tongue and lips for, when his patient could write, she could not expres herself, making mistakes in the words she wrote o her slate. This mental symptom has been describe by Trousseau under the name of *aphasia*. I hav heard Dr. Brown-Séquard describe it many times a the Hospital for Epilepsy and Paralysis.

In several cases of the kind that I have seen early

atients did not put out the tongue when asked; t, at first glance, it seemed as if there was para- of the tongue itself, rather than a mental de- that the dumbness was a loss of power of arti- on, rather than of language. But it will be red, in such cases, that the patients can eat wallow well, which, of course, they could not do, tongue were really paralysed. Again, in all cases, the patient after a time puts out his e well, although he does not regain the power eech. For instance, in a case I saw lately, the at could only say the word "awful". When I aw him, he did not put out his tongue, although ed hard to get him to do it. At the next he did, and has done ever since; but he can a month later, only say the one word "awful", first.

e loss of smell is another physiological symptom y great interest. Part of the olfactory bulb is ied by the middle cerebral artery, but most of it e anterior. Now, if the patient had lost smell *ther*, it would be difficult to understand how it red from cutting off the supply of blood to *one* granting that the anterior as well as the middle ral artery had been plugged. In an article in a t number of the *Natural History Review*, by Dr. of Dundee, a decussation between the two ory bulbs in some of the mammalia is described. is be so in man too, we can more easily under- l how disease of one bulb should affect smell on sides. Dr. Fletcher's case is the only one I of in which this symptom has been noticed in lism of the arteries of the brain. I had omitted quire about it in all my cases, but have now so in four. In two it was nearly lost; in the two, not affected. I have noted cases in a slight epileptiform seizures began by an altera- of smell, and have suggested that such attacks be due to contraction of the blood-vessels in the e of one anterior cerebral artery.

sides the great physiological value and clinical rtance of Dr. Fletcher's case, it has great patho- al interest, as showing one of the conditions hich plugging of arteries occurs. Again, Dr. her is to be congratulated on his therapeutics, ich cases have, I believe, rarely so favourable a ination. I am, etc.,

J. Hughlings Jackson, M.D., M.R.C.P.

Queen Square, Bloomsbury, May 2nd, 1864.

AGNOSIS OF OVARIAN AND UTERINE TUMOURS.

Letter from C. H. F. Routh, M.D.

r,—Mr. Spencer Wells acknowledges his obliga- to M. Nélaton for having taught him to diagnose ween associated and transmitted movements in where it is doubtful how far an abdominal tu- is or is not independent of the uterus." But I y cannot be in any way held responsible for M. Nélaton said either to Mr. Wells or to Dr. ge. I examined the patient for a long time at house, and concluded that she was affected ovarian dropsy, chiefly—1, because the tumour distinct from the uterus; 2, because I at least l neither by the stethoscope nor the vaginoscope the cardiac sounds transmitted through the our, although the impulse might be; 3, because, xamination *per vaginam*, I distinctly found the our in one part to have a *semi-elastic*, not a *solid* This it was that led to my conversation with Nélaton. I told him the grounds upon which I luded pretty certainly that the disease was ova- ; and I distinctly understood him to express the opinion, in reply, that it was a fibroid tumour unconnected with the uterus. If I am wrong, and M. Nélaton says so, then, and not till then, I am ready to admit and correct the error.

In so difficult a case, I think Mr. Wells's omission of my name, in giving the account, when I made a correct diagnosis, was scarcely courteous; more especially as, to the last, he was uncertain whether it was a "*semi-solid tumour of the right ovary, or a fibroid outgrowth from the uterus*". (*Medical Times and Gazette*, July 26th, 1862.)

The statement made by me, that the patient had been to several hospitals, I gathered from herself, and have it so recorded in my notes taken at the time. If her language or my account were not sufficiently explicit, I am at most only open to courteous correction. Moreover, to avoid offence, I omitted all names.

As to Mr. Wells's limitation of the meaning of the term "exploratory incisions" to incisions made where it is doubtful if the tumour can be removed, this is not generally admitted. Such a distinction may be useful in a statistical return, to determine more exclusively the percentage of mortality in cases of ovariotomy, when the operation is either not completed, or the tumour turns out to be extraovarian; but, I apprehend, in every case of ovariotomy, the first incision must be exploratory. But in this case the play on words can only be excused by a faulty memory. He was uncertain as to the nature of the tumour; and, besides, I learn from a late colleague, who distinctly remembers the circumstance, that the summons to the medical officers was, not to witness a case of ovariotomy, but to see Mr. Wells make an "exploratory incision".

Such, then, is my explanation, which I trust may be deemed satisfactory. I am, etc.

C. H. F. Routh.

52, Montague Square, W., May 1864.

[We can publish nothing further on this subject. Editor.]

ARMY MEDICAL DEPARTMENT.

Sir,—Allow me to make a few remarks upon a letter which appeared in the *Army and Navy Gazette* of the 30th April, and apparently written by a *retired* medical officer of the Indian army.

That gentleman evidently is most grossly ignorant of the present state of affairs, and it is not to be expected that he should be well acquainted with it; but it is to be regretted that he should endeavour to deny the validity of the grievances of the department. When he states that there are men who "labour to be out of their own sphere", who are "aping to be field-officers", and "to put all things under their feet", his remarks may *possibly* apply to a very small number of medical officers, but they certainly do not in the slightest degree apply to the vast majority of the department; and it is an indisputable fact, that ninety-nine out of every hundred medical officers now serving are dissatisfied with the state of affairs. Is it to be credited that the medical officers of the present day are all "factious persons of weak understanding"? and that only the *retired* medical officers are endowed with wisdom?

Assuming that the discontent of the army medical officers is general, and not confined to a few (and that fact is sufficiently notorious), we are invited by the correspondent of the *Army and Navy Gazette* to believe that all the cardinal virtues were possessed by the *retired* medical officers, and that the present men are worthless "malcontents"; but this is not credible. Refer to the list of *resignations* during the past five

years, and then say whether it is probable that so large a number of gentlemen would have resigned on account of mere *shadowy* grievances.

The retired medical officers are quite welcome to offer their services, and the authorities are free to accept them; but that measure would only serve to lessen the present urgent necessities, and would not in the least degree render the service more popular. It was the existence of such a spirit of "abject submission" on the part of the medical officers of previous times, as evidently influences the *retired* officer to whom I have alluded, that has induced the present crisis.

The thanks of the army medical officers are due to you, sir, for your consistent advocacy of their cause; and, so long as the *medical* journals stand fast to their cause, they need not fear the malicious or ignorant letters which from time to time appear in the *Army and Navy Gazette*, which is apparently the organ of the Horse Guards.

I am, etc.,

A Surgeon.

MERCURY IN SYPHILIS.

Letter from G. Gaskoin, Esq.

Sir,—In your number of April 9th I perceive the details of an instructive case related by Mr. Henry Lee, which, taken in connexion with your editorial comments, may appear to render unnecessary a reply to Dr. Drysdale's letter contained in the same number. Not to be wanting, however, in courtesy to Dr. Drysdale, I will answer as I can, and I will say he cannot be ignorant that the term "ulcers on the organs of generation" includes more than one kind of disorder; and, besides, it is an induration, rather than an ulcer, which characterises syphilitic disease, in some cases of which there is no ulceration at all. Brodie and Lawrence, as British surgeons, knew pretty well the difference between local and infecting sores; but it was reserved for Henry Lee to define in an exact manner the boundaries of each, and to render diagnosis accurate. As far as I am aware, the clever and precise ideas of this observer are not fully apprehended on the continent, where attention has been chiefly occupied with the local inoculable ulcer; and it is entirely through the medium of this kind of ulcer that their mistaken or miscalled "syphilisation" has been effected. The Hunterian chancre—the constitutionally infecting sore—is not inoculable on the integument of the patient. That this latter form of disease and its sequelæ require mercury for their cure is a maxim of English surgery from which its best exponents have never swerved. If Boeck has found that venereal ulcers heal up more speedily without mercury, that is certainly interesting; he is not single in entertaining such an opinion. If Ricord is reputed to be unsuccessful in the employment or adaptation of his novel therapeutical means, this does not affect the question that sooner or later, in true pox, you must have recourse to mercury. The medicine, as Vidal has said, must be given with "method and art". In combating so virulent a disorder, it is no wonder we do not always obtain satisfactory and rapid results; but at least mitigation is pretty constant, and perfect cures very common.

Not to speak of approved methods, I should have thought Dr. Drysdale's attention would have been drawn to the very gentle and efficacious means by which, in some hands lately, mercury has been applied to the treatment of the disease. I cannot conceal my opinion that at no time in the history of syphilis has the expression of the doctrine that it can be very well cured without mercury been inoperative for mischief. One must be very indifferent to what is going o the present day not to perceive the existing tend to treat all diseases without the employment of important remedies whatever. With many th the form invention takes—to rest on no rece ideas, to begin all over again. But, with men have found themselves in contact with striking c there are certain arguments which are in their nature superfluous. With them, faith in certai medies becomes confirmed; and, to say the truth attempt to discredit mercury in the present day s rather like mustard after dinner. I can reco when those who "ruled the town" gave truly e mous doses of calomel, long and frequently repea for all sorts of inflammation, and in many kind constitution; yet I must say that the evil co quences to the patients have been far less appa than might reasonably have been expected. W different are the results of syphilitic disease. very common now to treat serous inflammations, notably pericarditis, without mercury; and perh by and by, as in America, quinine is destined usurp its place. Pericarditis, indeed, gets well u many kinds of treatment—guaiacum, alkalies, sali Nevertheless, I believe that mercury has an ir ence in controlling inflammation both in serous mucous membranes, and in improving some pyre and chronic conditions. Guided by my experienc confess that, in a case of severe idiopathic pericard I should be disinclined to omit it. The valuable marks of Dr. Nelson in the July number of the *Bri and Foreign Medico-Chirurgical Review* for the year tend, I believe, to show that, in the treatmen dysentery in the Eastern seas and coasts, the n tality has increased since the use of mercury been discontinued. What I wish to point out that this remedial agent, in its general applicatio does not deserve to be so entirely discredited.

I am, etc., G. Gaskoin

3, Westbourne Park, April 21st, 1864.

New Pharmacy Bill. The following are the p cipal provisions of the bill proposed by the Counci the Pharmaceutical Society. The preamble rec that it is expedient for the safety of the public t such a bill should pass. Clause 1 enacts that a January 1, 1864, all chemists and druggists, not m bers of the Pharmaceutical Society, who compou prescriptions, shall be examined, unless, as a appears, they be already established in busin Clauses 2 and 3 relate to the appointments of e miners and registrar. Clause 4 permits the regist tion of chemists and druggists actually in busin on payment of a fee not exceeding one guinea. Cla 5 allows the registration of assistants engaged such before January 1, 1865, on payment of five sh lings. Clause 6 allows such assistants and associa (before the above date) of the Pharmaceutical Soci to become registered when commencing business payment of one guinea. Clauses 7, 8, 9, 10, and relate to the evidence required before registrati and the duties of the registrar. Clause 12 impose penalty for obtaining registration on false preten and Clause 13 imposes a penalty for falsely pretend to be registered. Clause 14 directs the fees paya under the Act to be paid to the treasurer of the Ph maceutical Society. Clause 15 allows registe chemists and druggists *who have passed the mi examination* to vote at the meetings of the Pharm ceutical Society. Clause 16 legalises the applicati of the funds of the Benevolent Society to the relie the newly registered chemists and druggists, a their widows and orphans. (*Chemical News.*)

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The owing gentlemen, having undergone the necessary aminations for the diploma, were admitted mem- s of the College at a meeting of the Court of aminers, on May 10th.

Bertin, Henri Victor, St. John's Wood (St. Mary's)
Brewer, Chas. C., Newport, Monmouthshire (St. Bartholomew's)
Broughton, Henry T., Bradford, Yorkshire (Guy's)
Burrell, Edwin, Westley, near Bury St. Edmunds (Guy's)
Coates, G. A. A., Sirhowy, Monmouthshire (St. Bartholomew's)
Drust, John, Gainsborough (Middlesex)
Earle, Robert C., Totnes, Devon (Guy's)
Goodfellow, William R., Commercial Road (London)
Grewcock, George, Folkingham, Lincolnshire (University Coll.)
Hawken, Charles St. Aubyn, Redruth (Westminster)
Hayes, Thomas E. D., Liverpool (Guy's)
Hume, Frederick H., Angell Terrace, Islington (St. Thomas's)
Jackson, Henry G., Leeds
Knight, Charles F., Brill, Bucks (Charing Cross)
Mann, William S., Birmingham
Masser, Herbert C. P., Longford, near Coventry
Morris, Joseph, Studley, Warwickshire
Paddon, George, Hitchin, Herts (Guy's)
Saltus, James, Conyers, Demarara, West Indies
Smith, Henry Richard, Newark, Notts (Guy's)
Spurgin, Herbert B., Thrapston, Northamptonshire (Guy's)
Thibou, Jesse W., Antigua, West Indies (St. Bartholomew's)
Ward, Martindale C., Markham Square, Chelsea (St. George's)

lmitted on May 11th—

Allen, Robert Francis, Cloughjordan, co. Tipperary
Barrett, Joseph W., Eton (Guy's)
Busby, Ralph A., Leamington (University College)
Caldwell, John Thomas, Knutsford, Cheshire
Colthurst, James Bunter, Bristol (King's College)
Cronin, Eugene Francis, Clapham (Westminster)
Dykes, William Astly Sherratt, Hull
Eatock, John Albert, Rivington, near Bolton
Flint, William Henry, Buxton, Derbyshire
Foster, Charles Wm. E., Aldershot
Harding, Peter, Shrewsbury (University College)
Martin, James H., Tregony, Cornwall (University College)
Milburn, F. Le Fevre, Leiston, Saxmundham (Charing Cross)
Miller, Andrew, Highbury (King's College)
Oxley, Charles Fox, Pontefract, Yorkshire (St. George's)
Peacock, Albert Louis, Huntingdon (Westminster)
Rudd, William Arkwith, Hull
Smith, Walter, Bognor, Sussex (University College)
Sparling, William Augustus, Norwich (London)
Williams, John, Anglesey
Woodgates, Samuel Henry, Hereford (Guy's)

t the same meeting of the Court—

Anderson, William (*a*), Royal Marine Artillery, Portsmouth, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons: his diploma bearing date July 17th, 1855.

APOTHECARIES' HALL. On May 12th, the follow- ig Licentiates were admitted :—

Ashton, John Henry, 10, Upper Barnsbury Street
Gibson, Robert Chapman, Fyfield, Ongar, Essex
Jones, William, Trewalter, Brecon
Kiernander, William Coleridge, 2, Brunswick Square
Marshall, William Norris, Upper Northgate Street, Chester

At the same Court, the following passed the first xamination :—

Birtwell, Henry Hargreaves, St. Thomas's Hospital
Spooner, Edward Monroe, London Hospital

DEATHS.

ROWNE, Robert, Esq., Surgeon-Major 25th Regiment, at Killiglan, Ballinglass, Ireland, on May 9.
APPER. On April 30th, at Mentone, Elizabeth Ada, infant daughter of Joseph Capper, M.D., late of Ipswich.
LARKSON. On May 5th, at Vertus, near Dieppe, aged 6, the only daughter of J. Clarkson, M.D., of Lancaster.
OCKE, Thomas G., Esq., Surgeon, at the Elms, Chapel, Essex, aged 57, on May 9.
OOPER, George F., M.D., at Brentwood, aged 37, on May 8.
URTIS, John W., M.D., at Alton, Hants, aged 50, on April 27.
MANUEL, Leonard, M.D., Assistant-Surgeon Bengal Army, at 21, Inverness Road, aged 29, lately.
AWKINS. On April 30th, at 36, Colet Place, aged 17, Anne, daughter of James Hawkins, Esq., Surgeon.
HOWELL, Thomas, Esq., Surgeon, of New Kent Road, aged 49, on May 8.
JOHNS, Robert, M.D., at Dublin, aged 49, lately.
KELLY, John, M.D., at Notting Hill, on April 30.
LEWER, John Richard, Esq., Surgeon, at Whampoa, China, aged 43, on March 7.
MADDEN. On April 23rd, at Torquay, aged 13, Elizabeth, third daughter of W. H. Madden, M.D.
MARTIN. At Oundle, on April 15th, aged 79, the wife of *J. C. Martin, Esq.
RIACH, John, M.D., formerly Surgeon H.M. 67th Foot, at Allanbank, near Perth, aged 73, on May 14.
RIDGE. On May 16th, at 35, Thomas Street, Southwark, aged 46, Emma Annette, wife of John J. Ridge, M.D.
SEAMAN. On April 30th, at Teignmouth, Catherine, widow of W. B. Seaman, M.D., of Vere, Jamaica.
SINCLAIR. On February 15th, at Sydney, aged 20, Samuel F., younger son of *Duncan Sinclair, Esq., of Halstead, Essex.
STUTTER. On May 5th, at Upper Sydenham, Emily M. M., infant daughter of Frederick A. Stutter, M.D.
THORNTON. On March 15th, at Port Elizabeth, Cape of Good Hope, Arthur M., youngest child of Robt. Thornton, Esq., Staff-Surgeon.

UNIVERSITY OF CAMBRIDGE. The examination for the degree of Master in Surgery will take place on the 24th of this month, instead of the 30th, as before announced.

ANOTHER SEWAGE COMMISSION. Lord Robert Montague has obtained a committee of the House of Commons to consider the plans for utilising the sewage of large towns.

CAUSES OF DEATH IN LONDON. In London during the past week scarlatina was fatal in fifty-one cases. Six deaths were caused by horses or vehicles in the streets. A boy was suffocated by the fumes of a brick kiln.

THE WAR IN NEW ZEALAND. General Cameron thus speaks of the medical services in his last despatch: "The wounded were promptly attended to by the officers of the medical department, under the superintendence of Deputy Inspector-General Mouat, C.B., who was present in the field."

DEATH OF DR. ROBERT JOHNS OF DUBLIN. The *Dublin Medical Press* of last Wednesday announces the death, at the early age of 49, of Dr. Robert Johns, a distinguished obstetric practitioner in Dublin, and the author of many important papers on obstetric science in the *Dublin Quarterly Journal of Medical Science*, and elsewhere. His death arose from peritonitis, occurring while he was in weak state of health from the shock produced by a gas-explosion which burned him severely.

BEQUESTS. The following bequests have been made to different hospitals by G. Wheelhouse, who died at Deptford on the 28th ult. The Westminster Hospital, £500; the Middlesex Hospital, £500; the Charing Cross Hospital, £500; the Royal Free Hospital £500; University College Hospital, £500; St. Mary's Hospital, £500; the Metropolitan Free Hospital, £500; the Seamen's Hospital Society, £500; the Royal Hospital for Incurables, £500; the Royal Infirmary for Children and Women, £500; the Great Northern Hospital, £300; the Scarborough Dispensary (to be expended in annual sums of £10 for each year until exhausted), £200.

HEALTH OF SCOTLAND. The Registrar-General of Scotland has issued his usual monthly return for the eight principal towns. It shows that since the establishment of the Register-office, nine years ago, there never were so many marriages or so many births in any April as in that of 1864, and only once (in the cold April of 1860) so many deaths. Births, marriages, and deaths have all been above the average; life seems to be going on at a rather fast rate. Greenock, Aberdeen, and Glasgow continued to suffer from typhus; and throughout the town populations one death in every four was caused by the zymotic class of diseases.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. B. Hill, "On the Occurrence of an Additional Muscle to the Subclavius"; Dr. Dickinson, "On Albuminuria in Children"; Dr. Wm. Murray, "On Abdominal Aneurism"; Dr. Greenhow, "On Congenital Imperfection of the Mammæ, etc."—Zoological.—Ethnological.

WEDNESDAY. Geological.

THURSDAY. Royal Society.

FRIDAY. Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

THE PRESCRIBER'S COMPANION.—SIR: I find the following mistakes on a cursory perusal of *The Prescriber's Companion* by Dr. Meadows, noticed in your JOURNAL. At p. 135 are Potassium Bromidum and Potassium Iodidum; I was thence referred to p. 29, where I found Potassæ Bromidum. At page 27, I found Lithia Carbonas; at p. 28, Lithia Citras; at p. 31, Potassii Sulphureta; at p. 33, Sodii Iodidi Effervescens; at p. 35, *Iodum* Sulphuris; at p. 42, Aconitium. With such palpable errors staring me in the face, how can I recommend it to my class?

I am, etc., A LECTURER ON MATERIA MEDICA.

COMMUNICATIONS have been received from:—Mr. CHARLES HUNTER; Dr. J. R. WARDELL; Dr. MERRIMAN; Dr. J. HUGHLINGS JACKSON; Mr. T. SOMERVILLE; Dr. GRAMSHAW; Dr. R. WOLLASTON; Mr. J. N. RADCLIFFE; Mr. MARTIN; Mr. LAWSON; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. HARLEY; Dr. HARDIE; Mr. GRIFFITHS; Mr. EDWIN CHESSHIRE; Dr. THOMPSON; Mr. J. C. MARTIN; Mr. RICHARD GRIFFIN; Dr. SANKEY; Dr. HUMPHRY; EQUITAS; Mr. JAMES ROBERTSON; Mr. T. M. STONE; Mr. W. M. CLARKE; and Mr. F. J. WILSON.

ADVERTISEMENTS.

Clock Making.—"Benson's great piece of Clock Work is certainly a marvellous achievement in clock-making, both as regards the workmanship, and its capacity under difficult circumstances for time measuring."—*Mechanics' Magazine*, Sept. 15, 1862. Clocks by the first artists of the day for the drawing room, dining room, bed room, library, hall, staircase, bracket, carriage, church, turret, railways, warehouse, counting house, musical, and astronomical. Church and turret clocks specially estimated for. Benson's illustrated pamphlet on clocks (free by post for two stamps) with descriptions and prices, enables those who live in any part of the world, to select a clock. Also a short pamphlet on Cathedral and public clocks, free for one stamp. Prize Medal and honourable mention in classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

Watch and Clock Maker by Special Warrant of Appointment to H.R.H. The Prince of Wales.

MEDICAL TRANSFER AND AGENCY,
50, Lincoln's Inn Fields, W.C.

Mr. J. Baxter Langley, M.R.C. (King's Coll.), begs to inform the members of the Medi Profession that he has undertaken the Medical Transfer and Gen Professional Agency business till recently carried on by the Mr. Bowmer.

Mr. Langley devotes his prompt personal attention to the nego tions entrusted to him, and treats confidentially and with care matters relating to Professional business.

Gentlemen desirous of relinquishing their Professional connex or prepared to receive partners, can be introduced to gentler ready to invest in *bona fide* transferable practices and partnersh The strictest reserve will be practised in all the preliminary rangements, and no expense incurred (except in special cas unless a negotiation be completed.

Gentlemen who have recently obtained their qualifications, or may be looking for new spheres of employment as principals assistants, are invited to communicate with Mr. Langley wit view to the satisfaction of their requirements. Having been gaged in practice himself, Mr. L. believes himself peculiarly c petent to give advice as to the value of partnerships or transf Mr. Langley can refer to the Professors of his College, Member Parliament, Clergy, and others, as a guarantee of his integrity honour in all negotiations entrusted to him.

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Lectures

ON

RTHOPÆDIC SURGERY.

BY

BERNARD E. BRODHURST, F.R.C.S.,

OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture XIII.

ON TALIPES, OR CLUB-FOOT.

(*Continued.*)

Talipes Varus. It has already been said that this d every other form of distortion may be both con- nital and non-congenital. But, as it was said of lipes equinus that it is essentially a non-congenital stortion, so it may be said of talipes varus that it essentially a congenital affection. Not only is this pecially a congenital distortion, but it is the most mmon form of congenital club-foot that is met th.

One foot only, or both, may be distorted. Double ub-foot is, perhaps, somewhat more frequent than distortion of one foot only; the male sex is more equently affected than the female, and the right ot than the left.

The *external characters* of this distortion are essen- lly inversion of the foot. To this principal cha- cteristic, may be added others which are scarcely ss important. Contraction of the tibialis anticus uscle alone, however, and without contraction of her muscles, as the tibialis posticus and the gastro- nemius, is known as varus.

In the ordinary form of congenital varus, as it is presented in Fig. 35, the plantar surface of the foot



Fig. 35.

esents backwards; the inner margin is turned up- rds, while the outer edge is directed downwards; e sole of the foot is shortened; the dorsum is irre- lar on its surface, and presents outwardly; and the el is raised.

But, although the inner margin may, in some in- nces, alone be raised, as in Fig. 36, the muscles ay, in other cases, be so much contracted, that the ner edge of the foot shall be in contact with the ner side of the leg, as in Fig. 37.

Again, contraction of the plantar fascia and of the muscles in the sole of the foot, together with contraction of the abductor pollicis muscle and the



Fig. 36.

muscles of the calf of the leg, but without contraction of the tibial muscles, is another and a very rare form of varus. During the last week, I operated, together with my friend Mr. Leigh, on the worst instance of this form of distortion that I have yet seen.

When the child begins to walk, and to bear the weight of the body on the feet, important changes



Fig. 37.

take place, which are necessary to be understood before the treatment can be efficiently undertaken. Instead of the superincumbent weight being transmitted to the ground through the arch of the foot, it is received on the outer margin of the foot, or on the fifth metatarsal bone. This bone then, receiving the weight, becomes rotated inwards towards the sole of the foot, as is shown in Fig. 38. In the same figure, also, is well shown the cushion, or callosity which, through pressure, and to protect the skin, is developed over the cuboid bone and the extremity of the fifth metatarsal bone. It is composed of cellular tissue and fat; and a bursa frequently is developed between the cushion and the bones, which is sometimes considerably distended with fluid. This cushion is of great importance in walking; it enables the weight of the body to be borne almost as easily as on

the heel. In non-congenital varus, the cushion is only imperfectly developed, and consequently the use of the feet is always painful.



Fig. 38.

Not only does the fifth metatarsal bone thus become changed in position, but the fourth also is in turn rotated with it; so that, at length, the weight of the body is no longer transmitted to the ground through the outer margin of the foot, but through the dorsum. This is well illustrated in Fig. 39. Here, also, is displayed a characteristic longitudinal



Fig. 39.

furrow, which occupies the centre of the sole of the foot, and which is produced by the folding of the metatarsal bones, above alluded to, into the sole of the foot—through the compression of the transverse arch of the foot, and the consequent approach of the fourth and fifth metatarsal bones to the first metatarsal bone.

Rotation of the foot itself may also take place, until a portion of the superincumbent weight is borne on the head of the astragalus, as was the case in the very rare example from which Fig. 40 was taken.

Morbid Anatomy. *In the infant*, when the distortion is not excessive, some slight rotation of the tarsal bones is found; but it is easily overcome, and the foot is restored to its normal shape by careful and gentle treatment. Malformation may exist, together with excessive distortion; but it is rare and exceptional. And even dislocation of a tarsal bone may occur. In the Museum at Strasburg, there is a very curious specimen of varus, where the astragalus is dislocated inwards and forwards. When malformations of the tarsal bones exist, some abnormality, such as spina bifida or other affection of the spine or the nervous centres, may also, for the most part, be remarked.

Except in severe forms of distortion, the ligaments are not affected in an important manner; and, indeed, their shortening never prevents the limb being restored to its normal form. Also, the muscles of the limb are perfectly healthy in structure, and, for the most part, they are well developed at birth.



Fig. 40.

The muscles which are principally concerned in this affection are those of the calf of the leg; the tibialis posticus, and the flexor longus digitorum; the tibialis anticus, and the extensor proprius pollicis. These muscles may even be somewhat hypertrophied, while the extensor longus and brevis digitorum muscles and the peronei are occasionally found to be weak and attenuated.

In the sole of the foot, the muscles and the plantar fascia are seldom so much contracted that they do not readily yield to extension.

In the adult, every structure forming the limb may have undergone some amount of degeneration. The bones of the leg and foot may have become light and their walls thin. These changes are to be expected much earlier and with much more certainty in non-congenital than in congenital varus. In the latter, all the structures remain healthy and convertible to use to a much more advanced period of life, as indeed would be expected, than is the case with non-congenital distortions.

Through pressure, the tarsal bones become somewhat altered in their forms; the head of the astragalus is slightly misshapen; and the cuboid bone becomes somewhat wedge-shaped. These changes are, however, much less than is generally supposed. Very exaggerated notions with regard to this part of the subject prevail. The restoration of the limb is without doubt difficult, and perhaps, in some instances, it has been until lately impossible. The muscles of the limb become atrophied through inaction; and, after the restoration of the limb to its normal form, they remain small; but, notwithstanding, their functions are restored.

In the sole of the foot, also, the muscles arising from the os calcis frequently are much contracted; and the plantar fascia may be so tense as to require complete division. The plantar ligaments, also, are shortened to accommodate themselves to the altered positions of the bones; and in advanced age, these may present a serious impediment to the removal of distortion. The improved mechanism which is now employed, however, renders, not only this, but almost every other form of distortion, removable.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

LECTURE II (*continued*).

ON SOME POINTS HAVING REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF FIBROUS TUMOURS OF THE UTERUS.

II. The symptoms of fibrous tumour most dwelt on in speaking of the disease, are an enlarged abdomen, with a hard rounded and solid tumour to be felt through the abdominal parietes in and about the uterine region, extending sometimes as high as the epigastric region, both lumbar regions being clear on percussion, and the umbilicus sunken in, not projecting. The tumour is also to be felt *per vaginam*, involving the uterus; an occasional loud and systolic bruit is to be heard over the tumour; menorrhagia is more or less intense; there is absence of fluctuation; the length of the uterine cavity is increased; and, lastly, owing to the close union of the uterus and bladder, the growth is drawn so near the abdominal walls, that it precludes the passage of the hand low down between the tumour and the walls of the abdomen. I will speak of these symptoms as I go on, to test their relative value.

1. *Physical Hardness, Roundness, and Solidity of the Tumour.* The feel of a fibrous tumour has been considered by many as almost pathognomonic. This, in connection with its rounded and lobulated character, is such, that the combination of the two characteristics would seem to make error almost an impossibility. Any one, however, accustomed to examine cases of cellulitis and hæmatocele, must know the contrary. I know that the same thing has been observed in cases of ovarian dropsy; and it may be laid down as a general proposition, that a *thin* fluid, and *à fortiori* a *viscid* one, may be included in an inelastic bag, and convey to the touch the impression of a solid.

I will illustrate this law by an experiment; and then mention a remarkable example in the living subject. Here is an ox's bladder contained within a calico bag. This bladder has been kept in spirit for a week, and is quite inelastic. The calico bag I put around it lest the bladder should burst. This bladder is now full of water, and fluctuation is quite evident everywhere. At its opening, however, you see I have affixed a tube connected with this pump, by which I can force in water *ad libitum*, securing its retention by this stop-cock in the connecting tube. As I pump in water, you will find that fluctuation will gradually cease, till none of you shall be able to detect it; on the contrary, it will feel quite like a solid. If this be so with so thin a covering as this membrane and piece of calico, *à fortiori* will it be difficult in many cases to recognise fluctuation through the abdominal parietes; for I am quite sure fluids are contained within cavities of the body quite as tensely as in this bladder.

The following case, however, is so satisfactory on this point that I cannot but mention it.

An inmate of Bedlam Hospital, about 35, declared herself pregnant; and Mr. Lawrence requested Dr. Greenhalgh to see her. Dr. Greenhalgh kindly allowed me to accompany him in his visit. We found a woman with a large tumour extending to above the umbilicus, very hard, nodulated, and giving altogether the impression of a solid tumour. The breasts, however, gave no indication of pregnancy. An examination *per vaginam* conveyed the same impression. The os, however, was hard; evidently that of an unimpregnated woman, and high up. The enlargement was chiefly in front of the uterus; and conveyed generally the same fibrous sensation. She passed urine freely; and indeed some was shown to us. On more carefully examining the tumour *per vaginam*, we thought that at one part we could detect some very obscure fluctuation, or at least a part less hard than others. It was thought wise that the bladder should be emptied of its contents. This was done; and about a chamber-pot and a half of thickish urine was drawn. On examining the abdomen after the operation, the tumour was gone; and yet, had we trusted to mere manipulation, both Dr. Greenhalgh and I would almost have positively asserted that, if ever we had before felt a fibrous tumour, this was one.

2. *The Auscultatory Signs of an Uterine Fibrous Tumour* are four in number: *a*. Two souffles, one a tubular, another a vesicular murmur; *b*. A thrill; *c*. A single or double cardiac sound; *d*. Absence of multilocular arrangement indicated on percussion.

a. Fibrous tumours are sometimes the seat of a souffle. Most writers do not discriminate between the two, and appear to refer them to the same cause. Thus, it is described by Dr. M'Clintock as always

"Synchronous with the pulse; sometimes short and abrupt, a mere whiff accompanying each arterial pulsation; at other times, prolonged and musical, and not to be distinguished by the most acute and practical ear from the *bruit placentaire*. Like it, it is occasionally loud and intense for some pulsations; then becoming feeble and almost inaudible. Again, it can be diminished and suppressed by moderate pressure of the stethoscope over the spot. It is present in those who have sustained no loss of blood, as well as in the anæmic." He adds that, "although a very interesting phenomenon, it is not one of any special diagnostic value, being common to pregnancy and ovarian disease, which are the two conditions most likely to be mistaken for fibrous tumour of the uterus." (McClintock's *Diseases of Women*, p. 131.)

However unwilling to differ from so high an authority, I cannot but take exception to the sweeping conclusion drawn. Nothing can be more graphic and true than the greater part of this description; but I think the fact is, that two very different souffles are here spoken off. The true *tubular* souffles are, so far as I know, very rarely, if ever, heard in pregnancy and ovarian disease. The *bruit placentaire*, or one very like it, may be, perhaps often is.

Now, I believe that these two souffles are produced by two different causes. The first, or *vesicular*, *bruit placentaire*, if you like, is produced by the combined action of the large vessels immediately coming into and supplying the organ. The latest writer on the uterine appendages, Dr. Savage, believes these to be the only cause of souffle in fibroids, which are supplied largely by veins and arteries, usually at each side.

But, I imagine, these produce only the vesicular murmur. The same cause produces them in pregnant

uteri; and it is not due to placenta, since it is heard after delivery, as long as the vessels supplying it are in the hypertrophied condition. It was long since shown by Nægelé (*On Obstetric Auscultation*, 1838), that, in aneurismal varix, where a direct communication for the blood exists, so that it passes from the artery to the vein, the opposed or interfering currents gave rise to a sound which may exactly resemble the *bruit placentaire*. This sound is also heard loudest at the point where the uterine arteries, reaching the broad ligament, become thicker in diameter, more tortuous, and sink into the uterus. How far the connexion between the arteries and veins in the pregnant or hypertrophied uterus may assist in the production of this sound, or whether the general circulation throughout the uterus must be taken into account, because so extensive, is a point for future inquiry. If we consider, however, that the arteries in the hypertrophied organ directly communicate with the large uterine veins; either, according to the Hunters, through the cavernous structure of the placenta; or, according to Weber, through the network of colossal capillaries; or, according to Goodsir, through a great cavity, which is everywhere traversed or intersected by filamentous prolongations of the uterine veins—we see how, physically, a sound like that of aneurismal varix could be produced by causes somewhat analogous. The later researches of Dr. Savage will rather explain the production of the the sound from an extended circulation, if we assume the same structure to be present in the impregnated organ, only more extended in the hypertrophied or pregnant uterus. Now, it is unquestionable that, in many cases of fibrous tumours at their connection with the uterus, we have, as in pregnant uteri, elephantine venous sinuses. Such was found to be the case at the *post mortem* examination of Dr. Matthews Duncan's example of fibrous tumour, to be hereafter noticed.

This uterine murmur, or *bruit placentaire*, in either case originating from the same cause, is destroyed by pressure, if this be sufficiently strong; it may be by the stethoscope; it may be by intense uterine contraction, particularly in the vicinity and all around the *locale* of its production, exactly as it is abolished at the height of an uterine pain. Auscultation proves, then, that the souffle, after gradually rising in pitch up to the moment of greatest uterine contraction, becomes at last inaudible, except at the groins, where it is still heard, though more feebly so. For the same reasons, also, it is not heard immediately after delivery, when the uterus is firmly contracted, but again becomes audible in twenty minutes or half an hour afterwards, when, the uterine muscles having somewhat relaxed, the vessels again enlarge; a state which persists, except at intervals, for forty-eight hours or so, till such time as, in the process of involution, the vessels become permanently smaller. This, then, is one souffle which is occasionally heard in fibroids, and in every way resembles the placental souffle; and it is heard loudest at the groins, or over the entrance of the uterine arteries.

The *tubular* souffle, however, is different. It bears the same relation to the former as bronchial respiration does to vesicular; and is, I believe, due to pressure upon the aorta, and direct transmission of the aortal sounds through the fibrous growth. It needs only the continuity of a solid body between the aorta and abdominal parietes, and the aorta to be slightly compressed thereby, to give rise to these sounds.

A remarkable case, illustrative of this explanation, is given by M. Hérard (*Bull. Soc. Anat.*, xxv p. 148), where a very thin woman complained much of epigastric pulsations. There was no tumour but auscultation revealed a souffle and a thrill. The case was diagnosed as one of aneurism. She died shortly of phthisis. The *post mortem* examination revealed a voluminous and also indurated left lobe of the liver. This it was that transmitted the aortic beats, and, by compression, produced the souffle.

We have, doubtless, all met with analogous cases, particularly in weak females, and especially where the middle lobe of the liver was indurated. Pressure over any large artery by a stethoscope will give rise to the same sound.

The position in which this sound is heard loudest also varies from that where the vesicular murmur is most audible. This is strongest at the inguinal region; the tubular souffle is generally heard loudest at some prominent point of the tumour, or within the vagina upon the inferior portions of the growth. It requires also some strength to compress the aorta through a large fibrous tumour; and hence one reason why it is rarely, if ever, destroyed by pressure of the stethoscope.

b. This tubular souffle is occasionally accompanied by a *thrill*. This thrill is very similar to that which is communicated to the ear in the case of an aneurism of the aorta, as M. Hérard's case proves. Indeed, in well marked cases, the musical note which accompanies the souffle and thrill are so exactly like the sounds heard in cases of aneurism in the neighbourhood of the heart, that it would seem impossible to detect a difference. Now, so far as I am aware, a thrill is never felt either in ovarian disease or in pregnancy. This is also the case in regard to the musical note. Once only have I heard this sound in the case of pregnancy. Then it was heard with the stethoscope upon the sacral region, the patient lying on her abdomen; and we can understand this. The aorta was pressed upon by the enlarged uterus, and the musical note, which could not be transmitted through the liquor amnii, was not heard in front. Behind, through the solid sacrum, it was readily heard. So far, this exceptional instance is a good explanation of its occurrence in fibroids.

c. Closely related to the tubular souffle is the *single* and *double* cardiac sound. This one sign, revealed by auscultation, I think most important; the more so, as it has not been hitherto sufficiently dwelt upon.

Let us remember that a fibrous tumour is, in most cases, a solid tumour. If it be of moderate size, and in any way can be or is compressed against the aorta directly or through the uterus—if the fibroid be placed in front of the organ—then the sounds of the aorta should be transmitted through the tumour. I do not know why it is; but these sounds are observed in practice to be of two kinds: first, a *single* sound synchronous with the systole of the heart; secondly, two sounds synchronous with and representing the double sound of that organ. I believe that, wherever either of these sounds occur, you have a solid tumour between your stethoscope and the aorta; and so that it is a favourable argument, *cæteris paribus*, for believing the tumour to be fibrous. It may occur in

rrhus of the uterus also. This sound is very distinct from *impulse*. I have seen and felt impulse in arian dropsy; but then the sound is not heard. his is especially true in regard to the *double* cardiac und. Ovarian tumours, except in very exceptional ses, and only where they are solid, if at all, do not ansmit the cardiac sounds; fluids being generally on-conductors of sound.

I have said that the tubular souffle is often heard udest within the vagina. Occasionally it may be ard here with a common straight stethoscope; and this be long, and made of glass, it is very easily plied. The patient is put on her left side; the ates are brought to the edge of the bed; and the ighs are well flexed on the body. If the woman e not too fat, and have a good perinæum, and ressure be made on this part by the stethoscope, the strument impinges the wall of the vagina against ie tumour, and the souffle may be heard through it. n stout women, the stethoscope may be safely introuced *per vaginam* and made to press upon the umour; and, because made of glass, the rubbing of he clothes upon it is scarcely heard, so that no exosure is needed.

I have also used a curved stethoscope made of glass vith advantage. It may then be passed when the atient lies on her back.

As a rule, however, I prefer the instrument I now how you, which I call a *vaginoscope*. It consists of he ordinary double stethoscope, to the distal end of vhich is attached a wooden speculum. This may be ntroduced as a speculum; and the ear-pieces being pplied to the ear convey any sounds heard in that egion. At any rate, in obscure cases, you will find t useful.

I cannot better exemplify the truth of the preeding statements than by quoting the following remarkable case.

Miss C., aged 42, had pretty good health up to five years ago, since which period she had not felt so strong. The catamenia had always been regular; but until lately rather under time than over, and lasted five or six days. For the last two years, she had been more unwell; the period had lasted a week altogether, lingering a little for the succeeding week; recurring every three weeks or twenty-three days. This increase was due, not to clots, but to an unusual quantity of water, which obliged her to use two napkins at the same time. The function began at the age of 17 or 18. Before 22, she had had dysmenorrhœa for one day, not since.

About three years and a half ago, on her lifting up a heavy weight, she felt something give way in her side as if she had twisted herself there; and she could not raise herself erect for the pain for a few minutes. Three years ago, while rubbing herself for a stomach-ache she felt a round tumour in the left iliac region. Even before this she had felt some bearing down in front. There was no alteration in the breasts at the time.

The *breasts* presented no areola. There were some small follicles around, whitish; becoming whiter on tightening sideways.

The *tumour* had enlarged, because formerly she could not feel it in the erect position; while now she could. At times it was very painful; always more so before a period. She thought she could connect the enlargement with the increased catamenial flow, and the colour was less dark than it was now.

On *external palpation*, there was dulness for four inches above the pubes. There was a projection half way between the pubes and umbilicus, of the size of an apple, quite pushing forward the abdominal parietes at this point. This was rounded, and the hand could grasp it superiorly. The dulness extended on a level with this quite to the left side. On the right side, about two inches beyond the tumour, the cæcal region was clear, as well as the two lumbar regions. All the dull parts were hard to the feel. The central projection was, however, movable upon the growth below it. It could be moved on the right side, quite near to Poupart's ligament; on the left side only half an inch. In either case, when so stretched, tight bands might be felt uniting it to the posterior growth.

Auscultation. On the front of the first growth, extending to the right side, there was quite a musical murmur, with a thrill, ceasing on deep inspiration. Over the projection superiorly, there was no sound; just below it, however, and over the pubes, there was distinct *tubular* souffle. There was a less loud sound on the left part of the posterior growth, and *vesicular*.

Vaginal and Rectal Examination. The os was small, high up behind the pubes; the lips were small. The whole pelvic cavity behind the vagina was filled by a large hard mass, smooth, somewhat lobulated; at the lower part, it was semielastic. Cystic sounding proved that the bladder was rather to the right side. The uterine sound penetrated to its normal length; an anteverted uterus, and turned rather to the right side. The finger in the rectum detected the tumour between it and the vagina, in the posterior *cul-de-sac*.

The *Vaginoscope* gave no indication of murmur. An exploratory puncture made at the inferior portion gave exit to about half an ounce of serum. This proved to be so on microscopical examination. The puncture afterwards bled freely; but the bleeding was arrested by the actual cautery.

The diagnosis was, extrauterine fibrous tumour, with a pedicle attached to the posterior wall of the uterus, inferiorly infiltrated with serum.

[*To be continued.*]

Use of Sulphuric Ether. Sulphuric ether is a most valuable remedy in detecting various diseases simulated by soldiers. Its slow and insidious action enables the surgeon to easily detect the feigned deformity or sickness. In aphonia, chronic rheumatism, anchylosis, incontinence of urine, and numerous other complaints the soldier selects often to deceive his medical officer, the exposition under its influence is complete, and hence its advantage over chloroform, the action of which is too sudden and dangerous to be employed with impunity. (*American Med. Times.*)

Formation of Cell-Wall.—Vegetable histology attracted of late years considerable notice. Herr Schacht has been examining into the formation of the primordial utricle, with a view to discover what light they might throw upon the formation of the cell-wall. At an early stage in the development of the embryo, numerous currents were observed in the protoplasm, and afterwards a network of threads of cellulose, corresponding to these currents, are found, resulting from the gradual change of the protoplasm itself; these continue to increase in thickness. This formation is considered analogous to that of the outer layer of the primordial utricle from the inner layer of the same; the various modifications are also explained by the supposition of the existence of currents. The gradual formation of cellulose threads in this manner is considered conclusive against the theory that the cellulose wall is a secretion of the primordial utricle. (*Chemical News.*)

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

CLINICAL REPORTS ON THE PAPULAR DISEASES OF THE SKIN.

By Geo. Nayler, F.R.C.S., Assistant-Surgeon to the Royal Orthopædic Hospital; Pathological Curator of the Museum of St. Mary's Medical School.

LICHEN.

The distinctive characters of the papular eruptions first recognised and classified by Willan have been acknowledged by most subsequent writers on diseases of the skin. They comprise lichen and prurigo; and include under the former, strophulus or gum-rash.

As a rule, the papular eruptions are characterised by pruritus, and by an elevated state of the papules of the skin, which undergo no further change. They are also devoid of any kind of moisture, and in no way contagious.

Several varieties are assigned to lichen, which, as an ordinary eruption, is met with in a simple or in a chronic state; the terms lichen simplex and lichen agrius being employed respectively to designate these two classes. The other, but less common, forms of lichen, as lichen tropicus, lichen urticatus, lichen circumscriptus, lichen pilaris, and lichen lividus, may be said to depend rather for their nomenclature upon some such causes as situation, colour, or climate. Two kinds described by Hebra remain to be mentioned, lichen scrofulosus and lichen ruber.

Lichen is generally characterised by successive developments of fresh papules, although Duparc and Alibert relate instances of the eruption being simultaneous and complete. It spreads gradually; but not often by continuity of surface. Thus originating in the lower, it may then proceed to the upper extremities, and afterwards appear on the chest and loins, or *vice versâ;* or, on the other hand, it may be quite local. The pimples of lichen are solid and firm, seldom larger than a millet-seed, and the intermediate tissue is of its natural colour; but in the chronic stage of lichen it is disposed to become thickened, and hypertrophied, and of a darker or yellowish-brown tint.

Lichen most frequently occurs in early or adult life; and men are more liable to it than women. Rayer speaks of lichen as being now and then hereditary, and Devergie lends his authority in support of this statement; but its rarity as an hereditary complaint, properly so called, may be inferred from the latter author, notwithstanding his large experience, being able to record it in only ten cases. Without entering into further discussion on this point, it may nevertheless be affirmed, that some individuals are much predisposed to it, and in them the disease is both obstinate and very liable to relapse.

There is no one character more constant in the papular eruptions than pruritus; and although this may vary in degree in different cases, yet, where it has been excessive, it will often linger after the eruption has entirely disappeared. Sometimes it assumes a periodic or an intermittent form, recurring at regular intervals; or, what more frequently happens, it returns on the least error in diet, or exposure, or any excitement. The amount of pruritus bears, however, no proportion to the number or development of the papules.

Since there is hardly any period of life at which lichen may not occur, its causes are numerous. Whatever tends to determine the capillary circulation towards the surface, may be ranked as a predisposing agent. Cases of that kind, which are so common in the South of Europe, and still more in the East, under the name of "prickly heat", are entirely due to a high range of temperature; or lichen may result from artificial causes, and is a frequent complaint in persons exposed to alternations of heat and cold, particularly if dust or any similar irritant be superadded. It will sometimes appear on the legs from the friction occasioned by the use of worsted stockings, or on the forehead from the pressure of a tight hat. Severe mental emotion has also been known to give rise to it.

Diagnosis. The papular eruptions will sometimes co-exist with other diseases of the skin, as scabies, eczema, and impetigo, and in debilitated subjects with ecthyma; or may succeed to them. It is not unfrequent to find in some hereditary affection, as in any of the squamous order, one member of a family the subject of psoriasis, another of lichen, and so on; and the difficulty of diagnosis is greatly increased, when the papular eruptions are thus complicated. It is important, however, to reflect, that lichen itself contains no vesicles, nor do its papules acquire a pustular character—conditions which are constantly observed in eczema and scabies; and, moreover, the outer aspect of the limbs and the back are the localities generally selected by the papular diseases. Certain cases of chronic lepra may resemble lichen circumscriptus; but the more or less raised circumference of lepra, and its freedom, in most cases, from itching, will seldom fail in enabling us to distinguish between them.

Lichen commonly terminates in resolution, with or without cuticular desquamation. In some exceptional cases, superficial ulcerations follow, which are tedious in healing.

Varieties of Lichen. Strophulus is a disease of infancy, and occurs shortly after birth, or about the period of dentition. In some cases, the eruption is of a vivid red colour, interspersed with erythematous patches; or it approaches the natural colour of the skin; or, what is rare, the papules are perfectly white. This last variety has been called lichen albicans; while, to the first, has been given the name of lichen intertinctus. These varieties of strophulus, which may be intermingled one with the other, are generally to be found on the face, neck, and hands, or they may spread from these parts to the trunk. Strophulus is a trivial complaint, unattended with danger, and seldom lasts beyond a few days. Lichen simplex is also a mild form of the disease; and runs an average course of three or four weeks. Some febrile disturbance occasionally attends it. The eruption is indicated by a number of small red pimples, occupying a like situation to the last, followed by a sensation of itching and tingling. After some days, the pimples fade, or are succeeded by a new crop, and sometimes a slight desquamation is seen.

Lichen agrius is of a severer, as well as a more chronic kind than the last, to which it sometimes succeeds; or it may commence primarily. I shall take it as the type of the rest. The eruption consists of small florid conical pimples, irregularly scattered over the face, back, or outer aspect of the extremities. To the touch, the pimples are hard, scarcely exceeding a pin's-head in size, and mostly distinct. They may be found either in clusters, or more widely distributed over the body. On passing the hand over the part, a peculiar rough sensation is perceived, which has been not inaptly compared to that of a nutmeg-grater. When on the face, the integuments are

ually more or less swollen, and considerable discurement ensues. It is seldom that any constitunal disturbance ushers in an attack, and the neral health remains unaffected. The pruritus is en so great, that the patient cannot refrain from atching; and hence are to be seen small dark sts of dry blood on the summits of the papules, a slight serous fluid exudes from their forcible rasion. The complaint is very variable in its duran, and likely to become protracted in those who ve previously suffered from its effects.

Lichen tropicus, or "prickly heat", is common in st warm countries. Indeed, there are few who ve resided any length of time in tropical climates at escape from this annoying complaint. It generally shows itself as the hot season sets in, and conues with greater or less interruption until the apoach of the rains, or the advent of cooler weather. ne chest, back, and extremities, are attacked tother or successively; the eruption not differing om that observed in lichen agrius, and sometimes arcely apparent. It is always increased by food, d becomes aggravated generally towards night. A ld bath may afford temporary relief; but the itchg soon returns, and in no way abated. The eruption sometimes vanishes altogether for a time; and less felt in the morning than at any other period the day. It is most severe where the extreme of eat is found. It has fallen to my lot to witness any instances of this kind of lichen, when doing uty as an assistant-surgeon in Upper Scinde, or on oard one of the late Hon. East India Company's vesels of war in the Red Sea and Persian Gulf—climes hich may be reckoned among the hottest in the lobe. "Prickly heat", it may be added, occurs at nat time of the year when sickness is least prevalent, nd is usually associated with excellent health. The anger, supposed by some to arise, of repelling suddenly the eruption by plunging into cold water, has o real existence. No class of men, from their habits, r the exposure to which they are frequently subected, as when engaged on survey duty, are more able to "prickly heat" than sailors; and yet they ontinually bathe in the sea in this state, with no ill onsequences resulting therefrom, as far as I have een or heard.

Lichen urticatus is usually met with in children of few months old. Sometimes it occurs at a later ge, especially when the skin is fair. It is attended vith the same degree of restlessness that marks the ther forms of lichen, but which generally abates towards the early morning. The part attacked seems as if it had been stung by a nettle or bitten by a gnat. It is subject to exacerbations and remissions; nd follows mostly the line of extension of the limbs n their outer surface, and also the back. It is oftenimes very intractable.

[*To be continued.*]

Homœopathic Literature.—"I lately met with a retired writer for the periodical press, who stated that one of the things with which he most reproached himself, was the getting up a work for a homœopathic practitioner, whom he characterised as a man of good address and plausible manners, but excessively ignorant professionally, and who, in a literary point of view, was scarcely able to string half-a-dozen sentences together. All the cases of cure were pure inventions, yet the work procured the supposed author a large amount of practice for some years; he got introduced to the Queen Dowager, to whom he presented a copy, which was duly noted in the papers." (*Dr. E. Lee's Pamphlet.*)

Original Communications.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

By W. H. O. Sankey, M.D.Lond., Sandywell Park, Cheltenham; late Medical Superintendent of the Female Department of the Hanwell Asylum.

[*Continued from page* 341.]

In the last paper, typical cases of acute mania were described; and the intimate connexion that exists between mania and melancholy was illustrated. The difference between these forms of insanity is scarcely sufficient, in my opinion, to separate them into distinct species. Indeed, a separation of the cases is almost impracticable; so much does one form merge into the other.

In all primary cases of what is called acute mania there is, as a rule, a premonitory stage of melancholy. In some cases, this stage is quite transient; in others, it is of longer duration. And, on the other hand, many of the cases which are called melancholic pass into a stage of maniacal excitement after a certain period; and often such stage is of favourable augury.

In one of the cases of mania narrated, the stage of depression was doubtful; and this was not the primary attack of insanity, and the patient was melancholic in the first attack. In the second case, the depression existed, but was scarcely heeded by the parents. In the following case, the melancholic stage was more evident, and became gradually mixed up with maniacal excitement towards the latter period of the attack.

Case xiii. B. E. was admitted in December 1861. The following history was narrated by the mother. B. E. was the wife of a coach-painter, and worked at shoe-binding. There was hereditary tendency to insanity in the family. The mother's sister was considered to be a lunatic, but was never in confinement. B. E. had had delicate health. She had rheumatic fever in her childhood, and had been subject to headache since. She was of irritable disposition; "the least thing preyed upon her mind." She had always been an industrious, sober, thrifty wife, and a perfectly respectable person.

About two months prior to admission, the patient was walking home with her mother, when they were stopped in the street by a man who accused B. E. of having robbed him. He said that she accompanied him home one night, and passed the night with him; that she rose early on the following morning, robbed him of all his clothes, and then locked him in to prevent pursuit. The man attempted to give her in charge, but the policeman, to whom she appealed, refused to arrest the patient. The man then demanded her address, which she gave; and from that moment she began to be greatly distressed in mind, and was "in a constant state of terror". She soon became very desponding; had numerous fears and apprehensions; began to neglect her house and children; was confused, forgetful, and abstracted in mind; "would often forget to dress the dinner". Her state of alarm increased daily. She next began to say that she saw "the man" (meaning her accuser). She saw him at all times of the day. Then followed illusions of the other senses. She complained of various smells—of the fumes of sulphur; said that the house was full of gas; that poison was in her food. By the end of the second month, she became unmanageable. One day

she rushed at the window, and endeavoured to precipitate herself out of it. She broke the window-sash; and it was as much as they could do to hold her. She became very noisy; raved; screamed "murder"; became very excited and very violent. She was always much worse at night. For one week prior to her admission, she never slept at all—"never closed her eyes". For six days she refused all food, declaring that "they wanted to poison her". During the daytime she was quieter and more morose.

She was admitted on the sixtieth day, and remained under observation till the 150th day. In this period, she improved in the state of both mind and body. The prominent features of her case exhibited in the asylum were, briefly, depression, illusions respecting smells, irritability of temper, and occasional outbreaks of violent conduct or language; but nothing that would remove the case from the category of melancholia. The patient's well-doing was much interfered with by her very ignorant husband. Nothing would make this man believe she was not quite well, because she talked coherently, and her memory was unaffected. At his visits, he repeatedly raised the question with her of unjust detention, etc., in madhouses. She was so much irritated, that it became necessary, for the poor woman's sake, to make choice between absolutely forbidding his visits to her, or risking her condition by a premature discharge. She was so far improved, that the latter alternative was adopted; and she was allowed to leave the asylum for one month, on trial, on the 150th day of treatment. At the expiration of the month, she refused to return. She was sent for, and resisted at first, but soon yielded; and on the following day she expressed regret at having refused. After her return, a marked alteration was observable in her state. She now had an illusion connected with the sense of hearing. She said that she heard voices under her bed. She continued to have occasional outbreaks of violence. Several times she used very threatening language to myself, demanding her liberty, and working herself into violent paroxysms of rage, which terminated usually by fits of crying. There was now nothing which could be called depression of spirits about her, as formerly. There existed no morbid fear or dread. On the 196th day, the husband again interfered, and removed his wife out of the asylum, by giving an undertaking, as provided by the Lunacy Act, that she should no longer be chargeable to the parish, and that she should be prevented from doing injury to herself or others. He was strongly advised by me against this course. The magistrates exercised their privilege, and discharged the patient, which they are fully empowered to do. This occurred in July. On June 22nd of the following year, she was, notwithstanding the undertaking, readmitted; and the following information was given by the husband.

On leaving the asylum, they went to live in the same house as her sister. She was very well, according to his estimate, for the first month; after that, she began to say that there were people on the top of the house, and that she would shoot them—she heard them talking. She endeavoured to get out on to the roof. She attended to her housekeeping, but was a little forgetful; would place things in wrong places; would put wearing apparel, knives, forks, saucepans, etc., together. She frequently went into her sister's apartments, and accused her of various things, and often abused her. She became pregnant in September. At first she ate and drank well, and improved in health. She wanted extravagant dishes, and wasted her money foolishly. She for some time wanted to assault the street-criers. She said that they were "crying things about her". One night, she rose and endeavoured to batter down the partition-wall, saying that there were people concealed there. She gradually became worse and worse. She took offence at the pictures hanging on the wall. She became violent towards her husband, and threatened his life. She took a poker to him on one occasion, and on another attacked him with a knife. For about the last three or four months her dangerous attacks increased, and were directed against every one. She accused her child—a little girl of seven years—of going with debauched characters. "She knocked the children about" frequently. They (the husband and wife) were turned out of lodging after lodging, on account of her violence. Her mother was at last afraid to come near her; and the husband was in constant fear of his life. She accused her family of wishing to poison her; took her food to the chemist to be analysed; and frequently refused to eat. She continually complained of bad smells, as of sulphur or gas; and frequently would not go to bed, unless the windows were left open. On several occasions, she wanted to go elsewhere to sleep. Lately she became erotic, and had illusions or delusions that she was ravished in her sleep, and accused her husband of conniving at it. In May, or in the tenth month after her removal from the asylum, she was delivered of a child, and became still more excited and violent. She threw the infant on the floor. She attacked the nurse, and at length was removed to the workhouse, and was very shortly brought back to the asylum.

Her condition on admission was that of a very dangerous and violent lunatic. She was very abusive, using also obscene language. She frequently struck; scolded, stormed, raved, and had become very incoherent in her language. She slept little. Her bodily health has improved since her return to the asylum.

This case is selected as an illustration of the transition of melancholy into mania. The symptoms followed each other in the order which I have pointed out in previous papers; viz.: 1. Symptoms connected with the feelings, and especially a stage of depression of spirits, apprehensions, fears, etc.; 2. Anomalies of the perception, or illusions; as foul smells, tastes, then hearing of voices; 3. Alteration of the intellect, as delusions, or false belief in the existence of persons concealed; the case terminating in confusion of ideas and incoherence. The motility was, for the most part, actively excited throughout; even in the state of depression, she was disposed to be violent.

The last point worthy of note is the passing of the case into what would be called by most physicians in England chronic mania, from a state which no one would have hesitated to call melancholy in its first stage.

[*To be continued.*]

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., Spilsby, Lincolnshire.

[*Continued from page 553.*]

Treatment. I now approach the last and most important test, by which the truth or otherwise of the proposed theory of the nature of diphtheria is to be tried. Having endeavoured to show how the various questions arising on the subjects of diagnosis, prognosis, etiology, and contagion, admit of more satisfactory solution, all that remains to me is, to inquire whether, by adopting such a theory, treatment can be placed on more rational bases. Since unity of disease naturally tends to uniformity of treatment, while diversity suggests diversity of remedies, at the first blush, we appear somewhat as losers by the change proposed. If, however, in any particular epi-

ıic, diversity of disease be once established, it is ı any longer to hope, satisfactorily, to carry out ıtment by uniformity of remedy. Treatment of ıplex epidemics of miasmatic diseases, especially ın extensive and malignant, if to be conducted h credit to ourselves, demands a close acquaint-e with all that pertains to the principles and prac-of treatment applicable to diseases generally. that experience, judgment, and vigilance, can ct will be required at our hands. Symptoms st be watched for and detected by every avail-e means, and their significance fully recognised; ile every weapon which can, in any, even the htest, manner, be made to influence our dread my, must be brought into action. In this war-e, let us ever be mindful of our true position; let remember, we are but allies—it may be powerful l necessary allies—and that the heat and brunt of fight has to be borne by the reparative powers of constitution. Still, by coming vigorously to the cue—by knowing when to strike and when to for-ar—by breaking down impediments *à fronte* and by parting *vis à tergo*—we may often so assist me Nature, that many a conflict, otherwise doubt-, shall be decided in her favour. Above all things, ıe must be gained; for, in such case, it may often said with truth, "time is life." The type of the idemic must be closely studied; and when, as in recent prevalence of diphtheritic diseases, that ıll prove to be asthenic, special heed must be taken, d any indications in that direction promptly ıailed. Local complications are to be attended to; ordered secretions to be rectified. Sustenance, most ncentrated in form and nutritious in kind, is to be gularly administered by the mouth, and, if necessary, the rectum; while stimulants, alcoholic and am-oniacal, are to be unsparingly supplied on demand. imal heat must be husbanded as far as possible by ending to the temperature of the apartment and the clothing of the patient. No sanitary defect n be safely left unrectified; especially must concen-ıtion of poison, either by crowding together affected tients or by neglecting proper ventilation, be ıarded against.

It is needless further to extend these remarks; , in a word, these terrible visitations require of all that is implied in the term "skilful treatment" that difficult accomplishment which can only be the sultant of a mind well stored with knowledge, re-ived by the twofold avenues of study and observa-ɔn; a judgment educated to draw correct infer-ıces; and a will ready to carry out decisions.

Having thus far indulged in generals, I will now scend to particulars; and endeavour to show how, adopting the views advocated, "treatment, having ore reliable indications, becomes less empirical, more tional, more successful"; and, in order to accom-ish this, it will be well to tabulate the various diph-eritic diseases, and then, following the usual plan, consider cursorily the treatment applicable: 1, to e external complication; 2, to the general symp-ms. Under the second heading, rather than go to a description of the numerous states of system, ıd descanting on the remedies for each, I propose consider *seriatim* the various therapeutical agents hich have been brought forward as beneficial in phtheria, viewed as a distinct disease, and to endea-our to point out the applicability of each to parti-ılar conditions.

Diphtheritic diseases may be arranged, according locality, as follows.

Skin.

Conjunctiva.

Mucous Membrane of the Female Genital Organs.

Cavity of the Mouth. Thrush; stomatitis; noma; canker; etc.

Nose. Chiefly catarrhal, or extending from below.

Throat. Strumous or other enlargements of the tonsils; chronic pharyngitis—relaxed throat; the phthisical throat, or analogous conditions in other chronic exhausting diseases; syphilis; epidemic sore-throat, benign or malignant; quinsy*; influenza; scarlet fever; measles (?); small-pox; fever—typhus, typhoid, relapsing, remittent, intermittent, puerperal, etc.; erysipelas.

Air-passages. Epidemic croup; measles; extending from above.†

The term influenza requires a word of explanation. It expresses, in my opinion, rather than one acute specific disease, a class containing many, and perhaps widely different, general diseases, which, owing to close analogies and to absence of positive symptoms, are incapable of isolation, or of reference to their proper place in our nosology. These diseases, always remarkably epidemic, and manifesting that disturbance of the general system to which we apply the term "low fever," are, like other febrile disorders, capable of existing in a mild or in a malignant form. The name simply expresses an influence; and that, during the recent epidemic of diphtheritic diseases, an influence or influences have been at work, other than those which produce the well known specific diseases, may perhaps be conceded. If there be a somewhat new disease during such epidemics, it must, I take it, for the present, remain hidden in this class. If there be cases which admit not of arrangement, *quoad* their general symptoms, as instances of common epidemic sore-throat, of one of the specific fevers, or of some other recognisable disorder, such cases, until furnished with diagnostic signs sufficient to enable us to remove them, must be received into that common category of miasmatic diseases, which embraces the analogous effects of unknown influences. Under this heading, I would, for the present, include "febricula", and all the many "doubtful and anomalous" cases of fevers. Severity, being a relative property, has no bearing on the question of kind. Let me repeat it, I dare not altogether deny the existence of such a general disease as diphtheria; all I contend for is that, in the present state of our knowledge, we have no means of distinguishing it; and, more especially, that it bears no special relation to the formation, other than contemporaneous existence.

The word *catarrhal*, applied to diphtheritic affections of the nose, is used in its etymological sense, as expressing simply a condition, without the slightest reference to the cause or causes upon which that condition depends.

Local Treatment. From what has been advanced, it follows, that the treatment necessary for the local symptom ought to be such as will have a tendency to bring about healthy action in the part undergoing disease, and thus render it no longer amenable to the influence of the external agent. In furtherance of this object, local remedies are of unquestionable service. Their value, however, will differ greatly, according as the case shall be one of local disease, *pur et simple*, or of general disease with local complication; for while, in the former case, they may be looked upon as curative, and all that is required in the shape of treatment, in the latter, they can be esteemed only as

* "More rarely the tonsils suppurate." (Dr. H. Greenhow, *On Diphtheria*, page 8.)

† "It should be borne in mind also, that cynanche tonsillaris does sometimes, by extension of the inflammation to the neighbouring parts, superinduce that very formidable species of cynanche—cynanche laryngea." (Dr. Watson's *Lectures*, vol. i, page 808.)

adjuvants, capable of restraining and moderating the local complication.

All strong remedies—especially if frequently applied—are greatly to be deprecated, as liable to produce those very pathological conditions which it should be our constant endeavour to prevent; and in this opinion, I believe, I am supported by modern experience generally, though the *rationale* has not, so far as I am aware, been previously given.

Diphtheritic affections of the *skin*, do not seem to require any special treatment. They are not in themselves dangerous; and all we have to do is to insure cleanliness, rest, mechanical and physiological, and to employ mild stimulating applications.

Conjunctivitis, when diphtheritic, is to be treated in like manner, as when not so complicated; the principal local means consisting of applications of solutions of nitrate of silver, the use of suitable collyria, and protection from light.

In affections of the *female genital organs*, it is important to ascertain whether the foundation disease be simple or syphilitic in character; for while, in the former case, simple remedies suffice, in the latter, such special remedies as dusting with calomel, black wash, etc., must be resorted to.

When the disease presents itself on the parts within the *cavity of the mouth*, the solid nitrate of silver, not too frequently applied, becomes the most convenient and efficacious of topical remedies; as assistants, we have borax, myrrh, honey, cream, etc.

In the *nose*, not having the same facilities for inspection, while principles remain the same, other modes of practice must be had recourse to. The syringe comes to our aid in the application of liquids, while powdered alum, calomel snuff, etc., may be received by insufflation.

To enumerate half the remedies which have been applied in diphtheritic affections of the *throat* would be a tedious and profitless task. Founded on Trousseau's view, that "by interposing energetically to combat the first manifestations of diphtherite, we may sometimes arrest the progress, and prevent ulterior manifestations," every possible medicament, no matter how potent its action, deemed capable of attaining the end, has found advocates for its employment. It is a view about which I am happy to say, with Dr. Jenner, "that the doctrine taught in the text, founded on my own experience, is quite opposed to it." All that I find it necessary to resort to in practice, are applications from time to time of moderately strong solutions of nitrate of silver or of sulphate of copper. Of the two, the copper is, perhaps, the preferable remedy; for not only is it more cleanly, but also its emetic action, especially at the commencement of the case, is often of signal service. When the patches are distinct and isolated, a large camel-hair pencil becomes the most convenient instrument of application. The membrane around, and especially below, requires the effect of the remedy; for the diseased action has a particular tendency to spread downwards; and it is in that direction that danger is most to be dreaded. When the morbid product is more extensive, especially when of the soft variety with much infiltration—and this, according to my experience, particularly occurs in erysipelatous cases—the swab will unquestionably be found to answer better.

Next to the astringents, I believe the most useful topical remedy to be glycerine. It seems to afford protection to the inflamed surface, to allay irritation, and to expedite recovery. If, however, we keep clearly in view the indication, to carry out which local remedies are applied, the actual mode and frequency of application, and agent to be chosen, may be safely left to the judgment of the practitioner.

Gargles answer two indications: 1, assisting the local remedies in their stimulating tonic effects; 2, washing away and deodorising detached particles. For the first purpose, we employ astringents such as the mineral acids, tincture of perchloride of iron, alum, etc.; for the second, chlorinated preparations and permanganate solutions.

Ice, cold water, solutions of nitrate of potash, etc., have a cooling antiphlogistic effect upon the parched and inflamed surfaces, and especially when grateful to the patient, are to be recommended. On the other hand, inhalation of steam, either of water or of vinegar and water, will, in some cases, especially of epidemic sore throat, with tendency to suppuration (quinsy), be found to afford greater relief.

Counterirritation, though not generally of much service, is to be employed on the same principle as if the epidemic had no diphtheritic complication. Blisters, owing to liability to cutaneous diphtherite, had better be avoided; but a mustard poultice applied early has often appeared to me to act beneficially. When it is desirable to keep the external skin in a state of more or less congestion, stimulating embrocations may be resorted to; and for this end, too, warmth, after the manner of poultices, becomes an useful adjuvant—linseed meal, bread, bags of heated oats, bran, or potatoes, according to choice.

In *laryngeal* cases, our direct means of local treatment becomes more difficult of application, and less efficacious. Blisters here, too, had best be avoided; and, perhaps, the most useful external application is the hot moist sponge, as recommended by Dr. Graves, over the neck and upper part of the chest; for not only does it act beneficially as a direct fomentation to the affected parts, but, also, by imparting warmth and moisture to the inspired air. Of tracheotomy, having no experience, I forbear to speak.

Disinfecting Vapours. It may be as well here to mention certain agents employed chiefly as disinfectants; for, although primarily intended to destroy noxious emanations, they admit, in one sense, of being considered as local remedies. An atmosphere more or less charged with chlorine, iodine, or ammonia, impinging on the diseased mucous membrane, acts as topically as the fluid applications of Beaufoy or Condy, and assists in furthering a like end.

Iodine has recently been brought forward with great commendation by Dr. Richardson, who believes that by it, "in one of the worst cases of smallpox he ever saw, he was enabled to deodorise the air of the patient's apartment with a facility and comfort never before experienced, and that the process contributed largely to the recovery of the case"; and also, "that iodine thus used affords a good practical index as to the purity of the air in the apartment. If, on volatilisation, the odour of the metalloid be long in being developed, the evidence is clear that the air is proportionately charged with organic matters."

[*To be continued.*]

THE THIRD APHORISM OF HIPPOCRATES. Among gymnasts, development of body carried to its utmost extent, is dangerous, for it cannot continue; and since it cannot continue, nor be increased, it must fall off; therefore it is expedient to resolve it, not by slow degrees, in order that the body may acquire a new commencement of growth; neither should the reduction be carried to its farthest point, for this also is dangerous, but it should be brought to that degree which is suitable to the nature of each gymnast. (*Rev. Dr. Haughton.*)

British Medical Journal.

SATURDAY, MAY 28TH, 1864.

THE MEDICAL COUNCIL: ITS CONSTITUTION, ACTION, AND CHARACTER.

WHETHER, and to what extent, the admission of public reporters to the meetings of the Medical Council will be productive of good, is a question which time and experience alone can solve. At present, the experiment is a new one; and one of its first and most prominent results has been to increase the number and length of the speeches delivered by members, and, consequently, the duration of the session. Subjects that would, under other circumstances, have been referred to committees in order that something definite might be laid before the Council, have been discussed by the whole body, because the members felt themselves bound to carry out their engagement of allowing the public to become acquainted with their deliberations; and thus theoretical eloquence has, for this year at least, prevailed to the detriment of action.

On the other hand, there is one advantage which has come out of the adoption of publicity by the Medical Council. Hitherto, little or nothing has been known of its proceedings beyond the information contained in the printed minutes of each day's work. Now, however, persons outside are enabled to observe more closely the *modus operandi* of the Council, to take stock of its collective mind, and, perhaps, to form a prognosis as to the probability of its bringing about those reforms which are so much needed in the medical profession.

Taking, then, the rendering public of the proceedings of the Medical Council simply as a *fait accompli*, we will offer a few observations which have suggested themselves to us.

First, it must be apparent to all who have had an opportunity of noticing the attendance at the meetings of the Council, that no exception can be taken to the manner in which its members perform their duty, so far at least as presence is concerned. On one or two occasions only during the recent session—except on the last day—was a member absent when the roll was called at the commencement of the meeting; and it was apparently only the pressure of professional duties that occasionally caused some to leave the room during the sittings.

As to the order of business, this is placed under the direction of a special Committee, which had, during the recent session, a very efficient chairman in Dr. Andrew Wood. Printed programmes, containing the notices of motion, and a list of all other business matters of which the Council has to take cognisance, are daily laid before the members; so that, *primâ facie*, every facility is given for knowing what is to be brought forward.

But, among these and other favourable circumstances in things external—that is to say, not necessarily connected with the constitution of the Council and its mental characteristics, of which we shall presently have something to say—there are certain occurrences which, as we think, somewhat materially impede the progress of business, and occupy time to the exclusion of valuable work.

One of these impeding causes is an inordinate propensity on the part of some members to make themselves prominent in debate. We do not allude to the speeches on medical education, medical reform, and other important matters, although much of what was said might have been condensed, and theoretical eloquence might have been advantageously replaced by practical decision; but to the manner in which some members impede the business, not only by frequent speaking and by repetition of things already said, but by raising objections in the course of the business, and thereby often necessitating replies and personal or general explanations, which must occupy minutes that might be more profitably spent. Among these must be specially mentioned Dr. Corrigan, a man evidently possessing much sound sense, and capable of giving excellent counsel; but who mars his worth and his influence in the Council by adopting the course—we do not say always intentionally—of impeding business in the manner to which we have referred. We would venture to suggest to Dr. Corrigan, and any other members who may have similar propensities, that, while it would of course be wrong to pass without notice any inopportune deviation from the proper line of proceeding, it is unadvisable to make any objections which are not necessary; and that the conduct of business may in general be safely left to the judgment of so able a president as Dr. Burrows. To arrive soon at a sound result is an object of more importance than a rigid attention to forms.

Another impediment is one which must be laid to the account of our Irish friends. Year after year the Medical Council is made, or attempted to be made, the arena of dispute on such matters as the privileges of the Apothecaries' Hall of Ireland; and each year the representative of that body and the representatives of the King and Queen's College of Physicians—for Dr. Corrigan decidedly acts in this capacity, equally with Dr. Aquilla Smith—are prepared to occupy the time of the Council—and, indeed, do occupy it—with questions which have been debated over and over again, and on which, we believe, the Council has at different times arrived at different decisions, none of which have apparently given satisfaction. We have the greatest respect for

the representatives of the Irish corporate bodies, as well as for all the other members of the Council; and of course we recognise the principle, that the Council ought to take cognisance of any dereliction of duty or grave offence on the part of the licensing bodies; but we cannot seen why matters evidently arising out of a state of chronic disagreement should be constantly inflicted on the Council by the Irish, any more than by the English or Scottish representatives. If such matters must be laid before the Council, cannot they be referred for consideration to a Committee, with instruction to obtain sound legal opinion, if necessary?

We have now to look a little more closely into the Council, and its fitness for its duties. It consists of a President and twenty-three members, of whom seventeen are appointed by the various licensing bodies, and six by the Queen, with the advice of the Privy Council. The following is the present constitution of the Medical Council.

Dr. Burrows	President.
Dr. Alderson	Royal College of Physicians of London.
J. M. Arnott, Esq.	Royal College of Surgeons of England.
G. Cooper, Esq.	Society of Apothecaries, London.
Dr. Acland	University of Oxford.
Dr. Paget	University of Cambridge.
Dr. Embleton	University of Durham.
Dr. Storrar	University of London.
Dr. Alexander Wood	Royal College of Physicians, Edinburgh.
Dr. Andrew Wood	Royal College of Surgeons, Edinburgh.
Dr. Fleming	Faculty of Phys. and Surg., Glasgow.
J. Syme, Esq.	Universities of Edinburgh and Aberdeen.
Dr. Allen Thomson	Universities of Glasgow and St. Andrews.
Dr. Aquilla Smith	King and Queen's Coll. of Phys., Ireland.
W. Hargrave, Esq.	Royal College of Surgeons, Ireland.
Dr. Leet	Apothecaries' Hall, Dublin.
Dr. Apjohn	University of Dublin.
Dr. Corrigan	Queen's University in Ireland.
Dr. Sharpey, Dr. Parkes, Dr. Quain, H. W. Rumsey, Esq., Dr. Christison, Dr. Stokes	Appointed by the Queen, with the advice of the Privy Council; viz., four for England; one (Dr. Christison) for Scotland; and one (Dr. Stokes) for Ireland.

The Medical Council is thus constituted of men regarding whom it might be, at first sight, supposed that none could be brought together better fitted for the duties which they have to perform. Many of them have been long distinguished, not only as members of the Universities and Colleges to which they severally belong, but also as teachers of medicine and the medical sciences; and several at least are known to have made medical education and medical legislation subjects of careful study. In a conclave of such men, one would think, something practical might have been arrived at.

Yet, as has been seen, the case is otherwise. Why is this? Why is this chosen body of the medico-legal wisdom of the United Kingdom to sit year after year for ten or twelve days in the College of Physicians as a mere *talking* body, uttering words of eloquence and delivering arguments, sound and unsound, by the hour together, and in the end *doing* little or nothing? Why have the members so great a propensity for moving round important questions in a sort of Indian file, and seldom or never concentrating their action on any point where amendment is demanded? How is it, in a word, that th Medical Council has placed itself in danger of bein considered the Circumlocution Office of the profes sion, where the great object to be arrived at is "ho not to do it"?

Perhaps one cause of this lies in the fact to whic we have adverted: that the majority of the Counc are men who have deeply studied the subject brough under notice, and have formed more or less indepen dent ideas thereon. With a natural tenacity, eac man holds to his own opinions; so that, while ther is a certain amount of agreement as to some point each member (perhaps too often) feels it incumbe on him to endeavour to bring his colleagues to h own way of thinking. In this way, members of th Council seem, at times at least, to lose sight of tha consideration for the common good, in which indi vidual opinions and shades of opinion ought to b merged.

It is apparent, also, that action is impeded by th reluctance which members of the Council have t dealing harshly with the corporate bodies, of whic the most of them are representatives; and, conse quently, to laying down plans, the non-adoption o which must either bring the Council and some of th licensing boards into unpleasant collision, or mus render manifest an absence of power on the part o the Council to enforce their regulations. We know quite well, as was expressed in the Council by mor than one member, that the duty imposed on tha body by the Medical Act, in regard to refractory corporations, is a delicate one; and one which mer of such character as those who form the present Council would naturally be slow to perform. But w would remind them, that the medical profession and th public have the first claim on them; and that, while undue interference with personal feelings or cor porate interests is to be deprecated, these must b postponed to the higher considerations to which w have referred.

Again, it seems to us that there is too great a tendency, on the part of some members of the Council, to regard as formidable obstacles the difficulties that stand in their way. Thus, one member imagines that the Privy Council would not be ready to attend to any complaints against corporate bodies, unless the Council were unanimous in such complaints—a condition, for obvious reasons, very unlikely to be arrived at. Another fears that, if the Council apply for an amended Medical Act, the powers which the Council already possesses may be curtailed, instead of being increased and rendered definite. The English Branch Council regards the differences of opinion existing in the profession as a ground for not engaging in fresh legislation; and Dr. Storrar, who is generally noted as one of the most valuable business-men in the Council, actually brings forward a resolution embodying this idea. In discussing medical educa-

on, too, difficulties in carrying out this or that plan, whatever it may be, arise at every turn. And, what worse, the counsels of these over-cautious members ve evident weight, and too often decide the turn hich a debate is about to take. But the members the Council should remember—and they must ow well—that to stand still or retreat at the sight danger (which after all may be but problematical), not the way to carry out great undertakings. If ere be doubts as to the power of the Council to certain things, their duty is plainly not to stand such doubts; but, having decided on doing that hich seems to them just and right, to challenge ponents to contest their powers. The profession, e are sure, would stand by the Council if it adopted ch a course; and, if the Council, in an honest sire to do that which was good and just and expe- ent for the profession and the public, sometimes mmitted errors of judgment, these would be far ore readily pardoned than want of action arising t of an inordinate appreciation of difficulties and ngers.

We have thus openly, and we trust fairly, pointed t what appear to us to be the principal impedi- ents which prevent the Medical Council from ing more than it has done. A mere display eloquence, and a resultless exhibition of the *sua- ter in modo* towards each other and to the corporate dies, without making any advance, is not altogether hat is wanted. The Council has just risen, after a elve days' sitting, of which the expense may be oderately estimated at £1500; and at what result s it arrived in regard to Medical Education—the bject on which, beyond all others, it was expected least to bring forth something definite? Simply is; that it has done this year just what it did last ar. It has drawn up a series of recommendations, d ordered them to be referred to the licensing ards for their considerations; and this it has done, twithstanding the fact, that the representatives in ouncil of the licensing bodies must have already en well acquainted with the views of their con- ituents on the very matters regarding which estions are asked. If the Council proceed in is way year after year, men will naturally ask hether it is not a mere farce that is enacted, and hether a Council is of any worth that goes on— s Mr. Syme is reported to have expressed it— doing actually nothing, except deceiving the public y publishing year after year a list of persons pposed to be qualified, many of whom are ot so qualified." Those outside will, too, think here is reality in the insinuation that the Council, ade up mainly of men connected with and dele- ated by corporate bodies, has more regard to the terests of these bodies than of the profession and f the public; and that the members are fettered in tion by this consideration, and by the dread of doing any thing which those who sent them to the Council may not fully approve. That such feelings may arise, is no exaggerated idea. Members of the Council themselves—as we have already seen—have in their places said things very much to the same purpose.

Much credit is due to the Edinburgh College of Physicians for the spirit which it has of late shown in protecting the interests of the profession at large. We wish the Medical Council were worthy of similar praise. The Edinburgh College has now taken in hand the affairs of the army medical service; and, in a memorial to Lord Palmerston, defines the grievances of the army surgeons, points out the causes of the present disgraceful state of the army medical service, and suggests the remedy. After detailing the history of the affair, the memorial winds up as follows.

"Your memorialists, viewing with great anxiety this very unsatisfactory state of an important branch of Her Majesty's service, would beg respectfully to urge upon your lordship the necessity for a reform of the following grievances, to which military medical officers are subject:

"1. In consequence of vacancies not having been filled up, promotion has become so slow that no assistant-surgeon now entering the service can expect to become a surgeon in less than fifteen years.

"2. In consequence of the deficient number of medical officers in the army, it is with great difficulty that leave of absence can be obtained.

"3. In consequence of the appointment for home service of acting assistant-surgeons, the commissioned assistant-surgeons will be almost exclusively employed on foreign service, and will be deprived of their proper turn of serving in this country.

"4. The system of confidential reports, of an inquisitorial character, is felt as a degradation, both by those who are required to draw them up, and by those to whose conduct they refer.

"5. Medical officers are required to superintend the branding of deserters, and are thereby placed in a position which no professional gentleman should be called upon to occupy."

Memorials of this kind cannot fail to have an indirectly beneficial influence at the Horse Guards. It is evident that our profession has no medical representative at head-quarters who is able to appreciate the interests of his medical brethren, or who has the courage to defend them. The Edinburgh College of Physicians, therefore, does well in thus taking into its own hands the direction of the army medical service.

In the form of declaration to be signed by candidates for the newly invented army appointment of acting assistant-surgeon, we see that, amongst other things, the candidate enters into an agreement to "discharge all the duties of assistant-surgeon in Her Majesty's Army to the entire satisfaction of the Director-General of the Army Medical Department, and *for so long a period as my services are required.*" We beg the numerous gentlemen who, as we understand, are seeking the honour of these appointments,

to reflect twice and consult their lawyer once before they sign an agreement containing the words above italicised by us. They may be signing themselves into perpetual bondage to the Director-General. The bargain appears of a most one-sided kind. The Director-General kicks out his servant at a moment's notice. He treats his professional brethren very differently from his household servants—in fact, much worse; for to his menials he must give a month's wages or a month's warning. His professional brother he keeps just as long as he wants him. There is no reciprocity. We will give the agreement in full; and we must venture to ask, Can any gentleman, who properly respects himself, sign such an unjust and (coming from a Medical Army Director) so insolent an agreement as the following, which, moreover, is curious as a specimen of a Director-General's composition?

"I hereby declare that I am ready and willing to serve Her Majesty in the capacity of acting assistant-surgeon in the Medical Department of Her Majesty's Forces, and to discharge all the duties of assistant-surgeon in Her Majesty's Army to the entire satisfaction of the Director-General of the Army Medical Department, and for so long a period as my services are required, under the following conditions.

"1st. To receive the pay of ten shillings *per diem*, and allowances equal to those of a staff assistant-surgeon.

"2nd. Upon a notification from the Director-General, to proceed immediately for duty to any station in any part of the United Kingdom, and from time to time to proceed to and serve at any other station therein.

"3rd. I understand that my employment is of a temporary nature, and that my services may (without previous notice or compensation) be dispensed with at any time; but if the Director-General shall certify to Her Majesty's Principal Secretary of State for the War Department, that my services as acting assistant-surgeon have hitherto been rendered to his entire satisfaction, then two months' pay without allowances shall be issued to me as a gratuity from the Secretary of State.

Signature at full length.
Place of residence.
Date."

In the Department of the Seine there are 582 duly diplomatised *pharmaciens*. In Paris alone there are 523.

M. Flourens has presented to his Academy of Medicine a series of photographs of well-known engravings of celebrated medical men.

A Medical Congress is announced to come off in Lyons during the month of next September.

L'Union Médicale persists in calling the republican Yankee Hammond *Sir William Hammond.*

Dr. Chierici has started a Temperance Society at Turin.

The French journals announce the appearance of a new journal, to be called *Les Archives de Médecine Navale*, and published under the auspices of the Minister of the Marine.

M. Ollier says that he removed the carious coccy of a woman, leaving the periosteum and adjacen fibrinous structures; and that he subsequently ob served the formation of a distinctly osseous plate oc cupying the situation of the removed bone.

An Austrian army doctor, writing from Frede ricia, says: "The inhabitants of Denmark are, as rule, well to do, and accustomed to pay their doctor liberally. Here medical men meet with a golde practice, such as with most physicians in Austria merely matter of tradition."

Professor Esmarch has received the order of th Iron Crown from the Austrian Emperor, for h great services in the hospitals in Schleswig-Holstein.

Professor Tommasi of Pavia has been raised to th dignity of Senator.

Professor Skoda calls the attention of the Vienn Medical Society to the fact that the City Park i covered with white sand, which is injurious to th eyes. He cannot understand how any gardener ca have selected white sand for a park. He propose to call the attention of the city officials to the fact.

Statistics show that there are 1706 doctors, 160 of whom are practising their art, in the Departmen of La Seine. Besides these, there are 270 *officier de santé*. Hence there is one medical man to ever 875 inhabitants.

M. Corvisart has shown that in animals the pan creatic juice has the power of dissolving albuminou foods without the assistance of the gastric juice o the bile; and now he has demonstrated the sam thing in man. A hospital patient, in perfect healt having suddenly died from chloroform administere for the reduction of the femur, M. Corvisart re moved the pancreas; and, with the prepared juic and ferment of it, operated on albuminous matter He found that a large quantity of albumen an fibrine was rapidly digested with its assistance.

M. Depaul lately reminded the Academy of Medi cine, that M. Gamgee, an English surgeon, had com municated a case of removal of an ovarian cyst, an presented the cyst. He added, that neither th operation nor the cyst presented anything remark able. What would have been of interest was th cure of the patient; and on this score he had mad inquiry, and found that the patient had died. M Velpeau supported the views of M. Depaul, and ex pressed a hope that an end might be put to th system of announcing operations before the final re sult of them was known. Most people will agre with the wish of M. Velpeau; but it will probabl occur to some of us, that it would have been mor polite if he had made the remark *à propos* of one o his own countrymen, rather than of a stranger.

The patients of the Hôpital St. Louis have peti tioned the French Senate, praying that contagiou diseases, and especially small-pox, may be confine to a special hospital.

Association Intelligence.

RITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

Thirty-second Annual Meeting of the British ical Association will be held at Cambridge, on lnesday, Thursday, and Friday, the 3rd, 4th, and days of August next.

T. WATKIN WILLIAMS, *General Secretary.*

Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

AME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Quarterly.]	Matlock.	Saturday, June 4th, 2 P.M.
EAST ANGLIAN. [Annual.]	General Hospital, Bury St. Edmund's.	Friday, June 17th, 2 P.M.
MINGHAM AND MID-AND COUNTIES. [Annual.]	Hen and Chickens Hotel, Birmingham.	Friday, June 17th, 3.30 P.M.
OUTH MIDLAND. [Annual.]	Woburn.	Thurs., June 23, 1 P.M.
VEST SOMERSET. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.

SOUTH MIDLAND BRANCH.

Annual Meeting of the South Midland Branch be held at Woburn on Thursday, the 23rd of e, at 1 P.M.; H. VEASEY, Esq., President.

entlemen intending to read papers or cases are uested to forward the titles of same to Dr. Bryan, thampton, not later than the 9th of June.

JOHN M. BRYAN, M.D., *Secretary.*

ST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

eighth annual meeting of this Branch was held Hull on Wednesday, May 18th, 1864. In the ence of F. B. ANDERSON, Esq., the President, OWEN DALY, the President for the in-coming r, took the chair. There were also present twenty- members and visitors.

ew Members. The following gentlemen were ad- ted members of the Branch: Dr. Graham; Jasson, Esq.; F. M. Foster, M.D.; and D. Gibson, .

fficers and Council. Mr. R. M. Craven was chosen sident-elect; and Mr. J. Fearne Holden, Honorary retary. Sir Henry Cooper, M.D.; Mr. Locking; Hardey; Mr. Henry Gibson; Dr. Lunn; Dr. mphry Sandwith; and Mr. Sleight, were elected mittee-men for the ensuing year.

ommunications. After the President, Dr. DALY, delivered his address, the following professional mmunications were made.

. Case of Fatal Cystic Hæmorrhage. By W. J. n, M.D.

. Case of Urethro-Vaginal Fistula. By W. J. n, M.D.

. Case of Laryngotomy. By R. M. Craven, Esq.

. Case of Amputation of the Cervix Uteri. By M. Craven, Esq.

. Case of Imperforate Hymen. By R. H. B. holson, Esq.

. Sequel to a case of Ovariotomy. By J. Dix, Esq.

inner. The business of the meeting being over, the members dined together at the Victoria Hotel, where they were joined by several other members who had been prevented from attending earlier. A delightful evening was spent; and the proceedings altogether were of a most encouraging character, the meeting being the largest that the Association has held in Hull for some years.

Reports of Societies.

MANCHESTER ROYAL INSTITUTION: MEDICAL SECTION.

GENERAL MEETING, APRIL 6TH, 1864.

JOHN WINDSOR, Esq., in the Chair.

FOUR new numbers were elected.

Bronchial Casts. Mr. SMART exhibited specimens of bronchial casts expectorated by a man aged 36, suffering from recurrent attacks of subacute bronchitis. Last autumn, he caught a bad cold, with cough; and he then noticed for the first time peculiar solid lumps in the expectoration. He got well, and remained so until shortly after Christmas, when he was again attacked with cough, attended with copious expectoration, containing occasionally what appeared to him solid lumps of flesh, as before. His occupation (that of a night-watchman) was generally not interfered with. He had a sudden dyspnœal seizure on the 10th of last March, when he was first seen by Mr. Smart. He was found sitting up in bed, breathing laboriously, with paroxysms of violent coughing. The cough consisted of a long series of short expiratory succussions, resembling somewhat the "chinks" of hooping-cough, with a shrill sibilant falsetto sound. The physical signs were those of bronchitis, and were almost entirely confined to the infraaxillary region, the rhonchi having a rather "sticky" character. There was no pain. In the course of twenty-four hours, he would sometimes cough up between one and two pints of gelatinous phlegm, with a slight admixture of air-bubbles, but having a "head" of yeasty-looking froth. Mingled with the gelatinous secretion were numerous streaks and small elongated fragments of a *milk-white* substance, and also a few large solid-looking pinkish lumps. Agitated in a basin of water, the latter unfolded themselves into long complex ramifications, consisting of a main trunk and branching offsets, and representing the complete cast of a portion of a bronchial tree, the aggregate being often from four to five inches long. Several of these were found to be solid cylinders, having a soft amorphous centre, coated with a stout surrounding lamina of great toughness. The external surface of the more voluminous casts was generally tinged with blood, as if the casts had adhered to the sides of the bronchial tubes, and had been removed by a violent evulsive effort. There was no other hæmoptysis, nor any symptom of tubercle. The expulsion of the larger masses was generally preceded by a violent and incessant cough, lasting sometimes more than two hours. He would spit from two or three to sixteen or eighteen of these bodies in twenty-four hours; and a washhand-basinful of them might have been collected in the course of a few weeks.

He had been troubled previously with dyspeptic symptoms; and, although his appetite continued good throughout his illness, eating nearly always increased his distress in breathing. The dyspnœa was only occasional, was not accompanied with lividity of the features, and did not cause much after-exhaustion.

The trachea and upper bronchial tubes appeared to be perfectly free from disease. No masses had been expectorated during the last ten days. Prolonged administration of alkalies was the treatment resorted to.

Pneumothorax. Mr. MELLAND communicated the following case of pneumothorax. B. M., aged 38, a reed-maker, had been ill about four months, and was at present (March 1st) suffering from general anasarca, œdema of both lungs, with a good deal of cough, laborious breathing, etc.; and from cardiac disease, probably mitral. The urine was not albuminous; and there was no jaundice. The anasarca disappeared under treatment, as well as the œdema of the lungs; and the patient was able to walk out a little. The pulse, however, continued quick; and the patient remained in a weak state. On March 11th, the patient, having been worse for several days, was suffering a good deal of pain; and there was found a total absence of respiratory murmur on the left side, with increased resonance on percussion, excepting over the scapula, reaching to the lowest ribs and over the whole of the sternum. There was no metallic tinkling. The heart had moved over to the right side, lying from an inch and a half below the right nipple to the edge of the ribs, about an inch to the right of the ensiform cartilage. Under treatment, he again improved, and continued to do so until March 27th, when an exacerbation of the symptoms occurred. The heart's sounds became very loud, and a loud clicking sound was heard over the lower part of the sternum. No succussion or metallic sounds were present, nor dulness on percussion. On March 31st, there was an improvement. The clicking sound could be brought on at pleasure, by the patient turning over on his left side; was close to the ear, over the edge of the ribs; and was double. Symptoms of œdema of the lower part of the right lung were presenting themselves a few days later.

Mr. Melland remarked upon the absence of any very acute symptoms at the commencement of the above case, the absence of metallic phenomena, and the moderate nature of the general symptoms during its progress, so far. The origin was presumed to have been a small tubercular abscess perforating the lung by a small opening, which may have become closed by inflammatory adhesion, and may have reopened when the severe symptoms reappeared. The heart seems to have been the original seat of disease, the œdema of the lungs and anasarca resulting therefrom. The case was considered by Mr. Melland to confirm Dr. Stokes's opinion with respect to pneumothorax, that "it may be so latent that one cannot determine the date of its invasion;" and also that, "in many instances, a period of comparative and often singular tranquillity succeeds the first violent symptoms."

Retrogressive Tubercle. Dr. W. ROBERTS exhibited the lungs of a man aged 20, who had suffered from phthisis, followed by Bright's disease. When first under treatment, the patient presented all the physical signs of phthisis; there being marked dulness, pectoriloquy, expectoration, etc. There were also symptoms of nephritis; viz., albuminuria, anasarca, and ascites. The case improved under treatment by cod-liver oil, steel, and constant rest in bed; the dulness and signs of a cavity remaining. After three months' residence in hospital, he returned home, and the same day became much worse; was readmitted after three days, and died with suppression of urine and ascites. The upper lobe of the right lung was found to be sealed by cicatricial tissue, there being six small cavities in the apex, free from tubercle, and shrunken, and three cavities in the left lung. The kidneys were of the "large white" order.

Dr. Roberts considered this a case of tubercle retrogressive under proper treatment, and chiefly by rest in bed; and as illustrative of the derivative effects produced upon the tubercular disease in the lungs by the morbid action established in the kidneys.

Fœtal Deformity in Twins. Dr. J. O. FLETCHER showed an example of the "sixth type of acephalia", according to Professor Vrolik (vide *Cyclop. Anat.*, vol. iv, p. 962), being a twin monster of seven months' uterine growth, with a common placenta measuring twelve inches in length. Dr. Fletcher did not believe these monsters to be the result of arrested development, because the "*primordial cerebral capsule*", developed in the embryo upon the "*chorda dorsalis*", has no existence, whilst the rest of the body undergoes the proper changes; but must rather be the result of some perverted formative power in the germ-cell itself.

Dr. Fletcher promised a further communication on the subject, after the completion of his dissections.

Scirrhus of Pylorus. Dr. JOHN ROBERTS exhibited, for Dr. DAVIES of Bury, a specimen of this affection. The patient was a male, aged 48, who had ailed for two years before his death. For some weeks before his death, he had suffered from great pain in the epigastric region, and constant vomiting after food. There had been vomiting of quantities of dark "coffee-grounds", with enlarged, tense, and tympanitic abdomen, and difficult deglutition, for a few days preceding death. The pylorus was found to be the seat of a hard tumour; and nodules of the same kind of growth existed on the under surface of the diaphragm. The diseased product encased the pyloric orifice and the adjacent portions of the alimentary tract, on both sides, in the form of a ferule of uniform thickness. The canal in its centre was patent, and of pretty uniform calibre. The growth was composed of nodules, which offered some resistance to the knife, and which, when cut, exuded an abundant juice, composed of cells, fatty granules, and molecules, and glossy structureless fibres. The cells were larger than pus-cells, ovoid in form, uniform in size, and containing each a single nucleus. There was a perforation in the greater curvature of the stomach; and the usual appearances in the abdomen which result from such a lesion.

This case of scirrhus was considered remarkable, on account of the seemingly uniform deposition of the cancerous matter, suggesting simple hypertrophy of the pylorus. The nodular composition of the "ferule," the similarly affected under surface of the diaphragm, and the microscopic characters, were considered to point unequivocally to a malignant growth, and that scirrhus.

Tænia Solium in an Infant. Dr. JOHN ROBERTS showed such a specimen, taken from an infant, aged 13 months. The entire tænia seemed to have been voided spontaneously and without pain. The infant was stated to have been fond of raw herring, beef, or pork. This affection occurring at so early an age is rare, and is confined to the children in metropolitan towns. (*Vide* Wolfius, Legendre, West, Smith, etc.)

Remarks on the Pathology of Strabismus. Mr. HUNT proceeded to communicate a few facts and opinions on this subject, by way, principally, of eliciting a discussion. He defined "true strabismus" to "consist in an obliquity in the position of the affected eye, which prevents its movements from being in accordance with those of the other eye." Normally, "each eye takes the same view of any object." "In true strabismus, there is a diminution, but not a total loss of power; and this diminution renders the failing muscle incapable of overcoming its antagonist muscle sufficiently to keep up that balance of muscular power which is essential to the according movement of the

," Mr. Hunt illustrated this by referring to ergent strabismus; the fact of the eye assuming orrect direction as soon as the other eye is closed ing that the affection is owing to diminution, not loss, of power. Mr. Hunt enumerated Dr. . Hall's list of the causes of strabismus, adding, his own observation, the following injury of the from blows which cause temporary strabismus strabismus after operations for cataract. Mr. t related a case of a "very rare variety of distor- of the eyeball, which, on a cursory examination, ıt be mistaken for strabismus, but which is com- ted with a condition of the general nervous em of a very serious character." Sir Everard ıe's cases, published in the *Philosophical Trans- ns* for 1797, Mr. Hunt considered to have been of ılar nature, and not owing merely to fatigue of nuscles. Mr. Hunt noticed that, "after a very essful operation for convergent strabismus, there a certain extent, a want of correspondence be- n the actions of the internal rectus muscle of eye, which has often been mistaken for con- ent strabismus of the unaffected eye." Mr. Hunt luded by referring to the affections of the eye- resembling strabismus, which are dependent distant functional disturbance, as during con- ons arising from irritation from worms in chil- , or in other convulsive diseases.

ıring the discussion which ensued, Dr. Samel- combated Mr. Hunt's definition of strabismus, alluded to the researches of Donders in the er.

AL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 12th, 1864.

'artridge, Esq., F.R.S., President, in the Chair.

CASES OF INTESTINAL OBSTRUCTION, IN THREE WHICH THE COLON WAS OPENED IN THE LEFT MBAR REGION, (AMUSSAT'S OPERATION.) BY MUEL SOLLY, F.R.S.

R acknowledging the value of Mr. Cæsar Haw- s contributions, Mr. Solly detailed his own ex- nce. The operation of opening the colon in the in properly selected cases, he believed to be er dangerous nor difficult; nor was it contrain- ed by the occasional passage of small quantities culent matter. The results, moreover, of the tion were far from unfavourablee, even where the ure was due to malignant disease; and the relief led was instant and decided.

e first case, that of a labourer, aged 28, was one ctal cancer, advancing with unusual rapidity, lating only five months from admission. At the , diarrhœa, with slimy and bloody motions, was ved by intermittent symptoms of obstruction, a before long became constant. On admission, bdomen was frightfully distended; the rectum ıot admit the passage of even a small elastic ter. Three days afterwards, the descending was opened in the left lumbar region. Much s escaped, but hardly any fæces until some hours the operation. This was followed by rapid im- ment in every respect. Sixteen days later the nt left his bed, wearing a tent in the wound. He nued in fair health for three months, when chronic onitis set in, probably from extension of the pri- disease, and slowly advanced to a fatal termina-

e second case, that of a railway clerk, was of een months' standing. It had been very gra- in its access, and palliated during the last month by the passage of rectum-bougies twice a week. On admission, the symptoms, both local and general, were very severe. At the operation, much fæculent matter was evacuated, and the relief obtained was very decided, lasting for six weeks, when sudden collapse, partially due to mental causes, was very rapidly followed by death. *Post mortem* examination was refused.

The third case had occurred very recently. A bank cashier, aged 54, of active and temperate habits, had begun about a year previously to suffer from constant tenesmus, with from five to seven evacuations daily; these were on three or four occasions accompanied by blood. Seven months later he consulted Mr. Solly, and extensive carcinoma was found, partially occluding the bowel. During the following five months he could evacuate the bowel without much distress; but at the commencement of the present year complete obstruction took place, accompanied by great distension of the abdomen, for which, ten days later, he was admitted into St. Thomas's Hospital. On admission he complained of dyspnœa and retching, but without actual vomiting. A nodular mass could be felt projecting into the rectum, hard and inelastic, almost obliterating the canal. The following day, a horizontal incision with a slight inclination upwards and outwards, from three inches and a half to four inches long, was made midway between the last rib and the iliac crest. The erector spinæ was partially divided, and then the quadratus lumborum inwards, on a director, to the extent of an inch and a half. The abdominal fascia was similarly treated, leaving the bowel exposed; this was fixed by means of two silk sutures to the edges of the wound, and the gut opened transversely by means of scissors. Very little blood was lost, and three pints of liquid fæces came away, with intense relief. During the afternoon more liquid fæcal matter was discharged *per anum*. On the following day the pulse was 86; he had slept well, and eaten a chop for dinner. The wound showed no inclination to close, and slight prolapse of the bowel was easily checked by an oiled sponge-plug. For six days he did very well, except that there was a tendency to the formation of bed-sores. Thirteen days after the operation he sat up two hours daily, and seemed better, fæces passing both by the wound and anus. But on the twenty-first day collapse, vomiting, and swelling of the face came on, followed by great dyspnœa and extensive mucous crepitation in the chest, which increased so rapidly as to carry him off in a few hours. At a *post mortem* examination, tubercle was found in both lungs, which were œdematous, with much injection of the bronchial tubes. The cæcum was distended by gas, and was adherent to the sheath of the right psoas muscle, in which was an abscess extending to its origin, containing several ounces of thin fœtid pus. There was a free opening in the descending colon, where it was uncovered by peritoneum, and its edges were adherent to the wound. The sigmoid flexure contained solid fæcal matter. The rectum was embedded in a firm mass of infiltrated tissues, adherent to the pelvis posteriorly and to the bladder in front. The deposit was firm, fibrous, and juicy. A softer growth projected inwards round the whole circumference of the bowel, so as almost entirely to obstruct it; below the tumour was an ulcerated surface of the intestines, two or more inches across, where the coats of the bowel were entirely destroyed. The scirrhous mass under the microscope showed fibrous tissue, with cells of various sizes, mostly round, and containing minute oil-globules. The liver contained several masses of scirrhus, most of them presenting traces of central degeneration.

The fourth case resembled the preceding up to a

certain point, where it diverged in consequence of the operation not having been performed, and the patient dying rapidly from rupture of the bowel. W. C., aged 55, a surgeon, was a ruddy and robust man, of very active habits, subject to no illness except occasional attacks of gout. In April 1863, he had a severe attack of what he termed colic, for which his father-in-law, a retired practitioner, successfully treated him. Even at that period Mr. Solly saw reason to diagnose stricture of the large intestine, though the patient attributed his symptoms to gout, and did not formally request his advice until two months later. On a first visit he was in great pain, and the abdomen was so tender as to preclude close examination. Palliative treatment mitigated the symptoms for a fortnight, and then the author was again hastily summoned to Tunbridge Wells. Examination of the rectum by means of the finger and a soft bougie revealed an obstruction at its upper part. The abdomen was intensely distended with flatus, although small quantities of fæcal matter were once or twice evacuated. It was suggested to open the descending colon in the left lumbar region, but postponed for the opinion of an eminent surgeon, who came to the conclusion that it was not desirable. Accordingly Mr. Solly unwillingly relinquished the proposal under protest. Within twenty-four hours the patient died in great agony, with symptoms of ruptured bowel. On *post mortem* examination, the abdomen was tense, and prominent above the umbilicus. The lower part of the descending colon presented a small perforation, from which half an ounce of fæcal matter had escaped. There were no signs of recent peritonitis; and the intestines were healthy except at the sigmoid flexure, where a mass occupied the interior of the gut, of a scirrhous hardness, measuring over three inches across. Several pulpy lobulated portions of this occupied the calibre of the tube, fitting into each other like cogs of wheels. No other morbid condition was found. Before opening the abdomen a trocar had been introduced at the spot where the proposed operation would have been performed, and its point was found in the intestine an inch and a half above the diseased mass.

In commenting on this case, it was noticed that death had obviously been the result of obstruction, not of any rapid malignant growth, and that life would undoubtedly have been prolonged by the operation for an indefinite period. Moreover, the valvular form of the obstacle was pointed out, and the possibility of the original channel becoming pervious when the accumulation above was removed by operation, as had actually occurred in the third case. Lastly, attention was directed to the fact, already noticed by Mr. Quain in his work on this subject, that obstruction might be complete and prove fatal, even when the autopsy did not exhibit total occlusion of the intestinal canal.

(A drawing of a portion of the intestine in this case was exhibited.)

LIVERPOOL MEDICAL INSTITUTION.

APRIL 14TH, 1864.

A. HIGGINSON, Esq., Vice-President, in the Chair.

PUBLIC BUSINESS.

A LETTER was read from Mr. McGOWAN, on behalf of the Watch Committee, informing the Society "that that committee have always recognised the value of prompt medical assistance in urgent cases coming under the notice of police; as also the right of the medical profession to be remunerated for their services. The Committee are informed by the head constable that the police never hesitate to call for medical assistance in proper cases, and that the fee are always paid through the head constable's office.

A letter was read from Mr. HUSSEY of Oxford to th Secretary, approving of the Society's proceedings i relation to the Birkenhead case.

The following resolution was passed:

"That a deputation from the Medical Society d wait upon the Board of Management of the Ladies Charity, with a view of ascertaining how far it woul be practicable to obtain from their institution medi cal relief in casual or urgent cases of midwifery."

PATHOLOGICAL DEPARTMENT.

Aneurism of the Abdominal Aorta. Dr. BARRET shewed a specimen. A gentleman, aged 65, of activ habits and general good health, was suddenly seize with severe pain in the left hypochondriac region an abdomen, whilst walking down some steps. Alarm ing syncope soon came on. Turpentine externall and by the rectum was ordered by Mr. Long, an the patient gradually rallied, and at his own urgen request was removed some distance to his own home he was able to walk from his cab to his bedroom. H passed a pretty comfortable night; but about eigh o'clock in the morning, he was again seized wit severe pain in the left hypochondriac region. Mr Long and Dr. Barrett saw him, and found him com plaining of much pain; he looked faint, and his puls was at times scarcely perceptible. There was nov some fulness and dulness on the side affected, an also in the course of the left inguinal canal, but n pain in the testicle. He had vomited once only, an then directly after taking some beef-tea. He sank and died about thirty hours after the first attack On opening the abdomen, and putting aside the intes tines from the left side, a dark mass of coagulum could be seen behind the smooth surface of the peri toneum, filling the left lumbar region and iliac fossa and extending into the hypochondriac region above and inguinal canal in front. On the removal of thi clot the aneurism was found burst. It was situated little above the origin of the two iliacs, and the aort above it was very much diseased and rigid, and ha quite lost its proper form. Dr. Barrett said th peculiarities of the case were the patient's rallying a first, and the prominence in the groin, and the pai simulating the passage of a stone. There was n blood effused into the peritoneum.

Tubercle of the Kidney. Mr. NASH shewed two ver well marked specimens of this disease from two diffe ent patients who had died in the Royal Infirmary. I the first case, a young girl aged 18, a prostitute, was ad mitted for slight laceration of the hand. She had symp toms of irritation of the bladder, pain after micturition etc. A stone was suspected, but none found. Th patient was going out when she was seized with apo plectic symptoms, and died in three days. There wa a very great deposit of calcified tubercle in both kid neys; no lesion of the brain.

In the second case, a boy aged 14, was admitte with symptoms of irritation of the bladder, passin blood, etc.; no stone was found in the bladde There was great emaciation and sweating; no hæ moptysis, but dulness over the left lung. Tubercula disease of the kidneys was diagnosed, and sedative were given. Very extensive tubercular deposit wa found in both kidneys.

Imperforate Anus. Dr. IRVINE shewed the intes tines of a child on whom he had operated for imper forate anus. The child, a male, was born on Marc 13th, 1864, at 2 A.M. At 4 P.M. he seemed quite well bowels not yet moved; his urine stained the line of a yellowish colour. On the morning of the 14t Dr. Irvine was sent for, and found the nurse ha given a dose of castor-oil the previous evening, an

child had vomited that morning for the first time. examination, he found no trace whatever of anus. e abdomen was swollen, but not tender or tympa- ic. There was constant straining. He determined operate; and at 5 P.M. made an incision in the sial line about half an inch in length, and termi- ing about half an inch from the coccyx. After iding the skin and subjacent tissue, he introduced robe for the purpose of exploring, but did not suc- d in finding the gut. He then passed his finger ng the hollow of the sacrum, making way with the fe, and at the end of rather more than an inch and alf from the surface he felt a pouch, which he ictured, but no meconium or flatus escaped. He n introduced into the artificial rectum a dossil of smeared with castor-oil, and left under the im- ssion the child would die. At noon next day, he nd the lint *in situ*, but great straining efforts had n made by the child during the night. The urine stained the linen as before; vomiting had oc- red once after the operation. He removed the and found it was tinged with the colour of es, and its removal was followed by the expulson of as. He did not replace the lint, but ordered a e of castor-oil to be given, and next morning was ghted to find the child had soiled three napkins a liquid yellow fæces. He again ordered castor- o be given, and the dose was continued from day lay, each dose being followed by two or three mo- s and free passage of flatus. On the 21st, there a very free motion, and he ceased to attend the d for the present. On April 1st he was again moned, and found that the urine had continued tain the linen, and for four days the child had vo- ed twice or thrice daily, and had had very slight on of the bowels. There was great tenderness the abdomen. The child gradually became se, and died on April 16th, exactly one month after birth. The small intestines were found to be in a ural state, but the large intestines were enor- sly distended and filled with fæces, which must in have lodged in the intestines since the child's h. The rectum measured five inches in circum- ice, and communicated directly with the bladder, ell as with the canal which Dr. Irvine had made. he CHAIRMAN said the case was very interesting, icularly from there being such a continuous his- of its progress. Possibly an opening in the loin ht have been of service.

r. BARRETT mentioned a case where there was no ; the rectum opened into the bladder, the an- r wall of which was wanting.

r. H. STEELE had seen a case in Dublin in which æces escaped through the bladder from birth.

cosis. Dr. BALMAN shewed under the microscope r affected with this disease.

ansmission of Secondary Syphilis: with Remarks. . SKINNER, M.D. The principal facts of the case as follows. A lady, perfectly free from syphilis lf, was confined on April 18th, 1863. Within a of its birth, the skin and mucous surfaces of the shewed unmistakable symptoms of hereditary ilis in an exaggerated form. The breast milk dis- ared, and every form of artificial food disagreed so, a wet-nurse was the only alternative, and a hy one was procured. The child scratched the of the nurse's breast beneath the left nipple, ng an ugly irritable sore, which ultimately d. Within five weeks from the date of this ch, the nurse became covered with a roseola copper-coloured rash, the same as was seen on hild. On examining the husband, he was found labouring under chronic syphilitic ulceration of ongue, the result of a chancre which he had had years before, and for which he had been severely salivated more than once. In his remarks upon the case, Dr. Skinner alluded to the responsibility of the medical adviser to the nurse and to the law in recommending or passing a nurse, to oblige the parents, knowing that the child is actually suffering from syphilis. Believing himself liable to an action in this case, he had warned the parents that they must take all risks and protect him from actions at law, and this they agreed to do. He also thought this case went to prove beyond all doubt the *certainty* of the transmissibility of secondary syphilitic symptoms. He was not, however, prepared to believe, as many do, that the poison of constitutional or any other kind of syphilis can be introduced into an uncontaminated system by simple contact of a diseased subject with a healthy and unbroken epidermis.

Some discussion, in which Dr. Barrett, Mr. Walker, Mr. Irvine, and Mr. Hodgson took part, followed the reading of this case.

Correspondence.

THE LORD CHANCELLOR'S COUNTY COURT BILL.

LETTER FROM J. H. GRAMSHAW, M.D.

SIR,—The Lord Chancellor has just brought in a Bill to facilitate the recovery of debts under £20; but, to my mind, it will have the effect of clearing the ledgers of many medical men otherwise than by payment of the amount due to them. Besides other objectionable enactments, it prevents creditors from suing for debts due more than a year. A debtor, whose bill has not reached him till a period of ten months has elapsed since it was contracted, may thus avoid being made to pay at all, by slipping away for the remaining two months of the year. Another clause, which will be objectionable to most masters, is to the effect that, if a county court judge has decreed a certain weekly payment against a servant, a notice to that effect is to be sent to the master by the court, and he is *required* to become accountable for his servant's payments. Now, I am much obliged to anybody who will make those who owe me money a little more prompt in their payments; but I think that, if this bill is to become law as suddenly as is proposed—viz., on the 1st of January next—a very large proportion of medical and other professional men will be very great losers. The bill will be a very great benefit to trade generally; but to professions it seems to me quite the contrary. I think we ought, by public meeting, or by petitions, or both combined, to express our sense of it at once, as it is brought in by a member of the Government, and is very likely, in some shape, to become law.

I am, etc., J. H. GRAMSHAW.

May 1864.

SIR,—The Lord Chancellor's Bill for amending the County Courts Act contains a clause which remits the liability of debtors where the accounts are of more than twelve months' standing. As it now stands, this will bear most injuriously on the medical profession, as it is a rule among the public to take long credit; and, were it not for the legal liability lasting also for a long period, this would too commonly run into repudiation, as the experience of medical men will abundantly testify.

If nothing be said by our profession against the Chancellor's proposal, our acquiescence will be inferred. I only ask the members of the profession to give it their serious consideration; for it is high time

that we look to our own interests; and the British Medical Association will give us the means of expressing our views in a manner that will be felt by the legislature. I am, etc., MEDICUS.

May 17th, 1864.

FOREIGN BODIES IN THE EAR.

LETTER FROM JOHN THOMPSON, F.R.C.S.

SIR,—I observed a letter on this subject in your JOURNAL of April 9th, in which reference is made to a variety of instruments of use in removing foreign bodies from the ear. I have had some experience in these cases, and have used the instrument that appeared most suited to each particular case; but the other day a little sufferer was brought to me with a small rounded stone in his ear, which had been in some time. On looking into the ear, the stone seemed so covered with secretion, that I thought I would first well syringe the ear with water, so as to have a better observation of the pebble, and a better hold of it for extraction. On placing the head in a proper position, and using the syringe for a little time with a fair amount of force, to my great satisfaction, not only was the ear cleaned, but the foreign body, larger than a barley-corn, came away in the returning stream of water.

This may seem a very little matter for insertion in the JOURNAL; but I nevertheless think it may not be amiss, in every case of a foreign body in the ear, to try first the effect of well-employed syringing, before resorting to the other more painful modes of extraction. I am, etc., JOHN THOMPSON.

Bidef rd, May 17th, 1864.

DO LONDON LECTURERS LECTURE FOR PRACTICE OR PAY ONLY?

LETTER FROM LIONEL S. BEALE, M.B., F.R.S.

SIR,—As you have repeated the assertion that London lecturers lecture "for practice or pay, and not for science", I trust that you will permit me to state that, from long personal acquaintance with many London lecturers, I feel quite certain that your conclusions are groundless.

Nor can I allow myself to be instanced as a "glaring exception" to your sweeping assertion, and as "proving the rule." I am confident that there are many more than three lecturers in London, lecturing and working hard, not for pay nor for practice, but to advance medical science, and with the view of diffusing the constantly increasing scientific professional knowledge in the hope that it may be turned to practical account as soon as possible.

Be assured that your estimate of the motives which influence London lecturers is utterly opposed to many facts that could easily be brought forward. I cannot refrain from expressing the opinion, that it is as unfounded and as ungenerous as an assertion which occurs a few lines further on in the same article, to the effect that "gratuitous medical services are a system of *medical advertising.*"

Doubtless, your "honest wish and endeavour is to attempt to raise the profession"; but it is not fair to suppose that you alone are working in this direction, or that the only methods of effecting this object are those which you propose. We do not all take so gloomy a view of the present state of the profession as you do; or consider that it really has to be raised "out of this low estate in which it lies bleeding." We are not so prostrate as this; and I am sure that the active members of our Association are by no means so hopelessly despondent as its "organ" appears to be. I am, etc.,

LIONEL S. BEALE.

61, Grosvenor Street, W., May 24th, 1864.

[We are glad to find so high an authority as Dr. Beale differing from our views, and only wish his opinion were backed by some tangible and convincing facts. In the meantime, we must, unfortunately, maintain the correctness of our own opinion. Dr. Beale confuses things, in suggesting that we pretend to be the only one endeavouring to raise the profession. Our remarks in that way were addressed to two medical journals. We simply advised those journals, when they differed from us, not to substitute abusive and ungentlemanly language in the place of argument. EDITOR.]

A SIMPLE OPHTHALMOSCOPE.

LETTER FROM J. Z. LAURENCE, ESQ.

SIR,—I find that, if a convex lens of about two inches focus be placed in close apposition with a concave one of about nine inches focus, and this combination be held before the patient's eye at the distance the object-lens of an ordinary ophthalmoscope usually is, it forms an ophthalmoscope, uniting in itself the reflecting and refracting elements of the instrument. For, whilst the light from a flame is reflected by two surfaces (the outer concave surface of the concave lens and the internal concave surface of the convex one) into the patient's eye, it is also, on its emergence therefrom, refracted by the effective convex element of the combination, so as to form the usual indirect image of the fundus oculi at the focal length. With such a rough combination, I have been able to obtain a distinct image of the optic nerve, retinal vessels, etc.; and I may hence not unreasonably hope a properly constructed meniscus will in itself fulfil the conditions of the mirror and object-lens of an ordinary ophthalmoscope.

I am, etc., J. Z. LAURENCE.

30, Devonshire Street, Portland Place, May 3rd, 1864.

MEDICAL EDUCATION AND MEDICAL PARASITES.

LETTER FROM JOSEPH STEPHENS, M.D.

SIR,—I trust your able articles on medical education will have their due weight with the members of the Medical Council when they next deliberate. It strikes me that, if uniformity were enforced in the curricula of different schools, and also in the examinations at the different boards, and a full correlation were established between them, the necessity for the grinder, whose existence you deprecate, would no longer exist. At present the course of preparation, as it is miscalled, has but little relation to the examinations to be undergone; and the intervention of the grinder with his practical knowledge of the peculiar views and requirements of the examining bodies, is, to the ordinary intellect, absolutely necessary. Without his pilotage, the student will often find that while he has been directing his chief attention, and devoting his greatest mental energies to the minute acquisition of subjects which the examiners ignore or glance at cursorily, he has scarcely come into contact at his school with matters which his examiners deem of paramount importance.

By raising and improving the standard of general and professional education, I doubt not that a more healthy tone and a greater vigour will be infused into the body medical, and morbid growths will become

e rare. But do you think, Mr. Editor, that this ıe will be sufficient to prevent the future im- ıtation and development of the parasites which rish so luxuriantly on the parent stock? At ;ent, the profession appears to be peculiarly genial to parasitic growths; and if these do absolutely sap its strength, they certainly do r utmost to divert and appropriate its nutrition, to destroy its comeliness. I need not tell you just now two well-marked varieties of the medi- parasite are especially rampant, the advertising ety, and the homœopathic variety. You have, as ell know, done your utmost to check their ravages, sever them from their connexions; but at the of obtruding the subject on your notice *ad seam*, I will venture to call your attention to the e book I enclose. I would ask you whether it is ng or creditable that those who prostitute the ıe of the most honoured of the profession to sell r "£5 cases" of "Vital Restorative" should con- e enrolled in a register of gentlemen, and be able arade, *ad captandum vulgus*, that they are "duly stered under the New Medical Act?" The book is g sown broadcast in the homes of England. The I send you was found on a Clergyman's drawing- a table; it had arrived by post, and, on the credit ts external appearance, and of the name so con- uously emblazoned on the cover, had without in- al examination been thus disposed of. You may gine the disgust of the clergyman, when his at- ion was drawn to the real nature of the book, and n he found that his wife had read it, and that for ral days it had been ostentatiously exposed to curious inspection of a numerous family and many ors.

ıe treatment of parasites who thus pollute private with their disgusting exuviæ is, I think, suffi- tly plain; the remedy is in the hands of the Me- l Council, and they ought to apply it effectually. ıe homœopathic variety of medical parasite is e insidious in its growth, is more widely spread, has fastened itself very firmly on the profession on public credulity; its treatment is, therefore, e difficult. I trust, however, if it cannot be red and destroyed by a *coup de main*, that some- g will speedily be done by the Medical Council to k its future ravages.

edical qualifications are, however, to my know- e, often obtained under absolutely false pretences. ll give you a case in point. Not long ago I saw nnouncement of the appointment to a homœo- ic dispensary of a doctor of medicine, who had taken his degree at an university where I had y reason to believe that orthodox and scientific icine reigned supreme. I at once wrote to the ipal of the university, to know how such a child l be born of such a parent. I was informed the graduate had been most carefully examined the principles and practice of medicine, and that ıd most distinctly and specifically expressed his rence to the commonly received views as to the cines and their doses proper to be given in par- ar cases of disease! The diploma so obtained at became his license to practise homœopathy! , if such flagrant breach of faith can continue to erpetrated with impunity; if men can, by un- ulous prevarication or gross mendacity, cheat ining Boards out of their diplomas, and at once their avowed principles, it will be a crying dis- e to the profession in general, and to the Medical ıcil in particular.

elieve that education will never prevent unprin- d men from setting their sails to catch the first of popular caprice, and sheering off into the ice of any humbug which promises to fill their pockets. I believe it will never prevent unprincipled men from subscribing to legitimate medicine in order to obtain qualifications to practise the most lucrative form of current quackery. And, if these things are so, I think you will agree with me that the sooner the Medical Council set themselves fairly to work to prevent such abuses, the better it will be for the interests and respectability of the profession, and for public health and morals.

I am, etc.,

JOSEPH STEPHENS.

Brighton, 25th April, 1864.

IRIDECTOMY.

LETTER FROM JAMES DIXON, ESQ.

SIR,—The last letter published by Mr. Bowman on Iridectomy, appeared in the BRITISH MEDICAL JOURNAL of April 4th; and, a week later, you summed up the evidence which had been brought forward by so many writers on the subject, and concluded by declaring, that "argument had said its last word." Evidently this is not Mr. Bowman's opinion; and in this day's JOURNAL, he re-opens the question, as it affects myself, dividing his charges against me into two heads: 1. "*As to the scientific points;*" and 2. "*As to the charges of recklessness, ignorance, heartlessness, and unworthy motives, brought by Mr. Dixon against some of those who have promoted the treatment of glaucoma by iridectomy in England.*"

The first head he subdivides into four sections (*a, b, c, d*); and demonstrates to his own satisfaction my want of knowledge about glaucoma and iridectomy in general; my unacquaintance with the literature of the subject; my inability to distinguish one kind of optic nerve cupping from another; and so forth. To meet such charges, I can only reply that, having diligently employed the same means of diagnosis as Mr. Bowman has employed, and having used the ophthalmoscope with certainly as much care as he has done, I consider myself quite as competent as he is to pronounce an opinion upon any case of ocular disease.

As regards the views of Gräfe and other foreign surgeons, they are open to all who choose to read their works; and certainly I have done this pretty regularly, from the first announcement of Gräfe's treatment of glaucoma down to the present time. Mr. Bowman, however, considers that I have read to little purpose, and have not at all apprehended Gräfe's opinions. We are not fair judges, it may be, of our own abilities; but I cannot see any grounds for Mr. Bowman's assumption of being my superior, either as an observer of morbid appearances, or as a student of the current literature of our profession.

I may repeat what I have before stated, that for years past I have been in the habit of practising Gräfe's operation for iridectomy in those *special* cases which I consider to demand it; and I am quite prepared to say as much in its favour as Mr. Bowman himself can do, as a means of arresting *acute glaucoma*, and preventing the otherwise inevitable blindness which that disease induces.

I pass over Mr. Bowman's contemptuous remarks as to my professional knowledge in this cursory manner, because they are little more than repetitions of his former attacks, and are obviously reproduced on the present occasion for the purpose of decrying my competency to pronounce sound opinions on the subject of glaucoma, and *à fortiori* to find fault with the practice of others. I proceed, therefore, to the second head of Mr. Bowman's indictment—"*As to the charges of recklessness, ignorance, heartlessness, and unworthy motives, brought by Mr. Dixon against some of those who have promoted the treatment*

of glaucoma by iridectomy in England—charges which, coming from such a quarter, and not having been withdrawn on a remonstrance some time ago privately addressed to him, cannot be allowed to remain on record with their true character unexposed."*

The history of this "remonstrance" is as follows. The co-operation of two of Mr. Bowman's colleagues at Moorfields having been secured, a letter, as his and their joint production, was sent to me on January 28th. It was accompanied with a paper containing a series of passages from my published works and letters, which I need not here reproduce *in extenso*, as the more prominent among them are to be found in Mr. Bowman's letter in the BRITISH MEDICAL JOURNAL of this day. (P. 569-70.) After alluding to the "strong language" which, in three recent letters, I had used in reference to the supposed abuse of iridectomy in England, both at an earlier period and at the present time, the Remonstrants thus addressed me: "At the time the second edition of your work appeared, those who had performed the operation of iridectomy in this country were few in number, and even at the present date the number is very limited, and the Moorfields Hospital has furnished the chief part of the cases upon which operations have been performed. It follows, as a necessary consequence, that a very serious imputation is cast upon a few ophthalmic surgeons, amongst whom all your colleagues appear to be included..... As we are unwilling to believe that you really intended to give expression to such a censure on your colleagues, either senior or junior, or upon any others who have been working at Moorfields; and as we entirely deny the correctness of the grounds on which you rest your statements, we ask you to consider whether it will not be possible for you to re-examine the subject, and withdraw imputations which, in justice to all parties concerned, we cannot allow to remain unanswered."

To this letter I replied on the following day. "Inasmuch," I said, "as the statements I have at various times made, as to the serious mischief I have known to ensue from the injudicious employment of iridectomy, were the result of my own observations, I cannot consent to retract them, as, by so doing, I should proclaim myself to have published what was untrue." I added, "there is one passage in your letter so grossly unfair, that I cannot pass it over without an indignant protest." [The passage was that just quoted, from "At the time the second edition," to "appear to be included."] "A more inconsequent deduction," I said, "could not possibly have been made than is contained in this passage. Among my hospital colleagues, there are men of the highest standing, as regards operative skill, judgment, and conscientiousness, whose friendship I value so highly, that I repudiate, as a calumny, the assertion that I have directed towards them the remarks I have felt it my duty to make." And I begged that my letter might at once be shown to my junior colleagues.

On February 5th, I received a second communication from the Remonstrants. They said: "Notwithstanding your indignant protest, and the surprise you express at our presumed inconsequent deductions, we still feel that your sweeping imputations, containing charges of gross moral delinquency [*sic*] on the part of practitioners whose names are not specified, must naturally, under the circumstances, be understood as including the staff at Moorfields."..... "We are far from wishing you to contradict any statements you have made, unless, by further inquiry, you should convince yourself that they have been made in error; all we suggest is that, having published severe censures, which, if left unexplained, are calculated, a your colleagues think, to injure them most unjustly and which have caused them pain, you would give t them collectively a public, as well as private assu ance, that such statements were not intended, eithe directly or indirectly, to apply to them, or to cast shade upon the reputation of the Moorfields Hosp tal."

I answered: "Such an assurance, I maintain, yo have not the slightest right to demand. All I hav written on the operation of iridectomy has bee written publicly, and on public grounds; and utterly repudiate your right to give a personal tur to statements, which I have published to the worl on broad and general principles. Neither you n any other individuals are entitled, in reply to suc published surgical statements, to ask me, 'Do yo mean your remarks to apply to us?' If the operatio of iridectomy had been performed only at one plac and by one person, the case might be different; suc a person might fairly say, 'Your censures must appl to me, and to me only.' But iridectomy has bee performed all over the kingdom—nay, all over th civilised world; and for me to publish a series of di avowals, as to my remarks applying to this or tha hospital, or to this or that surgeon, would be to mak myself contemptible in the eyes of the professio I hope this very unpleasant correspondence, whic has been forced upon me, may now close; but shoul you persist in what I must regard as unreasonabl demands, I must beg that such a public matter ma be publicly judged, by the printing, in one of th medical journals, of all the letters which have passe between us."

A short note, acknowledging the receipt of th above, and stating that the Remonstrants had "r objection to publishing the correspondence," te minated this series of letters; and thus the matt rested, until Mr. Bowman, in his own name, renewe the attack in his letter of to-day.

In conclusion, I would remark that, in reproducir the substance of the letters which have passed b tween myself and the Remonstrants, I have ende voured to do so fairly. To have printed every se tence, together with all the long extracts from m published works and letters, would have so much i creased the bulk of my present long communicatio as, perhaps, to have rendered it inadmissible to th pages of your JOURNAL. I trust I have succeeded giving a fair and impartial version of all the essenti parts of the correspondence. I am, etc.,

JAMES DIXON.

Portman Square, May 21st, 1864.

* The expressions "heartlessness" and "unworthy motives", are not quoted from any writings of mine.

THE ARMY AND NAVY MEDICAL BOARD AND THE LICENSING BODIES.

SIR,—During the recent session of the Gener Medical Council, Dr. Apjohn brought forward a m tion, to the effect that the Army and Navy Medic Boards be requested to furnish the Council annual with a list of all candidates examined by them, spec fying the number of those who passed and those wh did not pass, and "the names of the institutions Schedule A from which they received their profe sional qualifications." In the report in your JOU NAL, I observe that the resolution was objected to b Dr. Alderson, as being likely to act unfairly on th examining boards: it passed, however—I believe by large majority.

Now it seems to me that this resolution, whi doubtless arose out of the narrative given by I Parkes on a previous day, was out of place. T licensing bodies, which are under the jurisdiction

Council, are only called on to give a list of cantes *admitted* and *rejected;* while the Army and y Boards, with which the Council has no direct ern, are requested to furnish not only the names, to mark also the *institutions which granted the ifications!* Thus these boards, although possessno power either by charter or by Act of Parliat, are virtually set up as censors over all the ising bodies in the kingdom! This certainly does seem just to the chartered bodies, who ought to e fair play, notwithstanding their faults.

I am, etc., N. S. U. C.

Medical News.

OYAL COLLEGE OF SURGEONS OF ENGLAND. The wing gentlemen, having undergone the necessary inations for the diploma, were admitted mem- of the College at a meeting of the Court of miners, on May 12th.

Blick, Thomas Edward, Islip, Oxon (St. Mary's)
Bostock, Edward Ingram, Horsham, Sussex (St. Bartholomew's)
Bowen, Philip, Kennington (St. Thomas's)
Evans, John Tasker, Hertford (St. Bartholomew's)
Fall, Joseph, York (St. Bartholomew's)
Frellet, Charles John, Lloyd Square (St. Bartholomew's)
Griffiths, Griffith, Alltwen, Glamorganshire (University College)
Johnson, Joseph, Hogsthorpe, Lincolnshire (Guy's)
McCully, James, Belfast
Mackinnon, Henry Wm. A., Somerset Street (King's College)
Owen, Robert Edward, Beaumaris (Guy's)
Perks, Charles, Lichfield
Pitt, Charles W., Malmesbury (Middlesex)
Shaw, Thomas C., Stockport (King's College)
Smith, John A., Louth, Lincolnshire (Middlesex)
Squires, William Westbrooke, Liverpool
Tudge, Timothy, Yeovil (Middlesex)
Warburton, Joseph Wilkinson, Liverpool
Watmough, William, Pocklington, Yorkshire (King's College)

nitted on May 13th—

Battersby, Henry Wade, Dublin
Commins, Henry, Bray, co. Wicklow
Evans, Thomas Griffith, Lawrence Lane (University College)
Jones, Alfred Orlando, Barnsbury (St. Thomas's)
Jones, John Talfourd, Brecon, South Wales (University College)
Liddard, William, Mildmay Road, Islington (Middlesex)
Manser, Frederick, Chatham (Guy's)
Nimmo, Thomas, Kirkaldy, Fifeshire
Peel, John Richard, London (King's College)
Rawle, Francis, Lambeth (University College)
Shuttleworth, George Edward, Russell Place (King's College)

OYAL COLLEGES OF PHYSICIANS AND SURGEONS, NBURGH. (Double Qualification.) The following lemen passed their first professional examinations ng the May sittings of the examiners.

Arrowsmith, William H., Dublin
Clarke, Alexander, Campsie
Crabbe, William T., Kirriemuir
Dickson, Frank Kennedy, Edinburgh
Esson, Alexander S., Edinburgh
Hay, George W. Robertson, Roxburghshire
Hilward, James, Bristol
Nicholson, Henry Alleyne, Penrith
Paterson, Thorburn, Bonnyrigg
Parbelton, Arthur Strickland, Leeds

ne following gentlemen passed their final examions, and were admitted L.R.C.P.Edinburgh, and .C.S.Edinburgh.

Allen, John, Malta
Callaghan, James, Cork
Campbell, John Alexander, co. Londonderry
Franke, Richard, Lancashire
Davson, Smith Houston, Berbice, British Guiana
Jenkins, Evan, Llandyssul, Cardigan
Macdonald, George, Perthshire
Mackenzie, Stephen Coull, Calcutta
Madigan, John Francis, co. Limerick
Mulvany, Matthew, co. Meath
O'Neill, Patrick, co. Kildare
Purcell, Theobald Andrew, Dublin
Shedden, Arthur William, Madras
Sinclair, William, Stirling
Stewart, Francis M'Bean, Dundee
Thomson, John, Fifeshire

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentleman passed his first professional examinations during the May sittings of the examiners.

Hume, George Haliburton

The following gentlemen passed their final examinations, and were admitted licentiates of the College.

Christie, George Augustus, New Brunswick
Cook, Henry, Newport, Monmouth
Dobie, William, Langholm
Hill, James, Northumberland
Hope, James Johnstone Hyslop, Lanarkshire
Knox, John, Tyrone
Lyon, James George, Forfar
Macdonald, Angus, Aberdeen
McCarty, John Winspeare, Cork
Morris, Thomas, Fifeshire
Munro, Alexander Donald Neil, Edinburgh
Orr, Adam, Cloumel
Phayre, Thomas Raleigh, co. Limerick
Provan, James, Haddingtonshire
Skimming, Robert, Wigtown
Smith, James, Dumfries
Smith, Parker Arthur, Canada
Telford, Archibald Barr, Lanarkshire
Wilson, William John, co. Armagh
Wyber, John, Glasgow

APOTHECARIES' HALL. On May 19th, the following Licentiates were admitted:—

Cowen, Philip, Kennington
Davey, Francis Albert, Bath
Eusor, John Arthur, Carter Street, Walworth
Heygate, William Nicholas, Hanslope, Stony Stratford, Bucks
Ireland, John Roaf, Kingswinford, Staffordshire
Jenkins, Evan, Cardigan, South Wales
Pearless, Charles Durrant, East Grinstead, Sussex
Richards, Frederick William, Winchester
Smallman, Edwin Charles, Barnet, Herts
Thomas, Robert Wrentmore, Cheyne Walk, Chelsea
Wagstaffe, William Warwick, Warwick Place, Kennington
Warburton, Joseph Wilkinson, Royal Infirmary, Liverpool
Wilson, Henry, Glasgow

At the same Court, the following passed the first examination:—

Andrews, Richard James, Guy's Hospital

APPOINTMENTS.

ALLINGHAM, J. H., Esq., appointed Dental Surgeon to the Surrey Dispensary.

*FOX, W. Tilbury, M.D.Lond., appointed Physician to the St. John's Hospital for Diseases of the Skin.

FRODSHAM, J. Mill, M.D., appointed Physician to the St. John's Hospital for Diseases of the Skin.

HEYGATE, Wm., Esq., elected Resident Accoucheur to St. Thomas's Hospital.

*WILSON, Erasmus, Esq., F.R.S., elected Senior Surgeon to the St. John's Hospital for Diseases of the Skin.

ARMY.

DRYSDALE, Staff-Assistant-Surgeon A. K., to be Staff-Surgeon, *vice* J. W. Mostyn, M.D.

MOSTYN, Staff-Surgeon-Major J. W., M.D., to be Surgeon 76th Foot, *vice* J. Jopp, M.D.

VERDON, J. J., Esq., to be Staff-Assistant-Surgeon.

ROYAL NAVY.

CLOSE, Henry A., Esq., Assistant-Surgeon, to the *Naiad.*

HANBURY, Ingham, Esq., Assistant-Surgeon, to the *Cumberland.*

HATHERLY, N. C., M.D., Surgeon, to the *Assurance.*

HOLLINGSWORTH, J. McK., Esq., Assistant-Surgeon (additional), to the *Euryalus.*

HUGHES, Thomas W., Esq., Assistant-Surgeon, to the *Formidable.*

JONES, William, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

HONOURABLE ARTILLERY COMPANY OF LONDON.

BARRINGER, T. S., M.D., to be Surgeon.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

ANDERSON, M. F., Esq., to be Assist.-Surg. 2nd Warwickshire R.V.

BENNETT, C. H., M.D., to be Assist.-Surg. 3rd City of London R.V.

CAMPBELL, W., Esq., to be Assistant-Surgeon 2nd Administrative Battalion Renfrewshire R.V.

CARTER, R. B., Esq., to be Honorary Assistant-Surgeon 1st Gloucestershire Light Horse Volunteers.

DEATH.

TOMKINS, Charles, M.D., of Weston-super-Mare, at West Monkton, Somerset, aged 68, on May 17.

Cholera has been committing great ravages at Bombay, Broach, and Baroda.

Surgeon-General Hammond. It is said that the court-martial on Dr. Hammond is still in session, and examining witnesses. What the decision will be remains to be seen.

Donation. Lord Stanley, M.P., has transferred to trustees the sum of £1000 for the benefit of the West Norfolk and Lynn Hospital, and one or two other kindred local institutions.

Royal College of Surgeons. Professor Fergusson will commence his course of lectures on Monday, June 6th, in the theatre of the Royal College of Surgeons, on the Progress of Surgery during the present century. These lectures will be delivered on Mondays, Wednesdays and Fridays, at four o'clock.

The Queen's College, Cork. The Professor of Surgery has had a letter direct from the Home Office, dated May 10th, 1864, through the President of the College, dispensing with his services. He also held the Inspectorship of Anatomy for the South; and Dr. Beamish, medical officer to the Cork Prisons, has been appointed Inspector, in the room of Dr. Bullen.

Bequests. Mrs. Veal, of Hampstead, has left by will bequests of £500 each to the University College Hospital, King's College Hospital, and the Cancer Hospital. Sir W. Brown, Liverpool, has left by will to the Northern Hospital, £1,000; Southern Hospital, £500; Royal Infirmary, £500; Deaf and Dumb School and Blind School, each £250; Eye and Ear Infirmary, £100.

Dangerous Percussion-Caps. A surgeon in the *Times* draws attention to the effects of cheap and bad percussion-caps. Many eyes are entirely lost every year by them. They are used by children in toy guns and pistols, and at fairs and other places of public resort. They are composed of a very brittle metal, which in the explosion is apt to splinter, and the fragments fly off with dangerous rapidity.

Dr. Normandy, who expired on the 10th inst., was a Frenchman by birth, but had made England his home. In addition to his numerous works on chemistry, and direct services to the department of science which he specially professed, Dr. Normandy was the patentee of the apparatus for the distillation of aërated fresh water from sea water, an invention of the utmost practical value on board ocean-going ships, in the equipment of which it has come to be considered in the light of a necessity.

Cattle Disease Prevention Bill. A deputation from the Metropolitan Association of Medical Officers of Health had an interview with the Right Hon. H. A. Bruce and Mr. Baring at the Home Office on the 21st inst., on the subject of the Cattle Importation and Diseases Prevention Bills. The deputation, which was introduced by Mr. Locke, M.P., consisted of Dr. Letheby, Dr. Addis, Dr. Ballard, Mr. Burge, Dr. Vinen, Dr. Buchanan, Dr. Druitt, and Dr. Porton.

Army Medical Department. A parliamentary return, just issued, states that the number of medical officers who have retired from the army, under the provisions of the Royal Warrant of October 1858, includes 3 inspectors-general, 4 deputy-inspectors-general, 4 regimental surgeons-major, and 6 staff-surgeons-major. In addition, 14 regimental assistant-surgeons and 13 staff-assistant-surgeons have resigned since January 1st, 1862. Among the vacancies now existing in the various grades of the army medical department, there are 26 regimental surgeons and 64 assistant-surgeons, staff and regimental.

The Pharmaceutical Society. The *conversazi* held on the 17th inst., in Bloomsbury Square, numerously attended. A fine collection of med plants was exhibited; and great interest was exci by some specimens of poison extracted from the u tree, which in bygone times was regarded with s mysterious awe. Amongst the numerous objects scientific and antiquarian interest was a doctor's of the eighteenth century, although it did not v materially differ from those of the present day. So admirable specimens of photo-sculpture, executed Mr. Claudet, were much admired; and praise freely bestowed upon an ingenious invention of Imray's, by which a semaphore railway signal may turned by the agency of electricity. During evening Mr. Ladd introduced several optical exp ments, and Professor Abel, F.R.S., of Woolwich, livered an entertaining lecture on gun-cotton.

Royal Medical Benevolent College. The nual general meeting of the governors of this Colle was held on May 18th, at the offices of the Colle No. 37, Soho Square; Sir Charles Locock in t chair. The report stated that during the past ye no events of very marked importance to the instit tion had occurred, but it continued steadily the go work for which it was founded. The governors h to fill up one vacancy in the pensioners, arising fr a death. There were six vacancies for foundati scholars, to be filled up from forty-four candidate and two vacancies would arise from superannuatic Since the last annual report eight of the college bo had passed the preliminary examination at the C lege of Surgeons, one that at the College of Phy cians, and five the matriculation examination of t University of London. At the present time the were 190 resident boys, besides 10 day scholars, a it was the intention of the Council to appoint an a ditional master. A systematic course of lectures a lessons on chemistry and natural philosophy had be established under the direction of Dr. Albert Bernay The Council had decided on opening the school to t sons of gentlemen not belonging to the medical pr fession, and with this view recommended that t second bye-law which precluded the admission as r sident scholars of any but sons of medical men rescinded, and the following adopted in its place:- "The school is intended for the education of 200 boy between the ages of eight and nineteen, none bein above fifteen years old on admission. One hundre and eighty boys, at least, shall reside in the colleg forty or more of whom shall be foundation scholars, t remainder being exhibitioners, and such boys, n being the sons of medical men, as shall be permitte by the Council to receive their education at th college. The foundation scholars shall be entirel educated, boarded, clothed, and maintained by th college. The exhibitioners shall pay a sum of £40 year each for education, board, lodging, and washing without any extra charge for the use of books, instru ments, etc. The scholars not the sons of medica men shall pay £63 a year each for the like advan tages. All payments shall be made in advance a the commencement of each term." The receipts fo 1863 were greater than those of 1862 by £364. Th report was adopted. Messrs. H. Blenkarne, T. B Curling, William Gilpin, C. J. F. Lord, Richard Quain Dr. Ray, Dr. Sibson, and Messrs. A. Sterry, W. Street and J. Ward, were re-elected members of the Council The formal resolution altering the constitution of th school having been moved, Mr. Cattlin moved as ar amendment, "That the school was intended for the education of 200 or more boys, between the ages o eight and nineteen, none being more than fifteen 180 boys at least should reside in the college, 40 o

ore of whom should be foundation scholars, and the mainder exhibitioners and commoners—the sons of edical men, and such boys not sons of medical men shall be permitted by the Council to receive edu-tion at the college. The exhibitioners and com-oners shall be admitted in such manner and in such lative numbers as the Council should from time to me determine, to be supported, clothed, and fed by e college; that the exhibitioners pay £30 for board, dging, and washing, without extra charge for the e of instruments, etc., and that they should be the ns of medical men; the commoners to pay £40, d the sons of other gentlemen to pay £63." Ulti-ately both the original resolution and amendment re withdrawn, and the whole subject was again re-rred back to the Council for reconsideration, and to abody the views of Mr. Cattlin in their resolution, be submitted to a general meeting to be called as rly as possible. The meeting was adjourned for e election of one pensioner and six boys.

University College, London. The distribution prizes to the students of the Faculty of Medicine ok place on Tuesday, May 10th. The Right Hon. ord Wodehouse presided. The annual report stated at the numbers of medical students during the ssion 1863-64 was 149; and that the number of w entries during the year had been 41. Two former udents, Dr. C. H. Marriott of Leicester, and Dr. S. inger, had taken the degree of M.D. in the Univer-ty of London. Six candidates from the College had ken the degree of M.B. Of these, Mr. John Talfourd nes obtained the scholarship and gold medal in edicine, a gold medal in forensic medicine, and a ace in honour in midwifery. The Atkinson Morley rgical scholarship of £45, tenable for three years, d been awarded to Mr. Thomas Griffiths; and the hibition in pathological anatomy to Mr. Alexander ruce, to whom had also been adjudicated the Long-dge prize for general proficiency. The report also ferred to an extension of the means afforded to udents for clinical study in the hospital. Since the undation of the medical school of the College, every portunity had been taken for establishing practi-l courses of study, in which the learner himself ight take an active part in the work. Thus, a urse of practical chemistry, involving work in the boratory, had been established by the late Professor Chemistry, Mr. Graham (now Master of the Mint), d had been continued by Professor Williamson. A hysiological laboratory had been opened for the ractical study of physiology, structural anatomy, d physiological chemistry; and a class for practi-l instruction in these subjects had been carried on y Dr. Harley since 1856. In the hospital, attention d all along been paid to means for making the stu-nts practically familiar with the work of their pro-ssion. Instruction in operative surgery on the dead dy was given by Mr. Marshall; by whom also in-ruction was given in the art of bandaging. Over nd above the clinical instruction afforded by the hysicians of the hospital, there had long been in-ruction in clinical surgery and clinical medicine by pecial professors of these subjects. During the past ear, however, Dr. Russell Reynolds, the Professor of linical Medicine, had instituted a new course of inical teaching, which had produced good results. certain number of the students had gone through his special course, the object of which was to bring ach individual into direct contact with patients, so hat he should, for himself, hear their complaints, xamine them, make his own diagnosis, and suggest he treatment which he thought advisable. This as done by requiring from each student a written eport in each case, according to a particular form, and by making that report the subject of subsequent examination and comment. Altogether, this plan was so promising of good that the Council had conferred special prizes and certificates on the students recommended by Dr. Reynolds for the merit of their clinical reports. The prizes were distributed as follows. *Anatomy and Physiology—Gold Medal and First Certificate*: I. Pearson Irvine, B.A., Lancaster; *First Silver Medal and Second Certificate*: James S. Cluff, Kildare, Ireland; *Second Silver Medal and Third Certificate*: Thomas Bailey, London. *Certificates*: 4, Marcus Beck, Isleworth; 5, Frederick Barton, Bedford; 6, Frederick B. Nunneley, Burton-on-Trent; 7, W. George Rigden, Canterbury; 8, Edward F. Willoughby, Brighton; 9, Alfred H. Garrod, London; 10, Charles J. H. Smith, London; 11, Henry Clothier, Haselmere, Surrey; 12, George O. Spencer, Notting Hill; 13, H. Carter Wigg, Geelong, Australia; 14, William A. Stuart, Barbadoes. *Anatomy.—Senior Class: Gold Medal and First Certificate*: G. O. Spencer; *First Silver Medal and Second Certificate*: F. B. Nunneley; *Second Silver Medal and Third Certificate*: H. Clothier. *Certificates*: 4, C. J. H. Smith; 5, E. F. Willoughby; 6, J. Pearson Hughes, Llandovery. *Junior Class.—Silver Medal and First Certificate*: Gysbert H. Maasdorp, Cape of Good Hope. *Certificates*: 2, Richard L. Roberts, Ruabon; 3, Nicholas Marshall, St. Austell; 4, Arthur Hensman, Northampton; 5, Louis M. Le Grand, Mauritius. *Chemistry.—Gold Medal and First Certificate*: J. S. Cluff; *First Silver Medal and Second Certificate*: Russell F. Carpenter, London; *Second Silver Medal and Third Certificate*: Charles Graham, Berwick-upon-Tweed. *Certificates*: 4, John T. Brown, Dorking; 5, Robert Colman, London; 6 (equal), J. Hindle Calvert, Accrington; Manning Prentice, Stowmarket; William R. Gowers, Coggeshall; 7, Ethelred Desse, West Indies; 8 (equal), Thomas R. Loy, Stokeley, Yorkshire; Phineas D. Abraham, London; 9 (equal), Thomas B. Hay, London; Robert C. Joy, London; William Thomas, Battersea. *Practical Physiology and Histology.—Silver Medal and First Certificate*: W. A. Stuart. *Certificates*: 2, H. Clothier; 3. G. W. Rigden. *Comparative Anatomy.—Gold Medal and First Certificate*: J. S. Cluff. *Certificates*: 2, John Williams, Llangudock, Carmarthenshire; 3, I. P. Irvine, B.A.; 4, W. R. Gowers; 5, J. Wreford Langmore, London; 6, E. Desse. *Principles and Practice of Medicine.—Gold Medal and First Certificate*: William Snow, Barnstaple; *First Silver Medal and Second Certificate*: Bryan H. Allen, London; *Second Silver Medal and Third Certificate*: M. Beck. *Certificates*: 4, George Jackson, Tavistock; 5, John Morison, Stirling; 6, G. W. Rigden; 7, W. A. Stuart. *Principles and Practice of Surgery.—Gold Medal and First Certificate*: Charles Bradley, Nottingham; *First Silver Medal and Second Certificate*: George Grewcock, Folkingham; *Second Silver Medal and Third Certificate*: William Spooner, Ealing; *Certificates*: 4, Griffith Griffiths, Altween; 5, William Akerman, St. Just, Cornwall; 6, Robert D. Lagg, Agra, Bengal. *Fellows Clinical Medal.—Gold Medal and First Certificate*: Bryan Holme Allen; *Silver Medal and Second Certificate*: Alexander Bruce, of London. *Special Class of Clinical Medicine.—First Prize* (Microscope): William Snow; *Second Prize* (*Guide du Médecin Praticien* par M. Valleix): John M. Whitwell, Kendall; *Third Prize* (Todd's *Clinical Lectures*): B. H. Allen. *Certificates*: 4, H. George Walker, London; 5, J. Morison; 6, Herbert Everitt, Norwich; 7, Joseph Thompson, Nottingham; 8, Thomas H. Green, Saffron Walden; 9, Samuel Mills, Huddersfield; 10, J. Williams; 11, Arthur Anstey, Australia; 12, John Stuckey, Langport; 13, Henry Clothier; 14, G. W. Rigden; 15, John W. Legg, Alverstock.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.— London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Greenhalgh, "On Placenta Prævia"; Dr. Aveling, "On Immediate Transfusion."

THURSDAY. Linnæan.—Chemical.—Royal (Anniversary).

FRIDAY. Western Medical and Surgical Society, 8 P.M. (Annual.) Dr. Morel Mackenzie, "On the Laryngoscope."—Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, *37, Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

DR. DRYSDALE ON MERCURY.—Dr. Drysdale's views are now so well known to the profession, that there is no occasion for us to publish his letter. In reply to it, however, we may remark, that the quotation made by him from Dr. Markham's Gulstonian Lectures contains no assertion that all syphilis can be cured without mercury. Neither has Mr. Henry Lee admitted that *every form* of syphilis common amongst soldiers can be cured without mercury. Again, infantile syphilis is not uncommon (as Dr. Drysdale would have it); for the last published report of the Registrar-General shews that under one year of age it is far more fatal than small-pox. The opinion of Sir B. Brodie, again, is not mere hearsay evidence, but is published in his *Pathological Observations*. "If my reviewer," says Dr. Drysdale, "will point the flaws in the evidence given by Fricke, John Thompson, Boeck, and others, I shall lay down my arms." To this we answer: The flaw required by Dr. Drysdale consists in this; viz., that none of the authorities whom he quotes have distinguished between the infecting and the non-infecting variety of syphilis, and have treated both alike. Until they have recognised that distinction, they are wise in abstaining from the use of mercury. No one in the present day would give much for statistics which would prove the value or the uselessness of any particular medicine in fever, if the persons using that medicine had not distinguished one fever from another.

GRATUITOUS MEDICAL SERVICES.—SIR: The impression left on my mind, and I doubt not on the minds of a very large number of all the best of the profession, is very greatly in favour of the views of gratuitous medical services which you advocate, and for which you are so coarsely attacked by the *Medical Times and Gazette*. The *mens conscia recti* will sustain most men; yet I imagine that votes, when polled, are of some support to any one. You may depend upon it, that, if polled, your views would command the chief part of the best men; and as I for twenty years now have been a salaried officer of medical institutions, I think I am at least as unbiassed as any one can be, in respect to work gratis. I have had nothing to gain or lose by it. I have never worked without pay; and I never intend to; believing it to be unfair to the patient, to the medical profession, and to myself.

I am, etc., S. O. W.

R. E.—We must decline to take any part in the personal side of the affair. Experience seems fully to have determined that Amussat's operation, practised at the right time in cases of obstructed bowel, both prolongs life and relieves the patient from great suffering. There is every reason to believe that it would have done so in the case referred to by our correspondent, had Mr. Solly's proposal been adopted.

THE LONDON COLLEGE OF PHYSICIANS.—Dr. Davey is labouring under a complete misapprehension of the facts of the case. The London College of Physicians never did at any time "delude gentlemen into taking its license on the strength of the supposed M.D. attaching to it," as the King and Queen's College of Physicians has done. On the very contrary, the College, as soon as the occasion required it, passed an express law to forbid its members and licentiates not possessed of the title of M.D. using such titles. Dr. Davey is unreasonable in accusing the London College of not granting what it has not the power to grant.

MR. GEORGE GREAVES has reprinted from the *Transactions* of the Manchester Statistical Society a paper read by him on "The Laws referring to Child Murder and Criminal Abortion"; and offers suggestions for their amendment. Mr. Greaves has evidently well considered the question; and has therefore a right to demand the attention of those engaged in dealing with the laws referred to.

DENTAL PERIODICALS.—The *Dental Review* now appears as a quarterly journal in a new form. The second number of this series appeared in April, and contains a full summary of the dental science of the day. Also has appeared No. 1 of the *Archives of Dentistry*, which is to be published quarterly, or from time to time. Both these journals are exceedingly well brought out; we may say, luxuriously, as regards type and paper. Both have an excellent object in view; and, we have no doubt, will not fail to advance the science and art of dentistry.

POOR-LAW MEDICAL REFORM.—SIR: I shall feel obliged for space to inform the Poor-Law Medical Officers, that in *Knight's Advertiser* of the 16th instant, is the following:—"It is understood that the Committee" (Select Committee on Poor Relief, England) "have agreed to resolutions on several subjects on which they have taken evidence; viz., the distress in the metropolis in 1861; the continuance of the central authority; the power possessed by the Poor-Law Board of issuing general orders; *medical relief*; pauper education; religious rights of workhouse inmates; district auditors; power of Poor-Law Board to dismiss officers; equalisation of rating; casual and houseless poor; classification in workhouses; and *superannuation of paid officers*. It now only remains for the Committee to settle the terms of their report to the House. Mr. Villiers, the Chairman of the Committee, stated on the 5th inst., in reply to a question of Mr. Göschen, that he was led to believe that the report would be presented before long, and in time for legislation this session."

Since April 14th, I have received the following subscriptions towards the funds of the Association:—E. Hall, Ulverstone, 10s.; C. Heaton, Leek, 3s 6d.; R. Cooper, Leek, 3s. 6d.; R. Turnock, Leek, 3s. 6d.; T. Robinson, Cheadle, 5s.; E. C. Buckoll, Radford, 5s.; T. Westall, Cookham, 10s.; S. A. Plumbe, Cookham, 10s.; T. Hewlett, Hendon, £1:1; H. Horsfall, Wakefield, 10s.; B. Kemp, Wakefield, 10s.; E. Walker, Wakefield, 10s.; T. Walker, Wakefield, 10s.; G. F. Wills, Chard, 5s.; R. Ransome, Cambridge, 10s.; R. F. Thompson, South Shields, 7s. 6d.; J. D. Hulme, Blaby, 5s.; R. W. P. Kerswill, St. Germans, 5s.; E. J. Worth, St. Germans, 5s.; J. Yeoman, Whitby, 10s.; W. N. Clarkson, Whitby, 5s.

I am, etc., RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, May 17th, 1864.

AN EXCUSE.—SIR: The *Medical Times and Gazette* says, in its number of May 14th, that, "owing to an unexpected failure of our reporters, we are unable to give the speeches we promised, and borrow these of Professors Parkes and Sharpey from the *Lancet*." As the *Medical Times and Gazette* appears anxious to be, or seem to be, on all occasions excessively correct, it will, I am sure, thank you for informing the profession that, from the first to the last day of the meeting of Council, it never had a reporter at all present at the Medical Council. This "failure of its reporters" is, therefore, merely an editorial inflation—a *façon de parler*.

I am, etc., ONE WHO KNOWS.

COMMUNICATIONS have been received from:—DR. W. TILBURY FOX; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; DR. W. H. O. SANKEY; DR. J. WEST WALKER; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY; DR. A. T. H. WATERS; MR. BRODHURST; MR. OLIVER PEMBERTON; MR. G. NAYLER; MR. A. H. DOLMAN; MR. JAMES DIXON; MR. J. H. ALLINGHAM; MR. J. H. JAMES; MR. F. JORDAN; DR. B. CHEVALLIER; MR. J. HOLDEN; THE SECRETARY OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH; DR. T. MAYO; and MR. T. M. STONE.

Remarks
ON
XTREMES IN PRACTICE.

BY
THOMAS MAYO, F.R.C.P., F.R.S.

my previous notice on this subject, I have adrted to the illustration of it afforded in the prace of blood-letting. During the years which have psed since I entered the profession, it has been inful to me to see that event threatened in this actice, which Dr. Markham deprecates in his Gulnian Lectures, and on which he reasons so well; mely, a total misconception of the use and abuse blood-letting. About the beginning of the prent century, the lancet was certainly used to excess; it since that time a moderate and philosophical timate of this excess was for some time proceeding, which Dr. Armstrong's views constituted the incipal exception. The idea of cutting short dise by intense depletion, was losing ground; and a ery fair chance of obtaining the benefit of depletion ithout its mischief was being opened to us. It is ithin about the last twenty years that the tendency extreme practice in *non*-depletion by the lancet as been obtaining a dangerous amount of fashion; nd the discoveries which we have made in pathogy and therapeutics have not been turned, as far as enesection is concerned, to making this remedy ssume its right position in practice, but to banishs use entirely, when other remedies might in truth ave been aided by its moderate introduction.

Dr. Markham enters into the important question, ow far the extreme opponents of blood-letting have one justice to the inquiry into *pros* and *cons*, on the esults of which their opposition ought to have been based. The reasoning of Dr. Markham on this subect is excellent; and it seems highly probable that a hange of type was not in this instance laid down as ground for a change of treatment on deliberate nductive inquiry; but that it virtually suggested tself as an excuse, when an excuse became necessary after the change of treatment had taken place. The change itself resulted from the operation of a law which occasioned one extreme of medical practice to generate and to be succeeded by an opposite extreme, under a strong and natural perception of mischief done by intense depletory practice in the early part of the century, and in some measure by the attainment through therapeutical observation of agents which were presumed to be of a safer character. Young surgeons, accordingly, were soon heard to boast that they did not, as a matter of course, carry a bouncet in their pockets; and physicians affirmed that they treated pneumonia without loss of blood. Under this predisposition to new views, a hospital starting up in a comparatively unwholesome district, might readily give an excuse for general *non*-depletory treatment, by affording many instances in which it would not be borne; and medicinal remedies tending to reduce inflammatory action would be used to perform this duty alone, in which they would have been well and safely assisted by some abstraction of blood. I have noticed in a former contribution the dangerous abstinence from the use of the lancet in many cases of cerebral congestion, where the case required some more immediate relief of the impeded circulation, and other remedies were inadequate.

I am here in some measure playing the part of an *ex parte* reasoner; but certainly there are some *à priori* considerations which give my views a character of probability, when I hesitate to assume that an *extreme* change in pathology and treatment has been adopted for good reasons. Does medical inquiry into the laws of pathology and therapeutics generally assume a character of deliberation such as ought to precede great changes? Does an inductive and deductive inquiry, such as Dr. Curry gave to cold affusion in fever, and Dr. Jenner to vaccination, often occur? How do we treat that most powerful agent from which we ought to elicit so much light—statistics? Dr. Markham's amusing illustration of misconceived statistics in the Edinburgh Infirmary, where an equal number of deaths occurred in the practice of three physicians under opposite modes of treatment relatively to depletion, justifies Bacon's somewhat precipitate affirmation—precipitate, considering what statistics have effected since his time: "Inductio quæ procedit per enumerationem simplicem res puerilis est, et precariò concludit." When Bacon made this remark, he might appear to be describing much of our medical statistics; but certainly not any profitable form of that great instrument, such as Quetelet would demand as a basis of inquiry. This is a painful subject. The defect to which statistics are most liable, is an insufficient number of instances. Again, whenever it happens, that the subject matter of enumeration is such as renders definition impossible or very difficult, the conclusion aimed at is proportionately deceptive.

Such, I regret to say, are many of the medical enumerations of the Registrar-General, where an average is supposed to have been struck in cases of a given disease, without any evidence existing that the enumeration of these cases was made by persons who were agreed as to the meaning of the terms, or who would make the same application of them to actual instances. Statistics labouring under these defects are unprofitable.

Meanwhile, I should be glad to know what amount of profitable statistics have been applied of late years to the great question, whether our forefathers had entirely erred in adopting venesection as a remedy, or the type of our diseases had entirely changed in that time.

With respect to direct evidence in favour of occasional removals of blood, I have done a trifle in my former contributions to this JOURNAL.

Dr. Markham's lectures in that direction are invaluable. I hope he will resume the subject.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture II (*continued*).

On some Points having Reference to the Differential Diagnosis of Fibrous Tumours of the Uterus.

3. *Menorrhagia* is one of the commonest symptoms of fibrous tumour of the uterus. It is often so excessive as to amount to a draining away of the patient's life, and always most alarming to the patient. The quantity of blood lost may exceed that of a miscarriage. The menstrual periods are sometimes much prolonged, extending to ten or fifteen days—sometimes with scarcely two or three days' intermission, dark clots being numerous. Sometimes they are continuous, and without intermission. The aspect of the patient in such cases is completely anæmic; and in dark subjects a yellow tint is superadded, which has often been mistaken for an indication of cancer.

As to the evidences of disease, which the kind and quantity of hæmorrhage affords, they are not very precise. French pathologists assert that, even with polypi, and not rarely so in old persons affected with fibrous tumour, hæmorrhage may be altogether absent. M. Lebert (*Bullet. Soc. Anatomique*, xxv, 366) has asserted that mucous polypi the more frequently only produce a kind of imperceptible oozing of blood, which increases with effort and exertion. Fibrous tumours, on the contrary, occasion much heavier losses of blood. M. Barth thinks age has a great deal to do with it. At the Salpêtrière, fibrous tumours are frequently found in the old women's uteri, without losses of blood. Cruveilhier states that subperitoneal fibroids do not give rise to hæmorrhage. Those projecting into the cavity of the uterus do; and all efforts of expulsion aggravate this result. A recent writer, Dr. McClintock, seems to think this difference inexplicable. So far, however, as his statement goes, out of 25 cases which occurred to him, 14 had menorrhagia, and in 11 it was absent. In 5 of these last, the tumours were distinctly ascertained to be subperitoneal or interstitial. In submucous fibrous tumours, the hæmorrhage was common.

From an analysis of 61 cases in which the locality of the fibroid was described, I obtained the following results. In 13 cases, the existence of menorrhagia was either not stated, or not known. In the remaining 48, it was as follows.

Cases with menorrhagia, 34; viz.: Interstitial, 1; intramural, 5; submucous, 4; intrauterine, 10; in the anterior wall, 5 (one projecting into the uterine cavity); in the posterior wall, 1 (projecting into uterine cavity); extrauterine, 1.

Cases without menorrhagia, 14; viz.: Interstitial, 1; intramural, 1 (this patient had never menstruated, and the Fallopian tubes were found closed after death); in the anterior wall, 4 (one had closed os another had ceased to menstruate for two years previously; in the posterior wall, 2 (one had a tumour projecting into the uterine cavity, but the internal os was closed); extrauterine, 5; several all over, but pregnant, 1.

So far as these facts go, they tend to verify the assertion made by Cruveilhier. Probably this is much more generally true than even my tables affirm. A tumour in the anterior or the posterior wall may or may not project into the uterine cavity, especially at a catamenial period; and yet, owing to the closure of the external os, this may not be detected during life. It is, therefore, only in cases that have died that this point can be accurately determined; and even here there may be a source of error, except in unusually marked cases, from the contraction of the vessels after death. Then, again, we may have small polypi of the mucous variety within the uterine cavity, where the uterine fibroid also present does not project into its cavity; and so the result is vitiated. I think, therefore, that, *cæteris paribus*, the result generally obtained is less exceptional than it appears.

a. The cause of this hæmorrhage has been differently explained. Dr. Atlee believes it to originate not from the uterus itself, but from the vessels of the membrane which covers the fibrous tumour. He believes that this view is confirmed by the results of treatment; because if, during hæmorrhage, the bistoury be passed up and very free incision be made into the most exposed portions of the tumour, a small gush of blood will follow, and the bleeding will soon cease. The cut ends of the vessels retract, and the blood soon coagulates in their mouths. Thus the veins of the investing membrane, according to his view, become at times greatly engorged, in consequence of their circulation being impeded by the muscular action of the uterus; while the arteries, by reason of their more resisting coats, continue to supply them with blood. The point of least resistance must consequently be at the os uteri, as all the other parts are compressed by the contracting uterus. The veins on the surface are thus distended. The mucous membrane is delicate, and offers but little resistance to the rupture of the vessels.

b. But, on the other hand, it has been satisfactorily shown by Dr. Simpson, Messrs. Brown and Nélaton, and Dr. McClintock, and the practice of a host of other surgeons proves it daily, that the mere opening of the os in a case of menorrhagia from a contained fibroid arrests the hæmorrhage. Mr. Brown's explanation is, that the division of the os and cervix uteri permits the fibres of the body of the uterus to contract upon the contained tumour, and thereby to compress the vessels and prevent hæmorrhage. Thus Dr. Atlee and Mr. Brown are at issue. It is the uterine contraction which, according to Dr. Atlee, produces, and which, according to Mr. Brown, arrests the hæmorrhage.

And here, I think, one important point has been lost sight of in this question. According as the tumour is situated lower down in the cervix or high up in the uterine cavity, so a different effect may result. The same difference of position may explain the altered action of ergot in different cases. Sometimes it completely arrests the hæmorrhage; sometimes not only does it fail in this respect, but it rather to increase it. Contraction of the fi

e uterine neck causes the cervix and os to dilate, l thus to enlarge its cavity. Contraction of the res of the body and fundus of the uterus tends to pel a contained body outwards, to diminish the erine cavity, and dilate the cervical cavity. It is the ne principle at work as is inculcated by Dr. Barnes cases of placenta prævia; and as, in these, artiial separation of the placenta is found (if the tachment of the placenta do not extend too high) arrest hæmorrhage, so it explains a fact commonly served with fibrous tumours adherent at this point, at, if much manipulated, they bleed less subquently, owing to a similar partial detachment. ne reverse is the case with tumours situated within e cavity; and the following case, brought before e notice of the Edinburgh Medico-Chirurgical Soety, on the 18th November last, by Dr. Matthews uncan, is an example in point.

"Dr. Matthews Duncan showed a fibrous tumour, obular, about three inches in diameter, occupying e fundus uteri, and as if pressing on the enlarged erine cavity. The uterus lay high in the pelvis, or ther elevated into the abdomen; and the cervix as slightly hypertrophied. The hypertrophy of the oper uterine tissue around the tumour was great, d the uterine sinuses enormous, as in pregnancy. r. Matthews Duncan was called to see the patient the day of her death. She was anæmic, but fat d puffy, suffering from dyspnœa, and evidently ing; but her pulse was firm, and respiration clear l over the chest. She died in a few hours. She d suffered long from excessive monthly hæmorages. Examined after death by Dr. Matthews uncan and Dr. Grainger Stewart, the tumour, as it rojected into the uterine cavity, was covered by a yer of muscular and uterine tissue and a healthy yer of mucous membrane. But about the centre of ne projection a little clot was observed, decolorised t its extremity. (No hæmorrhage had taken place me days before death.) This clot projected through round opening as large as the transverse section of large crowquill. This opening communicated with ne elephantine reticulations of various sinuses, with ypertrophied uterine tissue surrounding the tumour roper."

The opinion of Dr. Matthews Duncan was, that in most cases of menorrhagia, many would, on minute vestigation, be found to result from a similar conition of uterine sinuses, or of the same vessels in the terine mucous membrane.

I think, therefore, that it is more philosophical to dmit the truth to lie between the opinions of Dr. Atlee and Mr. Brown. There can be no doubt that ome of these tumours become larger during a mentrual period, and subside again to their normal size when this has abated; so polypi, which cannot be elt during an interval through the os, during a eriod often protrude below it, and can be readily letected by the touch, and seen through a speculum. This denotes that congestion of the tumour as occurred. During gestation, also, fibrous tumours will partake of all the enlargement of the terine organ. Such a case is recorded by Dr. Priestley (*Pathological Transactions*, vol. i.)

This patient, before conception, had several vesicular polypi, which were removed. A small nodule at this time was, however, noticed in the posterior wall. After delivery, in consequence of hæmorrhage, Dr. Priestley removed a fibroid situated at this part, about four inches in breadth by one in length. This tumour was probably the nodule, which had enlarged during gestation; and this view was confirmed by the great similitude of its structure to the walls of the gravid uterus.

And there are several cases illustrative of this same view. There is, then, hypertrophy and congestion of the tumour. This in itself is a cause of hæmorrhage from the polypus itself.

We observe the same cause and effect in the uterine lining. We all know how commonly, in cases of menorrhagia, an enlarged congested uterus is all that explains it, from whatever primary cause induced. Rokitansky has laid down the proposition, that the nearer the fibroid growths approach the uterus, and thus maintain the mucous membrane in a state of inflammation or irritation, the more palpable is the hypertrophy of the uterus. Here, therefore, is the reason why the uterine mucous membrane, as in simple hypertrophy and congestion of the organ, should give rise to menorrhagia.

The following case, however, which occurred to myself, is interesting, as I think it affords a solution of the question.

Some months ago, a lady called upon me, suffering from menorrhagia. I found a heart-shaped polypus just within the vulva, of about the size of a plover's egg, attached by a long narrow pedicle to the os uteri. I learnt that some months back the growth was much larger, and had projected more out of the vulva. It had been accidentally injured, and there had been much hæmorrhage from it. Since then it had been smaller, and the hæmorrhage less; so far explaining how, if the polypus be wounded, the hæmorrhage will be lessened, after the first gush, for a time. I removed the polypus. I found, however, the cervix intensely congested in its immediate neighbourhood; so much so that an accidental slip of the scissors gave rise to so much hæmorrhage, that I was obliged to use the actual cautery to arrest it.

The hæmorrhage after ligature of a polypus has frequently been noticed by writers to arise from neighbouring parts, and is, in my opinion, in the main due to the mucous membrane of the uterus (already very much more vascular than normal) being irritated by the foreign body. In this way, retention even of a small portion of adherent placenta, after the recovery of the patient, will produce menorrhagia. The way, therefore, in which the incision acts is chiefly by removing the pressure against the uterine mucous surface, and so diminishing the irritation.

[*To be continued.*]

A New Medical Periodical has lately appeared in New York, called the *New York Medical Independent*, a strictly professional but entirely independent weekly journal, to be issued every Wednesday morning, printed with clear type, on good paper, octavo, sixteen pages, at the low price of two *dollars* per year, payable in advance (fifty cents additional per year, for postage for city and Canada subscribers. The objects of the *Independent* are to elevate the medical profession, by advocating improvements and reforms wherever practicable; to stimulate a purely American literature; to unmask abuses and quackery of all kinds; to urge a higher standard of medical education; faithfully to chronicle discoveries, advancements, and progressions made in every branch of medicine and surgery; to discuss topics of interest to the profession, and generally to be a true, faithful, and independent representative in periodical literature of the American medical profession.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. Waters, M.D.,
Physician to the Hospital.

[*Continued from page* 443.]

Case xxvi.* *Pneumonia: Recovery.* George C., 25 years of age, a Danish sailor, of rather spare build, was admitted into the hospital on June 29th, 1863. The patient could not speak a word of English, and scarcely any history could be elicited from him. It appeared, however, that he had been laid up for four days before admission.

When first seen, on the 30th, he complained of pain in the chest, and inability to lie down. The skin was hot; the tongue furred; and the pulse 88. Well marked crepitation and dulness were found over the back of the left lung, with deficient movement of the left side of the chest. The breath and percussion sounds were normal all over the right, and over the front of the left, lung. A purgative was ordered, and the eighth of a grain of tartarised antimony every three hours, with low diet.

On the 31st, the pulse was 90; the respirations were 36; the skin was hot, and the tongue somewhat cleaner. There was dulness with bronchial breathing over the lower half of the left lung. He had not slept. He was ordered half a grain of morphia at once, the same quantity at bedtime, to continue the mixture, and to have a blister applied to the left side.

On February 1st, he said he felt better. He had slept well. The pulse was 104; the respirations were 30. He had expectorated a quantity of tenacious rust-coloured sputum. He was ordered to take the mixture three times a day only, and to have half a grain of morphia at night.

On the 2nd, the pulse was 90; the respirations were 25. The tongue was cleaner, and he was perspiring profusely.

On the 3rd, the pulse had fallen 62. There was less dulness, and slight crepitation only was heard. The antimony was stopped, and an effervescing saline draught ordered, together with four ounces of port wine. The diet was improved.

On the 7th, he was up, and seemed quite well. The breath and percussion sounds were normal. He subsequently took quinine; and was discharged well on the 12th.

Case xxvii. *Pneumonia: Recovery.* (Reported by Mr. G. W. Armstrong, House-Surgeon.) Leopold A., 29 years of age, a Norwegian sailor, moderately stout, was admitted into the hospital on November 20th, 1863.

On admission, he complained of pain in the chest and cough, and the physical signs of bronchitis were present. He was ordered turpentine fomentations to the chest, and stimulating expectorants, with six ounces of port wine daily, and beef-tea. No improvement followed, and, on the 22nd, symptoms of pneumonia set in.

On the 23rd, the skin was hot; the pulse was 132. There was marked crepitation at the base of the left lung, with dulness on percussion; the right lung being unaffected.

On the 24th, the pulse was 128, and strong. There was great anxiety of countenance, and much general distress; the skin was very hot; and the sputum rust-coloured. Crepitation and dulness were found over the lower half of the left lung, with some crepitation over the base of the right. Up to this time, no change had been made in the treatment originally prescribed, and the patient was evidently getting worse. The stimulating expectorants and the wine were stopped; and a fourth of a grain of tartarised antimony, with acetate of ammonia, was ordered every three hours. In the evening, six ounces of port wine were given in mistake; but none was afterwards taken until convalescence was established.

On the 25th, there was great improvement; the pulse was 104; the respirations were 46; the sputa were frothy and copious, but less rust-coloured. There was no crepitation over the right lung, but slight dulness was found. There was marked crepitation all over the left lung, with deficient expansion of the left side of the chest.

On the 26th, the pulse had fallen to 88; the respirations to 32. The sputa were frothy and copious. The antimony was ordered to be taken during the day only.

On the 27th, the pulse was 80; the respirations were 32.

On the 28th, they were respectively the same; the breathing was natural over the right lung, but slight dulness remained at the back of the left. The antimony was stopped; and ipecacuanha wine, with tincture of squills, ordered; together with four ounces of port wine and chop diet.

On the 29th, the pulse was 76; the respirations were 28.

On December 1st, the pulse was 90; the respirations were 24. There was some return of crepitation on the left side in front, with slight fever. The wine was omitted; it appeared to act prejudicially.

From this date, the case progressed satisfactorily. On the 8th, the pulse and respirations were normal; and on the 11th, the patient was discharged well.

[*To be continued.*]

* The last two cases (see p. 442) were improperly numbered. They ought to have been xxiv and xxv.

A Plea for Specialists. A correspondent in the *American Medical Times* says: "If every effort is made in the United States to stigmatise specialists, to take from them every opportunity of showing their capacity; if the professorships to which they are entitled are withheld from them, or given to the incompetent tools of certain *cliques*; if the profession does not take measures to protect legitimate specialism, practised by regularly admitted M.D.'s, against the miserable practices of advertising quacks, ci-devant corn-cutters and spectacle-vendors, then the time is not distant when specialists will be bound to take their own defence, and to vindicate their rights before the public, in that way which they may deem proper. In England this question is different. Quackery in the American fashion is impossible on account of the law and the social influence of medical men, which in this country is far below the European standard. If a general practitioner has a right to state in public prints that he practises physic, a specialist may announce that he attends only to such and such a class of diseases. Specialists exist, and will exist and increase. But they never can be forced either to give up their position as specialists or return to the ranks of general practitioners, and can well afford to seek for 'improper' channels of celebrity or notoriety which are open to them, if those which are considered 'legitimate' are closed to them by the prejudice and injustice of the profession at large."

Original Communications.

ON IMPETIGO CONTAGIOSA, OR PORRIGO.

By W. Tilbury Fox, M.D.Lond., Physician to St. John's Hospital for Diseases of the Skin; and to the Farringdon General Dispensary.

[*Concluded from p.* 555.]

Diagnosis. Impetigo contagiosa or porrigo contagiosa, differs from the *contagious furunculoid* described by Dr. Laycock in the *Edinburgh Medical Journal* for Oct. 1856. Dr. Laycock thinks that the furunculoid forms, viz.: simple furuncle, effusive inflammation of the derma (phlyctenæ), suppurative inflammation (ecthyma), carbuncles, gangrenous inflammation, phlegmon (diffuse inflammation of the cellular tissue) and pustule are associated as to cause with epidemics of eruptive diseases, due to the action of virus prevailing epidemically. A good many of these forms are erysipelatous; the character of the result depending upon the nature and extent of the tissue affected—communicable from one to another, and from one part to another, it is affirmed. Reference is only casually made to this class, with the view of showing that confusion has been carefully and completely avoided. No confusion of the disease with variola or typical vaccinia can arise; but the disease may very fairly be confounded with pemphigus, ecthyma, rupia, eczema impetiginoides, and impetigo simplex.

Pemphigus. Impetigo contagiosa is umbilicated on the surface; the contents are puriform, not watery; the blebs are all round, and not oval or distended, as in pemphigus. The smaller pustules are conjoined. The scabs are yellow, flat, and adherent. The disease, too, affects the face and the scalp, where it is seen to develope as isolated spots, commencing from the pustules. Lastly, it is contagious, and often inoculable to vaccination. All these latter features are wanting in pemphigus.

Ecthyma is made up of phlyzacious pustules. There are no umbilicated pustules or blebs, but more inflammation at the base. The eruption does not occur on the head and face, as a rule; it is not contagious; and it does not break out in the *superficial* port-leather-looking ulcerations, with a dark red blush around them. The ulceration is *deep*, and the areola well defined, in ecthyma. Besides, the history of the case is different from that of impetigo contagiosa.

Rupia. Impetigo contagiosa never possesses the scabs of rupia, the bloody or sanguinolent contents of the apparent blebs. The latter, in rupia, are not umbilicated. Rupia does not occur on the face or head, in the way that impetigo contagiosa does; but has a history of great debility or of syphilis, and occurs chiefly in adults; whereas the other is almost peculiarly limited to the child.

Eczema Impetiginoides. Impetigo contagiosa, when on the face near the mouth, may assume the aspect of eczema impetiginoides; but we mostly find scattered around the edge of the patch little minute pustules, which show the origin of the disease, perhaps in conjunction with characteristic pustuloids or ulceration elsewhere. But impetigo contagiosa may be positively limited to the face; and then careful examination will show that the patch is made up of the fusion together of little circular ulcerations. There are not only cracks, but distinct ulcerations of a circular form,

Scabies. I have positively seen the disease mistaken for scabies. When seated about the back, buttocks, or legs, it may certainly present a rough likeness to the severe form of scabies seen in unhealthy subjects—a form of disease which is quite familiar to those who have attended Dr. Jenner's *cliniques* on skin-diseases. But scabies does not occur on the face, and but very rarely, if at all, on the head; though it is certain that it may give rise to eczema capitis by mere sympathetic irritation. At all events, impetigo contagiosa developes from pustules; it possesses no vesicles with cuniculi; nor can the acarus be found. It does not attack the buttocks of children by preference. Itching may be absent. The eruption is not multiform, yet characteristic in the pustuloid stage. The contagious quality of the lymph is distinctive; inoculation will settle any dispute in forty-eight hours.

Impetigo Simplex (non-contagiosa), a degree of eczema, is not confined to age; is not so amenable to treatment; always follows or accompanies eczema; *always* developes out of the latter, on the scalp. In other words, it is not a *primary* form of disease, and it is non-contagious. There is more redness around the base of the pustule in impetigo simplex.

There may be but one spot in impetigo contagiosa, and that is usually absolutely characteristic.

The character of the eruption (its circular form and umbilication, etc.); the isolation of the several spots, as a rule, on the general surface; its connexion with vaccination; its occurrence chiefly in the child, and on the face and head particularly, assuming in the latter situation the aspect of circular, isolated, well defined, flat, yellow granular-looking scabs, developed from primary pustules; the implication oftentimes of the mucous surfaces; its contagious quality especially; the results of inoculation; its similitudes; the character of the ulceration and the tint of the areola,—mark impetigo contagiosa as an essentially distinct disease. *Impetigo rodens*, I suppose some would name the severer cases; but this designation really refers to a mixture of several ulcerating diseases.

The subject of impetigo contagiosa was brought before the notice of the Harveian Society, in December last year, by myself; and, in the accounts in the medical journals, Dr. Hillier is reported to have said that "I had mixed up several diseases under the head of porrigo". Now, it is evident that not only was my differential diagnosis and description of the disease very full, but that the confusion, if any, existed in Dr. Hillier's own mind—probably brought about by the hold which the unfortunate word "porrigo" obtains over dermatologists. There can be no question that many of Willan and Bateman's cases of "porrigo larvalis" were instances of the disease now under notice. The references made to porrigo tonsurans and porrigo scutulata, etc., were introduced into the discussion in the face of the opening remarks of my paper, which were framed to show the absolute separateness of parasitic disease and (as I called it) impetigo contagiosa. Dr. Hillier's remarks afford additional proof to my mind that the word porrigo is a most undesirable one in the nomenclature of skin-diseases, though the great authority of Mr. Erasmus Wilson still sanctions its retention, restricting its use to the parasitic group. Porrigo, if it be a derivative from *porrigere*, to stretch or spread out, is certainly very descriptive of impetigo contagiosa of the scalp; but it would appear to signify rather "squamous"—"a porro, quia, ut porrum in tunicæ involucra, ita cutis velut in squamas resolvitur," as lexicographers have it. All confusion will be best avoided by rejecting *in toto* "porrigo".

Another point worth noticing is the occasional rarity of impetigo contagiosa. Always keenly alive to anything of interest in skin-disease, during the whole course of my stay at University College I rarely saw

impetigo contagiosa. Now and again cases occurred which have been categorised as impetigo; and yet which, in some way, would not fit the ordinary descriptions of the latter, but which are now capable of appreciation. Nor have I seen the disease so well developed, or in such an amount and extent, as during the past year at the Farringdon Dispensary; and, therefore, it is not at all unlikely that many who read these remarks may at first demur to them, and, indeed, imagine that at present there cannot be sufficient data from which to arrive at a trustworthy conclusion. Indeed, if my memory serve me, the objections already made have come from those who, although engaged in extensive skin-practice, have yet seen comparatively little of the disease.

Treatment. Clinically speaking, we find, in treating the disease—

1. That many cases get well if left alone; but this is a tedious affair.

2. That a more efficacious plan of treatment is that in which the internal administration of cod-liver oil and iron is combined with the local use of soothing applications—*ex.*, zinc ointment.

3. That a still more successful plan is to give cod-liver oil and iodide of potassium internally, and to apply externally sulphur ointment—a plan of treatment recommended and sanctioned by my colleagues.

I think we may safely conclude that the latter is the "basis" of successful treatment. It must be remembered that the disease occurs among the lower orders, and especially in delicate and strumous subjects; that it also follows vaccination, and is eminently contagious. Nature is able sometimes to carry on the suppurative and desiccative processes quietly, and to overcome further mischief by the establishment of convalescence; but there evidently is a low state of vital power, which antagonises this good effect, and leads to ulceration; hence we must always enjoin a tonic plan of treatment. At the outset, we may have a good deal of febrile action; this must be kept within due bounds by the ordinary means.

The local treatment is most important. The chief point is to remove all scabs (pediculi, according to my own observations, are rare). The scabs must be removed, and the medicaments applied to the subjacent sore surfaces. Sulphur ointment is the best. Solution of nitrate of silver, the solid salt itself, zinc ointment, iodide of potassium ointment, acetate of lead lotion, or benzoin, may also be used. Sulphur has probably no very special charmed action in this disease, any more than in other cases—*ex.*, lichen, psoriasis, pityriasis, etc.

We must be careful to prevent all methods and modes of contagion; but, with the exercise of the greatest care, the disease will in all probability spread from one to several members of the same family.

Case I. (August 24th, 1863.) R. G., aged 6 months, was vaccinated eight weeks ago. The operation succeeded admirably; but the spots never actually healed up. Four weeks ago (a month after vaccination), a place "broke out", about the size of a threepenny-piece, on the arm; it was like "a little flat bladder. At the present time, there is one on the nose; one on the left thigh, of the size of a split pea: and another, about as large as a fourpenny-piece, on the right leg, with a cluster of the size of a florin, made up of five circular slightly confluent pustules; at the back of the thigh is a place of the size of a shilling. The centre in each is depressed, the edge raised into a border about one-eighth of an inch broad. There is not the least history or evidence of syphilis. There is no blush around the little bullæ. The patient was ordered quinine and zinc ointment.

Aug. 28th. There was another spot on the belly, and one on the knee. The other spots are now surrounded by an annulus of soddened-leather aspect.

Sept. 11th. The eyelids are swollen. The face one mass of scab, of ordinary "porriginous" character. There is a fresh place on the arm, which look like an angry bulla, depressed in its centre. The ol spots have enlarged by centrifugal increase, and a partly scabbed over. The one on the belly ha attained the size of a shilling. They discharge viscid secretion, especially in the morning. The ge neral health is "good" (?) There are spots on th head.

Sept. 14th. The patient has high fever; the urin is febrile. The spots have increased in size; are in flamed; and they discharge freely. The leg is red swollen and œdematous, tender, and hot. Salin aperients were ordered.

Sept. 18th. The patient was better in every way.

Oct. 5th. The places have scabbed over with fla crusts, and some have dropped off, leaving dull re dusky stains.

The child quickly recovered, under tonics and zin ointment. Sulphur ointment did not agree with it.

Case II is very instructive. It was seen Augus 28th, 1863, for the first time. E. B., aged 2½, wa bitten in the arm by another child affected with sc called "impetigo of the head" (seen). On the arm i a patch, of about the size of a shilling, in the site o the bite; and this patch, when compared with other which exist elsewhere, is clearly seen to be the mos advanced in duration and changes; in fact, here th disease evidently first showed itself outwardly. Im mediately contiguous are four or five little blebs, o about the size of threepenny-pieces, circular, raised slightly, and looking like little flattened blisters they are not confluent. The fingers of the right hand are also affected. On the forehead is one bulla, and on the cheek another. The child is ill and fretful The history given by the mother is this: that, on the fifth day after the bite, the child was awakened by fever and vomiting; it could not sleep. The marks of the teeth then became hard; they "gathered" and ran into sores. On Sunday (20th), the eighth day after the bite, the third day of the eruption, the child began to "break out" all over, first the bites then the fingers and thumb, then beneath the elbow on the forehead, and chin. The bite, as the mother described it, "came out like scalds". Some of the spots are scabbed, in the way imagined to be characteristic of "porrigo". There is very little discharge but the spots, which have assumed a pustuloid aspect contain a gelatinous fluid, filling up an ulcerated pit The general health has always been good. The mother has a spot on her neck. Another little boy, a brother, has two very characteristic spots of so-called "porrigo" on his abdomen.

Case III was that of the father of two children who had been under my care for "porrigo". He was an intelligent man, who described the history of the disease very well indeed. He had a spot on the back of the left hand, at the root of the little finger; and one also at the point of the elbow. He noticed the disease as a "bladder-like humoury head", which kept spreading centrifugally. At first the spot was of the size of a shirt-button; now it is as large as a shilling, dull red at the base. Yellow matter oozed away at first; now there comes "pale blood", or matter. The patient did not feel ill. The spot at the right elbow-joint enlarged for ten or twelve days, with a little "humoury ring"; the centre of the spot being depressed, and the lymphatic gland above the right elbow being enlarged. (Oct. 23rd, 1863.)

Case IV. A. D., aged 12 months, was seen on Monday, October 29th, 1863. On the previous Tuesday, one of the eyes became inflamed—"blood-shot";

he lid became rapidly swollen, with at first little ischarge, the lids sticking together; and at the same me a great many "pimples" made their appearance n the face. Last Saturday (Oct. 27th)—*i. e.*, two ays since—the child seemed ill, feverish, and cross, nd was attacked by a severe cough. On one of the houlders, near the root of the neck, appeared four mbilicated bullulæ, of about the size of split peas, lightly confluent, with two others quite isolated. hey have the aspect of scalds. There is a great "running" at the nose. The eye is inflamed, and ischarging pus. The external part of the ear (the irina) is sore; and on the inner aspect is one pustuar spot, of about the size of those on the back, depressed in the centre, looking just like some exmples of variola. With cod-liver oil and zinc intment, the child got well; the later progress of he case showing the peculiar crusts of "porrigo".

This was a good example of so-called bastard vacinia—a transition stage, it would appear, between accinia and impetigo contagiosa. The changes as o time and character were different from those of ariola or vaccinia; and yet, in external aspect, one ould not fail to see some relation. The disease asted about a month. I have never seen the exact ike of the case before, and at first it puzzled.

Case v. E. D., aged 2 years, seen September 3rd, 863, was vaccinated four months ago. The operaion succeeded admirably, and the sores left healed p perfectly. The child is in good health, and there s no evidence of scrofula in the family history. It ppears that an elder brother was laid up with smallox, and this child was vaccinated in consequence. here is a "porriginous" spot on the left arm, at the eat of vaccination; also on the right arm, between he buttocks, on the head, and on the right thigh. here are on the left arm six circular spots in the six eparate punctured (vaccinated) places; they are ull red, quasi-squamous, depressed below the surounding integuments, feel harsh; their colour goes y pressure. There is no copper stain; and immediately joining is a yellow crusted spot. Just above he elbow is a circular patch, made up of aggregated pots, and freely crusted, of about the size of a shilng. On the forearm are two more; and above the rrist another place, of the size of a sixpence. Between the buttocks, the two spots are about as large s a shilling, and possess a raised thickened edge, with epressed centres, and an ulcerating surface. Codiver oil, administered internally, was the sole remedy used.

The above five cases are quoted as illustrations ather of the more uncommon instances and aspects f the disease.

15, Old Cavendish Street, W.

TARTARISED ANTIMONY AS A REMEDY IN STRUMOUS OPHTHALMIA.

By Edwin Chesshire, F.R.C.S., Senior Surgeon to the Birmingham and Midland Eye Hospital.

I have so frequently prescribed tartar emetic, generally in combination with opium (but often alone), in strumous ophthalmia, as well as in acute corneal and conjunctival inflammations, and with such marked success, that I have no hesitation in suggesting to my professional brethren a more extensive use of the remedy in the treatment of those obstinate, and frequently protracted, affections of the eye.

In cases of strumous ophthalmia, where there was excessive photophobia, I have found the internal administration of tartarised antimony, in doses varying from one-twentieth to one-twelfth of a grain, according to the age of the patient, to be attended with the most decided benefit; and its efficacy has been singularly marked, where quinine, steel, arsenic, and cod-liver oil, had each, in its turn, been tried and failed. No remedy that I know of so completely or so permanently removes the photophobia, which is such a distressing symptom in strumous affections of the eye.

In phlyctenular ophthalmia, and in vascular cornea or pannus, uncomplicated with a granular condition of the palpebral conjunctiva, or with inversion of the cilia (trichiasis), a continued course of tartar emetic, in small doses, arrests the progress of the affection most effectually, and with it may be combined the early use of local stimulants, a combination which may be continued, if necessary, for a lengthened period without injury to the general health; in fact, the patients who have taken tartarised antimony under my care, both at the Eye Hospital and in private practice (and I have prescribed it very extensively), have almost invariably told me how much stronger and more energetic they felt during the time they were taking the remedy. I am aware it has long been the practice of ophthalmologists to administer a single emetic dose of tartarised antimony, as a beginning to the treatment of strumous ophthalmia; and that it has occasionally been given in combination with bark and quinine; but it does not appear to have been resorted to as a remedy, *per se*, for the cure of strumous affections of the eye. It is quite true, in the case of the little strumous patients, while under treatment, that they were usually placed on milk diet; and, when the photophobia was severe, attention was paid to the exclusion of light, which would probably assist in promoting a favourable result; but the same diet was generally resorted to, and the same care to exclude light was taken, when the treatment had consisted of cod-liver oil, quinine, etc., and yet often with an unsatisfactory result.

Unlicensed Lunatic Asylums. Mrs. Sophia Leander, of Zion House, Turnham Green, was charged on Monday, with unlawfully receiving into the house occupied by her more than two lunatics, such house not being an asylum or hospital registered under the provision of the Act of Parliament. The magistrate sent the case for trial at the Sessions; Mr. Leander giving bail for the appearance of his wife. Dr. Christie, superintendent of the Hackney Lunatic Asylum, stated that he had inspected Zion House, in company with Mr. Luttridge, one of the Lunacy Commissioners. There were about eighty inmates. He examined four or five of the patients, and found them to be persons of unsound mind. The premises were certainly not proper for the accommodation of so many persons in this condition.

Philadelphia Military Hospitals are models of cleanliness and good order. From all quarters they extort praise and admiration. We have at present the South St. Hospital, an old silk factory, with about 250 beds; the Christian Street, with a like number; the Filbert Street, about 400; the West Philadelphia or Satterlee, accommodating 2,500 patients; the Chestnut Hill, or Mower, about 3,000; the Turner's Lane, the Nicetown and the Germantown Hospitals, each of much less proportions. Four of these were built as army hospitals, and are models of the kind, being splendidly ventilated, and supplied with every means to restore the health of the sick or wounded patriots who may be brought under their shelter. In addition, we have an officers' hospital at Camac's Woods, where officers are furnished with hospital attendance at a reasonable rate. (*American Medical Times.*)

Reviews and Notices.

ON DISEASES OF THE THROAT AND WINDPIPE, AS REFLECTED BY THE LARYNGOSCOPE; a Complete Manual upon their Diagnosis and Treatment. Embellished with 116 Engravings. By GEORGE DUNCAN GIBB, M.D., M.A., Member Royal College of Physicians, London; Assistant-Physician and Lecturer on Forensic Medicine, Westminster Hospital. Second Edition. Pp. 481. London: 1864.

ALTHOUGH this book bears the words "second edition" on the title-page, we are assured by Dr. GIBB that it is "perfectly new"; inasmuch as "the introduction of the laryngoscope has added so much to our knowledge of the throat and larynx, as to render it necessary that the greater part should be re-written." It consists of thirteen chapters, with the following titles: 1. General Diseases of the Upper Air-passages; 2. Diseases of the Vocal Cords, giving rise to Hoarseness and Modifications of the Voice; 3. Acute Inflammatory Diseases of the Throat; 4. Specific Diseases of the Throat; 5. Exanthematous Affections of the Throat; 6. Diseases arising from Specific Changes; 7. Nervous Affections; 8. Diseases of the Mouth, Nose, and Continuous Passages; 9. The Various Affections of the Trachea; 10. Extraneous Substances in the Throat; 11. Diseases and Injuries of the Hyoid or Tongue-bone; 12. Injuries of the Throat; 13. The Laryngoscope and Rhinoscope. Each of these chapters is subdivided into several sections; so that a large number of subjects are treated of in the work. This circumstance prevents us from giving a detailed analysis; we must, therefore, be content with noticing a few points only.

In the first chapter, Dr. Gibb commences with a section on Follicular Disease of the Throat and Air-passages, commonly called Clergyman's Sore-Throat. In speaking of the treatment of this affection, he mentions the respiratory hydrostatic plan, introduced by Dr. Sales-Girons, in which medicated fluids are disseminated through the throat and air-passages in a fine vapour or spray, driven from an apparatus by which the fluid is "pulverised". Much debate has, our readers are probably aware, taken place in Paris as to the efficacy of this method. Dr. Gibb says of it:

"In some cases of throat- and chest-disease combined, this hydrostatic treatment cannot be too highly praised; and, notwithstanding the opposition raised against it by Dr. Fournié of Paris, will become generally adopted in cases requiring it."

In the treatment of follicular disease of the air-passages, Dr. Gibb's favourite topical remedy consists in the application of solution of nitrate of silver—or of sulphate of copper or zinc, tannic acid, iodide of silver, mineral acids, etc., according to circumstances—to the parts by means of a brush or sponge. He has always held, in opposition to the opinion of many surgeons, that the introduction of an instrument into the larynx, as described by Dr. Horace Green, is a possible act. He now tells that, whereas he formerly took means to accustom the glottis to the presence of a foreign body, he now introduces the brush at once "without the least inconvenience, or even a spasm."

"The exquisite sensibility of the glottis does no seem to be excited by contact with the brush, excep in some rare instances. Yet it must be remembere that this operation is not always one of easy perform ance, on account of spasmodic constriction of the lip of the glottis. The frequency of its application therefore, will depend upon the amount and duratio of the disease, and the effects it produces."

The internal remedies which Dr. Gibb employ in this malady are ioduretted iodide of potassium and iodide or bromide of ammonium. Lozenges o the *Eucalyptus Rostrata* or red gum are useful as a astringent remedy; and the general health should b attended to, doses of mercurials, aloes, podophyllin etc., being given as circumstances may demand.

In the remaining parts of this chapter, Dr. Gib speaks of Chronic Disease of the Windpipe, Disease of its Cartilages, Diseases of the Epiglottis, Con sumption and Bronchitis in connection with Diseas of the Windpipe and Throat, and Weakness of th Voice and Chest.

In the second chapter, the author begins by de scribing Aphonia, dividing it into functional and or ganic; and each of these are considered according t their respective causes. The utility of the laryngo scope is demonstrated in cases of this kind; and, i speaking of growths and tumours of the vocal cord as causes of organic aphonia, Dr. Gibb observes tha "perhaps nothing has so strikingly demonstrated th value of the laryngoscope, as the diagnosis of such growths and their successful removal after years o suffering." Notwithstanding that the detection o these growths during life has only been rendered possible in the last four or five years, Dr. Gibb ha found, in the hospital museums of London and else where, a greater number of specimens of them tha would at first be expected. He gives a table o thirty-one such growths preserved in the Londo museums—eleven being in children, three in youths and seventeen in adults.

These laryngeal tumours may be found above o below the true vocal cords; when above, they ar larger and disseminated; below, they are smaller an compact. The seats of their development are, i order of frequency: the root of the epiglottis above and the subglottic space anteriorly below the cords the anterior free borders of the vocal cords, and progressively backwards, their surfaces and borders but rarely the edges far back; the inner surface o the cricoid cartilages, below and between the ary tænoid cartilages and vocal cords posteriorly; th ventricles of the larynx; and, in occasional but rar instances, the false cords and the arytæno-epiglottic folds.

"In number, they vary much according to the character of the growth; being generally broad and flat and sometimes numerous, in syphilitic cases, and single or isolated, sometimes double or treble, in others. In one instance, there were four from the surface of the true and false cords, in another as many as five; but I have counted eight, twelve, or upwards, on museum specimens." (P. 132.)

In size they vary "from a pin's head to a pea or bean, or perhaps a tamarind stone"; sometimes (in the epithelial or warty variety) they are as large as a hazel-nut. In nature (excluding the epitheliomatous or cancerous variety), the growths are either simply epithelial, or fibro-cellular; more rarely they may be cystic, fibro-plastic, fatty, or follicular, sometimes

onsisting of a mere prolongation of mucous membrane. Regarding their character, as affected by disease, Dr. Gibb says:

"In syphilitic dyscrasia, they will partake of warts of the same nature elsewhere; in follicular disease, the follicles on the surface of the cords or elsewhere will enlarge and form warty growths, with coalescence sometimes of several together into one large mass. They may be off-shoots from an hypertrophied vocal cord whose structure has undergone some interstitial or molecular change. At first they resemble little acuminated tooth-shaped projections on the free edge of the cords, which may grow or not; at other times they simulate bead-like projections on the upper free edge of the cords, which may subsequently disappear under progressive pathological changes. When arising from below the cords anteriorly, it may be from a puckering or plication of the mucous membrane, the result of relaxation from cough or other cause; and posteriorly between and below the arytænoid cartilages, I believe, an ulcerated surface, probably secreting pus, is the cause of their origin; for there, more than in any other place, they seem to partake of the character of a foliaceous wart." (P. 134.)

The possibility of removing such growths by means of the laryngeal *écraseur* is now an admitted fact; having been established by the success of operations performed by Dr. Walker of Peterborough, Dr. Gibb, and other practitioners. We must here, with all respect for Dr. Gibb, make a few remarks on the tone which he sometimes adopts. It is quite natural that, as he describes at p. 135, the greatest surprise should be manifested at such an occurrence as the restoration of voice after it had been lost for ten years, on the removal of some morbid growths from the larynx; and, in all instances of this kind, there will always be found persons who will doubt the accuracy of the operator's diagnosis, or even his credibility. But if the narrator and those who have assisted him be confident that no error in diagnosis was committed, and if he be strictly truthful—as we believe Dr. Gibb to be—he can surely afford to rest on his own integrity, without going out of his way to administer a side-blow at "some *malignant rascal*" who "will try to rob him of his justly earned fame." Such expressions are very much out of place in what is intended to be a soberly instructive medical book. Again, in speaking, at pages 140 and 141, of the chronology of the operation in England, Dr. Gibb, after giving Dr. Walker the credit of having first removed a growth from the larynx in this country, says that he followed, and was the first to remove a tumour attached directly to the vocal cords. He also names Mr. Bracey of Birmingham and Mr. Thomas Wright of Nottingham, as having successfully performed the operation; and then he says:

"No other person that I am aware of has done this operation, although it has been attempted several times in this metropolis."

Now, this may be quite true; but the assertion is one that should not have been made by Dr. Gibb himself. He must, on reflection, see that the inference deducible from it is, that he wishes himself to be regarded as the only practitioner in London who is capable of removing laryngeal tumours—a conclusion which it cannot be supposed that he wishes to be drawn. Nor can we approve of an expression at page 155, where, after relating several cases in which he has removed laryngeal tumours, he says:

"Without laying myself open to the charge of egotism, it may be permitted me to say, that the foregoing details show an amount of success that I feel justly proud of, and that has not as yet been equalled by any physician devoted to the same branch of medicine, in any other part of Europe."

Dr. Gibb may justly feel proud of his success; but, having stated his facts, he should leave comparison to others. It is apparent, that he possesses some personal vanity; and that he, injudiciously in our opinion, allows this feeling now and then to crop out in his writings, and to get the better of his good sense. But we would advise him, in friendly warning, to endeavour to repress the tendency of the *Ego* to manifest itself unduly. He need not fear that his labours, in the department of medical science which he has specially undertaken, will not meet their full recognition from all honest men in the profession, or that he will fail to meet with that justice which, it pleases us to observe, he scrupulously accords to his fellow-labourers in this and in past times; but any expressions on his part, which may be, however wrongly, interpreted into a desire to push himself into notice, or to raise himself by depreciating others, will be liable to alienate from him men who would otherwise hold him in respect.

Another section of the second chapter is devoted to Hoarseness; and then Dr. Gibb goes on to speak of certain Pathological Modifications of the Voice. Two of these he describes under the somewhat barbarous titles of *Contendophonia*, occurring in declamation and oratory; and *Acantophonia*, affecting singers; he also speaks of Double Voice (Diplophonia or Vox Convulsiva), Stuttering and Stammering (Ischophonia and Psellismus), and General Disease as affecting the Voice.

The condition which he terms *acantophonia* consists in a "loss of control over some of the notes of the diatonic scale, whether the lower, the middle, or the upper, but chiefly the middle, in either the chest or the falsetto registers." It is frequent among professional singers, but is not rare in private life. The pathological phenomena observed by the laryngoscope, in regard to the middle and higher notes, are thus described:

"When the middle notes are imperfect, and the person is required to ascend the scale slowly from the lower notes, the tension and parallelism are found to be good and without fault; as the middle notes are reached, both are altered, for the tension becomes irregular and the parallelism is destroyed, especially if the tension of one cord is good and the other imperfect, for then the fissure of the glottis corresponds to a small thin segment of a large circle. As the notes now rise, the natural tension of the cords, or of the affected cord, is regained; and both perform their proper vibrating function to the termination of the notes of which the singer has been accustomed to go, whatever that may be. When both cords are affected in the middle notes, they equally lose their power of tension, and consequently of vibration, at that part of the scale; and parallelism, though it may not be wanting, is powerless for perfection of melodious, or rather harmonious, sounds." (P. 180.)

The treatment of this condition, as well as of contendophonia, consists in rest of the voice, attention to the general health, and the application of topical remedies, such as fine showers of solutions of nitrate of silver or other agents, or electricity.

In the third chapter, under the head of Œdema of

the Larynx, Dr. Gibb speaks of a condition which, he says, has not been hitherto described—subglottic œdema. Indeed, most pathologists and surgeons describe the mucous membrane below the vocal cords as being so closely adherent to the subjacent fibrous structures, that no fluid can be there effused. Dr. Gibb, however, while admitting the rarity of subglottic œdema, holds that it does occur with sufficient frequency to demand attention; and, in support of this view, he brings forward several cases from his own practice, and also some examples which he has found in the hospital museums and elsewhere.

"The symptoms are those of acute laryngitis primarily, followed by obstructed breathing as in the supraglottic form; but laryngoscopic inspection alone can determine which form of œdema is present. It may be taken as a rule, that the swelling never extends further than the commencement of the first ring of the trachea; and if found to be seriously embarrassing the breathing, the trachea (not the larynx) must be opened to give relief. The breathing in the subglottic disease is more stridulous and wheezing, and has a peculiar laryngeal or croupy hoarseness about it. There is, moreover, intense dyspnœa, laryngeal cough, and much mucous secretion. If constitutional remedies are early applied, they should consist of tartar emetic and acetate of ammonia, and, if necessary, some anodyne; inhalation of hot steam; poultices to the neck; and small doses of mercurials, to absorb the effused material. Small quantities of brandy or other stimulants should be frequently administered.

"Subglottic œdema is a more dangerous disease than the other form. Scarifications would be useless in it, from the nature of the effusion; and in the great majority of cases (although hitherto not suspected), it has no doubt demanded early tracheotomy. It is the form, also, more likely to demand the permanence of the fistulous opening, and probably has obliterated the passage upwards from filling up of the calibre of the cricoid cartilage. Additional information will be very desirable to complete its clinical history." (P. 223.)

There are several other passages in this book, which, if our space permitted, we should be well pleased to notice; but at this point we must conclude. Dr. Gibb has most laboriously and ably investigated the whole subject of which his work treats, both by research in books and museums, and by personal observation; and he has put together a great amount of information in a form which is—with the exception of the blemish which we have noticed above—pleasing and instructive. He may safely entrust his labours and reputation into the hands of his professional brethren, in the confidence that he will receive from them his full share of credit for having enlarged our knowledge of throat-diseases, and especially for having been one of the first to demonstrate the utility of the laryngoscope in the investigation of these maladies.

A Voice from Derby to Bedlam. London: 1864.

With the ostensible object of deprecating the language employed, and the *animus* assumed to be felt, by the authors of a recent pamphlet on the Townley case, the author of *A Voice from Derby* reopens the question as to the guilt or innocence of the murderer of Miss Goodwin, with the evident intention of vindicating the evidence as to his insanity given at his trial by Dr. Forbes Winslow.

The able report to the Home Secretary, which finally decided the fate of Townley, so carefully drawn up by Dr. Bucknill, and endorsed by Dr. Hood, Dr. Meyer, and Dr. Helps, had, as we thought, set at rest for ever the question of Townley's sanity. The convict himself felt the searching force of the examination to which he was last subjected, and anticipated its result. "They think me sane," said Townley, as the Commissioner left his cell; "still it is very hard if they hang me now."

Although there is nothing new in the pleas brought forward by the author of *A Voice from Derby*, the question as to the insanity of Townley is treated with considerable ability; the manageable facts being dexterously handled, and awkward and damaging ones judiciously left unnoticed. Thus we are referred to the *opinion* of the counsel for the prosecution, that there was no evidence of any premeditation on the part of the prisoner; but the fact of Townley's having three knives upon his person—one a large clasp-knife, newly bought, the instrument with which the murder was committed—is not explained.

We cannot say that the "Voice from Derby" is distinguished by either temper or moderation; and we regret to find in it an attack upon an estimable provincial physician, whose talent and character should have protected him from such language. We cannot see anything in the conduct referred to that justified such language; and certainly the reproach cast upon that gentleman, that he has never been concerned in any of the great lunacy trials, is far from being any disgrace to him. He has at least escaped the imputation that so many have incurred; viz., of merging the medical witness in the paid advocate. The "Voice" takes great pains to vindicate the motives as well as the views of Dr. Winslow. But this was surely unnecessary. All that can, in our opinion, be said in the matter, is, that Dr. Winslow made a mistake in diagnosis, as others have done before him, and will do to the end of time.

De L'Inoculation Syphilitique, etc. Par Henri Lee. Traduite par Dr. Baudot. Paris: 1864.

As Inoculaçôes Syphiliticas, etc. Pelo Sr. Henrique Lee. Traduzido pelo Dr. Marques. Lisboa: 1864.

The *Saturday Review* assures its readers that the treatment and nature of syphilis are not studied or understood in England. It will be, therefore, gratifying to the clever young gentlemen who ventilate their learning in that journal, as well as to English syphilographists, to note that the works of Mr. Henry Lee have been so generally appreciated on the continent.

Certainly, Mr. Lee's work may be fairly said to have excited more interest on the continent than it even has in this country. We have no doubt that, had it originally appeared in Germany, and been translated into English, and properly introduced as of German growth, it would have received more attention in England than it has done. However, Mr. Lee may satisfy himself with the correctness of the old adage, *Magna est veritas*, etc. At all events, his views are well inoculated throughout Europe.

already his lectures have been translated into German and Italian, and now we have to announce a French and a Portuguese translation of them.

THE RESTORATION OF A LOST NOSE BY OPERATION, ETC. By JOHN HAMILTON, Surgeon to the Richmond Hospital, Dublin, etc. Pp. 58. Dublin: 1864.

THE accomplished and skilful author of this practical essay has had greater experience in the performance of the so-called Taliacotian operation than perhaps any modern surgeon of Europe. The operation is certainly not one which has been much accredited in these latter days. Surgeons of great authority have even condemned its results, as being worse than the condition for which it was employed. We are very glad, therefore, to find a man of Mr. HAMILTON'S sound judgment and large experience come forward and pronounce, on the strength of his experience, that the operation, rightly performed, so far from being a failure, is a great success.

In this essay, Mr. Hamilton gives an interesting history of the Taliacotian operation. In Ireland, it appears that the chief cause of the loss of the nose is lupus. Ten cases of the operation are detailed by him, and wood-engravings are given to show the marked benefits which have resulted from the operation. As Mr. Hamilton truly says, the best answer to be given to those surgeons who ignore the operation, is the opinion of the sufferers who have had their noses restored. This opinion is expressed in the warmest and most unmistakable terms of thanks on the part of the patients. Gaining the substitute for a nose, says Mr. Hamilton, "raises them to self-respect, and greater confidence in working their way in the world." At the end of the detailed cases is given a succinct account of the steps to be pursued in performing the operation. It is plain, on the face of it, that a delicate and tedious operation of this kind is one which requires skilful manipulation as well as experience for its complete success; and therefore is it pleasing to find that Mr. Hamilton's increased acquaintance with the operation only tends to confirm him further in its usefulness. A man without a nose is a painful object to all who look upon him; and, moreover, usually has a most painful consciousness of being so. We sincerely trust, therefore, both for the sake of the mutilated and of the public, that Mr. Hamilton's essay may be the means of bringing this nose-restoration operation once again into general favour. We can quite believe that, *non cuivis*, not to every surgeon is it given to be successful in such operations. What we have seen of them has satisfied us that peculiar and somewhat rare qualities are required in their performance; viz., great delicacy of fingers, calmness, an absence of haste and flurry, great steadiness and perseverance to the very end. Want of success may possibly be in some cases attributed to the absence of these rare qualities in the operator; and to the possession of such qualities may we fairly attribute Mr. Hamilton's success.

PRIZE ESSAY ON ANÆSTHETICS. The Mississippi Valley Association offers a gold medal of the value of one hundred dollars for the best essay on anæsthetics and their use. It is open to the world for competition. (*Amer. Med. Times.*)

Progress of Medical Science.

SURGERY.

PULSATING VARIX OF OPHTHALMIC VEIN. On March 10th, 1863, J. L., a female, aged 32, was admitted into the Hôtel Dieu at Rennes, under the care of M. Aubry, with a tumour in the orbit. She had no recollection of having been struck on the head; and the tumour was said to have become developed, without apparent cause, after an attack of typhoid fever which she had four years previously. On admission, her face was congested and puffed up, and she had a somewhat stupified appearance. The globe of the right eye projected, but the functions of the organ were not impaired. At the inner part of the upper eyelid there was a tumour of the size of a hazel-nut; it was subcutaneous, and the colour of the skin was unchanged. Farther inwards, between the nose and the eyelids, was another tumour, divided into two parts by the tendon of the orbicularis muscle. Its upper lobe measured about half an inch vertically and one-tenth of an inch in breadth; the lower lobe lay in front of the lacrymal sac, and simulated a lacrymal tumour. The tumours were soft and fluctuating; they disappeared on the least pressure, and immediately reappeared when it was removed. On laying the finger very gently on the tumours, pulsation isochronous with the arterial pulse, and a very manifest *frémissement*, were perceived. On applying the ear over the palpebral region, there was heard a very distinct souffle, presenting intermissions isochronous with the ventricular systole; it was gentle and prolonged, and might perhaps be better described as a continuous souffle, intensified by each beat of the heart. M. Aubry, and several of his professional colleagues, arrived at the conclusion that the tumour was an aneurism of the ophthalmic artery. On March 7th, after feeling ill for two days, the patient died almost suddenly.

On *post mortem* examination, all the organs were found healthy, except the encephalon and the skull. The entire portion of the cerebral hemispheres lodged in the middle lateral fossæ of the base of the skull was very much softened. The walls of the skull were much thicker than in the normal state; the vascular furrows were deep and large, and the cranial walls were very vascular. The skull presented a remarkable deviation in form. Behind the posterior edges of the lesser wings of the sphenoid bone, the configuration was normal; but, in front of these, it seemed as if the frontal bone had undergone a sort of twist, so that its left side was pushed forwards and its right backwards. An injection having been thrown into the right carotid artery, M. Aubry examined carefully the ophthalmic artery and its branches. There was no aneurism of this vessel; but the tumour consisted of a dilatation and thinning of the ophthalmic vein. On following out carefully the course of the vein, it was found to constitute the projections which had been observed on the upper eyelid. The vessel was as large as the little finger; its walls were so thin, that they might be compared to a serous sac opening into the cavernous sinus, which was itself three times as large on the right as on the left side. The vein in passing through the orbit followed a winding course; and the infraorbital vein, at its point of entry, was itself dilated. The nasal and facial veins were also dilated and thinned near the inner angle of the eye. The right cavernous sinus was much dilated, and communicated freely with the varicose ophthalmic vein; but posteriorly it ended in a *cul-de-sac*, instead of communicating with the inferior petrosal sinus.

For the pulsations observed in the tumours during life, M. Aubry suggests two possible causes. 1. The pulsation was due to the beating of the carotid artery in the dilated cavernous sinus and the transmission of the impulse to the blood in the vein. M. Bérard, being at the time at Rennes, was, on examining the vessels, inclined to this explanation. Or, 2, in consequence of the vascular development in the cranial walls, the capillaries, being dilated, established so free a communication between the arteries and veins, that the action of the heart on the venous blood was more than usually perceptible. M. Aubry prefers this latter explanation, because, while throwing water through the vessels with a syringe previously to injecting them, he observed the tumour to become filled, and was able to reproduce in this way the pulsations and the *souffle* which had been observed during life. It was evident, he thinks, that the beating, distension, and souffle which accompanied the injection of water by the syringe were due to this fluid reaching the vein, exactly in the same way as during life the same phenomena depended on the entrance into the vessel of blood forcibly impelled by the heart through the capillaries. (*Gaz. des Hôpitaux*, 12 Avril, 1864.)

Aneurism of the Sciatic Artery: Injection with Perchloride of Iron. On March 18th, M. Nélaton treated, by means of injection of perchloride of iron, an aneurism of the terminal part of the sciatic artery, which was of the size of a thumb and projected in the natis. The case was an interesting one, inasmuch as the patient had already had sciatic aneurism in the same region, for which M. Sappey had in 1850 tied the sciatic artery above the tumour —the operation being for a time successful. This is said to be the first case in which the operation was performed. After one injection of the perchloride of iron, the pulsation completely ceased; the tumour subsequently gradually diminished; there was no inflammation; and, at the end of a month, the patient was making favourable progress towards recovery. (*Gaz. des Hôpitaux*, 19 Mars and 16 Avril, 1864.)

Cauterisation of Malignant Pustule. The Drs. Maurezin have published in the *Archives de Médecine* for March 1864, a memoir on the treatment of malignant pustule, in which they relate fourteen cases shewing the efficiency of the actual cautery. The success of this application was complete, even in one case where the disease was of six days' duration. In a case of pustule seated in the fold of the elbow, in front of the tracheal artery, the application of the cautery was unattended by any dangerous result, and was followed by success. This mode of treatment is suitable in the first and second stages of the disease, while only an inflamed areola and vesicles are present. The whole disease may be removed without leaving a large wound; but a cicatrix is left, which on the face is more or less unsightly. This treatment is not new. Malignant pustule, when it was seen by Duhamel in 1737 and described by Morand in 1766, was treated in the provinces by extirpation, Maret of Dijon and Fournier extirpated malignant pustule and applied red-hot iron. There is reason to believe that this practice, which Thomassin opposed, had then become common; since Enaux and Chaussier have described in several pages the inconveniences of the proceeding, preferring to it a combination of scarification with cauterisation. The treatment of malignant pustule affords an instance of the danger of laying down therapeutic formulæ as absolute. Maret succeeded in some cases in curing the disease by extirpation; but he failed in others—and the operation was condemned. In some of his unsuccessful cases, cited by Thomassin, however, the disease had arrived at the gangrenous stage and was very extensive; and in this instance the want of success is no argument against the operation, which failed because it was performed too late. At the present day, it seems that, at the commencement of the disease, extirpation or the actual cautery are the most powerful agents; and if the cicatrix left after simple extirpation be equally healthy with that left after cauterisation, the former operation is to be preferred. When the disease has extended, scarification, and the application of caustic solutions, such as butter of antimony and corrosive sublimate, or with caustic potass, are the best means of treatment. (*Gaz. des Hôpitaux*, 16 Avril, 1864.)

Inguinal Aneurism Treated by Compression. An officer came under the care of M. Rizzoli, with an aneurism of the left groin, the result of a fall. As the tumour reached into the pelvis, compression could only be applied below it. At the end of three days, in spite of interruptions of the treatment, fibrine had been deposited, and the aneurism so far hardened and reduced in size that it became possible to apply pressure above it. This was at first done by means of the finger; but, although Valsalva's method of treatment was also followed, only an imperfect effect was produced. Electro-puncture also produced merely an incomplete and temporary result. As the aneurism, although diminished in size, continued to pulsate at the end of forty days, M. Rizzoli had an instrument used by which pressure could be more easily and exactly applied to the artery where it passed over the bone. At the end of two days, this pressure, which had been maintained sometimes by the patient himself, sometimes by an assistant, had caused pulsation to cease, not only in the aneurism, but in all the arteries of the limb; the temperature of which, however, remained normal. The pulsation gradually returned in the arteries of the foot and leg. The aneurism remained hard and free from pulsation; and at the end of thirty-five days, the patient left the hospital cured. (*Acad. delle Scienze dell' Institut. di Bologna*, and *Bull. Génér. de Ther.*, 30 Avril, 1864.)

Œsophagism. As an example of the nervous condition termed œsophagism, M. Nélaton some time ago called the attention of his class to a man of vigorous temperament, 35 years of age, and in good health, who came to the hospital under the idea that he had a foreign body in the œsophagus. A fortnight previously, while picking his teeth with a thin piece of wood, he was suddenly spoken to. His attention was turned away for an instant, and at the moment hs was about to make a reply he perceived a perfect sensation of a foreign body on the left side of the pharynx. A practitioner who was at once called in, recognised the foreign body at the spot indicated, and made some vain attempts to extract it. Extremely little pain followed, but as this afterwards increased he came to the hospital. M. Nélaton suspected from the narrative, that no foreign body existed; and observed, that not unfrequently an unpractised finger mistakes the upper edge of the cornu of the hyoid bone for the body supposed to have been swallowed. Usually these nervous symptoms disappear at the end of three months under suitable general treatment; but M. Nélaton referred to a case in which they manifested much greater tenacity. A lady, about six months since, being about to drink some water sweetened with syrup, not liking the appearance of the latter, placed a single drop on the tip of her tongue, and discovered it to be a solution of potass. Immediately, and notwithstanding that the drop had never been swallowed, she perceived a pain at the lateral

rt of the pharynx, accompanied by an impossibility swallowing. The pain diminished, but so difficult l deglutition continue to be, that the patient re- ired an hour to swallow a simple cup of broth, while e passage of the smallest solid body was absolutely possible. It was believed that she was the subject of icture of the œsophagus, until M. Nélaton, being nsulted, passed down the largest bougies with great ility. (*Brit. and For. Med-Chir. Review.*)

British Medical Journal.

SATURDAY, JUNE 4TH, 1864.

OUR ARMY MEDICAL DIRECTION.

HE present deplorable condition of the army me- cal service, the chronic state of discontent and un- rtainty in which army medical officers live, and e constant disfavour with which their just com- aints are met at the Horse Guards, naturally sug- st to us to inquire into the nature of the authority hich regulates the Army Medical Department. Who ts up above and pulls the wires, and plays the ma- inery which brings forth such discontent? Who responsible to the country for this defective super- tendence of the soldier's health? And who is re- onsible to the profession for this neglect and disre- ard of the welfare and the honourable sentiments of ir medical brethren? It is high time the profession large should know something on this score; for it scarcely possible that things could have come to the ass at which they have arrived, had the machinery hich is supposed to regulate them been equal to, or apable of properly performing, its work. The proofs e before us which show that our medical brethren the army are not treated as they have a right to e treated; and, we confess, to us the conclusion is bvious, that the main fault in this respect lies at he door of the Director-General's office. If the eneral Direction understood their business, or, un- erstanding it, had the courage to perform it, we annot believe that such a complete break-down vould have ever occurred in the service. If our pro- ession had been rightly represented at head-quarters, ve will not believe that our army medical brethren vould have been so unfairly and ignominiously reated as they notoriously have been; that promises nade one day would have been so scandalously roken the next, and the medical service of the army o grievously injured. We surely have a right to xpect that he who represents our profession at the Horse Guards should be something beyond a mere overnmental red-tape official; that he should be im- bued with the science of his calling, and know how o maintain the dignity of his profession in the face of high military authority; that, while defending the interests of the country, he should not forget the honour and interests of the man of medicine.

Universal dissatisfaction of the kind now referred to could not have broken out in the army medical service, had there not been something very rotten in the management of it. The dissatisfaction, moreover, is not of to-day; it is long standing and chronic. It has, therefore, gradually grown up under the eyes and direction of the Direction-General; and on the Direction assuredly must and ought to rest the responsibility of the failure. Their incapacity is now manifested in the fact that Lord Hartington applies, not to them, but to civilian medical men, to learn how it is that things have come to such a state that army medical officers cannot be had! Civilians are asked to help the service out of the mire! For years past the medical press has warned the Direction-General bureaucracy of the evils they were bringing on the army medical service; so that, if that division of Horse-Guards official red-tapism were ignorant of the causes which have worked the failure, they must have wilfully and blindly shut their eyes and ears to patent facts, and were certainly the only members in the profession who could boast of such ignorance.

If we must judge this Army Medical Direction by their operations, we are forced to the conclusion that they are composed of mere official instruments—of simply mechanical agents—of men who use their fingers rather than their heads; who live and move under the light of superior orders of officials, by whom they are held in low esteem; with whom to hear is to obey, and to think or recommend high insubordination; who are directed, not directors. We see in the fruits which they have produced none of that savour of high scientific intelligence and proper assumption of professional dignity, which we have a right to expect in those who come between the profession and the Government, who connect us with the Government, and are our sole representatives with the Government. If the men who compose that bureau have neither a scientific knowledge of their business, nor the moral courage requisite for a due assumption of professional power and pride in the face of authority, it is manifestly not a bureau fitted to manage the affairs it pretends to regulate, not a bureau such as the profession have a right to see in that high place. The profession, therefore, will begin to inquire into its nature, its origin, and its composition; and to demand its reconstruction.

The present Direction-General seems to us inevitably convicted of incapacity or unfitness for directing army medical affairs. If they see and recognise the evils attaching to the present state of things, and are unable to remove them through want of power, then are they nothing but official nonentities, and their direction a mere sham; or, again, if they have the power, but do not exercise it, they convict themselves of moral incapacity to sustain the dignity of the profession; they degenerate into mere clerks of

the War Office, lovers of ease and of comfort at any price, quiet baskers in the sunshine of high official favour. But such a medical board is not what either the public or the profession has a right to look for. We have a right to have presiding over the army medical service those who possess, in the first place, a high scientific knowledge of medicine, large practical experience, and that personal dignity—the offspring of science and long-tried experience—which shall obtain the ear and guide the councils of authority.

That a reconstruction of this army medical body is necessary, seems obvious enough. It is impossible not to trace in the incapacity of the Board the evils which beset the army medical service. The public has, at all events, a right to demand that its army medical service shall be presided over by those alone who have proved their capacity for the work. The public has a right to demand that men shall be appointed to the Direction who have given hostages to science, and have shown by their antecedents that they are fit for the important work. Our army medical brethren and the medical service of the army should be directed by men, and by those only, who have proved themselves in the eyes of the profession fit for the business. Assuredly it is the duty of the profession at large to exercise its legitimate influence over all its members, and bring before the bar of its opinion and judgment every individual occupying a public position who may sacrifice the interests of his profession. It is the duty of the public also to ask if they, who can so manage a branch of the service as to bring it into its present state of failure, are equal to the task which they have undertaken. The army medical service has totally broken down; let us know who they are who have brought about this complete break-down.

THE ARMY MEDICAL DEPARTMENT.

It is interesting and instructive to observe the tone taken and the arguments used in the military journals on the subject of army medical officers' grievances. The *United Service Gazette* intimates that the present medical Director-General is not to blame for the present state of things; that, in fact, he is doing all he possibly can for the rights and interests of his professional brethren; that it is possible that the supreme authorities might be found to yield in the matters of pay, promotion, and retirement, but that they will not yield the points of relative rank and the courts of inquiry question, which had been settled in our favour by the Warrant of 1858, and afterwards withdrawn; that immense numbers of highly qualified surgeons from all parts are coming forward in answer to the demand made by Dr. Gibson for civilian medical officers; that, consequently, the profession had better be content with a modicum of what they now demand, leaving the questions of relative rank and precedence for future adjustment; that the number of vacancies is exaggerated, and only due to the accidents of the time; and that crowds of young men from Edinburgh, and still more from Dublin, are preparing to compete for the appointments into the military medical service.

The *Army and Navy Gazette* remarks upon the *curious social problem* presented to us, of a large number of valuable appointments now going a begging; there being two hundred vacancies for posts whose value rises from £230 up to £500 and even to £800, and perhaps to double that amount in India, with a prospect of good retiring pensions, etc. The editor says that the withdrawal of the concessions of relative rank, precedence in courts, etc., by the Warrant of 1858, can have nothing to do with the matter; that it is too much to believe that young medical men can be actuated by "sympathetic sensitiveness" with the supposed wrongs of the service to such a degree that they would deny themselves the advantages offered to them with so liberal a hand. But he does not attempt to solve this curious social problem—not even in the easy way attempted by Lord Hartington, who also says that petty questions of rank, etc., can have no deterring influence on young surgeons; that the cause of the dearth of candidates is to be found in the advantages held out by private companies, steam-boat, mining, colonial, etc.

We need hardly say that we differ in opinion from these writers, who are determined, in a purely military spirit, to ignore all the real grievances which are brought to their notice by their correspondents. They ignore the honourable sentiments of a large class of medical graduates, and threaten us with a swamping of the department, by means of the appeals made to the merely mercenary sentiments of other graduates, to the great discredit of the War Office and of the army medical authorities. The correspondence in the columns of these military journals shows that they do not understand the real grievances of the medical officers. There is, it is true, a widespread discontent on such questions as the branding of deserters and the fines on the rejection of recruits, as also on the disputed questions of rank and precedence; but it is not these alone which cause the well-bred and well-educated medical graduate to avoid the army. The paramount cause is the profound distrust the medical profession have in the intentions of the War Office, the Horse Guards, and the medical Director-General. When we see that the authorities do their utmost to deprive the doctors of all the advantages which a previous administration has been compelled to grant to us under circumstances of emergency, how could we advise our young medical friends to attempt the hopeless task of giving and gaining satisfaction in a service in which we verily believe that the *pur sang militaire*—in common parlance,

e Horse Guards—would always be pleased to place em as much as possible in the condition of camp-llowers? We cannot concede the point of the gradation of rank, from which army medical offi-rs are now suffering. Rank, with its concomitants, nour and consideration, are everything in the iblic services.

IRIDECTOMY.

We have purposely avoided, and for very obvious easons, attempting any analysis of the important bservations made by various writers in this JOURNAL n the subject of iridectomy. We brought the subject orward solely on public grounds, and because, as far s we could judge, there was a feeling amongst many iembers of the profession that the operation was either oo extensively practised by some surgeons, or too equently neglected by others. Naturally enough, here also arose in the minds of surgeons—not speci-lly occupied with eye-diseases—a degree of surprise hat neither the original proposer of the operation, ior any of his followers, had offered a satisfactory *ationale* of its action. But it would be absurd to eject a surgical operation on this score, if experience lemonstrated its merits; and it must be now admitted hat the general assent of eye-surgeons to the operation ertainly gives to it all the value which attaches to uch experience. The difference of opinion which ow exists amongst eye-surgeons touching iridectomy ppears to be in the matter of its application; and, n this respect, there certainly still exists much want of agreement. Some ophthalmic surgeons, nd, amongst others, Mr. Bowman, recommend the peration of iridectomy in cases which embrace a wide field of pathological conditions. Others, again, regard iridectomy as valuable only in the special, acute, and comparatively rare form of sudden glau-comatous inflammation—a position assumed, for ex-ample, by Mr. Dixon. Some surgeons there are, again, who cannot recognise the morbid conditions of the eye for which the operation is proposed and prac-tised, and who, therefore, reject it altogether.

Thus, as far as we can read the history before us, the exact position of the case is this: the majority of ophthalmic surgeons accept iridectomy as a good and an established operation; but some hold its right application to be of a more restricted character than others do.

SANITARY STATISTICS.

NUMEROUS cases continually show the necessity of a due controlling of statistics. Margate, according to the Registrar-General, was one of the most un-healthy sea-towns in England. The unsatisfactory statistics roused the inhabitants to action. The Mayor convened a meeting of medical men to inves-tigate the matter; and the investigation shows that Margate, so far from being unhealthy, is one of the most healthy towns in England.

"The Registrar's table of mortality for the ten years 1850-60, relating to English watering-places, arrived at the strange fact that Margate showed the highest death-rate of any. The minimum being 15.4, and the average for all England 22.2, in the thou-sand, it appeared that the figures in the case of Margate were 22.3. The result of investigations, however, showing the monthly mortality of the Mar-gate residents for thirteen years, gives the death-rate at less than 16 in 1,100. Margate, with a sta-tionary population, receives annually an increasing number of visitors, and has become to a certain ex-tent a sanitarium. The Royal Sea-Bathing Infirmary, now the Royal National Hospital, was founded in the year 1792. Within the last twenty years, two other infirmaries have been established, one for children, the other for aged persons. The cottages in the vicinity of the town receive patients from the Wan-stead Orphan Asylum, and other invalid children. The mortality must, beyond all doubt, be greatly in-creased by such influences. Putting this point aside, however, the extraordinary lowness of mortality for a long series of years is sufficient to place the town in a very enviable rank as regards public health."

Dr. Prior has in a like manner pointed out that the high death-rate of Bedford, which statistically appears so striking, is to be placed to the account of the deaths in the lunatic asylums, workhouses, etc., which are concentrated in the town. He has shown that the town of Bedford is, *per se*, a very healthy town.

THE Seventy-sixth Anniversary Dinner of the Society for the Relief of the Widows and Orphans of Medical Men took place at the Albion Tavern on Saturday last; T. A. Stone, Esq., President of the Society, in the chair. About eighty gentlemen were present. The Society, which was until lately under the control of the Friendly Societies' Act, has lately received a Royal Charter of Incorporation—an event which appears to have given great satisfaction, inas-much as it places the Society on a firmer basis, and removes certain inconveniences and restrictions under which it previously laboured. The annual report issued in March 1864 shows that there were 456 members of the Society; and that forty-six widows and twenty children of deceased members were re-ceiving relief from its funds. During the year 1863, thirty-four new members were elected; nine died; and four withdrew. The amount in relief during the year ending November 1863 amounted to £1929 : 10. The property of the Society, in November, amounted to £47,567 deposited with the Commissioners for the Reduction of the National Debt, and £17,410 in the new Three per Cents. We would recall the attention of the profession in London and the vicinity to an article published in this JOURNAL for May 16th, 1863, in which the ob-jects and advantages of the Society were set forth.

The Council of the Metropolitan Counties Branch has determined on summoning a special general meeting of the members, to be held at the office of the Royal Medical Benevolent College, 37, Soho Square, on Monday, the 13th instant, for the purpose of taking such steps as may seem advisable in reference to the present condition of the Army Medical Service. It would be premature to point out the precise line of action which will be proposed; but probably it will be similar to that of the Edinburgh College of Physicians, to which we referred last week. We trust that the members of the Branch—one of the largest in the kingdom—will, by their presence, show the interest they take in the important topic to be discussed; and further, that the other Branches, which are now about to hold their annual meetings, will not fail to advocate, by memorials or petitions, or in any other practicable way, the claims of the medical officers of the army. A consentaneous expression of opinion, from various bodies of medical men, cannot surely be without effect in high quarters. We would also venture to suggest that, in this matter, the London College of Physicians and other medical corporations might advantageously follow the example of the Edinburgh College of Physicians, and memorialise the Government upon the subject. It is evident, that the army medical direction is utterly incapable of advising or assisting the Government in the matter.

At the late trial of La Pommerais, it was asserted by some of the agents of life-assurance companies in Paris, that contracts were not entered into by them with medical men, and that La Pommerais had contracted the assurances in which he was concerned solely through concealing the fact of his being a doctor. The French medical journals have naturally enough taken up this slur thrown upon doctors in general. The theory upon which the resolution is founded, says M. Guérin, is this: 1. That medical men can get behind the scenes, and make unfair use of their knowledge in effecting assurances; and 2. That they are in a position which enables them to readily get rid of—*i. e.*, murder—the individuals whose lives they have assured. M. Jules Guérin, in a long article, rather favours this view of the companies. He says they have had only too much reason to be suspicious. There have been Palmers, and Castaings, and Pommerais; and his conclusion is, that doctors must have nothing whatever to do with contracts of this kind. "It is the duty of all medical men to renounce all kinds of assurance, both on their own and on other people's lives." Doctors must be like Cæsar's wife—without suspicion. *L'Union Médicale*, however, takes a more reasonable view of the case, and does not accept the injury thus thrown upon the profession. He tells us that he doubts if the French offices do actually reject all medical assurances; and believes only this, that the inquiry i the case of the doctor is made especially minute. H defends the profession against the calumny inferre in M. Guérin's assumption. At all events, it is satis factory for us to know that in England the profes sion is not under such vile suspicion.

It is worthy of note, that the whole weekly medica press, with the exception of the *Lancet*, views th admission of reporters to the Medical Council wit disfavour and doubts. The *Dublin Medical Pres* has the following on the subject.

"We suppose we ought, for the interests of jour nalism, to congratulate our readers on the admissio of reporters to the meetings of the Medical Council but we do not do so in the interests of the profession The question was brought before the Council on two former occasions by Dr. Andrew Wood, and was rejected on both occasions by considerable maiorities.* At the last meeting, however, Dr. Wood again brought forward the question, and succeeded in carrying his motion *by the casting vote of the Chairman only*. The Medical Council is a Council, and not a Debating Society; and its mission is not declamatory combating, but quiet deliberation; and we fear the effect of the admission of reporters to its sittings will be to substitute talk for work. If this assumption be true, it follows that some of the most valued representatives, who are not possessed of the 'tongue of a ready writer', will rank as silent voters. The change has certainly borne already one remarkable fruit; for the reports of the Council's proceedings have suddenly dilated to a length which will render them quite unreadable to the profession at large. We anticipate evil results from the notoriety which such reports must confer on the speaker; for their tendency will be to lead to the delivery of speeches, not for the purposes of argument, but to create sensation, not for the ear of the Council, but of the profession. We find the speech of Dr. Andrew Wood on the admission of reporters interlarded with extravagant laudation of the *Lancet* as the 'leading journal', occupying many columns in the pages of the 'leading journal' itself the same week. If the same course be pursued by other speakers in the Council, we do not hesitate to say that the publicity of its reports, instead of being a boon or a credit to the profession, will vitiate the good which we yet hope from it, and reduce the value of the debates to the level of the political claptrap of the Dublin Corporation."

The Small-Pox and Vaccination Committee of the Epidemiological Society urge on the Government the necessity of an immediate amendment of the vaccination laws. Abundant evidence, they say, exists of the imperfect working of those laws.

"The medical officer of the Privy Council has represented 'that the laws now in force for the purpose of extirpating small-pox are not likely to accomplish their object'. Three thousand two hundred and forty persons die, on an average, every year in England from small-pox. The very large majority of deaths from small-pox is in young unvaccinated children; but there is, especially at epidemic periods, a considerable mortality among imperfectly vaccinated adults. Mr. Marson has informed the Com-

* The motion was brought forward by Dr. Andrew Wood in 1861, 1862, and 1863. In 1861, it was rejected by 16 votes to 2; in 1862, by 16 to 6; and in 1863, by 12 to 11.

ttee that there were 123 deaths from small-pox last ar, in the Small-pox Hospital, in persons who had en vaccinated; but that in only 3 of these had the ccination been such as all persons ought to receive their full protection; and that, while the mor- lity among the unvaccinated was 47 per cent., and ong the imperfectly vaccinated 15 per cent., less an 1 per cent of those properly vaccinated died. therefore, all were thoroughly well vaccinated in rly infancy, small-pox might be nearly banished m our death-registers.

"Amendment in the law is especially required in e following respects: 1. For enabling local authori- s to have more complete information as to the vac- nation of the children born in their respective calities, by improvement of the registration of vac- nation. 2. For enabling local authorities more rea- ly to take proceedings against negligent parents. For empowering local authorities to employ, and course to remunerate, persons to supervise and ake local inquiries into the observance of vaccina- on in their respective localities. 4. For the esta- lishment of better arrangements for the public per- rmance of vaccination.

"On no subject connected with vaccination is there more entire concurrence of opinion than on the perior advantages of the performance of vaccina- on with well-selected lymph direct from arm to rm; and the Committee are of opinion that all rrangements for public vaccination should keep this rimarily in view.

"The Committee, looking to the great benefits hich have resulted from the Compulsory Vaccina- ion Act even in its imperfect state, would deprecate trongly any extension of the limits of age now llowed by law for the performance of vaccination. t appears to the Committee that the powers now xercised by the Poor-law Board should be trans- erred to the Privy Council."

N consequence of the death of Mr. Green, there will e three vacancies to be filled up at the next election f Councillors of the College of Surgeons. Mr. Han- ock and Mr. Gulliver go out by rotation; but it is understood that they will present themselves for re- election. The names of Mr. Curling and of Mr. Le Gros Clark are also already mentioned as candidates n the occasion. Any of our country Fellows, who may be desirous of the honour of a seat in Council, should bestir themselves betimes.

THERE is no truth whatever in the statement made by a medical journal, that the regulations of the London College of Physicians are, like the regula- tions of the Society of Apothecaries and the Royal College of Surgeons, not in accordance with the re- commendations of the Medical Council. Its regula- tions are in the strictest accordance with the recom- mendations of the Medical Council. So scrupulous, indeed, has the College of Physicians been in this matter, that it last year summoned two special *comitia* for the sole purpose of making (at the sug- gestion of the Medical Council) a few verbal, not material, alterations in its regulations. The journal referred to in making this statement has exhibited just the same amount of ignorance of the subject, as it did in asserting that the regulations of the Society of Apothecaries were in accordance with the Council's recommendations.

THE Professorship of Hygiene to the Royal College of Surgeons of Ireland, formerly, at its establish- ment, held by Dr. Maunsell, but which had remained vacant since his resignation, has been revived. The reason for this is, the increasing attention which is being paid to sanitary matters in Ireland. On Monday last, the election of a Professor took place. There were two candidates; and the choice fell on Dr. Mapother, Demonstrator of Anatomy in the College, and Surgeon to St. Vincent's Hospital.

THE Cottenham Estate at Wimbledon—a beautifully situated property of about twenty-eight acres—has been purchased by the Governors of St. George's Hospital for the site of their Convalescent Hospital. The purchase-money was, we believe, £17,000.

THE German journals announce the death of Hein- rich Müller, Professor of Medicine at Würzburg. He was cut off by erysipelas. Also died, on May 13th, at Göttingen, Rudolph Wagner, the well known physiologist.

In a late discussion at the Parisian Surgical So- ciety, on amputations, M. Broca observed that sta- tistics proved little or nothing in the matter. Am- putations made in Paris and in the provinces were followed by very different results. In the provinces, amputation of the thigh generally succeeds; but in Parisian hospitals, it is an operation of extreme danger, death being the rule and recovery from it the exception. Statistics, according to M. Broca, show that the mortality in Paris hospitals after am- putation of the thigh for injuries is 100 per cent.! Trélat makes it 83 per 100 cases.

A Dr. Mailloux, first physician to the King or Queen of the Malgaches, informs the Academy of Medicine that he has discovered a remedy for cholera. The disease, he says, acts on the body like hydrocyanic acid, and he saves the afflicted by sub- jecting them to nitric acid fumigations.

In 1599, Henri Quatre had no fewer than sixty- five medical men of different kinds to take care of his health; viz., a head physician; an ordinary physi- cian; eight district physicians; fifteen consulting- physicians; a doctor to superintend distillations; four apothecaries; a distilling apothecary; a head surgeon; a surgeon in ordinary; eight district sur- geons; nine other surgeons; two bone-setters; one operator for the stone; an oculist; and a head barber, assisted by eight district barbers. In this list are not included the doctors in the service of Marguérite de Valois, and of Marie de Medicis.

There is an old German proverb which says: "Physicians purge the body; theologians the con- science; and lawyers the purse."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Quarterly.]	Matlock.	Saturday, June 4th, 2 P.M.
METROPOL. COUNTIES. [Special General.]	37, Soho Square.	Monday, June 13, 4 P.M.
EAST ANGLIAN. [Annual.]	General Hospital, Bury St. Edmund's.	Friday, June 17th, 2 P.M.
BIRMINGHAM AND MIDLAND COUNTIES. [Annual.]	Hen and Chickens Hotel, Birmingham.	Friday, June 17th, 3.30 P.M.
SOUTH MIDLAND. [Annual.]	Woburn.	Thurs., June 23, 1 P.M.
LANCASH. & CHESHIRE. [Annual.]	Town Hall, Lancaster.	Wednesday, June 29th, 12 noon.
NORTH WALES. [Annual.]	Black Lion Hotel, Mold.	Tuesday, July 5, 1.30 P.M.
WEST SOMERSET. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.

METROPOLITAN COUNTIES BRANCH.

A SPECIAL General Meeting of the Metropolitan Counties Branch will be holden at 37, Soho Square, on Monday, June 13th, at 4 P.M.:

To consider the present position of the Army Medical Service, and to take such steps in the matter as may seem advisable.

A. P. STEWART, M.D. } *Hon.*
ALEXANDER HENRY, M.D. } *Secretaries.*

N.B. Members of the Association in London and the neighbourhood, who may be desirous of expressing their opinions in regard to army medical matters, but have not yet joined the Metropolitan Counties Branch, may be admitted to membership on application, in writing, to either of the Honorary Secretaries, Dr. Stewart, 74, Grosvenor Street, W., or Dr. Henry, 15, George Street, Portman Square, W.

SOUTH MIDLAND BRANCH.

THE Annual Meeting of the South Midland Branch will be held at Woburn on Thursday, the 23rd of June, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases are requested to forward the titles of same to Dr. Bryan, Northampton, not later than the 9th of June.

JOHN M. BRYAN, M.D., *Secretary.*

LANCASHIRE AND CHESHIRE BRANCH.

THE Twenty-eighth Annual Meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, June 29th, at Twelve o'clock, noon: E. D. DE VITRÉ, M.D., President.

Gentlemen intending to read papers are requested to transmit the titles of the same to the Honorary Secretary, Dr. Wm. Roberts, Chatham Street, Manchester, not later than June 16th.

WILLIAM ROBERTS, M.D., *Hon. Sec.*

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

IT is worthy of remark that, in spite of the large and, as many hold, excessive number of classes which medical students are obliged to attend, so many are to be found ready, nay anxious, to seize every additional opportunity of instructing themselves, and quite willing to devote their few leisure summer hours to lectures, attendance on which is purely voluntary. These reflections are forced upon one by a perusal of the list of lectures which the different teachers in our extra-academical school are delivering this summer. Besides the Botany class, which can only be attended in summer; the Natural History lectures, which all prefer attending in the less busy months; and the hospital, which good students always attend—time seems to be found for lectures on the History of Medicine, Morbid Anatomy, Operative Surgery, Diseases of the Eye, etc. Whether students be wise or not in thus overburdening their brains with knowledge which may not be considered strictly essential, it, at least, is a sufficient evidence of the zeal, devotion, and energy, which actuates the students of our Edinburgh school.

During the summer months comparatively few lectures are delivered in the University. The literary classes are only held during the winter session, and so the harder worked medical students are left in quiet possession of the Quadrangle, and the reading-room, where they may now, at least, read in comparative tranquillity, undisturbed by the loud construing of Latin and Greek authors, to which the very young students of the junior humanity class are so much addicted. If the literary department make so little use of the summer months, I cannot, fortunately, say the same of the medical. The dissecting-rooms here continue opened now as in winter; and, as bodies are comparatively more plentiful, good students profit by the opportunity, not only of dissecting, but of getting through a little operative surgery; for Professor Goodsir generally arranges that a course of the kind shall be conducted by one of the demonstrators. In addition, Mr. Turner has an admirable summer course of demonstrations on Regional Anatomy. Professor Goodsir has been in the habit, almost every year, of giving lectures on some branch of Comparative Anatomy. This year, he is not doing so; nor could he be expected to do so, as the precarious state of his health requires the exercise of the utmost vigilance, in order to enable him to get through his arduous winter's work.

Botany flourishes as well as ever in Edinburgh, as any one may convince himself by walking down Inverleith Row at about a quarter to eight in the morning, and seeing the stream of students making their way to the Botanical Gardens; for Professor Balfour is as early a riser as he is an enthusiastic botanist, and seems to think that a morning walk in

e summer weather will give a charm to the hardest tural orders. It were well if the course of study all departments were as thorough and as practical as is in botany. Besides the daily lectures and demonstrations in the gardens, the Professor conducts cursions into the country every Saturday during e summer session; and so every student of the ass has the opportunity of getting up the details a science, which might otherwise appear dry and uninteresting, at the same time that he visits the eautiful scenery which lies within a radius of thirty forty miles of our beautifully situated city. Our atural history students follow the example, although a less extent, of their botanical friends, and spend gether some pleasant days dredging in a little eamer about the Firth of Forth, enjoying, at the me time, the zoological treasures which they are curing, the beautiful scenery, and the delightful il.

All who have been students in Edinburgh will cal with pleasure and satisfaction these excursions, pleasant and instructive, so calculated to inspire e student with a love for science, and, moreover, so ell fitted to bring men into contact with one nother; and to supply, to a certain extent, the gap hich exists in our northern university system in the ocial relations of the student.

But, besides the studies which I have mentioned, nd which are more particularly followed out by the unior students, the seniors are not neglected; for e have lectures on Medical Jurisprudence, which, y the bye, Professor Maclagan is making as practical as possible, and a course of Medical Psychology, hich Dr. Laycock conducts; and instruction in Practical Histology in the physiological laboratory of Professor Bennett; and to all this *embarras des richesses*, I must add the clinical lectures in the Royal Infirmary. To Professor Syme's lectures, I shall not to-day refer, with the exception of saying that a full audience continues to testify to the value of his admirable instructions; nor to the extra-academical clinical classes, which are well filled, and very well conducted. I shall more particularly confine my attention for the moment to the University class of Clinical Medicine.

I was sorry to inform you, some months ago, that Professor Bennett had, in consequence of illness, been obliged to leave Edinburgh for some time. After a residence of a few months in the South of Italy, Dr. Bennett has returned, his health having, I believe, been restored by the change; and on May 2nd, he resumed his duties as clinical professor. In doing so, he took the opportunity of giving his opinion on the subject which has of late attracted so much attention, the *quæstio vexata* of medical education. Dr. Bennett insisted that the great evil in the medical education of the present day did not consist in students being too much lectured to, but in the lectures being often delivered by incompetent persons. Dr. Bennett drew a strong picture of the superficial knowledge of those who occupy, in many instances, the position of teachers; and recommended that the qualifications of teachers for their task should be tested by a stringent examination. But if Dr. Bennett were severe on the lecturers, he was no less so on the examiners of our medical boards. On this subject, Professor Bennett alluded to the examining boards of our own University. Up to a very recent period, the professors were the only examiners in the University; each professor had the power of rejecting or approving candidates in his own department. When the University Commissioners inquired into the condition of the University, and drew up regulations for its future government, assessors were appointed, as gentlemen were called whose duty it was to examine in connection with the professors. A very moderate salary was set aside for the payment of these gentlemen, who, in the opinion of all, have a very delicate and important duty. But, in his condemnation of examiners who do not happen to be professors, Dr. Bennett included these gentlemen. "In Edinburgh," Dr. Bennett affirmed, "there are certain parties who allege that all teachers are too lenient to their own pupils. They have had sufficient influence to cause a portion of the limited sum granted to the Scotch Universities to be set aside for the payment of what are called assessors. It has been sufficiently shown that these gentlemen, for all the purposes of a true examination, are unnecessary; and that, so far from acting as guards for the public against incompetent practitioners, they are more indulgent to the students than the professors themselves." Dr. Bennett appeared to ignore one great function of the assessors. He appeared to forget that some examiners are, like other men, subject to prejudices, caprices, and vicissitudes of temper; that the student who to-day is complimented for a brilliant examination, might, perchance, were he to go up to-morrow, figure with a *vix satis bene*; that, indeed, the success of the candidate depends, in some cases, almost as much on the examiner's manner and treatment, as upon his actual knowledge. It is, undoubtedly, as important a duty of the assessors to see that the student is fairly examined, as it is to protect the public against incompetent practitioners.

This is, I can assure you, the opinion of the students of Edinburgh at the present time; and that it will continue to be so, is most likely; as long, at any rate, as there are professors in the University who condemn in general, still not less decided, terms the extra-academical school, and show a manifest dislike and disrespect to everything connected with it, so long will the students of Edinburgh continue to demand, in justice, the presence of assessors at the University Board.

The case of amputation at the shoulder-joint for aneurism of the subclavian artery, to which I referred in my last communication, is progressing admirably. The case is under the care of Mr. Spence. The aneurism was situated in the whole course of the artery on the right side; and the only plans of treatment which could have been followed, consisted in tying the innominate, or amputating at the shoulder-

joint. Mr. Spence had recourse to the latter expedient. He tied the artery in two places, at some distance, however, from the seat of the aneurism. The patient has progressed very favourably since the operation; the aneurism is becoming smaller and smaller; and there is little room for doubting the favourable issue of the case.

At the last meeting of the Medico-Chirurgical Society, Dr. Thomas Keith, in showing a specimen of ovarian cyst, stated that he had performed ovariotomy fourteen times, and that ten of the patients had recovered.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

APRIL 29TH, 1864.

JAMES VOSE, M.D., Vice-President, in the Chair.

GENERAL BUSINESS.

The Secretary's Report was read, from which it appeared that the attendance of members had been rather less than during the previous session. There had been a good supply of pathological specimens.

The BRITISH MEDICAL JOURNAL. After a vote of thanks to the Secretary, it was moved by Mr. HAKES, seconded by Dr. STOOKES, and resolved:

"That the best thanks of this meeting be forwarded to the Editor of the BRITISH MEDICAL JOURNAL, Dr. Markham, for his kindness in inserting in that JOURNAL the reports of the meetings during this session."

PATHOLOGICAL DEPARTMENT.

Absence of the Anterior Wall of the Bladder. Dr. BARRETT shewed the bladder, kidneys, and portion of bowel from a child in whom the anterior wall of the bladder was wanting, whilst the rectum opened into the posterior wall. The os pubis was wanting and the sexual organs. The orifices of the ureters were seen on each side of the opening of the rectum. Not much care was taken of the child by its parents, and it died in thirty-six hours. Mr. Hakes said there is now a man, aged 30, at the workhouse, the anterior wall of whose bladder is wanting, and Mr. Fletcher is trying to make a canal between the ureters and the rectum.

Specimens. Dr. NOTTINGHAM shewed the following specimens, viz.: a Tumour removed from the Face; a Large Cyst surrounded by apparently Malignant Disease; two specimens of Disease of the Knee, for which Resection had been performed.

Mr. LOWNDES said Dr. Nottingham had shewn several interesting specimens of disease of the knee during the session; he would be glad to hear the general results Dr. Nottingham had met with in his resections.

Dr. NOTTINGHAM said this reminded him that he met a boy to day walking whose hip he had excised. In that case he had used no apparatus whatever after the operation. With regard to the knee-joint, in thirteen cases of resection he had had, he believed, two deaths, one sixteen months after the operation, the other after amputation had been resorted to. One boy went out labouring under abdominal complications, and he did not know the result. One young woman had still some weakness left requiring support. All the rest, he believed, were able to walk about. In the operation he found hæmorrhage from the bone sometimes troublesome; he found the application of pads dipped in tincture of sesquichloride of iron useful.

In answer to Mr. HAKES, Dr. NOTTINGHAM said he believed firm bony ankylosis resulted in some cases. In Mr. Park's original remarks on the subject almost everything of value in regard to this operation is to be found.

Cases of Trephining. Mr. HIGGINSON related two cases in which he had performed this operation at the Southern Hospital. In the first case, a boy was admitted with fracture of the radius and compound fracture of the skull; a portion of the parietal bone was depressed, and was raised into position by removing a portion with a small trephine. A good deal of blood escaped. The boy lay for six days comatose and unable to swallow; food was administered per anum. He had incontinence of urine and fæces, and much excoriation, and sank and died. In the other case, a man aged 47, was knocked down by a spoke of a wheel. He walked to the hospital, and then was seized with convulsive fits. Mr. Higginson raised a portion of the frontal bone that was depressed, by cutting off a corner of the fractured portion; air passed through from the frontal sinus. The fracture was found to extend into the orbit. The patient became quite conscious, but inflammation came on, and he died in thirty hours. The fracture was found to extend completely through the æthmoid bone; small bits of bone had been set up edgeways, and intense inflammation of the arachnoid had taken place. A complete false membrane had formed over the anterior parts of the brain, and there was much seropurulent fluid. The operation gave great relief for a time.

Case of Hydrophobia. In Dr. CAMERON's absence, the Secretary read notes of a case of hydrophobia taken by Mr. C. Evans, the Junior House-Surgeon at the Southern Hospital. The patient was under Dr. Cameron's care.

This case will be reported in full. Some discussion followed, in which the Chairman, Dr. Barrett, Dr. Balman, Dr. Nottingham, Mr. Hakes, and Mr. Higginson took part.

LADY-DOCTORS. But, then, are the lady-doctors to marry? and if they marry, are they to go on with their calling? We presume that they, and all their admirers, and all the believers in the mission of women would reply that the best thing they can do is to marry, if they only marry tolerably well. But, after they are married, are they to go on visiting and receiving patients? We can easily answer this question if we look at occupations in which women have been accustomed to gain their bread with more or less success. An actress, an artist, a schoolmistress, goes on with her trade if she is obliged to do so, or if the circumstances of her household give her abundant leisure; but if she has a family to attend, and if she has a husband who provides for her, she will attend to her family, spend her husband's money and abandon her business. We may be sure that lady-doctors would do just the same. They would marry if they could marry with satisfaction, and then, if they could afford it, they would leave off doctoring and stick to ordering dinners and watching the babies. The object, therefore, of a lady-doctor is to be able to leave her profession at an early age; and this constitutes a profound difference between her and her male rivals. She can have very little professional ardour if she views her profession as an arrangement which, if things go well, she may hope soon to get rid of, while the male doctor hopes to go on increasing in knowledge, and with a deeper hold upon science, in every year of active life. (*Saturday Review.*)

Correspondence.

IRIDECTOMY.

SIR,—We, the undersigned, are anxious to take the rliest opportunity of publicly supporting the inions expressed in Mr. Bowman's letter of the th inst., on the subject of a supposed abuse of dectomy in glaucoma. The charges impute reck-sness, ignorance, and bad motives, in the perform-ce of this operation. If, as we fully believe, they e utterly groundless, it is important that they ould be met and refuted, as they tend to injure the use of science, and lower the tone of the profession.

We beg, therefore, to state that, in the course of r experience, we have not met with anything to stify them in the slightest degree. We have no ason to doubt that those who have practised iridec-my in glaucoma have done so in a scientific and nourable spirit, with a sufficient knowledge of what ey were engaged upon, and with a humane regard their patients' welfare.

We, therefore, extremely regret that any such im-tations should have been at any time thrown out rough misapprehension of what has actually taken ace, and, still more, that they should have been tely repeated in stronger terms and with greater rshness than before.

We believe the character of our profession to have en entirely unsullied by any such acts or motives.

We are, etc.,

GEORGE CRITCHETT,
JOHN COUPER,
GEORGE LAWSON,
CHARLES BADER,
J. W. HULKE,
J. SOELBERG WELLS,
E. C. HULME,
J. C. WORDSWORTH,
R. B. CARTER (Stroud),
D. ARGYLL ROBERTSON (Edinburgh),
THOMAS WINDSOR (Manchester),
J. G. HILDIGE (Dublin).
T. PRIDGIN TEALE, JUN. (Leeds),

SIR,—We trust we were justified, as the immediate lleagues of Mr. Dixon at Moorfields, and as jointly terested with him in the reputation of our hospital, addressing ourselves to him privately in the corre-ondence from which he has given extracts in your OURNAL of last week. We inclose the whole for ur information, and for publication, if you think .. The letters marked C and D, however, seem fficient to explain our views and those of our col-ague Mr. Dixon. We are, etc.,

GEO. CRITCHETT,
WILLIAM BOWMAN,
JOHN C. WORDSWORTH.

Royal London Ophthalmic Hospital, Moorfields, May 31st, 1864.

[The following are letters C and D, above re-rred to.]

C.

"Moorfields Hospital, February 5th, 1864.

"DEAR DIXON,—We have received your letter of e 29th ult.; and, in accordance with your request, e have shown it to our junior colleagues. Notwith-anding your indignant protest, and the surprise u express at our presumed inconsequent deduc-ons, we still feel that your sweeping imputations, ntaining charges of gross moral delinquency on the rt of practitioners whose names are not specified, must naturally, under the circumstances, be under-stood as including the staff at Moorfields. In point of fact, we have reason to know that this has been the impression left upon the minds of many. It is satisfactory to find that you have, in private communications addressed to our junior colleagues, exonerated them from all participation in your censures; but we must remind you that private letters do not remove the unfavourable impression created by public statements, and that the limitation of your disavowal to a part of the surgical staff seems to leave an invidious reflection on others which we cannot suppose you intend. We are far from wishing you to contradict any statements you have made, unless, by further inquiry, you should convince yourself that they have been made in error; all we suggest is, that, having published severe censures, which, if left unexplained, are calculated, as your colleagues think, to inquire them most unjustly, and which have caused them pain, you would give to them collectively a public as well as private assurance that such statements are not intended, either directly or indirectly, to apply to them, or to cast a shade upon the reputation of the Moorfields Hospital.

"We may add, in conclusion, and as an additional reason for thus urging this matter upon you, that your position as senior surgeon of our hospital necessarily lends weight to any statement you may put forth, especially on such a subject. The verdict you originally pronounced against iridectomy, which your tardy and partial recognition of its value at the present time has but feebly modified, gives to the opposition it has since encountered much of its force and authority; and the assertions, which in your recent letters you continue to make, that the operation of iridectomy has been, and still is, grossly abused, give a sanction to uncharitable remarks that may be uttered in reference to all those who practise iridectomy, which, inasmuch as your colleagues are all included under that head, we feel sure you would regret.

"We remain very truly yours,

"G. CRITCHETT,
W. BOWMAN,
JOHN C. WORDSWORTH."

D.

"2, Portman Square, February 8th, 1864.

"DEAR CRITCHETT,—I have received your letter dated Feb. 5th, in which you suggest that, 'having published severe censures, which, if left unexplained, are calculated, as my colleagues think, to injure them most unjustly, and which have caused them pain, I should give to them collectively a public as well as a private assurance that such statements were not intended, either directly or indirectly, to apply to them, or to cast a shade upon the reputation of the Moorfields Hospital.' Such an 'assurance', I maintain, you have not the slightest right to demand. All I have written on the operation of iridectomy has been written publicly, and on public grounds; and I utterly repudiate the right of you, Mr. Bowman, and Mr. Wordsworth to give a personal turn to statements which I have published to the world on broad and general principles. Neither you nor any other individuals are entitled, in reply to such published surgical statements, to ask me, 'Do you mean your remarks to apply to us?'

"If the operation of iridectomy had been performed only at one place and by one person, the case might be different. Such a person might fairly say: 'Your censures must apply to me, and to me alone.' But iridectomy has been performed all over the kingdom—nay, all over the civilised world; and for me to publish a series of disavowals, as to my remarks applying to this or that hospital, or to this or that

surgeon, would be to make myself contemptible in the eyes of the profession.

"I hope this very unpleasant correspondence, which has been forced upon me, may now close; but, should you persist in what I must regard as unreasonable demands, I must beg that such a public matter may be publicly judged, by the printing, in one of the medical journals, of all the letters that have passed between us. "Yours faithfully,

"To Geo. Critchett, Esq." "James Dixon.

TYPES OF FEVER AND BLOOD-LETTING.

Letter from W. Allison, Esq.

Sir,—In reference to fevers, I presume that, with respect to changes of type, "there is nothing new under the sun", though many things may be new to the peoples of different generations: moreover, that, as epidemic fevers and inflammations have fluctuated from the extreme of violence to the extreme of mildness during the space of 1864 years, for anything we know to the contrary, so they may continue to do in the future.

Writing from tradition handed down through medical men, and from my own memory, without any theory to support, I would state the following facts.

At the end of the eighteenth and the beginning of the nineteenth centuries, the types of fever in this locality were very low, requiring stimuli, wine, and good nourishment; but had risen again in 1812, when bleedings had become necessary, and when the stimulating plan was generally abandoned.

Speaking simply of facts as they occurred, I well remember hearing, in 1814, when I was a pupil, from a medical gentleman in London, that the late Dr. Babington's practice was reported by the dressers at Guy's and St. Thomas's Hospitals to be much more successful, especially in chest-affections, than that of some other physicians, in consequence of the bleedings to which he resorted. In the practice of the gentleman to whom I was articled, as well as in that of another gentleman with whom I lived as assistant in 1817 and 1818, I recollect the relief afforded by bleedings in cases of labouring pulse with threatened apoplexy, when the patients had drowsy headaches, with inability to stoop down or to turn round without swimming and giddiness in the head; when they had burning, irritable rashes on the skin, and other states of high energy, with over-distended blood-vessels, especially about the eyes. It may not be irrelevant to the questions before us to observe that, in cases of concussion of the brain with a depressed pulse, if we waited for reaction and for the pulse becoming too full before we bled, one or two abstractions of blood sufficed; but, if we bled before reaction was well established, the pulse rose suddenly and went on at a great rate, and four or five bleedings were required to bring it to its natural state.

In 1819, there was an ebb of the tide of feverishness. The subjects of an epidemic in this neighbourhood had a pulse, if firm, under 50, or, if feeble, above 100, lasting three, four, six, or eight weeks. They were treated by some medical men on a stimulating plan—bark and nitric acid; by others, on a moderate plan—Mindererus's spirit, sweet spirit of nitre, and camphor julep; by others, again, with tartarised antimony and digitalis. The fever exhausted the strength, so that some subjects of it soon required a bottle or a bottle and a half of wine during twenty-four hours. As usual, each plan of treatment appeared to be equally successful or otherwise.

After this ebbing, the tide again rose until the year 1822, when fevers became very high; that is, vascular action was unusually energetic, quick, and strong, and often accompanied by severe organic or local inflammation. In most cases, the fever was preceded by a rigor, and succeeded by excessive perspiration, purging, fainting, or extreme enervation—by a crisis so well marked, that we knew precisely when the fever began and when it ended; which is more than we can tell in the present day. In the beginning of 1822, the treatment of fevers, as before 1819, began with a bleeding, an emetic, a calomel and saline purge, succeeded by nauseating doses of tartarised antimony, to avoid inflammatory action.

In June 1822—a year of the most violent inflammatory action I ever saw before or since—we bled *heroically*. But, before giving a statement of quantities from my notes, I will premise that, in those days blood was not weighed. A pint basin was placed upon a large plate, so that it might be filled to overflowing, and that quantity was considered to be twenty ounces. Each bleeding was increased in quantity and repeated in frequency, for inflammation of the lungs, according to the amount of pain, the full bounding of the pulse, the difficulty of breathing, the cupped appearance of the blood last abstracted, the redness of the crassamentum, the thickness and toughness of it, as well as of the yellow substance on its surface (which substance, in the form of cup, was called coagulable lymph), together with the depth of the cup. These appearances led to a further abstraction of blood. We had two or three cups upon a plate, also; and caught the stream of blood in them, when it did not run down the skin of the arm, as it might best show the crassamentum. I may just remark that, in rheumatic subjects, the blood is generally sizy; *i. e.*, the crassamentum is usually yellow and tough on its surface, and somewhat cupped; but not so as to indicate further bleeding.

The first bleeding was continued until the patient fainted. We afterwards judged, not by the quantity abstracted, but by the effect produced, as to the extent of the next bleeding. To occasion faintness, a large opening was made in a large vein; to procure a large quantity of blood, a smaller opening.

After the first bleeding, from five to ten grains of calomel were given, to be succeeded by a mixture for two doses, containing one ounce of Glauber's salt, two grains of tartarised antimony, and two ounces of water. After the second bleeding, a blister was applied also, occasionally a sinapism. Small and frequently repeated doses of calomel, antimony, and opium were administered, hoping to produce salivation. I never saw a man die from inflammation of the lungs with a mouth sore from mercury.

A few memorandums of the most extensive bleedings for inflammations of the lungs, during the summer of 1822, will show the plan then adopted.

Anson, June 5th, lost 20 oz.; 7th, 20 oz.; 17th, after a fresh cold, 27 oz.; amounting to 67 oz. in twelve days. Recovered.

Hurst, June 13th, was bled to 18 oz. (fainted) 14th, from a smaller stream, 35 oz.; 15th, 25 oz. amounting to 78 oz. in three days. Recovered.

Barker had suffered from chronic liver-disease. June 14th, he was bled to 18 oz.; 15th, 30 oz.; 17th, 12 oz.; 18th, 25 oz.; 19th, 20 oz.; 20th, 16 oz. amounting to 121 oz. in seven days. Died of pneumonia.

Booth, June 14th, was bled to 30 oz.; 16th, 30 oz. 18th, 30 oz.; 19th, 14 oz.; amounting to 104 oz. in four days. Recovered.

Nettleship was bled to 95 oz. in three days. Recovered.

Simpson lost 81 oz. in three days. Recovered.

Chambers, June 15th, bled to 30 oz.; 16th, 30 oz.

30 oz.; 19th, 14 oz.; amounting to 104 oz. in days. Recovered.

wstead, a free drinker of ale, lost 210 oz. in six . He died, not from exhaustion, but from un-ued inflammation, neglected in the commence-t.

cal bleedings occasioned a loss of time, and led rger bleedings from the arm on the following day. hat I actually see, where there cannot be optical sion, I believe; and it is my firm conviction, from vidence of my own senses, that, if the subjects of foregoing cases, who recovered, had lost a less int of blood respectively than the quantities drawn, they would have died; because similar cts, under like circumstances, not bled to the extent, did die of inflammation. Those, whose mmations were subdued by the copious bleedings ified, recovered and lived many years in the en-ent of good health, and with their wonted gth for daily work as agricultural labourers. sionally I saw swollen ankles for a week or ten , from which swellings, and from all other conse-ces of bleeding, they recovered entirely within ty-eight days; excepting that they had not then ined their usual tone and strength, from the vation and debility which their illnesses and the ssary treatment of them had occasioned.

nce 1822 I have not seen such violent vascular n, nor blood fly so far from a vein. If the blood then allowed to spirt out over the bed, it would o the top of, or the opposite of, the room. I ed to place the arm so that, when the vein was ed, the blood should jet out into the basin.

1824, I removed from a large village to a neigh-ing market-town in a damp valley. Since that , cupping or leeches, with general treatment, been sufficient for removing local congestion lood-vessels; though occasionally, especially in surrounding villages, one general bleeding has necessary.

the year 1832, we had our first visitation of tic cholera. In 1840 to 1842 (I think) we were rised by a very enervating variety of influenza, h became general. During its continuance, gh more particularly on its first appearance, the ects of it could scarcely raise their heads from r pillows without fainting.

the half-century from 1814 to 1864, I have seen y different phases of fever and inflammation; even now, during one season, *might* see the dif-ace of type in the fevers of erysipelas, measles, let fever, etc., by first visiting dirty people in damp, confined, dark, and overcrowded streets rge towns; and then cleanly country people on hilly districts, where the air is pure, light, sunny, dry.

is possible that a combination of causes in a lity occasion a type of fever, as well as general ospheric influences; and produce a variety of in-matory affections, active and weakly; acute and ghing sore throats, boils, etc., requiring very dif-t treatment.

ne bygone inflammatory bilious fever was of a different type from that of the gastric fever of present day. I forget when George the Fourth his inflammatory attack (I think, when Regent). r repeated bleedings for inflammation of the s, his physicians would not allow him to lose any e blood; so he sent for a surgeon, who twice e bled him freely before inflammation was sub-l. His Majesty afterwards suffered from dropsy. uestion arises: Without the last two bleedings, ld he have lived to become dropsical? After -like inflammatory action as we have seen during ast twenty or thirty years, it might be thought that he would have had a better recovery without the last two bleedings. However that might be, his illness required very different treatment from that which destroyed the life of the late Prince Consort.

It is not possible to name a plan of treatment for the future—for all medical men to act upon invariably, at all times, in all localities, for the same kind of affection. It is very probable that we shall all have to adopt different plans, according to circumstances; for what has once occurred may be again seen at a future time—types of fever may continue to vary in this climate.

What would be more scientific or better in practice, during all ages, than to adapt treatment to the type of a fever, or to the violence and degree of inflammatory action? I am, etc., W. Allison.

May 11th, 1864.

Letter from John R. Wardell, M.D.

Sir,—I have read Dr. Markham's admirable papers on Blood-letting with the greatest interest, and I feel persuaded that he has done signal service to practical medicine, by so forcibly advocating the re-adoption of the rational use of an important remedy which, till our own, has had the sanction of all ages, and of the greatest minds which have been devoted to the treatment of disease. I read a paper on this subject at the Royal Medical Society of Edinburgh more than twenty years ago; and from then, until now, I have employed blood-letting in properly selected cases. I have ever maintained, amongst my professional friends, its all-important benefits in some instances.

There always have been, and for ever will be, fashions in physic as well as in other things. The minds of men are prone to run into extremes. Then comes the reaction. I firmly believe that the notion of the "asthenic phase" is only maintained at a continuous loss of human life. The prejudice against the lancet has become so fixed, that the vast majority of practitioners will not bleed, even to relieve the sudden oppression of vital organs. I wish, however, to speak of two cases, all the circumstances of which I know thoroughly.

B. was an inn-keeper, a pale, thin, emaciated person, who had repeatedly had violent attacks of delirium tremens. After a debauch, he again became delirious; and, on this occasion, his symptoms were more strongly pronounced and of graver form than ever. Large opiates were tried; but in vain—nothing would induce sleep. An old physician of the town was called in, who was a very Sangrado, and who bled in all forms of disease—in fine, who believed in nothing save the lancet. He felt the patient's pulse, which was neither hard nor of large volume. The practitioner in attendance, pointed at the moist tongue, the moist skin, the utter danger of opening a vein. These fears were lost upon the mind of the physician. Sixteen ounces of blood were at once taken. The patient did not fall into a fatal syncope, but into a long and tranquil sleep, from which he awoke comparatively well. This occurred fifteen years ago. The man is now alive and well.

C., a drunken butcher, of pale, flabby appearance, had repeatedly had delirium tremens. An attack came on; the general practitioner was summoned. Large doses of opium and morphia were given; but to no avail. He was long sleepless, and the "busy restlessness" began to produce alarming symptoms. The same physician was called in consultation. Although the skin was relaxed, the tongue moist, and the pulse soft, he recommended venesection. Fifteen or sixteen ounces were drawn from the arm. The patient immediately fell into a long and refreshing

sleep, and at once recovered. He lived ten years after this, and died of some other disease.

Just at that time, a gentleman, of powerful frame, about 30 years of age, was attacked with the same disease. He was not bled, but treated with morphia. Effusion came on, and he died. I do not say that he would have lived had he too been bled; but the public in that town compared notes very greatly in favour of the lancet.

I remember a ploughman (aged perhaps 25) bled to approaching syncope seventeen times in three weeks for pleuropneumonia. He recovered perfectly.

When I was the late Professor Graham's clinical clerk at Edinburgh, I repeatedly heard him give a fine example of heroic bleeding. A man was admitted who had hepatic congestion. Dr. Graham said to his then clinical clerk, "Bleed this man in the erect position to approaching syncope." The clerk obeyed orders; and it was not until more than seventy ounces had been emitted, that any appearance of fainting supervened. He made a speedy and good recovery. I believe this case is recorded in an early number of *Craigie's Journal*. The views expressed by Dr. Markham are what I have always maintained; and I do hope that his paper will be placed in a more convenient and permanent form. I am, etc.,

JOHN R. WARDELL.

Tunbridge Wells, May 9th, 1864.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 24th.

Armstrong, Henry Edward, Newcastle
Beckett, Francis Mears, Canterbury (St. Bartholomew's)
Brewer, H. M., Newport, Monmouthshire (St. Bartholomew's)
Burne, Joseph, Dublin (Dublin School)
Churchill, John Foot, Poole, Dorset (Charing Cross)
Dickinson, Frederick Thudd, Wicklow (Dublin School)
Douglas, George Cox, Grantham (St. Bartholomew's)
Edwards, Henry Nelson, Finsbury Square (St. Bartholomew's)
Fowler, Oliver H., Kingsclere. Hants (St. Bartholomew's)
Fry, Augustin Barber, Sleaford (Guy's)
Gedge, Joseph, Bexhill, Sussex (King's College)
Knipe, Wm. Melville, Leigh Sinton, Worcestershire (Guy's)
Mason, Philip Brookes, Burton-on-Trent (University College)
Phillips, Thomas Richards, Dublin (Dublin School)
Sanders, Thomas, Plymouth (University College)
Shorto, Wm. Burt, Southampton (Charing Cross)
Smith, Edward Roberts, Dudley (St. Bartholomew's)
Wills, Charles James, Stockwell (St. Bartholomew's)
Wise, Andrew, Plumstead, Kent (Guy's)

At the same meeting of the Court—

Devonshire, Charles James, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College; his diploma bearing date April 4th, 1855.

Admitted on May 25th—

Borough, Edward, Kilrush, co. Clare
Burrows, William, Liverpool
Cantrell, Matthew Henry, Wirksworth (University College)
Cross, William, Liverpool
Fairles, Nicholas Watson, South Shields (St. Bartholomew's)
Fox, Charles James, Mortimer Street (St. George's)
Hinds, William Richard Gore, Galway
Levick, George, Stratford, Essex (London)
Lyle, William Vacy, Harrow Road (St. Mary's)
Norrish, John, Ceylon (Middlesex)
Read, Charles, Falmouth (University College)
Roberts, Augustus Morton, Sheffield
Squarey, Charles Edward, Salisbury (University College)
Strange, Wm. Heath, Streatley, near Reading (St. Thomas's)
Tomlinson, Daniel Webster, Pen-y-nant, N. Wales (St. Mary's)

UNIVERSITY OF CAMBRIDGE. Examined and approved for the degree of Master in Surgery, May 31,

Godson, Alfred, M.A., Trinity College

APOTHECARIES' HALL. On May 26th, the following Licentiates were admitted:—

Rayner, Alexander Clement, Bedford
Shaw, George Huntsman, St. Bartholomew's Hospital
Simpson, Spencer Henry, Stowmarket, Suffolk
Williams, William Griffith, Haverfordwest

At the same Court, the following passed the f examination:—

Shepard, William Lively, St. Bartholomew's Hospital

APPOINTMENTS.

BULLEN, Francis, M.D., to be Surgeon to the Mercy Hospital, C in the room of Dr. D. B. Bullen, resigned.

MAPOTHER, Edward D., M.D., elected Professor of Hygiene in Royal College of Surgeons of Ireland.

ARMY.

HUNT, Staff-Assistant-Surgeon J. H., to be Assistant-Surgeon Brigade, *vice* J. Watters, M.B.

RANDELL, Assistant-Surgeon H. L., Royal Engineers, to be S Assistant-Surgeon, *vice* J. V. Seddall, M.D.

SCOTT, Assistant-Surgeon R. R., 8th Hussars, to be Staff-Assist Surgeon, *vice* J. H. Hunt.

SEDDALL, Staff-Assistant-Surgeon J. V., M.D., to be Assistant-S geon Royal Engineers, *vice* H. L. Randell.

ROYAL NAVY.

LAUDER, Henry S., Esq., Assistant-Surgeon, to the *Irresistible*.

MACLAREN, George D., Esq., Staff-Surgeon, to the *St. Vincent*.

MAGRATH, Miles M., Esq., B.A., Assistant-Surgeon (additional) the *Euryalus*.

NICHOLSON, William, Esq., Surgeon, to the *Aboukir*.

RAYNER, Frederic M., Esq., Staff-Surgeon, to the *Eagle*.

SHEPPARD, Charles D., Esq., Surgeon, to the *Immortalité*.

SMITH, William, M.D., to be Surgeon-Superintendent of the *chantman* convict-ship.

TAYLOR, Thomas H., Esq., Surgeon, to the *Rinaldo*.

THOMSON, James, Esq., Surgeon, to the *Enterprise*.

WILSON, David, Esq., Surgeon, to the *Wolverine*.

WRIGHT, George E., Esq., Acting Assistant-Surgeon, to the *Vict* for Haslar Hospital.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V Rifle Volunteers):—

COLLIGAN, H. S., Esq., to be Assistant-Surgeon 2nd Administra Battalion Renfrewshire R.V.

COUSINS, J. W., Esq., to be Surgeon 3rd Hants A.V.

DAYMAN, H., Esq., to be Surgeon 4th Administrative Batta Hampshire R.V.

GRIFFITH, A. L., M.D., to be Honorary Assistant-Surgeon 16th W shire R.V.

LANE, H., Esq., to be Assistant-Surgeon 1st Administrative Ba lion Warwickshire R.V.

LAURIE, G., Esq., to be Hon. Assistant-Surgeon 5th Midlothian R.

LAVER, H., Esq., to be Honorary Assistant-Surgeon 6th Essex R.

MASON, M., Esq., to be Hon. Assistant-Surgeon 4th Cornwall A.V

MILLER, A. G., Esq., to be Assist.-Surg. 1st City of Edinburgh R.

MILLER, H., M.D., to be Hon. Assistant-Surgeon 9th Cornwall R.

MORTIMER, J., Esq., to be Honorary Assistant-Surgeon 13th A deenshire R.V.

PARK, J. H., Esq., to be Assistant-Surgeon 3rd Forfarshire A.V.

SMART, J. A., Esq., to be Surgeon 2nd Gloucestershire Engin Volunteers.

TRAILL, J., Esq., to be Surgeon 1st Administrative Battalion F farshire R.V.

WATSON, P. H., Esq., to be Surgeon 1st City of Edinburgh R.V.

WILLIAMS, J., M.D., to be Hon. Assistant-Surg. 4th Cheshire A.V

YEAMAN, G., M.D., to be Assistant-Surgeon 2nd Administrative talion Lanarkshire R.V.

BIRTH.

NISBETT. On May 18th, at Gravesend, the wife of *R. In Nisbett, Esq., of a son.

DEATHS.

DAVISON, Thomas, M.D., at Paris, aged 65, on May 28.

MANIFOLD. On February 30th, at Rathgar, Dublin, aged 12, M Clarke, eldest daughter of Michael F. Manifold, Esq., Surge 34th Regiment.

SOMERVILLE. At Lanark, on May 31st, aged 17 months, Archib William, youngest son of *Thomas Somerville, Esq., Staff-Surg Royal Navy.

TESTIMONIAL. Mr. R. J. Rogers, late House-S geon of the Sussex County Hospital, Brighton, h received, on his retirement after having held offi nearly six years, a testimonial from the nurses, s vants, and patients, in the shape of a handsome sil snuff-box and another small piece of plate.

THE UNIVERSITY OF OXFORD has determined to pend £200 in the purchase of some of the patholoal preparations belonging to the late Professor rœder van der Kolk of Utrecht.

UNIVERSITY OF CAMBRIDGE. Dr. Humphry's course lectures on the Principles and Practice of Surgery l commence on Friday, July 1st, and be continued ly.

THE MEDICAL PROFESSION IN NAPLES has sustained avy losses in the death of the Cavalier Felice de nzis, and of Mr. Roskilly, the oldest English sur- on resident in Naples.

BEQUESTS. Mr. George Wheelhouse, distiller, of ptford Bridge, Kent, has left by will to the Westnster Hospital, Middlesex Hospital, Charing Cross spital, Royal Free Hospital, North London Hospi-, St. Mary's Hospital, Metropolitan Free Hospital, men's Hospital Society, Royal Hospital for Incures, Royal Infirmary for Children and Women, £500 h; to the Great Northern Hospital, £300; to Scarborough Dispensary, £200; and to Mr. Gay ute, surgeon, £500.

GMELIN'S CHEMISTRY. Another volume (the sixnth !) of Gmelin's work was announced as "nearly dy" at the last meeting of the Cavendish Society. is Society appears to be approaching its end. ofessor Graham said he considered its mission urly fulfilled. When the publication of Gmelin's *emistry* was completed, the Society would have omplished all that could be expected of it. Sotties like the Cavendish in the present day could compete with private enterprise. The Society l, in fact, been superseded by the press, and was longer called for. It might, therefore, be allowed expire when the great work of Gmelin is comted.

ST. BARTHOLOMEW'S HOSPITAL. The following is list of honours awarded to gentlemen in connecn with St. Bartholomew's Hospital and College, the winter session, 1863-64. *Scholarship in Medie, Surgery, and Midwifery:* 1. J. W. Snook; 2. W. Lush. *Scholarship in Anatomy, Physiology, and tany.* F. Bateman and T. Cole, equal; 3. R. Robon. *Wix Prize:* T. Cole. *Bentley Prize:* W. V. sh. *Practical Anatomy: Foster Prize:* 1. R. P. npson; 2. R. G. Rogers; 3. T. Cole, T. Cuddeford ual); 5. F. Bateman, W. Illiffe (equal); 7. A. C. rrington; 8. E. Renshaw; 9. G. F. Webb; 10. R. D. oughton, and J. Goodall, equal. *Treasurer's Prize:* W. Square; 2. R. B. Moore; 3. J. Quick, 4. F. H. vell; 5. F. Ewbank, and E. J. Leverton, equal; 7. H. Ellis; 8. W. Sedgwick.

DEATH FROM LIGHTNING. The following is the acunt of the appearance after death of a man who s lately killed by lightning at Belfast. The htning struck him on the top of the head. A large gged hole was torn in his felt hat. About the adth of one's finger of his hair was singed clean as if the spot had been shaved, and a cut penetted through to the skull. The lightning then ssed in front of his right ear, burning away his isker. It went down the right side of his neck, ving a mark like what would be caused by the w of a cane. It spread across his chest and abdon, causing in them a livid discoloration, and burng away the cuticle or outer skin. Its course then down both legs, off which it singed almost every ir till it came to the man's socks. The part of the s covered by the socks was untouched. Thus, ove the top of the socks not a hair was left, but low the top of the socks not a hair was touched. fact, a perfect ring of hair was formed round the . From this it is evident that the man's socks being wet, and therefore better conductors of electricity than flesh, attracted the electricity from his legs and communicated it to the ground by his boots, which were also wet and heavily shod with nails. The man's feet were, consequently, not at all affected.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY. .....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."—Epidemiological Society, 8 P.M. Dr. Dickson, R.N., "On the Prevention of Syphilis in the Navy."—Entomological.—Odontological.

TUESDAY. Ethnological.

WEDNESDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."—Geological.—Microscopical.

THURSDAY. Royal Society.

FRIDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."—Astronomical.—Royal Institution.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

S. F.—We can trouble ourselves no more with a journal which ignores the rules of civilised society. The journal in question accused us of a wilful misstatement, in saying that the regulations of the Society of Apothecaries were not in accordance with the recommendations of the Medical Council. On discovering, however, that our statement was strictly true, the journal in question puts itself completely out of consideration. In its ignorance, it makes a false accusation; by the force of facts, it is forced to admit the falseness of the accusation; and, under the guidance of its own sense of propriety, it next attempts, whilst confessing its error, to blind its readers to the truth by repeating the original accusation. Instead of apologising for its unseemly language, as respectability required, it reiterated the charge of misstatement. The Society of Apothecaries, it tells us, was forced to disregard the recommendations of the Council because other Bodies had done so! We question, by the way, if the Society will thank their apologist for offering such an excuse as this. At all events, it will be thus seen that of a contemporary we in future wash our hands.

BOOKS RECEIVED.

1. Lectures on the Diseases of Women. By Charles West, M.D. Third edition. London: 1864.
2. Stimulants and Narcotics; their Mutual Relations. By F. E. Anstie, M.D. London: 1864.
3. Practical and Pathological Researches on the Various Forms of Paralysis. By Edward Meryon, M.D. London: 1864.

COMMUNICATIONS have been received from:—Dr. JAMES RUSSELL; Dr. MAYO; Dr. HUMPHRY; Mr. H. ANDERTON; Mr. E. CHESSHIRE; Mr. D. G. GARNHAM; Mr. WM. HOAR; Dr. JAMES H. GRAMSHAW; THE HONORARY SECRETARY OF THE OBSTETRICAL SOCIETY; Mr. CALLENDER; Dr. ALEX. FLEMING; Dr. WILLIAM ROBERTS; Mr. EVANS; Dr. WILDASH; Mr. STONE; Mr. KENT JONES; Mr. T. SOMERVILLE; Mr. CRITCHETT; M.D.; Mr. WILLIAM BOWMAN; Mr. GAMGEE; and Mr. P. BELCHER.

ADVERTISEMENTS.

Horological Productions.—"Ranged around the base of the clock were the Watches which Mr. Benson exhibited, and which have been universally admired for the beauty and elegance of the designs engraved upon them. The movements are of the finest quality which the art of horology is at present capable of producing."—*Illustrated London News* Nov. 8, 1862. Chronometer, duplex, lever, horizontal, repeaters, centre seconds, keyless, split seconds, and every description of watch, adapted to all climates. Benson's Illustrated Pamphlet on Watches (free by post for 2 stamps) contains a short history of watch-making, with prices, from 3 to 200 guineas. It acts as a guide in the purchase of a watch, and enables those who live in any part of the world to select a watch and have it sent by post. Prize Medal and Honourable Mention, Classes 33 and 15. J. W. BENSON, 33 and 34, Ludgate Hill, London. Established 1749.

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In the Press.

A Brief Description of the THERMÆ ROMANO-BRITANNICÆ, or ANCIENT BATHS of ITALY, BRITAIN, etc. With Notices relating to their History, Mythology, and Mosaics. By R. WOLLASTON, M.D., Member of the Royal College of Physicians, London; Member of the Archæological Institute of London; Physician to the Staffordshire County Infirmary.—Stafford, May.

Just published, price 1s., 8vo (post free)

On the Advantages Derivable to the Medical Profession and the Public from the Establishment of VILLAGE HOSPITALS; with General Instructions concerning costs, plans, rules, etc., and an appropriate dietary. By ALBERT NAPPER, Esq., M.R.C.S., L.S.A., Founder of the system, Cranley, Surrey.

London: H. K. LEWIS, 15, Gower Street North.

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The Ophthalmoscope: its Con- struction, Varieties, and Use. From the German of ZANDER. By R. B. CARTER, M.R.C.S.

CONTENTS.

Introduction. [they depend.
1. The Varieties of the Ophthalmoscope, and the Principles on which
2. The Examination with the Ophthalmoscope.
3. Ophthalmoscopic Appearances of Healthy Eyes.
4. Ophthalmoscopic Appearances of Diseased Eyes.
5. The Ophthalmoscope in its Relation to Forensic Medicine.
6. Influence of the Ophthalmoscope upon Treatment.

Index.

London: ROBERT HARDWICKE, 192, Piccadilly.
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"Audi alteram partem."

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JACKSONIAN PRIZE ESSAY, 1864.
Will shortly be published,

The Pathology and Treatment of DISEASES of the LARYNX.

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Lectures
ON
RTHOPÆDIC SURGERY.

BY
BERNARD E. BRODHURST, F.R.C.S.,
OF ST. GEORGE'S HOSPITAL, AND THE ROYAL ORTHOPÆDIC HOSPITAL, ETC.

Lecture XIV.
ON TALIPES, OR CLUB-FOOT.
(*Continued.*)

on-congenital talipes varus may be readily dis-uished from congenital varus by its external cha-ers. It depends chiefly on a paralytic condition he limb; and there is consequently wanting both active muscular contraction and the rigidity of foot which belong to congenital varus. Fig. 41 excellent illustration of this form of distortion.



Fig. 41.

Morbid Anatomy. All the structures which enter the formation of the limb undergo degeneration; bones become light, and their cancellous struc-is charged with oily matter; the ligaments are the most part softened, and the muscles undergo y degeneration. At 40 years of age, muscular neration will generally be found considerably ad-ced, especially in the paralysed muscles; and at there may remain scarcely a trace of muscular .

Pathology. Although this distortion depends ly on paralysis, it is also induced by spasm. In infant, during teething, carpopedal spasm is by neans uncommon. And, although inversion of foot is not the most frequent variety of distortion h is produced, yet it is occasionally seen. m of the adductor muscles of the foot is also etimes found to be connected with hysteria and ngement of the uterine organs. Two of the best ked cases of this description which I have seen ow under my care at the Orthopædic Hospital. epsy also gives rise to this and to almost every r form of distortion.

Non-congenital varus is always a painful affection, inasmuch as the callosity on which the superincumbent weight is, in great measure, borne, is imperfectly developed. The integument, also, being in some degree deprived of vital force, is readily affected by heat, cold, and pressure; so that inflammation and ulceration are rapidly induced, producing large and troublesome sores; for which, not unfrequently, such limbs have been amputated.

Equino-varus is a much more frequent form of distortion than that last mentioned. In this variety of distortion, the foot is less inverted than in varus; so that the anterior portion of the sole may yet be in contact with the ground; and, in consequence, the act of walking is much less painful than in varus. This variety of distortion is represented in Fig. 42.



Fig. 42.

Traumatic inflammation and burns occasionally, through loss of substance and the formation of cicatrices, induce inversion of the foot. In these cases, distortion continues to increase after the cicatrix has formed; and even dislocation of one or more phalanges may result. Fig. 43 exemplifies this form of varus.

The *treatment of congenital varus* should commence within some few weeks of birth. Nothing is gained by delaying the operation; but, on the contrary, more time is then required to produce an equally suc-

cessful result. From one to two months after birth is an excellent age for the treatment of these cases.



Fig. 43.

In very slight cases of varus, bandaging and friction may occasionally be sufficient to remove distortion. Its removal may, however, be temporary only, and the contraction will probably recur in its original form. Frequently, I have been called upon to proceed to the radical cure of varus in cases where extension had been practised fruitlessly for lengthened periods.

The tendons to be divided are those of the tibialis posticus and the tibialis anticus muscles, and the tendo Achillis.

This is a compound distortion; and, consequently, it is right to divide the operative treatment into two stages; namely, first, to remove the inversion of the foot, and reduce the distortion to equinus; and, secondly, to remove the condition of equinus.

The first part of the treatment consists of the section of the tibialis posticus and the tibialis anticus tendons; and, in severe cases, it is also necessary to divide the tendon of the flexor longus digitorum muscle.

These tendons do not, even in moderately severe cases, occupy exactly their normal positions; but they become slightly displaced in accordance with the altered position of the foot. The tibialis posticus tendon, above the malleolus, is always to be found somewhat more forward than usual; it may even lie upon the edge of the tibia. The tibialis anticus tendon inclines to the inner side of the foot; and, in severe cases, it passes obliquely downwards and backwards to its insertion. And the Achilles tendon also deviates slightly, according to the obliquity of the os calcis. All these tendons may be in general easily felt. But, occasionally, neither of the tibial tendons can be distinguished; and sometimes, but very rarely, the Achilles tendon also cannot be even remotely traced.

In the adult, the tendons to be divided can always be readily distinguished; the patient himself will put the muscles in action, and render their tendons prominent; so that to divide them is frequently a much more easy operation than in the infant.

In dividing the tendon to be operated on, the knife should be carried beneath it, and the cutting edge being then turned upwards, or towards the skin, the tendon will be divided transversely.

In dividing the tendons of the tibialis posticus a the flexor longus digitorum muscles, the knife shou be made to puncture the skin, and to pass down pe pendicularly to the surface on to the sheath of t tendon and close to the edge of the tibia, about thre quarters of an inch above the inner malleolus. N unfrequently, however, the edge of the bone cann be distinguished; and, when such is the case, the ru which has been laid down by Dr. Little may be fo lowed—to insert the knife exactly midway betwe the anterior and posterior borders of the leg, on i inner aspect. The knife should be inserted, howeve rather in front of than behind this line, and be ca ried down to the fascia, freely opening the shea without extending the external puncture. The sca pel may then be withdrawn, and a probe-point knife may be passed into the opening thus mad and be directed by the edge of the tibia beneath t tendon of the tibialis posticus and that of the flex longus digitorum muscles. The edge of the knife then to be turned upwards towards the tendon and these being made tense by an assistant sharp everting the foot, they will be divided with or wit out a distinct snap.

In infants, when the knife is well placed betwe the bone and the tendon, the movement of the fo now alluded to is sufficient to cause the tendons to divided, the edge of the knife being turned towar them; but, in adults, a slight upward cutting mov ment of the knife may be necessary to complete t section.

Sometimes the tendon is so prominent, that it ma be safely divided with the sharp-pointed knife. As rule, however, it is safer to divide both tendons wit the probe-pointed knife.

If the peculiar snap be heard after division of t tendon, no further proof will be required of the con pletion of the operation; but even though this absent, the sudden yielding which is caused by t division of the tendon, together with the vibr tion which is communicated to the hand of t operator, will be evidence that the tendon has be divided.

When the tendons have been previously divide probably a snap will not occur on severing t tendon.

It is of great importance, in the management congenital varus, completely to divide the tendons the contracted muscles, and to proceed without hi drance to the complete restoration of the foot. the adult, it is always difficult to restore the for and function of the limb, even with the most skilf surgical care and the nicest mechanical adaptatio Without this section of the tendons and the greate care in the after-treatment, I have no hesitation saying that restoration is impossible.

As soon as a tendon has been divided, the wou should be closed with lint.

The division of the anterior tibial tendon shou follow that of the posterior tibial. It should divided as it passes over the ankle-joint, where it wi be found somewhat nearer to the malleolus tha in its normal position. The knife having be passed beneath the tendon, the foot is to be evert as the edge of the knife is raised towards t tendon; and at the same moment the tendon will divided.

The division of the tendo Achillis has already be spoken of in Lecture XII. Before this tendon

ded, however, the mechanical treatment of varus t be undertaken. In the adult, it is of the ut- t importance to retain the Achilles tendon intact le the anterior portion of the foot is being un- ed; inasmuch as, this being divided, the os calcis s its support, and in consequence it becomes im- ible to unfold the contracted sole. This is a rule ch cannot be departed from in the treatment of lt varus; and if it is of so much importance in adult, it is scarcely less so in the young child; when this tendon is divided at the same time as tibiales tendons, or before the foot is fully everted, ay be impossible to overcome any contraction in sole of the foot, and calcaneus will then be pro- ed almost as a necessary consequence of this pre- ure division of the tendo Achillis.

The mechanical treatment of varus in the infant is y simple. When the punctures have healed—on third or fourth day after the operation—a softly lded pliable splint is to be gently bound to the er side of the foot and leg. No force is required the application of the bandage and splint; and ough they are lightly applied, yet it will be found the third day, when they are removed, that the t has yielded somewhat, and has become straighter hat it has yielded even to a greater extent than it ld have been influenced by the splint; and there- e it becomes evident that it is not so much exten- n of the new material which is to be aimed at, as general yielding of all the structures which are ncerned in the restoration of the limb. This is treatment, then, which is to be continued until foot is fully everted, when the plantar fascia or tendo Achillis is to be divided, as the case may quire.

In the adult, or when the foot has been used in gression during several years, not only is distor- n much longer in being removed, but a well justed instrument is necessary for the restoration the shape of the foot. The instrument which is own as Scarpa's shoe was never intended for the rpose to which it has been applied in this country; d, indeed, its construction is such, that with it ne it would be impossible to restore the limb in a rere case of adult varus. With this instrument ere is no power to overcome the rotation of the terior portion of the foot; and consequently it came necessary to add to it an apparatus called a screw-pad", to break down the transverse arch of e foot.

Instead of this inadequate apparatus, one is now use which has been constructed by Mr. Bigg, on atomical principles and in accordance with the dis- rted foot and the varied positions of the tarsal nes. I have used this instrument in the treatment adult varus with the greatest success. In it, the ntres of motion correspond to the tarsal joints to acted on, and they are so applied that eversion d rotation of the anterior portion of the foot must on simultaneously: the foot is unfolded at the me time that it is extended. With this instru- ent, I have been able to overcome some of the most vere cases of distortion that I have seen. I have und three months sufficient to remove inversion, d to unfold the transverse arch of the foot in the ost severe form of distortion at forty-eight years age. Those who have been accustomed to make se of the instruments which have been hitherto em- oyed, will scarcely understand such a statement as that which I now make, for such cases have been deemed incurable.

With these well adapted instruments, there is hardly any limit to the age at which this operation may be performed. So long as it can be ascertained that serious changes have not taken place in the tarsal articulations, we should be justified in recommending the operation.

The *plantar fascia* must in severe cases be divided before the foot can be fully extended and unfolded. This should be done before the Achilles tendon is divided; so that, the os calcis being fixed, the longitudinal arch of the foot may be unfolded. In infants, it is seldom necessary to divide the fascia; and when this division becomes necessary, the inner band of the fascia alone requires to be divided.

After the shape of the foot has been completely restored, passive motion is required that the use of the ankle-joint may be gained. Without attention to this point, not only will the foot probably relapse into its distorted position, but the ankle-joint will remain useless and unused. Baths, frictions, and instruments for passive motion of the limb, are to be employed, until muscular power is well developed.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

QUEENS HOSPITAL, BIRMINGHAM.

OVARIOTOMY: CURE.

Under the care of FURNEAUX JORDAN, Esq.

SARAH A., aged 20, single, eighteen months ago observed an enlargement in the lower and central portion of the abdomen, which had been constantly increasing in size. On admission, there was in the centre of the abdomen a prominent circumscribed tumour, which was distinctly moveable. The apex was dull on percussion in all positions. Fluctuation was distinct. The swelling was of about the size of an adult head, and did not completely distend the abdomen. The uterus was slightly displaced downwards and backwards.

Operation. Every necessary precaution having been taken as regarded the bladder, bowels, temperature, chloroform, etc., an incision two inches and a half in length was made close to the pubes. The several anatomical structures were easily recognised, and the cyst was quickly reached. No adhesions were present near the wound, nor were any discovered subsequently, as the cyst was slowly withdrawn, while it was being emptied. Before the trochar was introduced into the cyst, the patient was turned well on to the side. [The operator believed this was the first time turning was resorted to in ovariotomy (October 2nd, 1862).] Not a drop of fluid entered the abdomen. The intestines were never seen. While the cyst was being emptied, it was partially withdrawn. Free exit to the last remaining fluid was obtained by incisions in the dependent portions of the cyst. The pedicle was brought into the wound close to the pubic bone, and secured by the calipers. The edges of the wound were brought together by silver wire carried through all the structures. An hour after the operation, iced milk caused a little sickness. For the week following, nothing was given

by the mouth, Beef-tea and brandy (occasionally a little opium) were freely introduced into the rectum. Uninterrupted recovery followed.

In his clinical observations to the class, Mr. Furneaux Jordan drew especial attention to the following points.

Selection of cases. As soon as the diagnosis of ovarian disease is clear, is the best time for operation. The general health is then good. Adhesions are least likely to be present. The cyst is less likely to be multilocular; and if it be multilocular, the secondary cysts are much smaller. A much shorter incision will suffice. It may safely be predicted, that the time will arrive when delay in ovariotomy will be considered as unjustifiable as delay in the operations for strangulated hernia, or aneurism, or stone in the bladder. The diagnosis is also much more certain when the abdominal wall is not fully distended.

Details of the operation. The incision should be made *close* to the pubes. (It can be extended upwards, if necessary.) This is nearest the pedicle; and as the part of the abdominal wall attached to the pubes is necessarily less affected by tympany, there is less chance of traction. The pedicle lies against the abdominal wall, and is thus less likely at any time to cause intestinal obstruction. The abdominal wall being thicker in this locality, the uniting surfaces are broader, and better adapted to each other.

Turning the patient on to the side is the best safeguard against the entrance of fluids into the abdominal cavity.

Neither sponges, flannels, nor, if possible, the hands, should be carried into the abdomen. Adhesions should, as far as is practicable, be examined at the wound. Of course, all these advantages are more easily secured when the operation is performed at an early period. Success follows in a proportionate degree.

The pedicle should be secured in the wound, so that all bleeding, suppuration, or sloughing, shall be external to the abdomen. If the pedicle be short, part of the tumour should be left in the wound. If the pedicle be very short, and the attached part of the tumour unusually bulky, as occasionally it is in multilocular cysts, the circulation may be efficiently arrested with silver wire cut short, and the tumour be completely removed. Another useful alternative is Dr. Braxton Hicks's wire-*écraseur*.

Adhesions, if long, should be included in the clamp; torn through if short and weak; and tied with silver wire cut close, if short, strong, and vascular; or, in the latter case, the fine wire *écraseur* may be used.

Cut or granulating surfaces in the abdominal cavity are placed (Mr. Jordan remarked) in circumstances analogous to the well known favourable subcutaneous conditions. No silver ligatures should be tight enough to cause sloughing; for sloughs, like all other non-metallic structures, act as setons or foreign bodies.

While acknowledging the great services which Mr. Spencer Wells had rendered to the operation of ovariotomy, Mr. Furneaux Jordan considered that wire sutures carried completely through the abdominal wall were preferable to hare-lip pins. Wherever hare-lip pins are used, there is a constant danger of sloughing of the tissue included between the pin and the twisted hemp or silk.

After-treatment. Immediately after the operation, a large but light linseed poultice should be placed on the abdomen. The great danger of vomiting may be best averted by introducing beef-tea and brandy freely and frequently into the rectum, and giving nothing by the mouth. Every five or six hours a little opium may be added. The occurrence of peritonitis should not in the least degree diminish the amount of nourishment. Constipation may contin for many weeks; but no circumstances justify t use of purgatives. An occasional enema and ti will restore the intestinal canal to health.

LIVERPOOL SOUTHERN HOSPITAL.

CASE OF HYDROPHOBIA.

Under the care of J. Cameron, M.D.

[*From Notes taken by* Mr. Evans, *Junior House-Surgeon to the Hospital.*]

John Lishman, aged 50, a joiner, of strictly stea habits, but of an exceedingly nervous temperamen and whose health had for some time been delicat was bitten in the left wrist on Wednesday, Octob 28th, 1863, by a yard-dog of the retriever breed. Th animal is described as having always been "qui and innocent", and was, to all appearance, perfect well during the day preceding the occurrence allude to. That night he was heard to bark frequently; n alteration being noticed in the character of his voic which was also observed the following day (Wedne day). He then exhibited unusual irritability of ten per, and did not take his food with his accustome avidity. On being taken out into a neighbourin field for exercise, it is stated that, of his own accor he went into a pool of water. It was on his retur home that he flew at and bit Lishman, who, in co sequence of the dog's refusal to come out of th kennel, had struck him on the head with a stick.

Lishman did not apply for medical advice unt Sunday, November 1st, when he was seen by D Petrie, who excised the injured parts, and applie caustic to the raw surface. The wound healed i due time; and Lishman seems to have been restore to his usual state of health; but, although he did no suppose the dog to have been mad, he had bee very anxious about himself ever since the receipt the bite.

On Friday, April 15th, he caught a severe cold from which he had sufficiently recovered to go t work on Monday, the 18th. On the afternoon of thi day (5.30 P.M.), having occasion to blow the fire, h suddenly felt a spasm in the throat, caused by som smoke coming against his face; and, on trying t finish his tea, he experienced an aversion to partak of this fluid. At 8 P.M., by the recommendation of friend, he took a warm bath; on returning fron which, he felt worse, and described the play of th wind against his face as having given rise to a sens of "suffocation" or "choking".

On Tuesday morning, the 19th, he was seen b Dr. Petrie, who, immediately recognising the natur of the malady, sent him to the Southern Hospital where he was admitted at half-past twelve.

A short time before admission, he had had his wil made, and signed it with a firm and steady hand.

When first seen, he was sitting in the out-patient room between an open window and door. Th draught of air thus occasioned, though not very strong, gave rise to constant spasms about the neck on closing the window, he obtained great relief. H was in perfect possession of his mental faculties; an there was nothing during the intervals between th spasmodic seizures to indicate serious disease. Ther was no pain nor change of appearance in the scars but he stated that the hand felt uncomfortable, being the seat of some morbid sensation, something lik numbness or tingling. All his sufferings were re ferred to a distressing sense of "suffocation" o "choking", and an inability to swallow, occurring i paroxysms, during which he was violently agitated his countenance expressing the greatest menta anxiety and apprehension. These paroxysms fre

ıtly occurred spontaneously, but were also ex-l, and with extreme violence, by the slightest ıpt at swallowing, and by the *sight*, or even the tion of the word "water". The movement of air ed by fanning him gently with a card, or the approach of a bystander, was sufficient to induce ggravate a paroxysm. He was continually ex-orating, or rather hawking up, in small quanti-, a tough and viscid mucus, which he spat about very direction, though conscious of the impro-ty of an act that he vainly attempted to control. pulse was 100, of moderate strength. There was eat of skin. The tongue was moist, slightly furred, protruded with tolerable ease. The following s were administered, and swallowed, by means of wing, with considerable difficulty.

ompound extract of colocynth, gr. vij; calomel, gr. ij; croton oil, mi; opium, gr. i; made into three pills.

P.M. Mr. Evans attempted to administer chloro-n in a Snow's inhaler; but even the sight of the rument approaching his face brought on the sms in the throat and the feeling of suffocation. same result followed another attempt, during ch his eyes were closed; and subsequently, when as endeavoured to give the chloroform by means a handkerchief. (The movements made by the ient, when labouring under these attacks of spasm, e observed by Mr. Evans to resemble very closely se performed by a child labouring under chorea.)

.30 P.M. Two grains of acetate of morphia in tion were injected with a Wood's syringe into subcutaneous areolar tissue, close to the cicatrix. e operation was borne without giving rise to any oxysm, and was followed by a comfortable sleep, ich lasted until 3.40.

.45 P.M. The spasms recommenced, an exceed-ly violent one being occasioned by an attempt drink.

P.M. The morphia solution was repeated. Ice s applied to the spine. (This was soon disconti-ed, in consequence of the extreme restlessness of patient preventing its being kept in position.)

.30 P.M. During the early part of the interval er the last report, he had frequent and violent roxysms, but subsequently became quieter, and zed a good deal. There was slight delirium.

P.M. An enema was given, consisting of four nces of strong beef-tea, a glass of wine, and two achms of tincture of opium.

.20 P.M. The patient succeeded, after many efforts, chewing and swallowing some ice. Pulse 70, in sitting posture.

.30 P.M. Vesicating fluid was applied to the nape the neck.

.45 P.M. Two grains of morphia were injected o the subcutaneous tissue of the nape of the neck; d the blistered surface was dressed with strong ercurial ointment. The front of the neck and roat were covered with lint soaked in chloroform iment.

10 P.M. The pulse was 120, more feeble. He had ffered much from the paroxysms, which had been ore frequent, but less violent. He had slight mut-ring delirium, but, when roused, was quite rational. e sat for some time on a slipper-bath half-filled with ater, the sight of which in this vessel did not dis-rb him; so that it would appear as if the dread of, d spasms excited at, the sight of fluids, were asso-ated with the desire and attempt to swallow them. roughout the evening, he had suffered from in-nse thirst, which he had endeavoured to alleviate moistening his lips with a towel dipped in cold ater. The hawking and spitting were constant; d he frequently was obliged to remove the mucus from his mouth by his fingers, on account of its vis-cidity. A few ounces of urine, having been passed, were tested, and found to be high-coloured, acid, of specific gravity 1030, and to contain about one-sixth of its bulk of albumen.

11.15 P.M. With the view of acting upon his skin and relieving his thirst, he was wrapped in a hot wet blanket covered with waterproof sheeting—an application from which he experienced considerable relief.

12 P.M. The paroxysms were more frequent and violent. He was perfectly conscious and rational, thought he was dying, and begged that means might be adopted to hasten his death and put an end to his sufferings. Two grains of morphia were injected into the subcutaneous tissue of the neck.

April 20th, 12.40 A.M. His wife came to see him; and her sudden approach caused him to be seized with a paroxysm more violent and more protracted than any of the previous ones.

1 A.M. He was a little quieter, though not disposed to sleep. He was perfectly rational, and talked to his wife, who was sitting at his bedside, about his affairs. A beef-tea and brandy enema was ordered.

1.40 A.M. He had been much quieter during the last half-hour, dozing occasionally. Pulse 160, in the supine position, very feeble.

2.45 A.M. The pulse was imperceptible; the hands cold and clammy. He foamed at the mouth. The paroxysms since last report had recurred less frequently. He had not slept.

2.55 A.M. He had become very quiet; the pulse was still imperceptible. The pupils were dilated; the eyes open and fixed; the conjunctivæ sensible to the touch. Respirations 26 in the minute.

3 A.M. A paroxysm of great length occurred, consisting of frequently repeated spasms of the muscles of the neck, with violent expiratory efforts, accompanied by irregular convulsive movements of the arms and legs, and jerking forwards of the abdomen. He did not spit as in the previous fit, but a frothy mucus flowed in considerable quantities out of his mouth, beyond which he was unable to expel it; subsequently, it became tinged with blood. The pupils were dilated and insensible. He seemed conscious to some extent, as he frequently addressed a few words to his wife, or alluded to his approaching end.

3.50 A.M. The beef-tea and brandy enema was repeated.

4.4 A.M. The paroxysm, which commenced at 3 o'clock, continued with more or less severity until 4; but it was evident that his strength was rapidly giving way. At 4.4., the struggling suddenly ceased, and the breathing became calm; then slower and slower, and accompanied by loud mucous *râles*; and in about three minutes more he expired, apparently from sheer exhaustion. Death took place in *thirty-five hours* after the first appearance of the symptoms, and *six months* from the time of the infliction of the injury.

POST MORTEM EXAMINATION. With the view of counteracting the gravitation of the blood towards the spinal marrow and brain, the body was laid, very soon after death, upon the face.

Four hours after death, *rigor mortis* was well marked, but did not seem unusually developed. The hands were firmly clenched, the thumbs being drawn in closely under the fingers. When the *post mortem* examination was commenced, sixteen hours after death, the rigidity had considerably decreased.

The *spinal cord* and *brain* were examined most carefully, and did not present any appreciable or reliable evidences of disease. It was thought, however, by some of those present, that there was an unusual amount of vascularity, showing itself in a bright red

distension of vessels of the medulla oblongata and pons Varolii.

The *lungs* were congested; the *larynx* and *trachea* healthy.

The *blood* was generally fluid, and somewhat dark in colour.

The *heart* was healthy in structure. The right and left ventricles and the right auricle were distended with blood, presenting in the right side a fibrinous clot; in the left, a black clot.

The *fauces* and *submaxillary* glands were healthy. The *tongue* was dry. At the lower part of the *pharynx*, the mucous membrane on each side of the epiglottis was coated over with a thin film of tenacious mucus, not unlike false membrane; and it was considered that the membrane itself was more than usually vascular, and the mucous follicles enlarged and red. This view was not accepted generally, some of those present at the examination believing the parts to exhibit nothing abnormal. The *œsophagus* was healthy.

Original Communications.

OVARIOTOMY IN PARIS.

By J. Sampson Gamgee, Esq., Surgeon to the Queen's Hospital, Birmingham; Corresponding Member of the Society of Surgery of Paris.

If the reference in the Journal of May 28th (p. 590) to an operation of ovariotomy, which I recently performed in Paris, only concerned myself, I might allow it to pass unnoticed; but as circumstances, doubtlessly accidental, placed me for a moment in the honourable position of a representative English Surgeon in the French capital, I desire to comment briefly on a proceeding which, I very much regret to find, wounded the susceptibilities of some of the Academicians.

On March 31st, I received a telegraphic message to a consultation in Paris on a case of abdominal disease.

I found the Baroness N. de T— much emaciated, but free from organic disease other than a large tumour, which, after careful examination, I pronounced to be ovarian, multilocular, and, in the main, non-adherent. There was a good deal of free peritoneal fluid; and the uterus was decidedly moveable. The patient's sufferings, from vomiting and oppressed respiration, were, from time to time, very great; her *morale* was heroic. She had taken great interest in the several consultations which had been held in her case by more than one of the celebrities of Paris; and she joined the members of her family in urging the question, Did I think operation offered a chance of life? I concealed none of the dangers, but I did not hesitate to reply, that the tumour was undoubtedly removable, and that I relied greatly on the patient's good constitution and marvellous courage for the reduction of the after-risks. Out of respect for the opinion of those French surgeons who have attributed the frequent deaths from great operations in Paris to its atmosphere, I expressed a wish that the Baroness should be installed on the borders of the Bois de Boulogne. Effect was immediately given to every wish I expressed, and throughout the Baron was advised, and I was most cordially and ably assisted, by Dr. Blatin, the physician with whom I was more directly in consultation. Under this gentleman's care, our patient greatly improved in health; so much so that, but for the mechanical troubles occasioned by the tumour, I should have longer deferred active intervention; but, under the circumstances, one of the best moments was selected, and I operated on April 16th; Mr. J. T. Clover of London administering chloroform. The result in every respect bore out the diagnosis; the pedicle was unusually long; only one adhesion existed, and that to the left iliac fossa; its length explained the previous locomotion of the mass and prevented subsequent traction.

Everything was done to keep up strength; the skin was cool; the tongue clean and moist; and the pulse averaged 100. With this state of things, the bowels having also acted spontaneously, the fourth day after operation, contemplating my speedy return, I consented, after consultation with Dr. Blatin, to present the tumour to the Academy of Medicine then sitting; and I availed myself of the kind offer of introduction to that august body by its members Baron Larrey and Professor Ricord.

Pathological specimens, and especially ovarian tumours, are best seen in the fresh state; and of the latter so little was recorded, when their motto amongst surgeons was *Noli me tangere*, that I scarcely think M. Depaul would affirm that even the countrymen of Cruveilhier have exhausted the natural history of ovarian disease.

Professor Velpeau may remember that when I had the honour, a few days previously, of addressing him and his illustrious colleagues at the Society of Surgery, on a successful case of amputation at the hip-joint, I noted the *dictum* of the Royal Surgical Academicians of the last century, "L'opération n'est qu'un point dans l'exercise de la chirurgie." In no procedure is this so true as in ovariotomy; the diagnosis and after-treatment being of at least commensurate importance with the operation itself.

In the case in question, grave doubts had been thrown on the amenability of the mass to surgical treatment. To these doubts, the specimen seemed to afford a sufficient answer; which, for obvious reasons of international courtesy, I should certainly have suppressed, if not otherwise advised by distinguished Frenchmen.

Probably, while occupying the Tribune of the Academy, I had not the honour of M. Depaul's presence amongst the distinguished auditory, as he appears to have remained unacquainted with the peculiar value of the specimen presented with a succinct history of the case. Only one of the cysts contained clear liquid; all the others were filled with purulent, yellow, green or brown thick matter; and the lining of several of the cysts denoted recent active inflammation. Nevertheless, the tumour was free, and I was justified in discarding the presumption of adhesion, indicated by the patient's long suffering and repeated acute attacks, in the presence of the positive evidence of locomotion of the mass demonstrated by the results of physical examination. The specimen and history supplied a typical illustration directly opposed to those cases in which, without any previous indication whatever of peritonitis or cyst inflammation, an ovarian tumour is bound to the abdominal walls and organs by the most formidable links.

When I left the patient after the expiration of the sixth day—clamps off; wound solid; pulse 105, respiration 23; tongue clean and moist; no tenderness—Dr. Blatin and myself regarded her as convalescent. The eighth day, sickness, which had previously been considerable, at intervals, but had yielded to treatment, returned violently, and proved rapidly fatal; apparently by exhaustion, which had frequently threatened a similar termination during the preceding illness. That such was the result, I feel no one will regret more than those of my French colleagues, from whom I received the most encouraging proofs of friendship.

he freedom of the tumour, the number of days ch the patient survived, and the advanced pro- ss she made towards recovery, are almost sug- tive of regret that the powers of life were not ed upon for the grand effort before they had be- e so much exhausted. I am left to the reflection t, but for the operation, a short prolongation of would have been possible to one of the rarest and st honourable women it can ever be my privilege ttend. But her sufferings had been so great; her ire of life for noble purposes was so eager; my ance on the diagnosis was so complete; my expe- ce in an almost precisely similar case was so en- raging—that I cheerfully undertook the great re- nsibility; and I should, under similar circum- nces, act in a precisely similar manner, with this eption: that if I were again permitted to address Academicians, I should plead, in the words of ofessor Velpeau, long since uttered, but still true, Iessieurs, la chirurgie a besoin, comme la médecine, ne révision presque complète." (*Leçons Orales de nique Chirurgicale.* Bruxelles 1841, p. 20.)

Transactions of Branches.

BATH AND BRISTOL BRANCH.

SE OF OVARIOTOMY: WITH REMARKS ON THE PROPRIETY OF TAPPING ONCE BEFORE PERFORMING OVARIOTOMY, AND ON THE BEST MODE OF SECURING THE PEDICLE.

By W. Michell Clarke, Esq., Surgeon to the Bristol General Hospital.

[*Read February 18th*, 1864.]

is my intention to bring before your notice the story of a patient upon whom I have recently per- med ovariotomy.

In August last, I received an urgent message re- esting me to visit a servant who lived near Bristol. e had been seized early in the morning with severe ins, which were gradually increasing in intensity. e had had similar pain on the preceding day, but had passed off again.

She was a tall, well-made woman, rather thin. She id that her age was 35; and that she had generally en healthy, except that, about twelve months since, e had been in the Infirmary with a sore leg, when was noticed by her surgeon that she had an abdo- inal tumour, but it was then small. She came out the Infirmary, and said that she had continued ell until the present time. The enlargement of her bdomen, which was at this time quite that of a nine onths' pregnancy, had not arrested her attention.

I requested her to go to bed, that I might make a ore careful examination. After noticing that the bdominal enlargement corresponded in form and tline with that presented at the full period of ges- tion, that there were several large superficial veins owing through the skin, and that the breasts were in and small, I examined her with the stethoscope. e was tender, and shrank from pressure over all e upper part of the tumour; and in the same situa- on there was a distinct friction-sound, produced, I id no doubt, by inflammation of the peritoneum. I ow percussed the abdomen, and found dulness ery where, except in the upper part of the epigas- ic regions and the posterior parts of both lumbar gions. There was also distinct fluctuation all over e tumour. On introducing the finger into the gina, I found that the uterus was undeveloped and ose. I could not feel any tumour in the pelvis.

I concluded that my patient was suffering from ovarian dropsy, with inflammation of the peritoneum covering its upper part; and advised her to go at once into the General Hospital.

After a consultation with my colleagues, Dr. Fripp and Dr. Swayne, who agreed with me, I decided to withdraw the contents of the cyst by tapping; and this, because it did not seem right to subject the woman to the grave operation of ovariotomy without giving her the chance, although an unusual one, of the cyst not refilling, or refilling very slowly; and because, also, we thought that some valuable information might be gained as to the connections of the tumour when its contents were discharged. Accordingly, on October 8th, the patient having in the meantime become very unwieldy and anxious for relief, I performed the operation of paracentesis. Fifteen pints of clear straw-coloured fluid were withdrawn; great relief followed this proceeding. After the operation, a compress was for some time applied over the situation of the cyst, and the abdomen was carefully supported by a flannel bandage.

Upon examining the abdomen after the cyst had been emptied, the integuments above the umbilicus were found to be puckered and drawn downwards; but the belly became every where resonant upon percussion, except for a considerable space extending from the left iliac fossa.

On October 26th, at which time the sac was already refilling, she was discharged to her home in Wiltshire.

By December 18th, the enlargement had become again so considerable that she returned to the hospital. It presented much the same features as before; but there could be now felt, through the vagina, a somewhat firm tumour, not fluctuating; and another, which appeared distinct from the principal cyst, could be felt in the left groin.

After a consultation held with Dr. Fripp, and with all my surgical colleagues, and with Dr. Swayne, and after pointing out to the woman very plainly the risks attending the operation and the general prospects of her disease, she elected to have ovariotomy performed. This was not a case in which any benefit could be hoped for from the injection of iodine. Tapping *per vaginam* was impracticable, for the principal cyst could not be reached in that direction; and tapping followed by pressure had been tried, and had failed. On the other hand, there seemed to be nothing unfavourable to ovariotomy, except the adhesion that had evidently taken place along the front surface of the upper part of the tumour; and this, it was thought, might be readily broken down.

On the day of the operation (Jan. 13th, 1864), the patient was in good general health. She measured thirty-seven inches at the umbilicus. An enema had been administered early in the morning, and the urine was drawn off just before the operation. There was some little difficulty in introducing the catheter, the bladder being displaced a good deal to the right. The room was kept as nearly as possible at a temperature of 70° Fahr. Chloroform was administered, and she was kept well under its influence during the whole time. She vomited once before the operation commenced, and again immediately after it was finished; but, whilst it was actually in progress, she was not sick, and she was perfectly unconscious.

I first made an incision of about four inches long, commencing about an inch below the umbilicus, and extending to about two inches and a half from the pubes. When I had dissected to the peritoneum, and opened it on a director, I introduced my finger, and found, as I had expected, considerable adhesions over the upper part of the tumour. I therefore enlarged the incision upwards, and introduced my hand, reaching as far as I could, and separating the adhe-

rent cyst from the abdominal wall. I could not, however, get my hand in far enough to break down all the adhesions; so I next tapped the cyst with Spencer Wells's trochar, and drew off all the fluid. This accomplished, the sac was readily drawn through the opening; the remaining adhesions separating readily, and also the omentum, which was lightly attached to its anterior surface. There was a little difficulty in bringing up the large semi-solid masses which are seen in the preparation on the table, and which occupied the lower part of the pelvic cavity; but this done, I came upon the pedicle, which was short and rather broad. A double whipcord ligature was passed through this, and tied on each side; and another circular ligature of the same material was tied on behind the others. The incision had already been stitched up as far as the pedicle, which was now cut; and, a pin having been passed through to retain it, the operation, which had lasted forty minutes, was completed.

There was at once, owing to the shortness of the pedicle, a good deal of tension upon the lower part of the wound, which drew the pedicle between its lips. Two long gilt pins were passed through the whole depth of the wound, including the peritoneum; besides the pin which fixed the pedicle. The rest of the wound was brought together by silver hare-lip pins and silver wire sutures, none of which were passed deeply. Owing to the very able way in which I was assisted, no blood nor fluid from the cyst escaped into the abdominal cavity. After the operation, the patient seemed in a most favourable condition. The pulse remained quiet; and, when she recovered from the chloroform, she was calm and easy; but in the course of the evening she became very sick.

No attempt was made for the first twenty-four hours to introduce anything by the mouth, except a little of Liebig's soup; which, however, she rejected immediately. An enema of four ounces of beef-tea and twenty minims of laudanum was administered every four hours, the opium being omitted when it was not required. These injections remained up well, and were continued for many days. The sickness, however, continued with scarcely any abatement until the 18th, five days after the operation, when, but only from inability to reject it, the stomach retained some food.

It would be wearisome to give in any detail the notes that were taken during this time. She was visited frequently. One of my pupils and a nurse were constantly with her, and she was most assiduously tended by the house-surgeon; but, in spite of all our care, she gradually got worse, and died on January 19th.

I tried in various ways to combat the sickness; but, except that for a short time oxalate of cerium seemed to stay it, nothing did any good. Creasote, hydrocyanic acid, brandy, soda-water, champagne, Liebig's soup, beef-tea, arrowroot, ice, were all alike vomited, and all alike useless. The withdrawal of everything for long periods was also tried, but with no good effect. When she had become very ill, and her case seemed desperate, I opened the wound, and cut away the ligatures; but this was followed by no relief. The pins that involved the peritoneum were taken out on the second day.

The abdomen all through remained soft, and almost free from tenderness. There was very little general fulness, but the stomach was constantly distended with gas. She lay, not as if suffering pain, but frequently with her legs quite straight. Except at the part where the pedicle came through, the wound closed at once, and was well united by the second day. The part through which the pedicle passed remained non-united.

A *post mortem* examination was made on Januar 20th. The part of the abdominal wall containing th wound was separated and turned down. The woun was found to be closed on the inner side, except the upper and lower portions. Between the lips c the upper part, there lay a small piece of omentum the pedicle, not at all adherent to the margin of th wound, occupied the lower. The peritoneum, brough together by the pins, was well united in their imme diate neighbourhood, but not elsewhere. The whol posterior surface of the wound was slightly adheren to the intestines which lay behind it.

A thin layer of extravasated blood, spread out ove the peritoneum, marked the extent and situation o the adhesion that had been torn away from the uppe part of the cyst. Near the centre of this was a smal yellow spot of lymph, passing into suppuration.

From near one iliac fossa to the other there passe across a broad band of lymph. In the pelvic cavity there was a large quantity of matter; and the peri toneum, upon which this lay, was in a state of acut inflammation. The pedicle sank to the uterus through this; and the part to which the ligature had been applied was in a state of ulceration.

The tumour, which was examined soon after the operation, was a multilocular cyst, the chief compart ment of which contained thirteen pints of fluid at the time of the operation. It weighed twenty-sever ounces and a half. The principal cavity measured twelve inches and a half by ten inches; and there were seven secondary cysts, varying in length from five to two inches. These secondary cysts contained a half-fluid material resembling jelly, entangled in the meshes of a dense areolar tissue. Under the microscope, besides the areolar tissue, there were found numerous cells, more or less resembling squamous epithelium, with single nuclei and nucleoli. There were also numerous free nuclei.

Remarks. In the treatment of this case, two principal points called for and engaged my anxious deliberation; and those, I believe, were the chief points of interest in it. The first was, whether, upon the admission of the patient into the hospital, I should subject her to the operation of tapping before undertaking that of extirpation of the ovary; the second was, when the tapping had failed, to decide upon the best method of dealing with the pedicle. And these two being, as I believe, the most difficult matters connected with these cases, they may, I think, usefully engage our attention a little further.

In our present position with reference to the treatment of ovarian dropsy, we cannot discuss the question of paracentesis altogether apart from its relation to ovariotomy. That is, if it could be shown that a single tapping has an unfavourable effect upon the only operation which holds out a fair prospect of curing the disease, then the decision whether a patient coming under one's care shall be tapped or not becomes a subject of great anxiety; it is no longer so trivial a matter as the simplicity of the operation would seem to make it. But we are also called upon to institute a comparison between the two proceedings as to their fatality; for, according to some accounts, the first tapping is as deadly an operation as ovariotomy. When my patient first came into the hospital, I felt this matter to be so important, that I examined carefully into it; and I found that the statistics given by Mr. Southam, Safford Lee, and Kiwisch were those most quoted and relied upon; and, if the conclusions from these could be considered final, the operation of ovariotomy would be found to be no more fatal than that of tapping. The collective number of these cases was 130; and of these, 22 died in the course of a few hours or days, which is about 17 per cent. (Kiwisch Clay's translation, p. 159.) On viewing these sam

bles in another light, the case would stand thus: of the total 130 cases were instances of the first rformance of tapping; and of these, 22 died within period of ten days from the operation. (West, *Diseases of Women*, p. 554.) This, you will see, is not far m a half of the whole number, dying in less than a rtnight. And this is the position of the case, as it ars upon the question before us; for it is only with gard to a first operation that we should have to derate.

Again, taking the case as it is put by Churchill, it ould stand thus. "Taking the reports collected by utham, Lee, and Kiwisch, amounting to 130 cases, died within a month, directly in consequence of e operation: this gives a mortality of more than 1 5. But of 109 of these cases, we are told that 46 ed after the first tapping; that is, about 1 in 2⅓." *Diseases of Women*, 5th ed., p. 530.)

If, then, as I said before, we were to take these bles as a basis for decision, we should elect to perm ovariotomy at once, and not tap at all; for the verage fatality of the former operation is 1 in 3 *b.*, p. 529); and with some operators it has become s low as 1 in 4, or with one even as low as 1 in 5. ut I did not think that these tables, for some reason r other, gave a fair view of the results of tapping; nd, in looking further, I found that this was also ne opinion of West and Velpeau, and of others. West ays that he has had 31 patients with 2 deaths after he first operation, and 1 after the second. (*Op. cit.*, . 554.) Velpeau performed it 312 times on about 98 atients, with only 4 deaths; and these were exceptional cases of large compound cysts, which it was ound possible to empty only very partially. (*Ib.*, p. 55, foot-note.) I also learned, from a paper of Mr. Spencer Wells, that he had performed paracentesis nore than two hundred times with only two deaths. (British Medical Journal, Dec. 21, 1861.)

Setting, then, these more favourable statistics against the more generally received opinion that the nortality after a simple tapping is about one in six, nd wishing also to give my patient the chance, although I scarcely hoped she would realise it, of the yst collapsing permanently, and being also desirous f getting fuller information as to the relations of the umour, I considered it better practice to submit her o a single tapping.

With regard also to the more direct influence of the operation of paracentesis upon any subsequent proceeding, the only way in which it could act injuriously would be by exciting inflammation and adhesions; but, with proper care of the patient, this may generally be avoided; and I cannot think that the operation of ovariotomy, except in cases where the cyst is distinctly and markedly multilocular, should be done before tapping has been tried once at least.

Another argument in favour of emptying the cyst once before performing ovariotomy is the danger that attends the sudden withdrawal of a large quantity of fluid from the abdominal cavity—a danger which the addition of a very formidable operation does not certainly tend to lessen. Sufficient stress does not seem to have been laid upon this point, although I believe Mr. Hutchinson has drawn attention to it; but it certainly seems well to remember that certain precautions have always been considered necessary, in order to prevent the patient from collapsing under the operation of tapping; and, as far as ovariotomy is concerned, this may be avoided by a previous tapping, the subsequent operation being performed before the cyst has refilled to any large size.

When the disease had returned, and I was compelled to extirpate the ovary, the only thing about which I could not readily make up my mind was the management of the severed pedicle. The mode in which the surgeon is compelled to deal with this is, I believe, the cause of the greatest mortality in these cases; and, moreover, the other causes of death, as hæmorrhage, exhaustion, etc., are more within our grasp, and more easily dealt with. Other matters connected with the operation, too, have been pretty well decided; as, for instance, that the shorter the incision the better; and that it is advantageous to pass a certain number of pins or stitches through the peritoneum, so as to bring its edges into contact; but upon the management of the pedicle there is still much difference of opinion, and much room for perplexity.

Theoretically, the danger of tying it, and returning it, with the ligatures cut short, or left long and carried out through the wound, seems very great indeed; knowing, as we do, how susceptible is the peritoneum of irritation, and feeling, as we must, that a separating slough is a very sufficient cause of irritation. And, yet contrary to all that one would have imagined, the operator who adopts the first of these two methods, cuts off the ligature short, and drops the pedicle into the pelvis, closing the wound at once (Simpson, *Medical Times and Gazette*, February 6th, 1854, p. 44; and Braithwaite, vol. xlvi, p. 225), has up to this time, had the greatest success—a success which one may well envy; for he has operated eighteen times, and lost only three patients—one in six.* (Churchill, *op. cit.*, p. 529.)

In my own case, I adopted, in almost all particulars, the operation of Spencer Wells, who, I thought, had been the most successful operator, as he certainly has been one of the hardest workers in this field; and I used the ligature in preference to the clamp, because the pedicle was very short. But it is obvious, that a ligature applied in this way and fastened to the wound must be a fearful source of danger, and that it must almost entirely depend upon the speedy closure of the wound against the entrance of pus whether the patient escape or not.

There are some other ways in which the pedicle may be managed; but if Dr. Tyler Smith's success continue, and if his success be due to the mode in which he deals with the pedicle, his is the plan that will, I think, be followed.

If the vagina sloped in another direction than that in which it does, a ready outlet might be made through it for the pedicle, and in a situation that would give exit to the pus that must necessarily be formed around the ligature; but, on trying this upon the dead subject, I found that the direction of any current was towards and not from the cavity of the pelvis.

As this method of Dr. Tyler Smith's, of returning the pedicle and closing the wound at once, appears to be the most successful, it is interesting to know that Mr. Wilson, who was one of the earliest ovariotomists, adopted the plan of cutting through the cyst, tying all the vessels that bled, cutting the ligatures short off, and then, returning the stump, he closed the wound.

CASE OF OVARIOTOMY.

By Henry Marshall, M.D., F.R.C.S.Ed., Surgeon to the Bristol General Hospital.

[*Read April 28th*, 1864.]

The recent discussion elicited by the reading of Mr. Clarke's paper, shewed that there existed a great diversity of opinion as to the propriety of performing ovariotomy; and I, therefore, believe that the record

* According to a later report, 1 in 5. Dr. Tyler Smith reports twenty cases, and four deaths. (*Medical Times and Gazette*, April 16th, 1864.)

of the following case may not be uninteresting, and may aid in refuting the theory that such an operation is always unwarrantable.

The subject of this operation is the wife of a shoemaker, and was admitted into the Bristol General Hospital on February 6th, but had been for some months an out-patient under Dr. Martyn. She had enjoyed good health up to July 1861 (two years and a half previously), when one day in endeavouring to pass urine she found herself unable to do so; and at the same time was seized with a violent pain across the bowels, which caused her to faint. On brandy being administered, she shortly revived, and was then able to pass urine, when the pain wore off. On the following day, she noticed a swelling of about the size of a hen's egg in the right hypochondriac region. This tumour rapidly increased in size; so that in six months it filled the entire abdomen. About this time (January 6th, 1862), she was seized with violent pain in the abdomen, like labour-pains. She was seen by two medical gentlemen in this city, and was told by them that she had "inflammation of the bowels," and was ordered to apply six leeches, which afforded her great relief.

Six months later, she had a similar attack; and herself adopted the same treatment with a corresponding result. The tumour, however, gradually increased in size, and at the same time she lost flesh; and, from having been stout and tolerably robust, became wan and emaciated. Dr. Martyn has favoured me with the following particulars of her symptoms while under his care.

"For one year previously to her admission Mrs. A. suffered from steadily increasing interference with the digestive system. For the first part of this time (as the bowels enlarged) she got gradually thinner; then the gastric functions began to fail; she became pale and pinched, lost her appetite, and suffered very much from heartburn and gastralgia; now and then the stomach refused all food, and quantities of acrid fluid were brought up with pyrosis. The tongue became coated and the bowels confined, and the general distress and nausea almost constant. Treatment with aperients daily; antacids and sedatives always gave relief; and perfect rest in bed for some days before the operation, restored the appetite, and the stomach symptoms were all somewhat alleviated."

At the time of her admission, the abdomen was greatly distended, measuring forty-two inches in circumference; and, when lying on her back, was everywhere dull on percussion, except in the left lumbar region, where it was slightly resonant. Fluctuation was perceptible over the entire tumour. A vaginal examination proved the uterus to be in its normal position; and the menstrual function had always been regular. She has three children; the youngest being now between eight and nine years old.

A consultation with my surgical colleagues at the hospital, together with Drs. Martyn and Swayne, resulted in the opinion that the case was a suitable one for ovariotomy; and the operation was accordingly performed on March 10th, in a small ward of the hospital, which at the time was heated to between 65° and 70° Fahr. Chloroform having been administered, I made a short incision in the mesial line of the abdominal parietes, commencing an inch below the umbilicus, of sufficient length to admit my finger and ascertain if the tumour was adherent to the parietal peritoneal surface, intending, in the event of such having been the case to any great extent, not to proceed with the operation, but at once to close the wound. Finding, however, that I could pass my finger freely in every direction, I enlarged the incision downwards to within two inches above the pubes and upwards to the umbilicus, which gave egress to a considerable quantity of clear ascitic fluid. The tumour was then punctured with a trochar half an inch in diameter; but, to my disappointment, the contents of the cyst proved to be too thick and viscid to escape even through this large cannula. I accordingly withdrew it; and the tumour being drawn forward with hooks, the puncture in the cyst was enlarged, thereby allowing the escape of about a quart of its thick gelatinous contents; and great care was taken to prevent any from passing into the peritoneal cavity. The opening in this cyst was then still further enlarged, so as to enable me to pass my hand within it, breaking down the partition walls of innumerable secondary cysts, and in this way getting rid of upwards of a gallon of the contents of the entire tumour. I was then able (after some manipulation) to withdraw through the opening in the abdominal parietes the tumour, which is now on the table before you, and weighs ninety-two ounces.

The pedicle (consisting of the right Fallopian tube and broad ligament) being secured by a strong silk ligature tied round it, was then divided, and the tumour removed. The pedicle, after both ends of the silk ligature had been cut short, was dropped into the pelvis, and the wound closed with silver sutures at intervals of three quarters of an inch, each suture being made to include the peritoneum on each side of the incision. A superficial suture was then inserted between each of the deep ones. The hæmorrhage during the operation was very trifling, and not a single vessel required to be tied.

The subsequent history of this case is told in a few words, inasmuch as the patient never had a bad symptom from the hour of the operation; and even during the days immediately following its performance suffered less from shock or constitutional disturbance of any kind, than is usual after most of the major operations in surgery; she was perfectly free from pain; slept comfortably without the assistance of opiates; and showed no tendency to nausea or vomiting. The pulse during the first few days varied from 94 to 104; but by the end of the week was down to 86, and a few days later was at 62. The wound united throughout by the first intention. The deep sutures were removed on the fifth day, but the superficial ones were allowed to remain some days longer. Nourishment was prohibited during the first twenty-four hours; after which, she got milk and lime-water, beef-tea, and gruel alternately, in small quantities, frequently administered. This diet was continued till the eleventh day, when I yielded to her petition to have a chop; which agreed so well with her, that the allowance was doubled at the end of two days; and shortly afterwards she was promoted to a full diet. For the first few days the catheter was regularly passed every six hours. A dose of castor-oil was given on the seventh day; but, not acting, was repeated, and resulted in a free action of the bowels. This is the only medicine she required since the operation. She was able to leave her bed at the end of the month, and a week later to enjoy a walk. The catamenia returned on April 22nd (two months after her last period), and passed off properly. The cicatrix of the incision in the abdominal parietes is now perfectly firm and good, measuring exactly three inches in length. The course I adopted in the management of the pedicle appears to me simpler, as well as safer, than that of securing in the wound, as recommended by Mr. S. Wells and others.

I consider that this case sufficiently proves the propriety of performing ovariotomy in certain cases of ovarian dropsy; and in this particular instance it was the only expedient by which relief could be afforded. Its previous history is particularly interesting in connection with the two attacks of severe

in resembling peritonitis, for which leeches were plied. This made me fear that the tumour was ore or less adherent to the parietal peritoneum or testines. Fortunately, however, such was not the se.

The importance of being well and efficiently as-sted during the operation, cannot be over estimated; id having myself been so favoured in this respect, I n able to speak of its advantages, while rendering y especial thanks to Mr. Coe and Mr Clarke for eir valuable assistance.

Rebiews and Notices.

ECTURES ON THE ELEMENTS OF COMPARATIVE ANATOMY. By THOMAS HENRY HUXLEY, F.R.S., Professor of Natural History, Royal School of Mines; and Professor of Comparative Anatomy and Physiology to the Royal College of Surgeons of England. Pp. 303. London: 1864.

HIS book contains the substance of the lectures hich Professor HUXLEY delivered in 1863 at the oyal College of Surgeons. It is his intention, he ys, should he continue to hold the position in the ollege which he now occupies, "to publish the sub-tance of subsequent courses in a similar manner; nd by that process to bring out, eventually, a com-rehensive, though condensed, systematic work on omparative Anatomy." Of the fourteen Lectures hich the book contains, six are on Classification, and ight on the Vertebrate Skull.

Classifications of objects may be effected according o their properties or relations to each other or to ther things, or according to the modes in which they re regarded. Thus, there may be, and have been, arious classifications of animals; some, as that by Hunter, founded on organs; others on geographical listribution; others on palæontological arrangement, tc. The classification which the author of this work liscusses is one founded purely on structure—a mor-hological classification, in which animals are con-idered "as fabrics, each of which is built upon a ertain plan."

Having explained his views regarding classification n general, Mr. Huxley proceeds to describe, con-isely, the leading characters of the several classes of nvertebrate and vertebrate animals. In a table on age 6, he gives a list of these classes, bracketing hem together according to the four subkingdoms of Cuvier—whose divisions, however, he must not be nderstood as accepting. The first three lectures are levoted to a consideration of the principal character-stics of the classes of invertebrata, without any at-empt to collect them into larger divisions. In the ourth lecture, the author speaks of the vertebrata; nd in them he at once recognises certain common haracteristics which bind together the several classes —Pisces, Amphibia, Reptilia, Aves, and Mammalia, nd distinguish them from the invertebrata. The most important of these structural peculiarities he, therefore, at once notices.

The first of these differential points consists in the fact, indicated by Remak and confirmed by Professor Huxley, that, while in the invertebrata "the ex-ternal, or integumentary and parietal, portion of the blastoderm, never becomes developed into more than a *single* saccular or tubular investment", in the ver-tebrate classes a *double* tube is formed, by the raising up of the parietal portion of the blastoderm on each side of the middle line, so as to form a groove, the margins of which unite, and constitute a second tube parallel with the first. In this second tube, and from it, are formed the cerebro-spinal nervous centres. Hence, there are formed a visceral tube, representing the tube of the invertebrata; and a cerebro-spinal tube, which "appears to be a superaddition—a some-thing not represented in the invertebrate series." The visceral tube in both contains the alimentary canal, the heart, and gangliated nervous cords. These facts open up the question of relation between the nervous systems of the invertebrata and the vertebrata; and on this point the author briefly observes that, "as Von Baer long ago suggested,. . . . . there can be no comparison between the cerebro-spinal nervous cen-tres of the *Vertebrata* and the ganglionated nervous centres of the *Invertebrata*, and the homologues of the latter must probably be sought in the sympathe-tic."

Other points of difference consist in the perfora-tion of the principal masses of the nervous system by the gullet in the higher invertebrates, and the de-parture from this arrangement in the vertebrates; the presence of the "chorda dorsalis" or "notochord", and of visceral arches, in the vertebrata; the restric-tion of articulated limbs to two pair in the verte-brata, and the attachment of their muscles to an in-ternal skeleton; the modification of limbs into mas-ticatory organs in the invertebrata, while in verte-brata the "jaws are always parts of the cephalic parietes specially metamorphosed, and totally distinct in their nature from the limbs"; and the presence of a distinct vascular system and of a "hepatic portal system" in the vertebrata.

In the fifth lecture, the author inquires into the possibility of uniting into larger divisions the classes which he has been describing.

Taking first the highest classes, we find the mam-malia, aves, and reptilia, united by certain striking features; viz., the possession of an amnion and an allantois, and the absence through life of apparatus for breathing air dissolved in water. Hence they have been termed *Abranchiate*, in contradistinction to amphibia and pisces, which possess no amnion nor allantois (or at most a rudimentary one), and which, from being provided during part or the whole of their life with branchiæ, have been called *Branchiate vertebrata*. (The terms anallantoid and allantoid are also sometimes employed in a similar manner.) Mr. Huxley, however, is disposed to separate mammals from birds and reptiles into a distinct primary divi-sion or province.

"The structure of the occipital condyles, the structure and mode of articulation of the mandibular rami, the presence of mammary glands, and the non-nucleated red blood-corpuscles, appear to separate Mammalia as widely from Birds and Reptiles as the latter are separated from Amphibia and Fishes."

The three primary divisions, then, into which the author divides the vertebrata are: 1, *Ichthyoids*, comprehending fishes and amphibia; 2, *Sauroids*, comprising reptiles and birds; 3, *Mammals*. As he clearly points out, the affinities between fishes and amphibia are very close; while those between reptiles and birds are much more intimate than would be ex-pected on a merely superficial view.

While the different classes of the vertebrata possess

characters which render their arrangement into groups comparatively easy, the arrangement of the various classes of the invertebrata is, as Mr. Huxley shews, a much more difficult matter. The subject is discussed by him with his well known ability; and, in the end, he states that

"In the present state of our knowledge, the whole animal kingdom is divisable into eight primary categories or groups, no two of which are susceptible, in the present state of knowledge, of being defined by characters which shall be at once common and diagnostic.

"These groups are the

Vertebrata,

Mollusca,	Annulosa,
Molluscoida,	Annuloida,
Cœlenterata,	Infusoria,

Protozoa.

"I leave aside altogether the question of the equivalency of these groups; and...I entertain some doubts regarding the permanency of one—the *Infusoria*—as a distinct primary division. Nor, in view of the many analogies between the *Mollusca* and the *Molluscoida*, the *Annulosa* and the *Annuloida*, do I think it very improbable that, hereafter, some common distinctive characters may possibly be discovered which shall unite these pairs respectively. But the discoveries which shall effect this simplification have yet been made, and our classification should express not anticipations, but facts."

The sixth lecture is on the "Subdivisions of the Mammalia larger than orders." In this chapter, the author first notices the division proposed in 1816 by M. de Blainville, of *Ornithodelphia*, including the Monotremata; *Didelphia*, comprising the Marsupialia; and *Monodelphia*, comprehending all the other orders of mammalia. Of these, he regards the Ornithodelphia and Didelphia as "distinct natural assemblages"; while the further grouping of the Monodelphia into orders has been a difficult matter. The author notices and gives outlines of the placental classification proposed by Von Baer and Eschricht, and Milne-Edwards; and of the cerebral convolution classifications proposed by Mr. Waterhouse in 1843, and (according to Professor Huxley) substantially revived by Professor Owen in 1857. Professor Owen, however, as Mr. Huxley points out, "made some additions to the nucleus furnished by Mr. Waterhouse, which are unquestionably original"; viz., the creation of the class *Archencephala* for the genus *Homo*; and the assignment of the name *Lyencephala* to the implacental mammalia—the Monotremes and Marsupials. The classification of Professor Owen is sharply criticised, and, as will be expected by those who have been cognisant of the differences of opinion between him and the author of the present work regarding the presence or absence of certain parts known as the "posterior cornu" and the "hippocampus minor", is "shown to be devoid of any sound foundation." Professor Huxley then goes on to discuss the classification founded on the structure of the placenta; and to this he gives the preference—at least, he says in concluding the chapter:

"Admitting all the difficulties and gaps in our information, it appears to me that the features of the placenta afford by far the best characters which have yet been proposed for classifying the monodelphous *Mammalia*, especially if the concomitant modifications of the other fœtal appendages, such as the allantois and yelk-sac, be taken into account. And it must be recollected that any difficulties offered by the placental method, attach with equal force to the systems of classification based upon cerebral characters which have hitherto been propounded."

Of the lectures on the Vertebrate Skull, it would be difficult to give an intelligible analysis—they must be read to be understood. In the last lecture, the author examines the various views which have been advanced as to the structure of the skull. The theory that the skull is formed of a series of modified vertebræ—taught in this country by Owen, and accepted by many—finds no favour with the author. He quotes various observations of anatomists and histologists having a bearing on this subject, gives a summary of what he conceives to be the present state of our knowledge regarding the structure and development of the skull, and observes that the facts brought forward

"Place the doctrine of the unity of organisation of the vertebrate skull upon a perfectly sure and stable footing, while they appear as clearly to negative the hypothesis that the skull is, in any sense, a modification of vertebræ.

"But, though the skull has not a vertebral structure, and in its membranous and cartilaginous states is not even segmented, it assumes a very definite segmentation in its completely ossified state.

"In every well ossified cranium there is, assuredly, an *occipital segment* ('ear-vertebra' of Oken), formed by the basi-occipital, ex-occipitals, and supra-occipital; a *parietal segment* ('jaw-vertebra' of Oken), constituted by the basi-sphenoid, ali-sphenoid, and parietals; a *frontal segment* ('eye-vertebra' of Oken), composed of the presphenoid, orbito-sphenoids, and frontals; and a *nasal segment* ('nasal vertebra' of Oken), formed by the ethmoid, prefrontals, turbinals, nasals, and vomer." (P. 301.)

We trust that no long time will elapse before Professor Huxley shall bring to light, in accordance with the intention expressed in his preface, another volume of his lectures.

THE CLASSIFICATION OF SKIN-DISEASES; containing a Tabulated Arrangement of all the Principal Modern Classifications, and a Modified Scheme. By W. TILBURY FOX, M.D.Lond., Physician to the Farringdon General Dispensary. Pp. 43; with Tables. London: 1864.

THIS little work is founded on a paper read by Dr. TILBURY FOX before the Medical Society of London during the present year; and its object is to place before the profession, if possible, a clear view of a complicated subject.

Dr. Fox informs us that, "from time to time, in consequence of the variableness of pathological doctrines, different divisions and arrangements" (of skin-diseases) "have been adopted, but not one as yet has satisfied the requirements of the practical physician." These divisions may be arranged into two great ranks —those founded on anatomical considerations, and those founded on causation. The former—the anatomical classification—has been generally preferred; lately, however, it has been urged that skin-diseases should be not classified according to aspect but to causation. Dr. Fox, on the other hand, holds that it is premature to abandon the anatomical classification, and points out that it is difficult, if not impossible, in the present state of our pathological knowledge, to assign this or that disease to its pathological origin.

w, he asks, are we to know what share the nervous em has in any given disease, or what the blood?

We err, it appears to me, very greatly in forgetg the *compound* character of the nutritive funci. We call this a blood-, that a nerve-, that a iph-disease; as though the two, for example, nerve l blood, ever, in actual disease, were mutually indendent in action."

After reviewing several of the modern systems of ssification—viz., those of Messrs. Startin, Hardy, Wilson (last classification), Buchanan, etc., Dr. x proposes an anatomical arrangement, differing m that of Willan and his followers in being nded on the extent and seat of the disease rather n on its aspect, and modified by causation—an angement, in fact, resembling in general outline, l more or less in detail, that proposed some years by Mr. Erasmus Wilson. He makes two grand isions, into *parasitic* and *non-parasitic* diseases; l the latter are further divided into diseases affectg the epidermis, and those of the derma. This ssification will be found at the end of the work, in ist of tables shewing the arrangements of Willan d Bateman, Willan (modified by Dr. Gull), Startin, ilson, Cazenave, A. B. Buchanan, Hebra, and urdy; and to this table, and the explanatory reurks thereon, we must refer our readers for further formation.

Whether Dr. Fox's classification be adopted or not nd he regards it as only provisional), he has given very fair and just outline of the present state of the ssification of skin-diseases, and of the difficulties tending it.

Alleged Antiseptic Property of the Sugar-ane. In the West Indies the fibrous residue of the gar-cane, after it has passed through the mill, is lled cane-trash. Until now this residue was not own to possess any remarkable properties, and the ly use that was made of it was to tie it up into ggots when dry, or else to give it to cattle. But cident, as is generally the case in most scientific scoveries, has lately revealed a property in this fuse of the sugar-mill which it had never been susected to possess; and henceforth, should further periments confirm the fact, the cane, while it yields gar to the community at large, will afford medical en a valuable therapeutic agent. A few months go a physician of Georgetown was summoned by the thorities to examine the body of a man that had een discovered under a heap of cane-trash. He was rprised to find that the body emitted no smell, and at instead of being in a state of putrefaction, it was ried up, like a mummy. He did not at the time roclaim his discovery, but immediately instituted periments on dead animals, which completely conrmed his observation. Convinced thereby that by ie fermentation of fresh cane trash a disinfecting nd antiseptic gas was evolved, he immediately turned is attention to the means of employing the sugarane as a preservative against epidemics and contaious diseases, and as a medicinal plant generally. There happened to be at the time a great number of atients suffering from ulcers in the hospitals, and a ontagious gangrene had declared itself; the physician caused several tubs containing cane-trash to be laced in the wards, and the supply to be renewed at ntervals. In a short time the atmosphere of the ospital was purified, the contagion ceased, and none f the patients who had not caught the gangrene efore were attacked with it. (*Standard.*)

British Medical Journal.

SATURDAY, JUNE 11TH, 1864.

CAMBRIDGE SCHOLARSHIPS.

Several correspondents have recently called our attention to the advantages of University study as a preliminary training for medicine; and especially to the pecuniary facilities offered in our great seats of learning to the careful and intelligent student. The information, indeed, which has been laid before us by Dr. Humphry, Dr. Ogle, and a writer in this day's Journal, in reference to the number and value of the scholarships obtainable at Cambridge, will doubtless be as new to many of our readers as it has been to us. There can, we think, be no doubt that one great reason why more advantage is not taken of University study by medical men is, that sufficient cognisance is not taken, by those whose sons are about to enter the profession, of the material aid afforded in our Universities.

The main facts of the case, as regards Cambridge, have been placed before us. Dr. Humphry, in his letter (Journal, March 5), speaks of the Fellowships, of which several have been held by well known members of our profession. These, indeed, are high class prizes, and are for the advanced student or the graduate, rather than for the incipient. But there are other pecuniary advantages in the University of which we are speaking, much more numerous than is generally known, and capable of proving, if sought for, of great practical value to the student.

Thus, from some notes with which we have been supplied by a gentleman whose information appears based on the best authority, we learn that a student entering Trinity College, Cambridge, may obtain a sizarship worth £60; a minor scholarship worth £60 or £70; and a prize at the end of his first year, of £10, £20, or £30, making in all from £120 to £150 or £160 a year. At the end of one or two years, foundation scholarships (not tenable with the minor scholarships), little short of £100 in value, may be obtained. In St. John's and the other Colleges, there are also scholarships of nearly equal value to those already mentioned; and, throughout the University, there has been in recent years, through good management, an increase in the revenues of the Colleges, and a consequent augmentation of their capabilities of affording money rewards to intelligent and industrious aspirants. Altogether, as our correspondent in this day's Journal informs us, the total sum given annually by the Colleges at Cambridge amounts to £26,000, in four hundred and fifty scholarships, having an average value of £55. And the information to which reference has been made above is con-

firmed by a statement made to Dr. Ogle by an actual recipient of some of the endowments, who writes as follows:—"In one year, I received £60 from scholarships; and when I came out in the Natural Science Tripos, the Caius Senior Fellows voted me £50 a year to the time of my taking the M.A. degree." (JOURNAL, April 9.) Many men indeed, we learn, have been more than repaid their University expenses, by the scholarships and other prizes which they have gained.

But the pecuniary advantages to which we have referred, of however great value they may be to the student, would be of comparatively little worth if the intellectual advantages whose acquisition they are intended to facilitate were of an inferior order. Happily, this is not the case. Dr. Humphry has well observed that—

"For the intelligent and industrious student, the Universities are the very best entrance to our profession. Even if he fail to gather those golden apples, of which there is so abundant a crop, he is sure to bear away still more valuable fruit, that will stand him in good stead for the remainder of his life." (JOURNAL, March 5th.)

Dr. W. Ogle, too (JOURNAL, March 26th), himself a Cambridge graduate, confirms generally the opinion expressed by Dr. Humphry; and the correspondent who writes in this day's JOURNAL endorses the same sentiment, and, as a mark of his appreciation of the value of University training, signs himself as one "who regrets not having had an University education." It is not surprising that those who have enjoyed the benefits of an University education, or who have witnessed its advantages in others, should thus express themselves. Independently of the position which the possessor of such an education always holds, it is the mental training undergone by him in its acquirement—the accuracy of observation and of thought which, being at first indispensable, ultimately becomes a habit—that is of so great value. And, however completely we agree with our correspondents as to the value of a sound classical training, and recognise this value as being as great to the medical as it can be to the student of any other profession, we must dissent from Dr. Ogle when he expresses a fear that the recent changes in favour of the "natural sciences", and other proceedings which the Universities are taking in order to adapt them to the demands of the age, will cause them to "lose their character of soundness and solidity". Surely, if there is any soundness and solidity in modern science, the universities cannot lose their character by adopting it. Have not the universities, in fact, held their ground in public estimation by adapting themselves to the requirements of their time? If it were otherwise, they would surely possess no chairs of Medicine or Surgery, of Chemistry, Botany, or Natural Philosophy. It is true that, a few years ago, modern natural science had not obtained in them an amount of recognition commensurate with that which it was gaining among the public; but in this respect an improvement has taken place; and natural science is now in a fair way of taking its place on a par with the older and time-honoured branches of learning which have ever been associated with the word University. By this judicious conservation of the old and adoption of the new in learning, the Universities assuredly gain rather than lose in *prestige;* and, what is specially to the purpose, they are becoming more fitted for the training of the medical student.

With regard to the strictly professional education required by the universities, we will here merely remind our readers of the fact, that the University of which we are now speaking—that of Cambridge—does not insist that the student's whole time of medical study—four years—shall be passed within its walls. He may, during a part of his studentship, obtain elsewhere the instruction necessary to enable him to obtain his degree. "Half of his time, or six terms," say the Cambridge regulations, "must be spent in medical study in the University, and the remainder in any great medical school." A similar observation is, we believe, applicable to the University of Oxford.

One word, before we conclude, as to the position which the possession of an University degree gives to a medical practitioner. Our esteemed correspondent, Dr. Ogle, whom all will recognise as sincerely desiring the more extensive diffusion of University advantages among our profession, opines that the very fact of the high name which an University degree gives a man, and the consequent idea that it renders his dignity too high for ordinary practice, are sufficient to deter parents from sending their sons to the Universities. If such a notion exist on the part of the public—and we do not deny that some do entertain it—it is a very absurd one. The idea that practitioners of medicine can have so high a name—so great a reputation for their general mental endowments and education—as to cause them to despise what are considered the more humble—though equally honourable—lines of practice, is surely not at all in accordance with the fact that medicine recognises no distinction of persons. If such an idea be prevalent, let it be met by multiplying the number of University graduates in medicine. It may be, that the very rarity of practitioners educated in the Universities has given them a pseudo-standing with the public, which they would never claim for themselves. And assuredly it cannot be the feeling of our Universities, that they will lose dignity by whatever honest and honourable course of practice their graduates may find it advisable to adopt on the commencement of their career. That only would be dishonourable and degrading, which was dishonest in principle.

We would earnestly call the attention of our asso-

s to the outline of the advantages afforded by Jniversity of Cambridge to the student. More ıded details they will be able to learn when they ıd the annual meeting of our Association in Au- next; and there is little room for doubt that y of them, when they learn what benefits, in pecuniary aid and in mental training, are g lost to students of our profession through igno- e of their existence, will fully appreciate the sur- expressed by a late shrewd dignitary of the ch, "that the members of our profession are not alive to the advantages offered by our Uni- ties".

VISECTION AND "TORTURE" TRAPS.

Society for the Prevention of Cruelty to Ani- have not yet done with the vivisectionists. They offer a prize of £50 for "an essay against vivi- on in England, and 1,000 *francs* for a similar in the French language." Our readers should rve that their prize is for a *counterblast* essay to section, not for an essay which shall calmly dis- the question. No one, therefore, need trouble self to take the subject in hand, unless he is pre- d to go the total *delenda est vivisectio* length.

t is rather amusing to observe that the many ntry gentlemen connected with the Society (and, ourse, all country gentlemen are sportsmen) have onsciously convicted themselves of cruelty to ani- s in their last Report. They offer a "prize of for an improved vermin-trap." The present min-trap, we are informed, causes great and pro- ged "torture" to certain of the lower animals; , as there are no animals that escape the protec- ı of this Society, vermin must be protected against elty! Well, our country gentlemen, members of Society for Prevention of Cruelty to Animals, p game; and keep game for their sport—for the *usement* of killing it. But, in order to keep game, tain game-destroyers (and therefore designated min) must be destroyed; and their destruction is cted by a process which usually inflicts great and y prolonged torture upon them—torture as great and, in fact, often very must greater than, is ever licted on animals by men of science labouring in cause of humanity—labouring for the purpose of ieving the sufferings of man! These country gen- men, consequently, by an inevitable logic, inflict orture"—the word is their own—on vermin, simply their amusement! If, therefore, they were ical—that is, if they applied to themselves the nclusions which they apply to vivisectionists—they uld necessarily be driven to the absurdity of giving "sporting".

We recommend this bit of solid and simple argu- nt to the logical sense of the Society; and we uld be glad to hear what answer can be given to it. The sporting members of the Society, by the very fact of this offer of a prize for a vermin-trap which shall not cause "torture", convict themselves of being *participes* to the commission of the crime of "torturing" animals. We ask the Earl of Harrowby how he can reconcile it to his conscience, or common sense rather, as President of the Society for the Prevention of Cruelty to Animals, to allow his game-keepers to trap—*i. e.*, in the words of the Society itself, to "torture"—animals; and to torture them, be it observed, simply for his amusement—*i. e.*, that he may have the pleasure of destroying game? We could go further. We could put him a puzzling query about this very item of game-destroying; and in this way. Every sportsman knows that, out of every hundred head of game shot at, a certain percentage get away wounded—*i. e.*, vivisected; and to get away wounded means, as a rule, to die a painful and lingering death. If his lordship would look beyond the narrow limits of a blind and bigoted ideal humanitarianism, if he would make himself master of all the facts of the case which his Society takes in hand, he would find that more "torture" is inflicted in this country on the lower animals on any 1st of September, 12th of August, or 1st of October, than is suffered by the lower animals in the hands of physiologists during many years! He will find, moreover, that in one case the "torture" is inflicted simply and solely for the mere amusement and "sport" of a few individuals, and that in the other the "torture" is inflicted for the simple and sole object of relieving the woes and sufferings of all humanity, of the whole human race!

Thus, then, the sporting members of this very illogical Society, with the Earl of Harrowby at their head, actually "*torture*" vermin in the first instance, that they may have the pleasure of *torturing* game in the second; and all this for mere amusement! We would suggest that, until they have dismissed their gamekeepers and thrown their vermin-traps away (which we should deeply regret to hear of their doing), they cannot come, at least as reasoning beings, with clean hands to the physiologists and preach about vivisection. Of course, we make this suggestion simply to show the absurd position in which the Society have placed themselves by taking up extreme and passionate views.

But far be it from us, in saying this, to patronise or palliate the infamous practices, the unjustifiable practices, committed in French veterinary schools, and in many French medical schools, in the matter of vivisections. We repudiate as brutal and cruel (and as most unjustifiable, because unnecessary), all surgical operations performed on living animals. We repudiate the repetition of all experiments on animals for the demonstration of any already well determined physiological question. We hold that no man, except a skilled anatomist and a well informed physiologist,

has a right to perform experiments on animals. But we maintain that physiologists have a perfect right—that it is their duty, in truth—to perform experiments on animals, if they can thereby advance medical science—that is, relieve the sufferings of mankind.

We put this case to the Society, and will rest the whole matter on their answer to it. Are they ready to give up the blessings of chloroform—blessings which reach over the face of the whole civilised earth, and will endure to the end of time—if they can get back to life the dozen of rats, cats, dogs, and *vermin* which were *necessarily* destroyed (tortured, if they please) in working out the grand discovery? Let the Society answer this: Will they boldly state that they are ready to give back to the world of the *unknown* the immense and lasting gift of chloroform, in exchange for the lives of the rats, cats, and vermin which were sacrificed in obtaining it? Their answer must obviously be in the negative; and their refusal to part with the gift on such terms is a complete refutation of the position they have assumed, and a complete condemnation of their *unreasoning* onslaught on vivisections.

ELECTION OF COUNCILLORS AT THE ROYAL COLLEGE OF SURGEONS.

Mr. Turner of Manchester will this year again present himself as a candidate for the office of Councillor to the Royal College of Surgeons. We need scarcely repeat the claims which he possesses to fill such appointment, so well known is Mr. Turner to every member of the profession by his reputation as a surgeon. We sincerely trust that he will receive, as he deserves, the warmest support of the Fellows of the College, both in London and in the country. The London Fellows cannot but admit, that it is very desirable to have the surgical profession in the provinces represented in the College by a provincial practitioner; and, of course, the country Fellows must be especially desirous of seeing one of themselves, at all events, occupying a seat in the Council. Indeed, both town and country Fellows should only be too glad to support any provincial gentleman who is willing to devote himself to the duties of Councillor.

This election will again remind the country Fellows of the very unjust position in which they are placed in reference to the manner of the election in question. Our readers may remember that last year the British Medical Association petitioned the Royal College of Surgeons on the subject of the election, and were informed that, as the Charter at present stands, redress of the grievance is not possible. The grievance is this—that the election of Councillors is virtually in the hands of the Fellows who reside in London. Why should it be so on any principle of fairness? It is manifest that the country Fellows cannot express their opinions unless they have th power of voting by proxy, as is done at the electio of Oxford and Cambridge. No class of men are s much tied to their homes, so *adscripti glebæ*, as med cal men, and for very obvious reasons. No class men, therefore, have a greater claim to the privileg of voting by proxy.

We sincerely trust, therefore, that no countr Fellow will record his vote for any candidate for th Council who will not pledge himself to use his be endeavours to secure for the country Fellows th power of vote by proxy. If an alteration of th Charter be required to secure the power, let prop steps be taken by the Council to obtain such altera tion of the Charter. We appeal to the London a well as to the provincial Fellows, and ask them, Is just that the election of Councillors should be solel in the hands of the London Fellows, as it in reality i at the present moment?

We have no hesitation in saying that, if the powe we are seeking for the country Fellows were give them, a great blow would be struck at the system c canvassing and jobbing, and, we must add, trickery which has of late too often distinguished the annua election of Councillors to the College. No one wi venture to say that the country Fellows are not jus as capable of making a good choice as the Londo Fellows. Most assuredly, they are much more likel to make an unprejudiced one—one in which no per sonal considerations would enter. They would elec their man on the strength of his professional reputa tion and character, and not out of any private or per sonal motives.

Besides, and above all, the great body of the Fel lows are, by the present system of election, which re quires the presence of each voter at the election actually deprived of performing the very functio for which the body of Fellows were instituted. Th Fellows were created for the sole purpose of formin an elective body. On what principle of sense or jus tice, then, we again ask, is the election permitted t fall into the hands of the London Fellows only?

A testimonial was presented on Monday last to Dr T. L. Mackesy of Waterford, in recognition of his services to the public and the profession, and to commemorate the fact of his having been the first provincial surgeon who filled the office of President of the Royal College of Surgeons of Ireland. The testimonial, whic was presented at a meeting held in the College of Surgeons, the President (Dr. Jacob) being in the chair. consisted of a portrait of Dr. Mackesy, and of a epergne, having the superior part supported by thre female figures, representing Faith, Hope, and Charity and the following inscription on the base:

"Presented, with a portrait of himself, to Thomas L. Mackesy, F.R.C.S.I., M.D. Honoris Causâ, Trinity College, Dublin, late President of the Royal Colleg

Surgeons in Ireland (the first provincial surgeon t ever obtained that distinction), by a large num- of his medical brethren, to testify their high se of his disinterested and untiring efforts, while sulting the best interests of the public, to sustain elevate the profession which he adorns."

E Archbishop of York, on the occasion of the dis- ution of prizes to the students of St. Mary's Hos- l on the 8th instant, delivered a very instructive ourse on Education. The Archbishop should w something of the subject, "having passed the t years of his life in the work of education in an nent place of learning." We are glad to find that Archbishop fully confirmed the views on lecturing, , which have been lately given in this JOURNAL. riously enough, indeed, he even used some of our y expressions. He said, as we did, that in our sent system the student was too much of a sive hearer, and too little of an active learner.

'He had an impression—it might be quite erro- ous—that the system of teaching medicine was much professorial and too little tutorial. It ght be that he was prejudiced in favour of the tu- ial method, that this kind of active attention was ry easily given on the part of the pupil, whereas e passive attention, which received and gave thing back was very difficult to maintain. He aintained the tutorial system against the profes- rial. He had heard that the lectures the students the hospitals are expected to attend varied from arteen to twenty-one in the week. He thought at an extraordinary number. At Oxford, where e lectures were easier, they thought twelve in the eek a very good average, and even with that num- r, towards the end of their time, when preparing r examination, students often come to their tutor to excused from attending lectures, and their request as granted as a matter of course. He was disposed say a word in favour of mercy with regard to the umber of lectures. [*Cheers, in which the students ost emphatically joined.*] It seemed to him almost npossible that a man could sit three or four hours, onstantly receiving and giving nothing back, with- it wasting a considerable portion of that time. It as possible, therefore, that a hint from the Oxford ystem might profitably be taken by their excellent nstitution; and that, when it was known that the upils were profitably employing their time, they ight with advantage be left more to themselves in he pursuit of their studies."

HE *Army and Navy Gazette* of May 28th, 1864, ays: "There can be no military character assigned o a non-combatant. The medical officers of the army elong to the civil branch of the army." We sup- ose that the Duke of Wellington, successive Com- nanders-in-chief and War Ministers did not understand his, or they would not have committed the blunder f admitting medical officers to the honours of the Military Division of the Bath. The next step will e for the *Gazette* and its military patrons to declare that the medical officers are camp-followers.

A MEDICAL Congress, which is to last for six days, will open at Lyons on September 26th. It is to be solely of a scientific character; not a word of politics or professional interests will be discussed. A series of twelve questions are proposed for discussion: 1. Sanguineous Concretions in the Heart and Great Vessels, etc.; 2. Are there really such distinct Diseases as Paralysis Agitans, Progressive Atrophy, etc.? 3. The Proofs of the Curability of Phthisis; 4. The Treatment of Anchylosis; 5. What Progress has Surgery made through Modern Researches touching the Osseous System? 6. What means can be substituted for the knife in order to avoid the accidents attendant upon wounds? 7. Consangunity, and Consanguineous Marriages; 8. The Genesis of Parasites; 9. The Contagious Element in Syphilitic Individuals; 10. The Use of Forceps in Midwifery; 11. The Insane who may be properly removed from Lunatic Asylums, and who may be placed in private families, or put to work on the land; 12. The Value of Iridectomy.

The Demonopathic Hysteria at Morzine in Savoy, which was for a time quieted by the judicious intervention of Dr. Constant, Inspector-General of the Insane, has again broken out there. The Bishop of Annécy, like his predecessor, attempted to assuage the folly; but, so far from being listened to, he was threatened with violence. The Minister of the Interior has, therefore, again sent Dr. Constant to the infected district, for the purpose of arresting the progress of this new species of convulsions. The females affected with the convulsions believe themselves to be possessed with the devil.

M. Flourens, on re-appearing in the Academy on the 3rd instant, after several weeks' absence, thanked the Academy, collectively and individually, for the numerous marks of sympathy which he had received whilst suffering under a painful disease. "I owe my life," he added, "to M. Velpeau, and am glad to express my gratitude to him in the walls of the Academy."

LAST year, M. Fournié related to the Academy of Medicine the case of a young man who had been inoculated with syphilis through catheterism of the Eustachian tube by a certain Dr. X. M. Ricord, consulted on the case, remarked that he had previously seen four other patients who had been inoculated with syphilis in the same way and by the same doctor. Dr. Lartet now relates in the journals another case, and still from the hands of the aforesaid blank Parisian.

HYGIENE IN BOMBAY. An admirable report on the sanitary state of the island of Bombay, by Dr. Leith, Inspector-General of hospitals, has just been published by Government, which exposes the utter inefficiency of the municipal board, as exhibited in a state of filthiness and want of sanitary measures that is perfectly appalling. Cholera still continues to make sad ravages among the inhabitants of the native town in Bombay.

THE SYPHILITIC SCHOOL OF LYONS.

M. Rollet is retiring from the position held by him for nine years—the senior surgeonship to the Antiquaille—which he has filled with much credit to himself and advantage to science; and he has recently reviewed the progress that our knowledge of syphilitic diseases has made during that period. More than twenty thousand patients have during those nine years been under his observation.

Educated in the school of Ricord, when he took office blennorrhagia was generally recognised as a disease distinct from syphilis. It is now almost universally acknowledged that, in inoculating the secretion from a simple soft chancre, a pustule is produced which becomes a simple soft chancre in its turn. In inoculating the secretion from a blenorrhagia, on the contrary, no result follows. The experiments so often repeated in Paris, upon this subject, were intended to show the difference between blennorrhagia and syphilis. But, in order that they should have any value for the purpose for which they were designed, the results of inoculating the secretion of an *indurated* chancre and the secretion from a blennorrhagia should have been compared. To the astonishment of those who so frequently witnessed and performed these experiments, it is now found that the indurated chancre is no more inoculable on the person who has it than is a blennorrhagia! The experiments so often exhibited, then, at the Hôpital du Midi, to the admiring circle of students, if they proved anything, would have proved that blennorrhagia and real syphilis were the same, rather than different diseases. The doctrine of the non-identity of blennorrhagia and syphilis is of English origin, and is due to Bell. The doctrine of the duality of chancres, on the other hand, originated in France, and is due to M. Bassereau.

Ricord was very near the truth when he said that there were some chancres which were not followed by secondary symptoms, and some which were; but he ought to have gone a step further, and asked himself whether the soft chancre did not differ essentially in its nature from the hard. This all-important question he left for others to solve. One of the principal proofs of the duality of chancres rests upon the past history of the disease. Blennorrhagia and the simple chancre were described by ancient authors; but astonished Europe beheld syphilis, as it affects the constitutions of men, for the first time in the fifteenth century.

After the historical proofs come clinical observations. M. Bassereau proved, in fifty cases, that the indurated sore had been acquired from an indurated sore; but, being biassed by the doctrine of his great master, he left out of his table those cases in which syphilis had been acquired from a person affected with secondary disease. M. Rollet, on the contrary, carried on his clinical investigations on a much larger scale, and showed that secondary syphilis was communicable; and that, wherever syphilis had been acquired, some form of the disease, either primary or secondary, existed in the person from whom it was taken. It is estimated that more than a thousand cases have been known where secondary syphilis has been transmitted to children at the breast, or from them to their nurses, or transmitted by means of vaccination.

Under the head of clinical observation, as a proof of the duality of chancres, is to be noted the period of incubation of the indurated sore, and its first appearance as a papule, in contradistinction to the first appearance of the simple chancre as a pustule. These facts, so well established and recognised in the present day in almost all the countries of Europe, do not agree with the theories of the past. The occasional transmission of syphilis from an apparently simple blennorrhagic discharge, or the occasional inoculation of that discharge so as to produce syphilis, was explained in Ricord's school by the supposed existence of a concealed chancre (*chancre larvé*) in the urethra. The secretion from this concealed sore was supposed, in all such cases, to become inoculated upon the person who received the disease. This explanation will no longer hold, under the new light shed upon the subject by recent investigations. It is now agreed by most who have directed especial attention to this matter, that a person can rarely, and only in exceptional cases, have an indurated sore a second time. It would be a curious fact, indeed, if this sore came for the first time in any individual in the depths of the urethra. Any sore occurring after this first one would be of the suppurative kind; inoculation would produce the specific pustule, and not an indurated sore. But in Hunter's case it was a "thickened sore" which was produced, and this was followed by secondary symptoms. The conclusion is, that if in this case there were a urethra-chancre at all, it was a form of secondary disease, from which the inoculated secretion was derived.

The last kind of proof of the duality of chancres is derived from experiments. The soft chancre may be reinoculated upon the same person almost an indefinite number of times; the hard chancre, only in exceptional cases. M. Fournier succeeded in inoculating this disease twice only in 100 experiments; M. Rollet, twelve times in 200 cases. In the face of these facts, what shall we say to Professor Boeck's directions for employment of the so-called syphilisation? "I take," he says, "the virus of an *indurated* chancre. . . . I make the first inoculations upon the sides of the trunk, three upon each side. After three days have elapsed, I make three more inoculations, etc." (*Recherches sur la Syphilis*, par W. Boeck: 1862.) It is evident that Professor Boeck's experience with regard to the inoculability of the indurated chancre is directly contradicted by the experience of medical men who have directed their attention to this subject in France, Germany, and England. The author of this article has now under his care a gentleman who underwent some hundred and sixty inoculations by Professor Boeck. At the same time, it was supposed to be a most successful case. He is, however, now suffering from much the same symptoms as before his heroic

tment; but the symptoms do not appear to be e of syphilis at all! And, as far as his history , it does not appear that he has ever had syphilis, er from the result of the syphilisation, or from other cause!

is evident that, if Professor Boeck inoculates his ents at all from indurated chancres, it can be in such cases as those in which M. Fournier and Rollet succeeded, and which must be looked upon xceptional.

he occurrence of these exceptional cases M. Rollet ounts for by considering them as cases of mixed ncre, or chancres in which a double inoculation taken place. He believes that a soft chancre ains its inoculability, although it may be seated n a hard chancre which is not itself inoculable; hat, even in cases where a hard chancre has apred to have been inoculated, it is not so, but the cetion of the soft chancre has in reality produced effect, after having become mixed with the secrea of the indurated sore.

But the most decisive proof of all of the duality of syphilitic poison is the inoculation of the secrea of an indurated sore or of a secondary affection on a person who has not previously had syphilis. ch experiments are not wanting, and have, in fact, en repeated oftener than the circumstances justify. papule has, as a rule, followed these inoculations; t a papule not developed immediately, as is the stule from a soft sore, but after the lapse of some ree, four, or five weeks. Taking the average durain of this period of incubation in all the recorded periments of the kind, M. Rollet found it to be enty-six days.

Our limits enable us to give an outline of one rt only of M. Rollet's admirable discourse, which roughout bears the marks of a liberal and enlighted mind of the first order. Nor must we omit to mention that in that discourse he has done ample justice those who have laboured in the same field as himlf in Vienna, in Munich, and in London.

High Walls and Lunatic Asylums. There is uch gloom and discomfort and very little additional curity in a high wall. A patient is in the house ow who effected his escape a few days ago over the ghest part of the highest wall on the male side, id he has returned to boast that a wall *of twenty* et high would never stop him. He can climb like a t, and he seems, from his own acknowledgement, have *been in and out of* various places of confinent. Within the last twelve months he has escaped vice from an asylum in Surrey, and twice from the uffolk Asylum, and at different times he has been inmate of the asylums at Hoxton, Brentwood, [aidstone, and Hanwell, from each of which he as either been discharged, or escaped without subcting himself to any *legal formality*. He bears a rand on his side of the letter D, as a deserter from ie army; and he complains of having been punished barracks by heavy shot drills. He says that after ne of his escapes he walked seventy-two miles in venty-five hours, from Charing Cross to Ashbocking, ithout food. He still protests against the injustice f his personal detention; with what justice he comlains his acts will show. (*Dr. Kirkman's 26th Report.*)

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Special General.]	37, Soho Square.	Monday, June 13, 4 P.M.
South-Eastern. [Annual.]	Town Hall, Brighton.	Thursday, June 16th, 2 P.M.
East Anglian. [Annual.]	General Hospital, Bury St. Edmund's.	Friday, June 17th, 2 P.M.
Birmingham and Midland Counties. [Annual.]	Hen and Chickens Hotel, Birmingham.	Friday, June 17th, 3.30 P.M.
Midland. [Annual.]	Exchange Rooms, Nottingham.	Thursday, June 23rd, 2 30 P.M.
South Midland. [Annual.]	Woburn.	Thurs., June 23, 1 P.M.
Lancash. & Cheshire. [Annual.]	Town Hall, Lancaster.	Wednesday, June 29th, 12 noon.
North Wales. [Annual.]	Black Lion Hotel, Mold.	Tuesday, July 5, 1.30 P.M.
West Somerset. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.

METROPOLITAN COUNTIES BRANCH.

A Special General Meeting of the Metropolitan Counties Branch will be holden at 37, Soho Square, on Monday, June 13th, at 4 P.M.:

To consider the present position of the Army Medical Service, and to take such steps in the matter as may seem advisable.

A. P. Stewart, M.D. } *Hon.*
Alexander Henry, M.D. } *Secretaries.*

N.B. Members of the Association in London and the neighbourhood, who may be desirous of expressing their opinions in regard to army medical matters, but have not yet joined the Metropolitan Counties Branch, may be admitted to membership on application, in writing, to either of the Honorary Secretaries, Dr. Stewart, 74, Grosvenor Street, W., or Dr. Henry, 15, George Street, Portman Square, W.

SOUTH-EASTERN BRANCH.

The Annual Meeting of the South-Eastern Branch will be held at the Town Hall, Brighton, on Thursday, June 16th, at 2 P.M.; Ed. Latham Ormerod, M.D., F.R.C.P., in the Chair.

Gentlemen desiring to bring forward communications, will be pleased to give notice to the Secretary one week previous to the meeting.

The dinner will take place at the Old Ship Hotel, at 5 P.M. precisely.

C. Holman, M.D., *Secretary.*

MIDLAND BRANCH.

The Annual Meeting of the Midland Branch will be held at the Exchange Rooms, Nottingham, on Thursday, June 23rd, at 2.30 P.M.; W. H. Ransom, M.D., President.

Dinner at the George Hotel, at 5 o'clock.

Joseph White, *Hon. Secretary.*

SOUTH MIDLAND BRANCH.

The Annual Meeting of the South Midland Branch will be held at Woburn on Thursday, the 23rd of June, at 1 P.M.; H. Veasey, Esq., President.

Gentlemen intending to read papers or cases are requested to forward the titles of same to Dr. Bryan, Northampton, not later than the 9th of June.

John M. Bryan, M.D., *Secretary.*

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-eighth Annual Meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, June 29th, at Twelve o'clock, noon: E. D. De Vitré, M.D., President.

Gentlemen intending to read papers are requested to transmit the titles of the same to the Honorary Secretary, Dr. Wm. Roberts, Chatham Street, Manchester, not later than June 16th.

William Roberts, M.D., *Hon. Sec.*

MIDLAND BRANCH: QUARTERLY MEETING.

The Quarterly Meeting of the Midland Branch took place on June 4th at Matlock. There was a very good and influential attendance, most of the leading practitioners of Derby and the neighbourhood being present. Dr. Cantrell of Wirksworth took the chair, in the unavoidable absence of Dr. Goode, the President for this year.

After the usual business had been transacted, and two papers—one by Mr. Lindley on Club-Foot, the other by Mr. Dolman on Hæmorrhage from Palmar Arch—had been read and discussed, the members and friends visited several of the beauties of Matlock.

An agreeable afternoon was pleasantly terminated by a first-rate dinner at the new Bath Hotel. After dinner, some very apposite remarks were made on the inconsistencies of the proposed alteration of the County Court law, and hopes were expressed that the several branches of the British Medical Association would petition both houses against the passing of such an unjust Act. A petition of the Derbyshire Branch has been numerously signed, and will shortly be presented.

Why Bees Work in the Dark. Every one knows what honey fresh from the comb is like. It is a clear yellow syrup, without a trace of solid sugar in it. Upon straining, however, it gradually assumes a crystalline appearance—it *candies*, as the saying is—and ultimately becomes a solid mass of sugar. It has not been suspected that this change was a photographic action—that the same agent which alters the molecular arrangement of the iodide of silver on the excited collodion plate, and determines the formations of camphor and iodine crystals in a bottle, causes the syrupy honey to assume a crystalline form. This, however, is the case. M. Scheibler has enclosed honey in stoppered flasks, some of which he has kept in perfect darkness, whilst others have been exposed to the light. The invariable result has been that the sunned portion rapidly crystallises, whilst that kept in the dark has remained perfectly liquid. We now see why bees are so careful to work in perfect darkness, and why they are so careful to obscure the glass windows which are sometimes placed in their hives. The existence of their young depends on the liquidity of the saccharine food presented to them; and if light were allowed access to this, the syrup would gradually acquire a more or less solid consistency; it would seal up the cells, and in all probability prove fatal to the inmates of the hives. (*Quart. Jour. of Science.*)

Correspondence.

IRIDECTOMY.

Letter from James Dixon, Esq.

Sir,—The gentlemen who appear in this day's Journal as witnesses on Mr. Bowman's behalf have attempted that which is proverbially difficult,—namely, to prove a negative.

In reply to my assertion that *I have seen* numerous instances in which iridectomy has been abused, they affirm that *they have not seen* such cases. It must depend, therefore, upon my character for truthfulness, and upon the extent of the opportunities I have had for careful observation, whether the profession at large will accept my statements or not.

I should feel it altogether undignified and unbecoming to hand about for signature a counter manifesto in opposition to that which has just appeared; but, were such a reply to be drawn up, I feel assured that a series of names, as well known and as respectable as those which appear in your Journal of to-day, would testify that the writers had seen numerous instances of the abuse of iridectomy.

During the course of the present controversy, I have repeatedly stated the opinion I entertain as to the great value of the operation in a certain special form of disease. As a cure for that disease, I practise, and have long practised it, with success. The clamour which Mr. Bowman has raised against me will neither induce me to employ it on what I deem unsuitable occasions, nor deter me from publicly expressing my opinion as to the evils resulting from its abuse. I am, etc., James Dixon.

Portman Square, June 4th, 1864.

SCHOLARSHIPS AT CAMBRIDGE.

Sir,—In his letter in this day's Journal, Dr. Ogle undervalues the scholarships at Cambridge in speaking of them as being from £20 to £40; whereas I find, from a list published in the *Lancet* (April 12th, 1862), that the greater number are above £40, many being as high as £60 or £70 *per annum*. Some of these are competed for by students before they enter the University, and some are given to those who have been at College about a year. Indeed, it is stated that the total sum given by the colleges at Cambridge is about £26,000 annually, in 450 scholarships, of the average value of £55 each. This is besides fellowships and University scholarships. Such prizes offer no small inducements to the better class of students, whether intended for the medical or for any other profession, to go to Cambridge; though I quite agree with Dr. Ogle, that the chief prize is the "mental training", that "best foundation" which is laid in reading for a degree.

While underrating the value of the scholarships, I think Dr. Ogle rather overrates the difficulties which beset the English graduate in first commencing practice. Difficulties enough, it is true, beset us all; but I do not see that they are greater to the university man than to those who enter the profession by other routes. Are they not, on the contrary, less? Does not a Cambridge or an Oxford degree prove a considerable assistance towards a good position in the profession? And do we not wish our children to get as good a position as possible? In London, I am told, the graduate has great advantages. My own knowledge supplies me with the names of several graduates who are doing well in the provinces.

The general tenor of Dr. Ogle's letter is so favour-

to his *Alma Mater*, that he will be glad to have contrary impression that may arise from its peru- corrected; and I attempt to do that, because I cur in the remark quoted from Dr. Humphry's er, that "for the intelligent and industrious stu- t, the universities are the very best entrance to profession." I am, etc.,

F.R.C.S. who Regrets not having had an University Education.

March 26th, 1864.

PROFESSOR BENNETT ON MEDICAL EDUCATION.

Letter from John Hughes Bennett, M.D.

Sir,—As my remarks on Medical Education appear have been much misunderstood, I have to ask, as avour, that you will insert the abstract of them ich I now forward. The insinuations of your Edin- gh correspondent are alike unfounded and un- erous. I beg emphatically to deny that I have ever nifested dislike and disrespect to the extra-aca- nical school of this city. I am satisfied, also, that he opinion of the Edinburgh students could be ertained, they would repudiate the correctness of statement, that assessors were required in the iversity in order to secure to them a fair examina- n. I am, etc.,

J. Hughes Bennett.

1, Glenfinlas Street, Edinburgh, June 4th, 1864.

Lectures. It has been said that lectures occasion s of time to the student, and that better informa- n is to be obtained by private reading and reflec- n. But this cannot with correctness be said of h lectures as are good and well delivered. An able idensation of our existing knowledge, drawn up one thoroughly acquainted with the subject, de- ered orally, with proper emphasis and gesture, and ustrated by well executed drawings and experi- nts, must be regarded as amongst the best means instruction. But if the lecturer knows little of subject, reads a monotonous compilation incapable fixing the attention of his class, or has not suffi- nt means for illustration and experiment, then the ture can produce little effect. What, then, is re- ired is not the suppression of lectures, but that h as are necessary should be well delivered and fficiently illustrated. In short, pains should be ken to obtain good instructors; and this point, hich has escaped all writers on the subject, is one hich primarily demands the attention of the Medi- l Council. No one should be permitted to become lecturer in medicine, unless he can show that, by evious studies at home and abroad, he possesses: st, an extensive knowledge of his subject; and condly, the power and means of communicating hat he knows to others. In France and Germany, is is sufficiently secured; but in this country, lec- reships in medicine are distributed in schools irre- ective of any knowledge or aptitude for teaching ecial subjects.

But whilst, on the necessary and essential subjects, e greatest care should be taken in the appointment teachers, every encouragement should be given to ose who lecture on extra topics. The greater num- r of specialties that can be treated of the better; d as such courses are not imperative, there is no nger of their being any tax on the student's time d resources—at least, so long as the essential anches are well taught. There are many subjects hich, in every medical school, admit of supple- entary instruction, such as ophthalmology, den- stry, syphilitic and mental diseases, practical his- logy, etc.

Examinations. With examinations, as with teach- ing, the first point is to secure that the examiners thoroughly know the subjects upon which they exa- mine, and are capable of eliciting from the student the amount of his knowledge. On looking over the list of our examining boards, it will too often be seen that some of the gentlemen who compose them have never taught or especially studied the matters on which they examine.

The only parties capable of examining are experi- enced teachers, who, in consequence of their annually reviewing their special subjects, must be cognisant of details. It is easy for boards or for the Medical Council to regulate on paper what may appear to be an effective examination; but unless they secure good examiners, who will conscientiously perform their duty, all such regulations must be vain. In Edinburgh, there are certain parties who allege that all teachers are too lenient to their own pupils. They have had sufficient influence to cause a portion of the limited sum granted to the Scotch Universities to be set aside for the payment of what are called assessors. It has been sufficiently shown that these gentlemen, for all the purposes of a true examination, are unne- cessary, and that, so far from acting as guards for the public against incompetent practitioners, they are more indulgent to the students than the professors themselves.

What the Medical Council, therefore, should espe- cially pay attention to are: 1, the means of securing good teachers; 2, the means of obtaining efficient examinations; and 3, how to extend the practical methods of learning the science and art of medicine in our schools.

[We insert those parts of Professor Bennett's lec- ture which refer to the point in hand. We certainly do not see that he anywhere condemns the extra- academical schools. Editor.]

FOREIGN BODIES IN THE EAR.

Letter from Paul Belcher, Esq.

Sir,—With your permission, I will make a few re- marks upon the subject of which Mr. Thompson treats in last week's Journal.

I do not think it needs any apology as a "little matter for insertion", because these *difficiles nugæ* make up chiefly the sum of the country practitioner's daily work. The other day, I saw a little child who had put a stone into his ear. He had been seen by an experienced surgeon, who had failed to extricate it by forceps, etc. Immediately upon syringing the ear, and before the syringe was more than half emp- tied, the stone was expelled. It was polished, smooth, and white, and of the size of a horse-bean.

I think I may state it as a fact, that there are very few cases where syringing with more or less assiduity will not be effectual; and that not only is it a means to which "it may not be amiss" to resort, but that it is the remedy *par excellence*, and will disappoint us far less often than the most ingenious or complicated instruments.

Dr. W. Kramer, in his book on *Diseases of the Ear*, says (New Sydenham Society's edition, p. 46: "La- ceration of the membrana tympani, serious injury to the periosteum of the tympanic cavity, with consecutive and fatal inflammation of the dura mater, are conse- quences which, even in the hands of eminent sur- geons, I have seen result from attempts to remove foreign bodies from the meatus. It would, therefore, be quite useless to enumerate the various instruments which have, even up to a very recent period, been suggested for this purpose." It is only, he says, when the body lies in the outer part of the meatus,

does not quite fill it, or is of a fibrous nature, that we should resort to forceps. In all other cases, he advises syringing. The water, he adds, penetrates behind it, and "raises it even where most firmly impacted, and, in a perfectly gentle and quiet manner, washes it unfailingly out of the ear."

I am, etc., PAUL BELCHER.

Burton-on-Trent, June 1st, 1864.

GRATUITOUS MEDICAL SERVICES.

LETTER FROM SEPTIMUS GIBBON, M.B.

SIR,—In a letter on this subject, or, as he calls it, "professional charity", Dr. William Ogle has, I think, entirely misrepresented the spirit and motives with which the Metropolitan Counties Branch discussed this question, when he says: "I think the narrow and self-interested view of advice gratis, which was taken, for instance, by the Metropolitan Counties Branch (see resolutions proposed by Dr. Gibbon, 1863), is most damaging to our professional reputation."

As far as I am concerned, my view was assuredly not *self-interested*, for I have long ceased to fill any gratuitous medical appointment; and, further, I have repeatedly declined to assist friends in securing such offices. It is more difficult to refute the charge of *narrowness*. Perhaps I shall best do this, together with that of selfishness, by referring your readers to the list of members present at the discussion, and to the fact that the resolutions were unanimously agreed to.

I have always argued this question in the patient's interest. In urging the Association to take action, I wrote you (Sept. 6th, 1862) as follows:

"There is one point which perhaps has not been sufficiently insisted upon; namely, the *inefficiency* of the out-patient practice, especially at our metropolitan hospitals, where one unpaid medical officer is expected to register the names and addresses of from 50 to 100 new patients, and to examine and treat 300 or 400 cases at one sitting. An assistant officer fresh from the schools, with abundance of time on his hands, and anxious to gain experience, may possibly do something like justice to the task. But what man, who has his bread to earn, can year after year afford the time necessary for the proper investigation of 100 cases—making, where necessary, stethoscopic, urinary, abdominal, and vaginal examinations? It soon degenerates into such rapid routine, if not *scamped* work, that he begins to think that the steam-engine which grinds the drugs might, with advantage to all concerned, be made also to do the prescribing work."

At the meeting, after detailing the injury which such a system inflicted on the public, I admitted that medical service might be rewarded by honour as well as by money; that, as unpaid labour was unprofitable labour, it ought to be paid for in some shape. And then I contended that the honour of a hospital appointment in London had been so diluted of late years as to be no longer adequate to secure that amount of skill and care to the labouring classes that was desirable.

I do hope, sir, Dr. Ogle will favour the Association with an exposition of what his views *really* are; for at present, although I have twice read his letter, I do not comprehend the drift of them. If they are at all practicable, and conducive to the medical relief of the poor, they shall have my best attention. Dr. Ogle bids us follow the example of the divine in this matter—the very thing that one of my resolutions pledges us to do. No clergyman gives his services gratuitously to any hospital or other public institution. As to surplice fees, my experience accord with that of your sensible correspondent "F. H. H. There may be a few exceptional instances in whic they are remitted. For instance, some of the Londo clergymen administer free baptisms on Easter Mon day; and, at the Cambridge Hospital, a dozen cle gymen at one time undertook to read prayers *gratu tously* in weekly rotation. The results, however, wer anything but satisfactory; and I believe the governo have since appointed a *paid* chaplain. I visit th homes of the London poor a good deal, and fail to re cognise the great unpaid labours of the Protestan clergy. Certainly they do not profess, *as we do*, t work gratis. The Bishop of London is now askin for three millions sterling to meet the spiritual dest tution of the metropolis. The bishops of our profes sion, including Dr. Ogle, cannot do better than follo this example.

Dr. Ogle is in error to suppose that my resolution are directed against *private* advice gratis. It woul be impossible, as well as wrong, for the Associatio to discourage this form of true benevolence; but i would be a boon to every one concerned to suppres the system of public gratuitous medical services.

I am, etc.,

SEPTIMUS GIBBON, A.B. & M.B.(Cantab.)

3, Finsbury Square, April 20th, 1864.

SIR,—I trust that your efforts in arresting th plague of gratuitous medical practice will be mor successful than was the attempt of our JOURNAL o the same subject some ten years ago. The harde worked portion of the profession owe you gratitud for your plain-spoken views on this question, despit the sneers of the *Medical Times and Gazette*, whic will not annihilate you. For my own part, I car hardly believe that the dons amongst us know th injury they do to their professional brethren, especi ally to those who have hard work to make both end meet. Is there any great difference between starving a brother to death and cutting his throat? Perhaps the latter is the more merciful plan.

It does not seem sufficient to some that they should already give their time and skill freely at hospita and dispensary work, but they must add to this ad vice gratis, at a certain hour, at their own houses. There is nothing that I can discover to palliate this. I have known a patient of mine obtain advice in this manner, who was well able to pay me four or five shillings a visit—a farmer, farming upwards of a hundred acres. It could not be said that I had misunderstood the case. I had never been consulted about it; he acted simply to save himself expense. Yet the giver of this advice was one of my greatest friends professionally, who perhaps at the time little thought of putting his hand into my pocket, robbing me, but none the better himself.

There is another form of this hydra-headed monster, which is equally degrading to us professionally, although *it does* bring something to the pocket. I allude to the fact that many profess to give advice gratis, and then in certain cases say, "Yes, but your circumstances are too good," etc. Is not this a form of *obtaining money under false pretences?* I have known this frequently. Not long since, a patient of mine was anxious to consult a physician. I recommended one to him; he chose to select his own; and I subsequently found that, with the view of getting his advice, etc., for nothing, he had gone to one of those public yet private special disease dispensaries; but, on the plea of paying more attention to his case, the presiding medical luminary of that institution persuaded him to go to his private residence; and, on going into the case, he found it necessary to deplet

ly, not from the arm, but the pocket. He was ered to see his adviser again in a week; and the kly depletion rendered him, I suppose, weak in h, as he soon returned to me. A very similar I have known quite recently, the medical ad- r being a *leading* practitioner in Bath, and giving advice gratis at his own house; but the patient l smartly for it.

Much has been said and more written lately on necessity of our having representatives in Par- nent, with many other devices of the same cha- ter, intended to place our profession in its proper ition in the world. These things may be useful; I apprehend they will fail, unless there be a ater degree of cohesion amongst ourselves. Whilst are untrue to each other—whilst we voluntarily our own throats and those of our brethren, and e out to the world, in unmistakeable language, that ourselves place no value on our advice and service, are ready to give them to all comers—we cannot expect that the public will value them still more ıtly. Then follows the reasoning: "If Dr. A. is ling to give me advice gratis, I cannot see the essity of settling the account I owe my poor ıntry doctor, Mr. B.; so he may wait." And, alas! he does often, until "hope deferred maketh the rt sick".

Whether you are successful or not in this warfare, ıe alone will prove; but, in any case, you deserve warmest gratitude of many amongst us. Accept arge portion from A Country Surgeon.

Near Bath, April 1864.

ARMY MEDICAL DEPARTMENT.

Sir,—At a time when the condition of the army dical service is engaging much of the attention of profession, I wish to invite attention to the se position assigned to regimental medical officers the *Army List*. The mere fact of their names ing placed in that list *last*—even after that of the artermasters—is not probably worthy of notice, hough it indicates the feeling of the military au- orities towards the medical profession; but evils sult from this arrangement which are not only un- easant for the individual, but which tend to degrade e whole profession socially. Very many persons nsider the *Army List* as the criterion of precedence the army, and act accordingly; and so long as the esent very objectionable arrangement is persisted , the true relative position of the medical officers ll never be generally recognised.

It is suggested that the names of all officers should placed in the *Army List* according to their relative nk; thus, first, of course, as at present, the name the colonel; then that of the lieutenant-colonel; en, in the case of a surgeon-major, his name, as lding the relative rank of lieutenant-colonel; then e majors; and after them, the name of the surgeon hen not a surgeon-major), as holding equal rela- ve rank; then that of the paymaster, if an honorary ajor; then those of the captains; and after them, ıe names of such officers as hold equal relative rank, ıe junior paymasters, and senior assistant-surgeons ith more than six years' service; then those of the eutenants; and after them, the assistant-surgeons ith less than six years' service, and any other officer equal relative rank; and then the ensigns.

Such is the relative position assigned to the various ficers in a regiment; and there is no valid reason hy their names should not be so placed. By the roposed plan, no individual would be unduly elevated bove his superiors, as at present; but the relative osition of the different ranks would be made appa- rent, and all cause for misapprehension and bickering be at once and for ever removed.

By the adoption of the proposed plan, no additional expense would be entailed on the country; nor would the medical officers become more military than at present; it is a simple matter of arrangement, and each individual's profession would be as clearly defined as at present.

I am induced to bring this to the notice of the profession, because I am in possession of several facts proving that the present *Army Lists* cause misconception, to the disadvantage of the medical officer, and because the remedy is so simple and inexpensive, and would not require any concession of additional rank.

The case of the paymasters is not so bad as that of the medical officers, because they have the use of the military title to indicate their relative rank. I have heard of a medical officer assuming the military title in order to prove his rank; doubtless, the imprudent man was driven to that act of folly by the present faulty arrangement of the *Army List*.

I commend the subject to the serious consideration of my professional brethren. I am, etc.,

Fortis est Veritas.

THE LORD CHANCELLOR'S NEW COUNTY COURT BILL.

Letter from Hugh Norris, L.R.C.P.Ed.

Sir,—There is no doubt that the Lord Chancellor's new Bill will, if passed, prove a very serious injury to the provincial members of the medical profession. In the poorer rural districts, many must be well-nigh ruined.

I would suggest, with Dr. Gramshaw, that a strongly worded petition should be immediately presented from the British Medical Asscciation, or even that a deputation might wait on the Lord Chancellor, to explain the position in which a very large proportion of medical men will be placed if his proposal becomes law. I am, etc., Hugh Norris.

South Petherton, June 2nd, 1864.

VACCINATION.

Sir,—On looking over the Register of Vaccination for this subdistrict, I find that at the present time (May 1864) there still remain unregistered as successfully vaccinated about 50 per cent. of the births for the year ending March 25th, 1863; and for the following year, about 75 to 80 per cent. We have the usual arrangements for vaccinating gratuitously; viz., one medical officer appointed to each Poor-law district; and I cannot learn that either of the medical officers in this union are more neglectful of vaccination than ordinary. Still the above named facts prove that some other arrangement is urgently needed, if a larger proportion of the population is to be protected against the ravages of small-pox.

Within the present week I have been informed by one of my patients, a draper in extensive business, that his youngest child has been vaccinated by a chemist and druggist—one of the fraternity who visits as well as dispenses; and to-day another patient, who called to request me to vaccinate his child, stated that a midwife had offered to perform the operation, as she was in the habit of doing it for those whom she had attended.

Now, sir, let me suggest that one way of satisfying the poorer classes of people that a sufficient care is taken in the selection of vaccine lymph is the throwing open the matter of vaccination to the whole number of medical men residing in the union; so that each parent may select whom he chooses to vac-

cinate his child. The more I think the matter over, the more am I convinced that nothing short of this will gain the confidence of the ignorant classes. It will, of course, be urged that by so doing the fees of the union medical officer will be reduced; but, as this plan would allow him to vaccinate in other districts as well as in his own, and more children would be vaccinated, I am fully convinced that he would suffer no diminution of the paltry pittance he is able to secure from the Board of Guardians for his laborious services. I am, etc., M.D.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having undergone the necessary examinations for the Fellowship, were reported to have done so to the satisfaction of the Court of Examiners; and at a meeting of the Council on the 9th instant, were admitted Fellows of the College.

Beddard, James, Edgbaston, Birmingham; diploma of membership dated April 30, 1861
Carter, Robert Brudenell, Stroud, Gloucestershire; Dec. 12, 1851
Cresswell, Alfred, P. and O. S. N. Comps. Service; May 28, 1858
Folker, William Henry, Hanley; July 4, 1851
Nankivell, Arthur Wolcot, Torquay, Devon; January 30, 1862
Travers, William, Charing Cross Hospital; April 17, 1860
Vernon, Bowater John, St. Bartholomew's Hosp.; April 22, 1862
Webb, William, Wirksworth; April 30, 1852
Wheelhouse, Claudius Galen, Leeds; May 25, 1849
Willey, Henry, Poplar Hospital; November 19, 1862
Wotton, Henry, Gloucester Place; February 18, 1859

At the same meeting of the Council, the following members, who had been *elected* Fellows at previous meetings of the Council, were admitted as such.

Selwood, Josiah Henry, Ampton Place, Gray's Inn Road; diploma of membership dated November 27, 1829
Webber, Charles Samuel, Connaught Square; March 25, 1836

APOTHECARIES' HALL. On June 2nd, the following Licentiates were admitted:—

Casey, Edward, King's College Hospital
Churchill, John Foot, Poole, Dorset
Haycock, George, Hackney Road
Pearson, Edwin Bold, Yeaveley, near Ashbourn
Salter, John Henry, Arundel, Sussex
Squarey, Charles Edward, University College Hospital
Viant, Henry, Guy's Hospital
Wey, William John, Stonehouse, Devon
Williams, David Martin, Camborne, Cornwall

At the same Court, the following passed the first examination:—

Denne, Henry, Guy's Hospital
Ewen, Algernon, Guy's Hospital
Perkins, John S. S., Guy's Hospital

APPOINTMENTS.

ARMY.

BACOT, Surgeon J. T. W., 89th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.
CORLAW, Staff-Assistant-Surg. J., to be Assistant-Surg. 58th Foot.
EFOLLIOTT, Staff-Assistant-Surgeon N., to be Assistant-Surgeon 20th Hussars.
FULLER, Assistant-Surgeon F., 17th Lancers, to be Assistant-Surgeon 19th Hussars.
HAWARD, Staff-Assistant-Surgeon W., to be Assistant-Surgeon 21st Hussars.
HENSMAN, Staff-Assistant-Surgeon H. F., to be Assistant-Surgeon 77th Foot, *vice* F. E. M'Farland.
HOILE, Staff-Assistant-Surgeon E., M.D., to be Assistant-Surgeon 11th Foot.
JESSOP, Staff-Assistant-Surgeon C. M., to be Assistant-Surgeon 6th Dragoon Guards, *vice* V. M. M'Master, M.D.
MACKENZIE, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon 10th Foot, *vice* B. Reed.
MACKINNON, Staff-Assistant-Surgeon C., to be Assistant-Surgeon 20th Hussars.
M'MASTER, Assistant-Surgeon V. M., M.D., 6th Dragoons, to be Assistant-Surgeon 18th Hussars.
MUNDAY, Assistant Surgeon J., 20th Foot, to be Assistant-Surgeon 21st Hussars.
MARTIN, Staff-Assistant-Surgeon W. T., M.D., to be Assistant-Surgeon 45th Foot.
REED, Assistant-Surgeon B., 10th Foot, to be Assistant-Surgeon 12th Foot.
RUTHERFORD, Surgeon C. C., 13th Hussars, to be Surgeon 18th Hussars, *vice* H. M. Webb, M.B.
SINCLAIR, Assistant-Surgeon E. M., M.D., 97th Foot, to be Staff-Assistant-Surgeon, *vice* C. M. Jessop.
STUART, Assistant-Surgeon J., 13th Foot, to be Staff-Assistant-Surgeon, *vice* J. Mackenzie, M.D.
WEBB, Surgeon H. M., M.B., 18th Hussars, to be Surgeon 13th Hussars, *vice* C. C. Rutherford.
WOODS, Staff-Assistant-Surgeon D., to be Assistant-Surgeon 19th Hussars.

INDIAN ARMY.

AMESBURY, Assistant-Surgeon (Brevet-Surgeon) J. W. K., to be Surgeon Bengal Army.
DE RENZY, Assistant-Surgeon A. C. C., to be Surgeon Bengal Army.
FLETCHER, Surgeon F., Madras Army, to be Surgeon-Major.
HUNTER, Surgeon A., M.D., Madras Army, to be Surgeon-Major.
MACKAY, Surgeon G., M.D., Madras Army, to be Surgeon-Major.
M'KELLAR, Assistant-Surgeon E., to be Surgeon Bengal Army.
SCOTT, Surgeon W., M.D., Madras Army, to be Surgeon-Major.
STEWART, Assistant-Surgeon C., M.D., to be Surgeon Bengal Army.

ROYAL NAVY.

WRIGHT, George E., M.D., Assistant-Surgeon, to the *Black Prince*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

HOLMES, M., M.D., to be Assistant-Surgeon 8th Derbyshire R.V.
LOWE, J., M.D., to be Assistant-Surgeon 4st Administrative Battalion Norfolk R.V.
MANN, C. W., Esq., to be Assistant-Surgeon 1st East Riding of Yorkshire A.V.
SMITH, F. P., Esq., to be Assistant-Surgeon 1st Administrative Battalion Norfolk R.V.

BIRTHS.

GODDEN. On May 29th, at Sudley House, Birkenhead, the wife of *Joseph Godden, Esq., of a son.
WILLETT. On May 27th, at Easton, Bristol, the wife of *Matthew Willett, M.D., of a son.

MARRIAGE.

WILLS, Cuthbert, Esq., H.M.'s Customs, to Lætitia Mary, only daughter of *Edwin HAWARD, M.D., of 28, Harley Street, at All Souls' Church, Langham Place, on May 19.

DEATHS.

*COX, Abram, M.D., of Kingston-on-Thames, at Bern, Switzerland, on May 26.
JAMEISON. On June 1st, at Bath, aged 61, Harriet May, wife of Q. Jamieson, M.D., late of the Madras Horse Artillery.
MURPHY, Brownwell R., Esq., Assistant-Surgeon R.N., on board the Cape Mail Steamship *Briton*, aged 28, on May 28.
*PENNINGTON, Jas., Esq., at Needham Market, Suffolk, on June 6.
PRATT. On March 30th, killed in action by the rebels in China, Lethbridge, son of Henry Pratt, M.D.

MEDICAL MEN IN ENGLAND. According to Dr. Farr the number of medical men in this country is on the decrease. In 1851 there were, he says, 11,105 medical practitioners in England under 40 years of age, whilst in 1861 there were only 9,910.

ST. MARY'S HOSPITAL. The prizes and certificates of honour awarded in the past year to students of this hospital were distributed by the Archbishop of York. The following were the successful candidates. *Winter Session*, 1863-64: *Scholarship in Anatomy* (£25), Mr. Philip G. Philps. *Prize for Students of the First Year*, Mr. Henry F. Parsons; *certificate of honour*, Mr. Edward B. Owen. *Prize for Students of the Second Year*, Mr. Augustus Müller and Mr. William J. Land.—*Summer Session*, 1863: *Prize for Students of the First Year*, Mr. W. J. Land; *certificate of honour*, Mr. Theodore T. Taylor. *Prize for Students of the Second Year*, Mr. Francis J. Marshall; *certificates*, Mr. A. Müller, Mr. P. G. Philps, and Mr. Hamilton de Tatham. *Comparative Anatomy*, 1863, Mr. Henri Bertin. *Natural Philosophy*, 1863, Mr. James F. Sargent; *certificate*, Mr. J. H. Webb. *Practical Anatomy*, 1862-63, Mr. H. Bertin; 1863-64, Mr. N. Bisdee Major.

EEPING AN UNLICENSED LUNATIC ASYLUM. Mrs. ıia Leander has been found guilty of keeping an ensed house for the reception of lunatics. The missioners had no wish to press for punishment; hey desired was the suppression of the establish- t. Mr. Baron Bramwell said that being the case, better course to pursue would be to direct the to enter into her own recognisances to appear udgment if necessary, and in the meantime some ngement agreeable to all parties could be entered .

OYAL COLLEGE OE SURGEONS IN IRELAND. The ege met on Monday the 6th inst., to elect a pre- nt, vice-president, and council for the ensuing . The following were declared duly elected:— *ident:* Arthur Jacob. *Vice-President:* Samuel G. mot. *Secretary:* Edward Hutton. *Council:* W. es, W. Hargrave, R. Adams, J. Barker, H. Irvine, Hutton, R. Pentland, R. G. H. Butcher, T. L. kesy, A. P. Banon, P. Shannon, R. Macnamara, Labatt, B. McDowell, E. Ledwich, W. Jameson, Carte, W. Healy, J. H. Wharton.

COMPLIMENT. Mr. Frederick Marsh, of Thaxted, ex, having recently resigned his appointment of lical Officer to the Dunmow Union, the following ıplimentary resolution was passed at a meeting of Board of Guardians on May 10th. "The Board Guardians of the Dunmow Union, accept the re- nation of Mr. Frederick Marsh with regret, and ire to express their entire satisfaction at the nner in which the duties of his office have been charged, during the long period (nearly twenty-one rs) he has held it."

SANITARY MOVEMENTS IN INDIA. The Sanitary mmission, presided over by Mr. Strachey, is busy- itself with the condition of towns and canton- nts, and its efforts will in all probability add much the comfort of the soldier in India, no less than of general population. The attempt to mitigate at great evil which sends a third of our army into hospitals, by the adoption of a strict system of pervision, can scarcely be otherwise than successful der the cautious regulations recently decided upon the Supreme Council.

A PITHY YANKEE REVIEW. "The name of Von öltsch is a sufficient guaranty for the good qualities his works. He never was guilty of writing works or en the briefest essays to trumpet his learning to e world to earn their praises. He always wrote to mmunicate all that he knew, that others might rn, and thus aid him in performing the nobler and evating duties of a physician. The translation by . Roosa is a good one. To translate German and ake intelligible English, is a difficult matter, but to anslate German technical terms is yet more diffi- lt."

SUICIDE IN EUROPE. A highly interesting paper as been read at the Academy of Medicine from M. egoyt, Director of the Office of Statistics of France, the number of suicides in Europe. It appears at suicides increase in a more rapid ratio than the opulation and mortality in general in Bavaria, Den- ark, France, Hanover, Mecklenburg, Prussia, Sax- ıy, and Sweden. Suicides are most frequent in orthern Germany and in the various parts of Den- ark. Sweden and Norway, though belonging to ıe same race, are proportionally inferior to Denmark ı that respect. Contrary to a generally adopted pinion, England stands nearly at the bottom of the cale; and so do Belgium, Austria, and Spain. France olds an intermediate position; she would rank with ıe three last named countries, were it possible to liminate the suicides of Paris, which are one-seventh of the total number in France. Generally, for every 100 suicides of men there are 29 or 30 of women. The number of suicides increases with the age of individuals, at least until the age of 60; it is generally lowest in January, and highest in July. As to the causes, insanity and physical suffering are about as active in producing suicide among men as among women; the latter yield more to grief occasioned by moral causes than men, who are chiefly affected by material affliction, such as loss of property, bankruptcy, etc. Drunkenness and debauchery form an insignificant item among the causes impelling women to suicide. In Denmark, Spain, and Saxony, the only countries where it has been possible to obtain reliable information on the subject, married people are least subject to commit suicide, and widowers, on the contrary, are most liable to it; but suicides occur most frequently among married people that have been divorced or separated. In Prussia, in the course of two years, there were 153 suicides of Protestants per million, 51 of Israelites, and only 47 of Catholics per million. Suicides are much more numerous in capital cities than in the country. The general result of all these investigations shows a universal and rapid increase of suicides. The author is of opinion that this is attributable to unlimited competition, to the immoderate thirst after wealth, to the progress of public instruction which excites ambition, to political agitation, and to speculation.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."

TUESDAY. Royal Medical and Chirurgical Society. 8 P.M., Ballot. 8.30 P.M., Mr. Toynbee, "On Sebaceous Tumours in the External Auditory Meatus"; Dr. Dick and Mr. W. Adams, "On Subcutaneous Incision in Stricture of Urethra"; Mr. E. Barker, jun., "On Progressive Atrophy of the Tongue."—Zoological.

WEDNESDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."—Meteorological (Anniversary).

THURSDAY. Zoological.—Royal.—Linnæan.—Chemical.

FRIDAY. Royal College of Surgeons of England, 4 P.M. Professor Fergusson, "On the Progress of Surgery during the Present Century."

SATURDAY. Association Medical Officers of Health.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MEDICAL EDUCATION.—SIR: In your remarks on medical education in the JOURNAL of April 30th, you state that there are numbers of persons who have no qualification, save the License of the Apothecaries' Society, but who practise surgery, although this forms no part of the examination to which they have been subjected. You further add, that such dangerous irregularities surely ought not to be allowed; and that the public should be protected against the ill consequences which cannot fail to arise from this state of things. Now, sir, what can the public do in a case like the following?

Mr. Black possesses a license to practise medicine; and Mr. White holds a surgical diploma, in addition to a medical license. Both parties reside in the same street or village; and both display to public gaze the brass plate, with the title of surgeon in large letters. Thus both are, in the eyes and estimation of the public, on a par; in fact, both are surgeons, although Mr. White has studied for, and passed his examination in, anatomy, surgery, etc., at the College of Surgeons, paid his £21, and obtained his diploma authorising him to practise the art and science of surgery, all of which is quite foreign to Mr. Black.

How often do we see in the police reports accounts of parties convicted for obtaining money under false pretences? and what is Mr. Black doing, I would ask, but obtaining money under false pretences? He is, in fact, gulling the public, and obtaining fees to which he has no just claim. It is true, we have the Medical Act, the fortieth section of which pretends to furnish a provision for such cases; but whose duty is it to interfere in such cases? Is it the duty of the College of Surgeons (which, I consider, ought to defend the rights and privileges of its members), or is Mr. White justified in bringing Mr. Black to account to answer for his pretensions to the title of surgeon? Of what value is the diploma if any one who does not possess it can still take the title?

I would suggest that a man be not allowed to be registered or practise until he obtains the double qualification; and I think that, until something of the kind does take place, the profession will never gain that standing in the estimation of the public which it ought to have; there ought to be more equality. I should like your opinion on the foregoing supposed case.

I am, etc., EQUITAS.

[The true remedy lies with the Medical Council, who should insist that Examining Boards pass no candidates who are not qualified to practise both medicine and surgery. EDITOR.]

THE following interesting notices appeared in the *Times* of the 31st ult.

"Female Medical Society, 1, Norfolk Street, Strand, W.—Ladies requiring the services of a superior class of fully qualified midwives, can apply as above, to Mrs. James Tugman, Secretary."

"Epileptic Fits, Paralysis.—Mr. Padman urges public attention to the unparalleled cases of cure of epilepsy and spinal complaints effected by him. May be consulted daily from 11 till 1, at 1, Thorney Street, Bloomsbury Street."

COMMUNICATIONS have been received from:—Mr. FURNEAUX JORDAN: Mr. W. M. CLARKE; Mr. B. E. BRODHURST; Mr. THOMAS JONES; Mr. GAMGEE; Mr. P. BELCHER; Mr. DIXON; Mr. THOMAS MARTIN; Dr. E. HAWARD; Dr. HOLMAN; Mr. J. GODDEN; FORTIS EST VERITAS; Mr. H. J. ALFORD; Mr. T. M. STONE; Mr. JOSEPH WHITE; Mr. JOHN W. FRY; Mr. JOHN ROBERTON; Dr. HENRY MARSHALL; Dr. HILLIER; Mr. T. SOUTHAM; Dr. PAGET; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. SEATON; Mr. A. H. DOLMAN; and Dr. STEWART.

BOOKS RECEIVED.

1. Lectures on Epilepsy, Pain, Paralysis, etc. By Charles B. Radcliffe, M.D. London: 1864.
2. Pyrmont: its Chalybeate and Saline Springs. By Dr. Th. Valentiner. Leipzig: 1864.
3. First Annual Report of the Coroner for the Central District of Middlesex. By Edwin Lankester, M.D., F.R.S. London: 1864.
4. A Handbook of Uterine Therapeutics. By Edward J. Tilt, M.D. Second edition. London: 1864.
5. Rheumatism, Gout, Sciatica, and Neuralgia. By John Pursell, M.D. London and Brighton: 1864.
6. Observations on Fatty Heart and Smoking. By H. Kennedy, M.D. Dublin: 1864.
7. The Essentials of Materia Medica and Therapeutics. By A. B. Garrod, M.D., F.R.S. Second edition. London: 1864.
8. Advice to a Wife. By P. H. Chavasse, F.R.C.S. Sixth edition. London: 1864.
9. Physiological and Medicinal Properties of the Veratrum Viride. By S. Percy, M.D. Philadelphia: 1864.
10. The Ophthalmoscope: its Varieties and Uses. Translated from the German of Dr. Adolf Zander. By R. B. Carter, M.R.C.S.E. London: 1864.
11. Manual of the Medicinal Preparations of Iron. By H. N. Draper, F.C.S. Dublin: 1864.
12. Ireland, Past and Present: The Land and the People. A Lecture. By Sir William R. W. Wilde. Dublin: 1864.
13. The Croonian Lectures for 1864. The Significance of Dropsy. By W. R. Basham, M.D. London: 1864.
14. Lectures; Chiefly Clinical. By Thomas K. Chambers, M.D. London: 1864.

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Lettsomian Lectures

ON

[DWIFERY AND DISEASES OF WOMEN.

)elivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture II (*continued*).

)N SOME POINTS HAVING REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF FIBROUS TUMOURS OF THE UTERUS.

III. The principal conditions with which fibrous nours of the uterus may be confounded are: pregncy, normal and extrauterine; conditions where ids are contained within the uterine cavity, as drometra and hæmatometra; cancer of the uterus; tention of urine; hæmatocele; cellulitis; ovarian opsy and fibroid disease; exostoses; encysted perineal dropsy, or dropsy of the Fallopian tube;)rous tumour of the broad ligament; hydatid cysts; .d tubercular and cancerous disease of the uterus, even of the abdomen.

The limits of this lecture will, however, necessarily :eclude reference to all of these, particularly as I ıve already incidentally referred to some of them. shall content myself with referring to two comlications of frequent occurrence, which often make ıe diagnosis obscure.

Pregnancy. Even with this condition, error in iagnosis has been made. Three cases, at least, have ccurred in our London hospitals, in all of which regnant women, supposed to have had ovarian or broid disease, have been operated upon, and have, nfortunately, died. It is seldom, when females ave fibrous tumour, unless it be of diminutive size, hat the appearance of the abdomen does not at a ery early period attract their attention. It beomes larger, and they will often tell you that they eel a tumour. In most cases, especially if married nd desiring children, they believe it to be pregıancy; and there are certain symptoms present at uch periods which lead them to suppose so.

First and foremost are the *breasts.* Now, I do not hink this symptom is sufficiently dwelt upon; but, n several cases of fibrous tumour, I have noted narked changes in these organs. They have been arger, in some cases hypertrophied; and this not nly from adipose deposit, but from enlargement of he lacteal vessels. The areola has been marked, and even œdematous; the follicles enlarged; and, on nilking the breast, a drop or two of a fluid, which nicroscopically presented all the characters of colostrum, have been obtained. Add to this, there is ccasionally a *pseudo-ballottement* felt. I have dected this on two occasions. I shall best illustrate ny meaning here by a case.

Eliza H., aged 37, married twenty years, had had one child and two miscarriages. The first miscarriage occurred nineteen years ago, and was followed by prolapsus, which had persisted ever since, but not to such an extent as it now manifested. The last miscarriage occurred between three and four years ago. She was generally a healthy woman. About ten weeks before I saw her, she was seized with pain in the left groin and back, very severe, so that she "could not breathe or walk". Two medical men were summoned, who applied mustard poultices and fomentations. One of the medical men in attendance stated that she was pregnant, and about to miscarry. The other said it was inflammation, etc. She kept her bed fourteen days, and her room three weeks. There was no unusual discharge *per vaginam.* She had been regular every month, the catamenial period lasting three days. The discharge was copious; and the catamenia persisted even during the time when she was suckling. After her recovery, and so soon as she was able to go out, she began to experience unusual feelings about the abdomen. These movements were exactly similar to those she had felt when pregnant before. She occasionally suffered from morning sickness, bringing up sour water. The abdomen also had been gradually enlarging. On examination of her breasts, I found that they were much enlarged; and she stated that for three weeks back she had noticed their sensible increase, and felt them unusually painful. This enlargement was not merely of adipose tissue, but of large lacteal tubes. The areola was very large, covered with follicles *of the same colour as the areola;* and those on the right side were *less developed* than those of the left side. On attempting to milk her, a few drops of a milky-looking fluid were obtained, microscopically consisting of a large abundance of milky globules, but with a deficiency of liquor lactis. The abdomen was large, and felt heavier than usual to her. There was considerable dulness over the lower part of it; but, as she was an unusually fat woman, the limits of the enlargement could not be made out at all accurately. It seemed, however, to extend to the umbilicus. There was no vaginal discharge; and connexion gave her no pain. The appearance of the external parts was peculiar. Projecting from the vulva was a fleshy-looking body without rugæ, not unlike a glans penis. There was an opening into it, which was very large, so as to admit the finger an inch. This proved to be the cervix and patent os; it was three inches long. Inclusive of the cavity, the sound penetrated five inches. The uterus was very large. Between the cervix and rectum was a large tumour, directly connected with the uterus, which seemed to fill up the pelvic cavity. This was very hard. It seemed, however, to be separated by a furrow, which to the finger closely resembled that of the sagittal suture. At any rate, it distinctly marked out the existence of two tumours. Both were hard and resistant; but one half seemed to be softer than the other.

I do not stop here to dwell upon minor points. I have mentioned enough to show that, if the sound had not been used, the case would have deceived, and might deceive a second time, a medical man. In noting carefully the condition of the breasts in similar cases, we may observe several points of difference. 1. The appearance of the breasts is unsymmetrical. This is not usual at all in pregnancy, but is very common in fibroid and ovarian disease. On one breast you may have several follicles; on the other none, or only one or two. The sizes of the follicles also differ on both sides. 2. The follicles were of the same colour as the areola, and did not become white on being tightened—*i. e.*, when the skin was pulled aside. 3. True vesicular or papuloid follicles—*i. e.*, white follicles—separate or clustered, are never found in a pure case of fibroid tumour, but are common in pregnancy. 4. The follicles, of the same colour as the areola, are most numerous near the nipple in fibroids; very few, if any, being on the outer border of the

areola. The reverse is the case in pregnancy. 5. The peculiar white honeycomb layer external to the dark areola is, I believe, never found in cases of fibrous tumours. In the above-mentioned case, we were fortunate in not making an error of diagnosis. A very remarkable case, in which this error was made, occurred in the service of M. Bouillaud (*Bulletin de la Société Anatomique*, vol. xxii, p. 178.)

A patient, aged 40, married and regular, but not of very bright intellect, was admitted. She complained of labour-pains. The abdomen was large, hard especially on the left side, where a sort of ball could be felt under the hand. The first day, the quick and rapid pulsations of the fœtal heart were supposed to have been heard; but no notice was taken at the time whether they were synchronous or not with the pulse of the woman. The *toucher* made by M. Capuron revealed an uterus low down in the pelvis; the head of the child could be felt, also the triangular fontanelle. Everybody present agreed to this diagnosis. The cervix of the uterus was completely effaced, and the os placed very high behind the symphysis. No dilatation occurred of this os for the subsequent fifteen days. On the contrary, the cervix seemed to elongate; and after a time the pains, although closely resembling labour-pains, also ceased. For several hours, however, during their prevalence, a largish quantity of yellow white matter, supposed to be the shew, continued to flow. The *toucher* was practised several times. The diagnosis was always the same—impending miscarriage. In a few days, however, fever set in; pain and œdema of the extremities supervened; and diarrhœa, with very fœtid stools. Fifty-two days after admission the patient died. At the *post mortem* examination (beside many very interesting appearances in the bladder, which was empty, but hypertrophied; the ovaries, which were enlarged to the size of an egg; the Fallopian tubes, which were full of small cysts, etc.), the uterus was found pushed to the right side; a fibroid tumour, hard and rounded, smooth, and of the size of a fœtal head of five or six months, occupied its left side. It was this tumour which during life simulated the feel of a fœtal head. The same sensation was even communicated by the *toucher* after death.

This is a remarkable case, but by no means an unique one. I have seen one of, perhaps, the most eminent accoucheurs in London mistake a fibrous ovarian tumour for a fœtus, and actually assert that he could feel the foot of the child. The *post mortem* examination revealed his mistake. The case quoted by Dr. Bradford, in his *Midwifery*, is an eminently interesting one, yet exceedingly sad in its results, as the false diagnosis led to the young lady's death.

2. The double cardiac or single cardiac sound are so seldom absent in cases where fibrous tumours assume large proportions, that their absence alone ought to make us doubt. The aorta, it is true, is sometimes heard through a child's head, or some solid part of its body, when the abdominal sounds are attentively listened to; but the movement of the part leads at once to the extinction of the sound.

3. The projecting umbilicus in pregnancy, and its puckering in cases of fibrous tumour, forms a marked diagnostic difference.

But, again, if the difficulty of diagnosis between a case of ordinary pregnancy and one of fibroid uterine tumour be not small, the differential diagnosis between *extrauterine pregnancy* and these tumours is still greater. I believe that the chief difficulty here has relation to the value of symptoms observed in the early history of the case, more especially the ca menial function. There seems to be no very prec knowledge of the normal character of this flow extrauterine pregnancy. Some believe that it is alm always arrested. If I am not misquoting an emine authority, Dr. F. Ramsbotham, that experienced a coucheur informed me, in conversation, that eighteen cases which he had seen of this affection, all there was suppression of the menses. It c scarcely be otherwise than often so.

In one of Dr. R. Lee's papers in the *Medico-Ch rurgical Transactions*, on the Membrana Decidu which surrounds the ovum in cases of tubal gestatio (vol. xl.), he has given us some twenty cases of extr uterine gestation in which the decidua existed in th uterus, and in several the uterus was plugged b mucus. If so, it is difficult to understand how th catamenia could go on. The absence, in this way, of th secretion would in some measure assist us in con cluding that the case was not one of fibrous tumou within the cavity or projecting into it. On the othe hand, the catamenia do occur, and these are th cases in which more difficulty would be found. Not t enter further upon this point, I may allude to case mentioned in the volumes of the *Obstetrical Transac tions.*

One was narrated by Dr. Drage (vol. ii, p. 254), i which the catamenia recurred three times between th period when first seen by him in January, when sh supposed herself three months gone, and the follow ing March. At the end of June, there was consider able hæmorrhage. In July, all symptoms of pre gnancy, except that the sounds of the fœtal hear were noted. In August, it ceased. From this time she continued quite regular. The fœtus came away *per vaginam* as an abscess two years after. Th other case is that related by Mr. Grace (p. 49), a case of tubal pregnancy, in which the patient had menstruated copiously before being seen by him. She was then in collapse from rupture of the sac Again, Dr. J. H. Davis relates a case of extrauterine gestation, in which menorrhagia had been very prevalent, and persisted for six weeks at a time. This case turned out, in the sequel, to have been a case of ovarian pregnancy.

To determine the relations of the catamenia in these cases, I have made the following analysis. The table might be very largely extended.

Out of twenty-seven cases, the state of the catamenial function was stated in twenty-one. Of these, in seven cases, it was entirely suppressed; in seventeen, it was suppressed for periods varying from one to three months, and then followed by menorrhagia, sometimes very profuse. In two, it recurred normally after suppression, in the one case of one month, in the other of nine months; and in two, there were slight uterine losses, but not of any consequence.

The probable explanation is, that there is a stoppage so long as the decidua exists; but when this is thrown off, then menorrhagia follows, owing to the uterine excitement, and precisely as after a labour, owing to the loss of the mucous membrane. The second case I shall quote is a proof of this explanation.

In this very remarkable case, an extrauterine pregnancy was diagnosed as a case of fibroid or ovarian tumour. It is given in the *Annales de Chirurgie* (vol. xiv, p. 249), and occurred to M. Jobert de Lamballe. This woman was a multipara; had three times had symptoms of pregnancy and miscarried, eject-

ıg, as she said, tumours *per vaginam*. The cata-ıenia, when present, were very copious. In April 1844, ıey stopped, only a few drops passing away. This ıppression was followed by lumbar and inguinal ains, colicky pains, and vertigo. In July, pains like .bour-pains supervened. A medical man now con-ılted diagnosed a polypus uteri. Next month, the reasts began to enlarge as well as the abdomen. he movements of a child were felt internally by her-elf and could be felt externally by the hand. In ebruary 1845, there was recurrence of labour-pains, onstipation, and difficult micturition. Eight days ıbsequently, a kind of membrane (decidua?) came way *per vaginam*, followed by catamenia for three ays. From this time, all fœtal movements ceased. he general pains and other symptoms recurred from me to time. The tumour had moved apparently om the median line to the left side. An eminent arisian accoucheur, now consulted, diagnosed a broid tumour in the uterus or ovarian disease. On une 3, the catamenia recurred, and lasted six days.

On admission, the following were the symptoms oserved. *By Palpation, etc.:* Large abdomen; round emispheric tumour, more on the right than on the ft side; percussion dull anteriorly, clear in the lum-ar regions, extending from six *centimètres* below the iphoid cartilage to the pubes over a space of thirty ntimètres; circumference, seventy-five *centimètres*; o uterus to be felt, nor fluctuation; external veins ot enlarged. When she was placed on her side, the ımour fell to such side, but without pain. There as no souffle. *Vaginal Examination:* The cervix lay ıther to the left side, and hypertrophied, behind ıe pubes; flattened from before backwards. The s was open, admitting the index finger. Between ıe vagina and rectum, in the posterior *cul-de-sac*, a ımour filled the cavity. There was no feeling of a etus. M. Jobert diagnosed extrauterine pregnancy ıd a dead fœtus.

The question may be asked, would it be justifiable) make a puncture with an exploratory needle in a ıse of dubious pregnancy, in the hope of being able) obtain a small quantity of amniotic fluid, and thus iagnosing the correct nature of the case? It seems ızardous to answer this question. Yet it would ppear wiser to do so, than to make an explor-ory incision and cut down upon the pregnant terus, as has now been done some three or four times, ıd always with a fatal result. The opinion of carpa might be quoted, who dreaded no evil effects om paracentesis abdominis in pregnancy, and who elieved the gravid uterus might be safely punctured, ıd supported his opinion by cases related in the ritings of Campa, Brown, Sarquis, and Reiscard. *Cycl. of Prac. Med.*, iv, p. 385.) In Dr. Hall avis's case of ovarian pregnancy, the woman as tapped when pregnant, and lived twenty-six ays afterwards. So did one of M. Rostan's. ı these cases, however, an ordinary trocar was sed. A very small opening might not have had the me result; and, by affording a smaller quantity of uid for examination, might have cleared up the dif-culty.

The subject of *hydrometra* and *hæmatometra* need arcely detain us. The stoppage of the catamenia ıd fluctuation present would in themselves show that ıe disease was not of a fibroid character; so, also, in ıe case of retention of urine. The introduction of catheter would remove the difficulty in the dia-ıosis; *and this should always be done in all doubt-l cases.*

[*To be continued.*]

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

OBSERVATIONS ON CEREBRAL HÆMORRHAGE, FROM AN ANALYSIS OF FORTY FATAL CASES.

By Thomas Jones, Esq., Assistant Resident Medical Officer at the Hospital.

[*Continued from page 494 of last volume.*]

2. *Tremors, Twitchings, Convulsions, Rigidity, and Spasms.* At variable periods after the attack of hæmorrhage into the brain, one or more of the above forms of altered motility supervened in 14 cases out of the 40, *i.e.* in 35 per cent. In four, two or more of these symptoms were observed in the same patient simultaneously or alternately, but not necessarily affecting the same parts. Thus, in one case there were observed tetanic spasms and tremor affecting the whole body, while there existed at the same time persistent rigidity of both arms. In others, spasms and rigidity were confined to one side, but there were convulsive affections of the whole body.

Tremor. This symptom was noted as having been observed in four of the fourteen cases. It affected the parts paralysed in three, and in the other it was general, while the paralysis was confined to one side. What is its relation to the seat of the clot? In three of the cases the clot was situated in one or more of the ganglia in the neighbourhood of the base; in the other, however, it was situated in the substance of the right middle lobe, but to such an extent, and so near the ventricle, as to completely obliterate it. Thus we find that the clot existed in close contact with the origin of the motor nerve-fibres in all the cases. Again, in three cases, the clot was confined to one side of the brain, in two of which tremors were general, but in the other this symptom was confined to the opposite and paralysed side. In the other case, the clot was situated in the central parts of the pons Varolii, and the tremor was general. In two of the cases, there existed softening of the parts around the clot; in the other two, it is distinctly stated that there was no softening. In the former two, the tremor was slight and occasional; and in the latter, this symptom was more severe and continuous. There seems to be a decided connection between the urgency of this symptom and the duration of life; for in the two cases in which it was severe and general in its extent, the patients lived but few hours; while in the other two in which it was either confined to one side, or to both, but to a slight degree, they lived as many days.

Muscular Twitchings. This symptom was only observed in two cases. It affected the side opposite to the one paralysed in one, and the hand in the other; the muscles of the eyeballs and face alone were mentioned as being paralysed in the latter. The clots in both cases were situated in the meshes of the pia mater over the cerebral hemispheres; in one, there was also some blood in one of the lateral ventricles. No softening was observed around the clot in either of the cases. The patients lived two days after the supervention of this symptom.

Convulsions were noticed in seven cases. The time

at which this symptom supervened varied from an hour to eighteen days, and after the appearance of this symptom the attack proved fatal in from few hours to seventeen days. In one instance, the patient recovered, but was readmitted for another and fatal attack. Of the six cases in which the parts involved by the convulsions were noticed, they were general in two, in each of which the paralysis was confined to the right side; in two, the convulsive affections were limited to one side; in one of these the paralysis was on the opposite side, and in the other it was general. In another case, the convulsions affected the muscles of the face, but the paralysis was confined to the left arm and leg. In the other case, the hands were the site of these movements, and the muscles of the face alone the parts paralysed. Thus, there does not seem to be any connection between the seat of the paralysis and the parts affected by these convulsive movements except this, that they are not generally observed on the side paralysed, where this is partial.

What is the relation existing between these convulsive movements and the site of the *clot?* Of the seven cases, the clot was in contact with the meninges in three, in one of which the crura cerebri and pons, and in another, one of the lateral ventricles, were implicated. In two, the clots were situated in the substance of the hemispheres; in one, the hæmorrhage was in the corpus striatum, opening into the ventricle; and in the other, the clot was in the centre of the cerebellum near its root. These movements seem generally to occur when the hæmorrhage is either in contact with the membranes on the surface of the brain, or when these extend into the ventricles, or with some of the ganglia at the base. They seldom occur when the clot is situated in the substance of the cerebral hemispheres, unless there be extensive softening or breaking down of the tissues around, as was noted in the above two cases.

Of six cases, in two the convulsive movements were on the same side of the body as the clot in the brain; in two, the clot was on one side of the brain, whilst the paralysis was general; and in the other two, the clot was on both sides of the brain, and the convulsions were general. It seems to be the prevailing rule that when the lesion is confined to one side of the brain, the convulsions are either general or on the same side of the body—seldom on the opposite side alone. In all the cases except one, there existed softening around a recent clot or old clots and cysts.

Rigidity was observed in five cases, and in all of these this symptom was continuous. It supervened in some cases in few hours; one patient died in two hours after seizure, and another in six hours. It almost always affects the parts paralysed. This symptom was associated in all the cases with a clot in one of the cerebral ganglia; and in all the cases except one, the structure around the clot was softened or broken down.

Tetanic Spasms. This is a phenomenon similar to the latter, but is greater in degree, and more general in extent. These spasms were noted in three cases, each attack being of short duration. They were general in all the cases, and accompanied with rigidity, or rather this symptom was observed in all the cases during the *intervals* of the spasms. Of all symptoms, this is the most fatal; for of the three cases, one died in few minutes after the supervention of this symptom, and another, which lived longest, died in six hours. In the former, the parts around the clot were healthy; it was a case of small amount of effusion into both lateral ventricles, issuing from a large dilated vessel in the tænia semicircularis; in the other two, there was softening around the clot.

b. Alterations of Sensibility. Cutaneous anæsthesi and paralysis generally coexisted. In consequenc of the frequent existence of coma in these cases, i was difficult, and indeed sometimes impossible, to de cide upon the presence or absence of this lesion sensibility. In all those cases in which this symptor is noted, it always existed in those parts which ha lost their power of motility. In few instances, how ever, where paralysis existed, anæsthesia was absen throughout. The loss of motion is almost alway greater than the loss of sensibility. In those case in which both symptoms coexisted in equal degree anæsthesia was the one first to pass off. This seem to point out that greater pressure is required upon nervous centre to cause anæsthesia than to caus paralysis. Of the *mucous membranes*, that of th eyes was most frequently affected with loss of sensi bility. Occasionally the conjunctiva becomes so in sensible, that the excito-motory action of the eyelid is completely abolished; so that the finger can b passed over the anterior surface of the eyeball with out causing the least movements of the lid, an without the patient evincing the least indication o pain. This I look upon as a very grave symptom and the patients who present it to a great degre almost always die. Sometimes anæsthesia is confine to one eye, which is generally the one corresponding to the side of the face paralysed.

c. Alterations of the Special Senses. Amaurosis wa noted in two cases only; in one of which the lesion in the brain was in the pia mater, and the corresponding cortical substance of both hemispheres This case tends to show that loss of sight is not always due to pressure upon the tubercula quadri gemina. Very probably it was due, in this instance to irritation transmitted from the seat of the clot t some parts of the nervous apparatus of vision. In the other case, there was sufficient hæmorrhage, an that in the central ganglia at the base of the brain which would account for the amaurosis, by the pressure which must have been exerted either upon the tubercula quadrigemina, optic tracts, or the optic commissures. Amaurosis is a symptom more frequently attending cases of softening, abscess, or tumours of the brain, than of hæmorrhage.

Deafness and tinnitus aurium are not mentioned in any of the cases as having occurred.

d. Alterations of Intelligence. In the majority of cases, the intellect was perfectly clear up to the time of the attack; or, if altered, the change was so transient as to escape observation; but in some cases, however, certain alterations were noted: as drowsiness, loss of memory, etc. At the time the hæmorrhage supervened, three conditions of the intelligence were observed.

1. The loss of consciousness was *complete.* This was observed in the majority of cases; for, out of thirty-eight, it occurred in twenty-six, or 68.4 per cent.

2. Consciousness was but *partially* abolished. Of the thirty-eight cases, this condition of intelligence occurred in 12, or 31.5 per cent.

3. Lastly, the intelligence was perfectly clear; although, in the cases in which this state was observed, there existed complete hemiplegia.

The chief cause of these differences in the state of the intelligence was the *extent* of the effusion. The *site* of the hæmorrhage seems to have influenced the state of consciousness but little. Generally, however, the coma is less deep where the clot is situated in or about the ganglia at the base, than where it occurs near the surface of the hemispheres; for it is interesting to note that, of the thirty-eight cases in which the intelligence was more or less impaired, the principal site of the hæmorrhage was in

arachnoid cavity in fourteen; and in all these, h the exception of one, consciousness was *com-tely* abolished. Again, of the fourteen cases, there s no paralysis in nine, and of these the hæmor-ge was *entirely* confined to the arachnoid in four; five, there existed partial paralysis, but there was ion in other parts, besides the arachnoid, in all ex-t one.

n most of the cases the coma continued until ath—an event which very rapidly supervened. Oc-ionally, however, the patients lapsed from a state complete coma into that of partial unconsciousness. others, again, consciousness was completely re-esta-shed; but in these cases the memory was feeble, l some became quite childish in their manner, n shedding tears on being talked to. Most of se cases marked by improvement, were seized by er attacks, of which they died.

As to the relation of loss of consciousness to paraly-, I find that, of the twenty-six cases of *complete* un-sciousness, there coexisted complete paralysis in ht, partial paralysis in eight, and no paralysis in ne; of the twelve cases of partial loss of consci-sness, there coexisted complete paralysis in two, rtial paralysis in nine, and no paralysis in one. fection of the speech has been said to be dependent on lesion in the anterior lobes. This symptom was ted in three only of the cases under discussion, and none of them were the anterior lobes implicated. one case, the arachnoid was the seat of the clot; another, the middle lobe; and in the third, the pus striatum.

There does not seem to be a very decided connection tween the condition of the pupils and the altera-ns of intelligence. Of the twenty-nine cases in ich the state of the pupils was noted, both were ntracted in nine, and dilated in five; and *one* pupil s dilated in six cases, and one contracted in one. In r cases the pupils were inactive, and in four they re natural. In those cases of altered intelligence which the pupils were contracted, paralysis existed 88.8 per cent.; and in those in which the pupils re dilated, paralysis coexisted in 55 per cent.

From the foregoing, I think we may infer that in se cases of deep unconsciousness associated with rtial, or with no paralysis, and contraction of *both* pils, the clot is most probably in contact with the mbranes.

[*To be continued.*]

Original Communications.

RHEUMATIC FEVER: ITS DANGERS AND ITS TREATMENT.

By John Roberton, Esq., Manchester.

[*Read before the Manchester Medical Society, February 3rd*, 1864.]

I have now for many years taken a deep interest in the treatment of acute rheumatism; and I incline to think (though in this I may be mistaken) that in Manchester we manage the disease more successfully than is done elsewhere. The importance of the subject cannot be questioned, especially when it is considered how large a proportion of all who have had rheumatic fever is found to suffer from some form of heart-affection. Facts in proof of this have long been well known; but none that I have met with are so startling as those lately given to the public in a very able work by Dr. Fleming of Glasgow, entitled *Medical Statistics of Life Assurance*. In the first place, Dr. Fleming states that, of fifty-seven deaths from disease of heart which occurred in members of the Scottish Amicable Life Assurance during a period of thirty-five years, as many as one in four had suffered from rheumatism in some form before acceptance. He next gives the results in no fewer than 894 cases of this disease, taken from the works of various authors, which, in Dr. Fleming's opinion, warrant the inference that the heart is affected *in at least one-half* of the cases of acute and subacute rheumatism; and, lastly, he supplies data illustrative of a most important feature in this disease—its frequent occurrence, and its ill consequences, in early life. Thus, from a table of 379 cases of acute rheumatism at different ages, compiled from the work of Dr. Fuller, we learn that 196 were under the age of twenty-five; and that of these, 110, or a fraction over 56 per cent., had heart-complication.

Dr. Fleming dismisses this portion of his subject in the following words. "Rheumatic fever may take place at a very early age, as early as the fourth or fifth year, and lay the seeds of irremediable disease of the heart. I have known two such cases where the circumstance was forgotten, and only recalled to mind by the parents, many years afterwards, when serious disease had become evident."

Such being the danger from acute rheumatism, what, we may now inquire, is the treatment best fitted to arrest the disease and so prevent heart-affection? I will state in few words the remedies I have been in the habit of using for more than thirty years in rheumatic fever; and perhaps the readiest way of doing this will be to give the two following cases. The first is that of a vigorous adult male. After fatigue and unusual exposure to the weather, my patient became feverish, and complained of headache, with acute pain in the right knee. By the evening of the same day, the pain had extended to the ankle, as well as to the other knee; and the following morning the joints of the lower extremities were generally affected, with the addition of pain in the loins and one shoulder. In a few hours, nearly all the joints were the seat of acute inflammation. The nature of the case being obvious, a pill, consisting of a grain of opium and two and a half grains of calomel, was administered every three hours till six grains of opium and fifteen of calomel had been taken. The effects were some relief of the pains and a moist skin. I then ordered a purgative mixture, composed of an ounce and a half of Epsom salts and two drachms of the wine of colchicum, in eight ounces of cinnamon water; the dose, a wine-glassful, was repeated every four hours until there was free, not profuse purging. This being accomplished, I prescribed Peruvian bark with quinine, compounded thus: one ounce of powdered cinchona bark, with twenty-four grains of the sulphate of quinine, were shaken up in eight ounces of water, with the addition of a little dilute sulphuric acid to secure the solution of the quinine. Of this a tablespoonful was given every third hour, and also during the night, when the patient was awake. Lemon-juice in water was taken freely as a beverage; and dry cotton-wool, made warm, was wrapped round the joints that were most painful. This course, being steadily maintained—I refer especially to the use of the cinchona and quinine—allayed in a few days the articular inflammation, and speedily effected a cure. Indeed, where this treatment is pursued, I rarely have a patient who is obliged to remain within doors longer than three weeks. Of course, the remedies mentioned have to be varied as to doses, etc., according to the age of the patient and other circumstances. For instance, when the muscles are the chief seat of the disease—a most painful variety of rheumatism—opium may have to be given nightly throughout the illness.

The other case was that of a tall vigorous girl,

twelve years old. When I first saw her, she was in bed, suffering from what appeared to be a sharp feverish cold. The following morning, there was pain in the joints of one limb; and, by the evening, painful swelling in the joints of both the upper and lower extremities, such as left no doubt as to the nature of the complaint. Indeed, late in the evening of this second day, the joints of the fingers and toes were all affected. I immediately ordered for her eight pills—one to be taken every three hours—each containing a grain and a half of calomel, with a quarter of a grain of opium. In about twenty-four hours from this, an aperient mixture was prescribed, consisting of Epsom salts half an ounce, wine of colchicum a drachm, an ounce and a half of the compound tincture of senna, with cinnamon water to six ounces; of which an ounce was given every fourth hour to cause free purging. When this had been accomplished, and the fever and pain much reduced, the following was ordered.

Quinine, xxiv grains; dilute sulphuric acid, xx minims; red cinchona bark (in powder) ʒvj; and water to ℥vj.

Of this, well shaken up, was given, *perseveringly*, a teaspoonful every three hours by day, and also in the night, when she was awake. Before the end of the eighth day, the pain had left; and in a fortnight she might be said to be quite well. This case occurred about two years ago, and the health has ever since been sound and vigorous. Last autumn, I treated a strong girl of eleven, living in the country, in the same manner as the above; and she had to keep her bed only for nine or ten days, and has since been in excellent health.

It is assumed, when I am speaking of the treatment of acute rheumatism, that the patient is seen by me *at the commencement*. When a case has been going on without treatment, it may be, for two or three weeks, the remedies I have mentioned might not be altogether applicable.

Certain important particulars, with reference to the general management of this disease, I give in the following order.

1. Be the patient ever so robust, and the fever and pain severe, I never bleed, either by the lancet or with leeches.

2. I avoid diaphoretics; that is, doses of the Dover's powder to cause and keep up profuse sweating; which was, I may say, the universal practice in my early days.

3. I forbid the use of fomentations to the inflamed joints; indeed, I forbid every kind of application to the joints, excepting *dry warm cotton*, or a dry warm silk handkerchief. The use of friction with some anodyne liniment (apt to be had recourse to by the friends of the patient, unless guarded against) I also prohibit.

4. In patients under the age of twenty, I do not allow even the hands or face to be sponged or washed during the fever; indeed, I dread every kind of liquid application. I well remember, early in my residence here, a fine young man, about the age of sixteen, brought home from a boarding-school with acute rheumatism, his knees enveloped in wetted bandages. The consequence was death in three days, from cardiac inflammation.

5. The quinine and bark should not be given until the feverish symptoms have been allayed by the use of calomel and opium, followed by a purgative.

I will just add that, when the patient has been seen early, and treated as here recommended, I have never, during the last thirty years, known heart-affection to follow in a single instance.

I may state, in conclusion, that I am quite aware there are several eminent authors who recommend, in rheumatic fever, other remedies and modes of treatment than what I have mentioned; but I have thought it best, for the sake of brevity, to give an outline merely of my own views and experience.

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., Spilsby, Lincolnshire.

[*Concluded from p. 586.*]

General Treatment. Chlorate of Potash. This medicine must be a special favourite in the treatment of diphtheritic diseases; for, no matter what else is recommended, it invariably receives favourable mention. The many points of resemblance between the diphtheritic false membrane and the white patches of thrush and its allied diseases, naturally suggest the idea of their being analogous morbid products; and any remedy known to possess a marked influence over the one was likely to be introduced as applicable in the treatment of the other. The result is that whenever the diphtheritic sign presents itself, it has become a matter of custom to resort to chlorate of potash. The action of this medicine is involved in obscurity. "It does not appear to undergo any chemical change in its passage through the system; a fact fatal to the hypothesis of the chemico-physiologists, who fancied that it gave oxygen to the system, and was, therefore, well adapted to patients affected with scorbutic conditions, which were supposed to depend on a deficiency of that principle." (Pereira.) Yet, notwithstanding all this, like many other articles of our materia medica, its use is pretty well recognised and its employment understood, though its *modus operandi* may not admit of ready explanation. It is generally considered to be one of the so-called salines; to possess cooling, diuretic, febrifuge powers, and to have a similar action to the nitrate, though, according to my experience, in accomplishing its effects it is vastly inferior to the last named salt. In the treatment of foul ulcerated conditions of the parts within the cavity of the mouth, ample experience confirms its value; and, under such circumstances, its beneficial action may be relied on.

Nitrate of Potash is an older and better established fever medicine, while its use in cases of inflamed states of the mucous membrane of the faucial region has long been acknowledged.

Speaking summarily, then, chlorate of potash is the special remedy in diphtheritic affections of the mouth, and is of secondary importance in feverish states of the general system. Nitrate of potash is more applicable to affections of the throat in sthenic cases, and is one of the best febrifuges we possess.

Guaiacum. At the close of Dr. Watson's lecture on Cynanche Tonsillaris, he says: "I ought perhaps to add, that recently Mr. J. Bell of Barhead has very strongly recommended the internal administration of powdered guaiacum in large doses, as being almost specific in the case of cynanche tonsillaris. He gives as much as half a drachm, suspended by means of mucilage in a draught, every six hours. Mr. Bell has no doubt that the remedy, if timely administered, will cut the disease short in ninety-nine cases out of a hundred. It has been found successful in other hands also." I have not had an opportunity of consulting Mr. Bell's contribution; but have had ample means for testing the efficacy of his remedy. It has long been my custom to prescribe it with confidence and satisfaction in the treatment of cases of ordinary sore-throat; and I have no hesitation in recording my belief that, under such circumstances, it possesses a very decided influence for good. I was, conse

uently, early induced to resort to it in diphtheritic ffections; and, according to my experience, the est means of general medical treatment of *epidemic re-throat with diphtheritic complications* will be found the judicious employment of this medicine.

Ammonia. The *London Pharmacopœia* furnishes us ith a preparation, the ammoniated tincture of uaiacum, wherein guaiacum and ammonia are in appy combination — a preparation admirably dapted to affections of the throat in connection with eneral asthenic conditions; in a word, the de-deratum in the treatment of diphtheria. I enerally suspend the guaiacum by means of honey, nd give it in the proportion of half a drachm of the ncture to an ounce of water. Of this mixture, from a ea- to two tablespoonfuls are given every hour or every our hours, according to the age of the patient and ne severity of the case. In sthenic conditions, the emedy admits of admixture with nitrate of potash; hile, when asthenia prevails, excess of ammonia may e added. Independently of the part which ammonia lays in the preparation just alluded to, it is of itself orthy of being considered one of the most service-ble of remedies in the treatment of diphtheritic dis-ases. It has long enjoyed the reputation of being he best stimulant we possess in adynamic states of he general system. In the low fevers, and wherever he heart's action shows signs of feebleness, this re-nedy, either in solution or in a state of vapour, must al-ays be employed. But, more than this; of late, ammo-ia has been introduced as possessing special powers ver the fibrine of the blood—checking its formation nd promoting its solution; and, on these grounds, ac-ording to Dr. Richardson, in affections accompanied ith excessive formation and separation of fibrine, t is to be looked on in the light of almost specific. In the treatment of scarlet fever, Dr. Vitt and others speak most highly in its favour; hough here, again, I prefer it in the preparation of uaiacum before alluded to.

The *Tincture of Perchloride of Iron* takes a de-ervedly high place among the numerous remedies rought forward as applicable to the treatment of iphtheritic affections; for, when administered in nswer to suitable indications, it is undoubtedly ifted with potent virtues. It has now fully esta-lished its claim to be considered the best therapeu-ical agent we have, when properly administered, in he management of erysipelas. And the nearer any iphtheritic case shall approach in its characteristics hose of that disease, the more confidently can its eneficial action be relied on. In closely packed, adly drained, badly ventilated districts of large owns, we look for erysipelatous affections more than n the open country; and in such localities, it is, I loubt not, that this remedy, first introduced by Dr. Ieslop in his practice amongst diphtherial cases at Birmingham, will be found more specially indicated nd more generally successful. It has also long been nown to be particularly applicable to certain affec-ions of the kidney, and to have a very decided con-roling power over albuminuria, when occurring in he course of general diseases. Purpura, too, is a ymptom which calls for its administration in suitable ombinations. Again, knowing the intimate rela-ionship between erysipelas and some forms, at least, f puerperal fever, this is the medicine we should be nost inclined to trust in any case of the latter dis-ase putting on the diphtheritic character. Lastly, I nake it a rule of practice, to prescribe this prepara-ion in the convalescent stages of all diphtheritic ffections, and to continue its action for some time; or not only is it a most useful tonic and assistant oward recovery, but also, as I am inclined to think, powerful prophylactic against sequelæ. From what has been said, it follows that, whenever the diph-theritic sign occurs in connection with erysipelas, ery-sipelatous affections, or puerperal fever—whenever, in a diphtheritic case, albuminuria or purpura manifest themselves—and whenever we require a tonic to assist convalescence, or to ward off secondary affections—the tincture of perchloride of iron becomes a remedy worthy of special commendation.

Iodine and the Iodides. In chronic enlargements of the tonsils, a condition particularly predisposed to assume the diphtheritic character, the iodide of iron, with cod-liver oil, becomes the most suitable remedy; while the syphilitic throat—and I have known bad and obstinate cases of so-called diphtheria to be nothing more than this disease complicated—requires, if to be satisfactorily treated, the employment of the iodide of potassium. The diphtheritic syphilitic af-fection, like erysipelas, is, doubtless, more frequently met with in urban than in rural practice; and, con-sequently, the practitioners of our cities will be more constantly called upon to resort to this particular re-medy in the treatment of diphtheria than we of the country. Dr. Willoughby Wade claims great powers for the iodide of potassium as a diphtherial medicine. He gives the following propositions: 1. "Assuming the presence of a substantive poison in the system, we know no drug which will act as a direct eliminant but iodide of potassium. It positively eliminates lead, and, we may presume, it positively eliminates syphilis." 2. "I employ iodide of potassium in two-, three-, or four-grain doses every two or three hours. I have been in the habit of conjoining with it chlo-rate of potash in five- or ten-grain doses." 3. "I have known no instance of fatal termination where this plan of treatment has been carried out. I have known no instance of serious symptoms or of se-condary paralysis supervening where this plan has been rigorously carried out."

Quinine may be employed as a general tonic in dis-eases attended with such often rapidly induced de-bility as is to be witnessed during a diphtheritic epi-demic, though, to my mind, with very uncertain con-sequences. It is as a fever medicine, as an anti-periodic, rather than as a tonic, that its beneficial effects are displayed; and whenever the general dis-ease puts on the intermittent character, and this is often the case in districts where ague is wont to abound, quinine and arsenic become our sheet-anchors.

The *Mineral Acids* are, perhaps, as useful as any-thing in the treatment of diphtheritic complications of the relaxed throat; and, according to Dr. Cham-bers and those who go with him, they furnish us with the best medicine for cases of the continued fevers.

Calomel. Much—and, to my thinking, unnecessary —fear has prevailed on the subject of the use of calo-mel as a diphtherial medicine. It behoves us to study well our disease; to be fully alive to its asthenic character; and to exercise due caution in the administration of depressants; but, on the other hand, let us beware lest our caution become over-caution, and we neglect to employ means of benefit to our patient. A smart purge of calomel, in connection with rhubarb, jalap, etc., when indicated, will have a rectifying influence on disordered secretions; it will assist in eliminating *materies morbi*, and often cut short the disease. In diphtheritic croup, calomel is to be administered in like manner as in croup not so complicated. The usual emetics and expectorants having been tried, a small dose of calomel every hour, until one of its physiological effects, the chopped spinach evacuations, be produced, has in my hands proved a successful mode of treatment, and one to which we must not be afraid to resort.

From this survey, rapid and meagre though it be, of the different medicaments which have been brought forward as applicable to the treatment of diphtheria, we are enabled to see, firstly, that each one may become the most suitable remedy, according as certain states of the system shall indicate; and secondly, that the study of the proper place and relative value of such general remedies, which, by continuing to look upon diphtheria as a single disease, must remain a matter of the greatest perplexity, becomes, by substituting the view of its complex nature, a matter of the greatest simplicity.

Now and then epidemics of miasmatic disease come amongst us in such a terrible shape, that curative treatment, be it ever so rational, seems completely powerless. No matter how well we think, how judiciously we act, patient after patient succumbs; and we are driven, sorrowfully yet honestly, to confess the total inability of medicines to cope with the destroying influence. Some cases are so rapidly fatal as to give no time for the sufficient introduction of remedies; and others, owing to the parts concerned in the function of swallowing being implicated, admit not, it may be, of their suitable administration. The true explanation, however, of our want of success, lies probably deeper than in reasons such as these; and is to be found in the conviction daily growing upon us that therapeutic agents are not, especially in diseases of this class, to be looked upon as directly curative; but rather only as adjuvants and amongst the means of ordinary treatment. So long as we confine medicines to their proper places, expecting from them only what they can possibly perform (and much it is, I grant), we shall not be disappointed; but if we invest them with mysterious powers for good, which they certainly do not, and possibly it is not according to the nature of things that they ever can, possess, we not only lay ourselves open to bitter disappointment, but bring discredit on our art. When curative treatment becomes so unsatisfactory, it is well to turn our attention to preventive. Diphtheritic diseases are known "to manifest a decided tendency to be restricted to particular places, and to cling, as it were, to particular houses." (Greenhow.) The dwellers on one side of a river, in one village in a district, in one or two not necessarily contiguous houses in a village, are not unfrequently the only ones affected. The diseases resemble in this particular certain vegetable blights; which, as we know, will appear in one farm in a neighbourhood, one field in a farm, or even one furrow in a field. This peculiar feature at once suggests a preventive remedy; which the confused notions prevalent on the subject of contagion have hitherto prevented from being carried out as fully as it deserves to be; viz., the prompt removal of at least the unaffected from infested to non-infested localities. Nor need we, in order to accomplish this, always go far; for I firmly believe I have seen the disease prevented in the unaffected, and stayed in the affected members of a family, by removing them no further than across the road.

Sequelæ. Any contribution on the subject of diphtheria must be considered incomplete which leaves unnoticed the secondary affections, proved by experience liable to affect the diphtheritic patient. "A peculiar character of the voice, resembling that produced by affections of the throat in secondary syphilis, is a common result of diphtheria, and often continues for many weeks after recovery. The power of swallowing is sometimes so impaired, that there has been difficulty in sustaining life during convalescence, and liquids especially are apt, even after a comparatively slight attack, to be regurgitated through the nostrils. Extreme anæmia, impairment of vision, a peculiar form of paraplegia, weakness of the hands a arms, numbness, tenderness of the limbs, tingli wandering pains, and, more rarely, nervous sequ of a hemiplegic character, are, in the order h written, ulterior consequences of diphtheria. Gast dynia, and sometimes dysenteric diarrhœa, occ onally follow diphtheria. Pain of the ear, deafn and abscess, are occasional but rare results of disease." (Greenhow.) Add to these sudden, of fatal, syncope, and a more or less persistent feeblen of the heart's action, and we have a tolerably co plete epitome of the diphtheritic sequelæ. By th who hold the specific disease theory, these second affections are considered to bear a special relation one and only one primary affection; and in all defi tions of diphtheria liability to such affections is cluded. I have previously attempted to show, t the diphtheritic formation—the pathognomonic of supposed distinct disease—is merely a characteris of an epidemic of many general diseases; and I vent to assert, that these secondary affections are quite readily understood and explained by supposing the in like manner, to belong to many rather than to disease. They simply indicate the prior existence a certain pathological condition; and such conditi whatever it be, may quite likely be the common p perty of many analogous diseases. At present, t special pathology of these sequelæ is clouded in curity. Some seem to indicate that the nerv system has received an influence capable of perve ing its healthy function, though morbid anatomy as yet quite unable to disclose alteration of str ture, by which to account for such perversion of fu tion. Others seem more readily interpreted by t light which has recently been thrown on patholo from the study of emboli and their relation to ov fibrinated blood. And others, again, may perha be more properly classed as second affections tak on during the convalescent stage, the anæmia spanæmia of such stage mainly predisposing theret for 1, they not unfrequently occur *longo interva* after the primary disease, to which, too, they bear regular proportion, either direct or indirect, *quo* severity; and 2, the only remedy found serviceable treatment, change of air, becomes, by adopting t supposition, more easily understood. Further servation is, however, required, before the final sett ment of this part of my subject; it is enough for purpose, to state that hitherto no fact has been a vanced in connection with the diphtheritic sequel which cannot quite as readily be explained by the theo which considers them to be common to many d eases, as by that which connects them only with on

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Ancient Rome. "In Rome," says Galen, "no o seeks after truth; money, public offices and volupt ousness are the sole objects of life. He who devot himself to the acquisition of knowledge, is consider insane. I am often blamed for applying myself t closely to researches after truth. They say that will never gain any advantage, either for my frien or for myself, until I throw aside this habit, and p my court to the great in the morning, and sup wi them in the evening. It is thus, rather than merit and learning, that confidence is inspired. A how can it be otherwise? Who are the judges b tween us? They are men who pass every hour their lives in frivolous and disreputable occupation When ill, they do not seek the attendance of the be informed physician, with whom, when in health th had no acquaintance; but they call in those who ha been their boon companions, who flatter them; gi them cold water, if they so desire; baths if they wis ice, wine, in a word, anything they fancy."

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

CASE OF DISEASE OF THE LIVER, WITH DROPSY, SUCCEEDED BY BRAIN-AFFECTION.

By James H. Gramshaw, M.D., Gravesend.

[*Read at Gravesend, April* 1, 1864.]

The case of an hotel-keeper in this town presents some interesting points in its history, so far as my memory will serve me to relate it; for, I am sorry to say, I have kept no written record of it. I have attended his family for a considerable number of years; and though he has much oftener required medical supervision than he was willing to allow, or willing to receive it, I have yet had him under my care a good many times, and for lengthened periods. He had been a strong hearty man at one time, with a good appetite; but of late years liquids have much preponderated over solids in his own bill of fare. He had been by no means an habitual drunkard, but a free liver, and one who always enjoyed the good things of this life.

For some years, his principal complaints consisted merely of occasional attacks of diarrhœa, alternating with constipation. He had also a troublesome erythmatous rash on the legs, which was sometimes better and sometimes worse; but was not sufficient to confine him to the bed or the house. By and bye, frequent attacks of epistaxis occurred; and these were so profuse and intractable as to occasion me to entertain serious alarm for his life more than once. The rapidity with which he used formerly to recover from the effects of the loss of blood—at least, so far as to be able to transact his business—was very remarkable; but latterly these attacks became much more persistent. Although he continued at his business till within the last two years, yet he gradually became more and more unfit to do so, and at last was obliged to desist entirely from taking any part in it.

At that time, the principal symptoms from which he suffered were the occasional diarrhœa and constipation mentioned before; the eruption on his legs; a throat-cough; difficulty in walking up-hill, very probably arising from an hypertrophied heart; some emaciation and pallor; and a frequent sensation as if a sharp-pointed instrument being run into his flesh, chiefly the legs, and making him quite jump off his seat; besides occasional flying rheumatic pains in his limbs. These, with the epistaxis, and some swelling of the ankles always subsiding at night, with loss of appetite, and increase of thirst which he took care to gratify, were the most prominent. The brain appeared yet unaffected; except that he complained often of a giddiness and swimming in his head, which I used to attribute to the frequency of his losses of blood. His lungs were healthy, except, as I believe, slight emphysema. He had an hypertrophied heart, with a feeble pulse and a dull epigastrium. His urine was always quite free from albumen. His age was about 48.

A change of residence was recommended, as much to detach him from the scene of temptation as for any other cause; but, as this did not suffice for that purpose, his friends persuaded him to take a house some miles away from the town, and to let his business. I had never been able to induce him to follow any plan of treatment persistently. He was as irregular in taking his medicine, as he was regular in taking what he should not. The medical men under whose care he placed himself were as unsuccessful as I had been, in persuading him to submit to a regular system of treatment.

It was not till his abdomen began to swell considerably, that he became frightened, and then a little more tractable. I was called to see him in consultation a short time after this, when it had become so large and tense, that tapping became almost imperative; but it was thought that some small doses of elaterium might be given with advantage even then. This was accordingly done, and the swelling decreased; but he had been so reduced in strength that he was for a long time quite given over by his medical attendants, and supported entirely by stimulants and enemata. His throat and mouth became dry and parched; and it was with difficulty that he swallowed anything except what was quite fluid. His urine was scanty, high-coloured, and turbid. His mind now gave way; and, though he knew all around him, he used to believe constantly that he was either going out to or had just come home from a day's exercise with the Cobham Yeomanry, of which he had been a member. Strange to say, however, the decrease in the size of his abdomen was persistent, till the fluid had disappeared, and it had returned to its natural size. As soon as it was thought reasonable to give him medicine, he took slight tonics, and, after a further lapse of time, quinine; and he gradually, though slowly, recovered, as far as we can call his present state a recovery, and returned to Gravesend. Of course, I do not mention all the medicines he took as occasional symptoms called for them, but merely the general plan.

His present symptoms may be thus briefly described. He is pale, and considerably reduced from the condition in which he was two years ago; but very much stouter then he was six months since. His cough is gone; his pulse is small, feeble, and quick. The heart's action is regular, but its impulse is extended. He has a very fair appetite, and drinks a bottle of sherry daily; occasionally, some gin and water. The epigastrium is still full. There is no appearance of dropsy of the abdomen, though there is occasional swelling of the ankles, disappearing as before. The urine is healthy in appearance and quantity; it contains no albumen. There is still the same aberration of mind; but he has now learned to conceal it, and one might talk to him for hours without its making its appearance. He will talk on common subjects with his family, play a game at whist, or read the newspaper; but he prefers to sit crouching almost into the fire, and taking no notice till his attention is attracted forcibly. He gets up about the middle of the day, as he is urged to do so; but would always prefer to lie in bed if allowed. He complains a good deal of headache, and of an inclination to fall forwards, which has been the case ever since his return to this place. He takes no interest in his business; but leaves it all to his wife, and says he does not feel competent to attend to it.

Two or three circumstances in this case appear to me remarkable. The first is, that an habitual drinker should reach so far in his career as to get disease of the liver and ascites, and yet lose the latter, and become very much better in health, though continuing, to a great extent, his habits of excess. With regard to treatment, nothing more was done than has been done over and over again for the same disease, and not very often with as much success. The aberration of mind is also remarkable. Was it in consequence of the blood circulating through the brain with an effete something existing in it, which a partially disorganised liver was unable to eliminate, but which that organ in perfect health would have removed?

Again, was the whole of the liver, so to speak, imperfectly disorganised? or was a portion of it totally so, and the remainder healthy? The relation, too, of some of the first symptoms to disease of the liver was well marked. Constipation alternating with diarrhœa is, I believe, very generally due to such a cause; and a dose or two of calomel will cure the latter as well as the former. Flying rheumatic pains, unsettled in position, have also often the same cause, as have many skin-eruptions, and such lancinating pains in the limbs as my patient suffered from.

These notes have been written down in a hurried manner from memory only, and that must be my excuse for omissions, and a want of more regularity in detail. I think it is by running over cases of this sort, which may be likely to happen again, and by discussing them, that benefit is likely to arise, rather than by the bringing forward the record of extraordinary cases which may never occur again. At least, though the other should not, perhaps, be altogether omitted, this plan would be frequently attended with much advantage.

Reviews and Notices.

LECTURES ON EPILEPSY, PAIN, PARALYSIS, AND CERTAIN OTHER AFFECTIONS OF THE NERVOUS SYSTEM, delivered at the Royal College of Physicians in London. By CHARLES BLAND RADCLIFFE, M.D.; Fellow of the Royal College of Physicians; Physician to the Westminster Hospital; etc. Pp. 340. London: 1864.

IT is now above twelve years since the physiological world was startled at being informed by Dr. RADCLIFFE, that the ordinary views of muscular action required a complete revision; that, in short, our ideas of activity and passiveness in regard to muscular contraction and relaxation ought to be reversed. With these views Dr. Radcliffe's name has become intimately associated; but, as he points out in an appendix to the present volume, although to him is due the merit of having arrived at his conclusions by independent observation and reflection, doctrines similar to his had already been expressed by other observers.

Thus Dr. West of Alford, as long ago as 1832, wrote, that the function of the nerves of muscle is to "restrain or control the tendency to contract which is inherent in the muscle, and that contraction can only take place when by an act of the will this influence is suspended, the muscle being then left to act according to its own innate properties." About the same time, also, Sir Charles Bell, in speaking of muscular action in a lecture delivered at the Royal College of Surgeons, said that "*relaxation* might be the act, and not contraction." Six years afterwards, Professor Dugés of Montpellier argued that muscular contraction was nothing more than the cessation or annihilation of expansion. At a later period also, but without Dr. Radcliffe's being aware of the fact till some time afterwards, Professor Matteucci, Professor Engel of Vienna, and Professor Stannius of Rostock, enunciated opinions regarding muscular contraction varying from those which have been commonly entertained. Extracts from the writing of these authors are given by Dr. Radcliffe.

In the eight Lectures of which the volume before us consists, the author treats of the Physiology of Ordinary Muscular Motion; the Physiology of Rhythmical Muscular Motion; the Physiology of Sensation; Convulsions; Tremor; Spasm; Pain; and Paralysis in Certain Aspects. The object which Dr. Radcliffe has in view is stated to be—

"To show that a fundamental change is necessary in the theory and treatment of all disorders of the nervous system which are characterised by convulsion or pain, or by any symptom analogous to convulsion or pain."

In entering on the consideration of the Physiology of Muscular Motion, the author first calls attention to the part which animal electricity has to play in this process. The subject is opened by a historical sketch of the researches of Galvani, Volta, Von Humboldt, Aldini, Nobili, Matteucci, and Du Bois Reymond; and it is observed, that it is especially to the researches of the two last named experimentalists that physiology is indebted for the means of clearing up much that would be otherwise obscure in regard to muscular action and to sensation.

Dr. Radcliffe now proceeds to express the doctrines which he holds, in a series of aphorisms or propositions, each of which is made the text for a commentary in the way of evidence or explanation.

The first subject considered is, the Electrical Phenomena presented by living muscle and nerve during the state of *rest*. In this state, the longitudinal surfaces of the muscular fibre and nerve are electrified positively, and the transverse surfaces negatively; and the degree of electric tension varies at different points, "the longitudinal surface being most positive at the point most removed from the transverse surface; and the transverse surface most negative at the point most removed from the longitudinal surface." Sometimes, also, the electrical relations of the surfaces of muscle and nerve become reversed. Again, during inaction, the presence of an electric current, and of electricity of high tension, is capable of being indicated. But the relation of this current electricity to action is not, according to Dr. Radcliffe, that which would be *à priori* imagined, nor what Dr. Radcliffe himself once believed it to be. He thinks it probable that, during inaction, muscle and nerve are in a state of statical and not of current electricity; and that "the electrical current which passes into the galvanometer from the muscle and nerve at this time is a secondary and not a primary phenomenon." He also suggests here, that the elongation of fibres of living muscle is due to the presence of electricity; and that the state of the fibres in *rigor mortis* is the consequence of the extinction of the electricity.

In commenting, next, on the electrical phenomena which belong to nerve and muscle in the state of *action*, Dr. Radcliffe notices the fact observed by Matteucci, that action in muscle and nerve is accompanied by an electrical discharge analogous to that of the torpedo. Further, the statical electricity, which has been described as being present during inaction, is now, during action, almost or altogether absent; this has been demonstrated by M. Du Bois-Reymond with regard both to muscle and to nerve.

Dr. Radcliffe next considers the effects of *artificial electricity* on muscular motion. The facts to which he calls attention are the following. Action in nerve and muscle is produced by instantaneous currents of high-tension electricity; while a paralysing effect is produced by continuous low-tension currents. Action,

wever, cannot be induced by artificial electricity, nless natural electricity be present; and, in the case a motor nerve stimulated by artificial electricity, ie natural electricity is diminished or discharged. arious other results also, arising from modifications the application of a galvanic current to nerve, are escribed; but we must, for an explanation of these, fer the reader to the work itself.

The next subject which comes under notice is the art which certain *non-electrical agents*, viz., the lood and the so-called "nervous influence", play in gard to muscular motion. The author here notices ie condition called *rigor mortis*. This, in a preding lecture, he has stated to be probably a result f the extinction of the natural electricity of the uscular fibre; and he now, after mentioning the ct that this condition is associated with stagnation nd coagulation of the blood, comments on the expements of Brown-Séquard and Stannius, by which has been shown that "muscles which have passed nto the state of *rigor mortis* will return into the ate of vital relaxation, if their fibres be supplied ith a sufficient amount of blood." From the facts escribed by the above named observers, he draws he inference that *rigor mortis* depends in part upon he simple absence of that action of the blood which eems to have to do with the production of vital rexation in muscle; and further, that increased disosition to ordinary muscular contraction during life eems connected with diminished supply of blood. n addition to experiment, there are several facts in natomy which bear out the latter statement. For nstance, the circulation is less active in fishes and eptiles than in birds and mammals; and the muscuar system is more irritable in the former classes than n the latter. A similar relation is observed in involuntary, as compared with voluntary muscle; and in ybernating animals during hybernation, as compared with the period of summer life.

From these physiological considerations, the transition to pathology is easy. Sudden hæmorrhage—as hown in the slaughter of animals in the shambles—r sudden arrest of the arterialisation of the blood, as y strangling, are well known to produce convulsions; and further, "there is reason to believe that ne way in which strychnia or brucia brings about pasmodic muscular contraction is by producing a hange in the blood which is equivalent to loss of rterial blood."

It thus appears that Dr. Radcliffe ascribes to the bsence of arterial blood the production of an abnorinal propensity to muscular contraction. In the same way also—*i. e.*, by the absence of arterial blood—he explains the phenomena found by Dr. Brown-Séquard o result from rendering the blood venous, and ascribed by the last named physiologist to a power possessed by venous blood "of producing muscular contraction by acting as a stimulus to a vital property of irritability in nerve and muscle."

The next point which comes under consideration is he part which "nervous influence" has to play in nuscular motion. On this subject, Dr. Radcliffe's views are remarkable, inasmuch as they differ from hose accepted by many physiologists; but he certainly supports his propositions by very strong arguments.

According, then, to Dr. Radcliffe, muscular contraction and nervous influence stand in an inverse ratio to one another; that is to say, *rigor mortis* and ordinary muscular contraction are associated with absence or diminution, and not with increase, of nervous influence. In proof that ordinary contraction is associated with diminished nerve-influence, the author cites the convulsion of hæmorrhage.

"If it be true, as it undoubtedly is, that the functional activity of an organ is directly proportionate to the activity of the circulation of arterial blood in that organ, and if the function of certain nerve-centres be to supply nervous influence to the muscle, then it follows that this supply of nervous influence must be interrupted in the most effectual manner when the whole muscular system is thrown into a state of convulsion by loss of blood." (P. 93.)

This inference is supported by experimental evidence; especially by some experiments related by Sir Astley Cooper and Drs. Kussmaul and Tenner, in which convulsions were produced by obstructing the vertebral and subclavian arteries of rabbits, so as to cut off the supply of arterial blood from the brain. On the other hand, the cutting off of the supply of arterial blood from the trunk and limbs, so that the circulation is confined to the head and neck, does not produce convulsions, although the supply of nervous influence may be supposed to be increased; paralysis occurs in the parts from which the blood is excluded—convulsion nowhere; but, as soon as the blood-supply to the head and neck is also obstructed, then general convulsions set in (Kussmaul and Tenner).

Nervous influence, then, according to Dr. Radcliffe, does not produce muscular contraction by acting as a stimulus to a vital property of contractility in muscle. But it has a function; and, in our author's opinion, it acts on the muscles through the instrumentality of the natural electricity of the nervous system. We shall, perhaps, better show Dr. Radcliffe's views on the relation of nerve-influence to muscular action by quoting a few of his propositions.

"There is reason to believe that there may be in nervous action a reversal in the electrical relations of the exterior and interior of the nerve-fibres in some parts of the nervous system; and that nervous action may be the consequence of such reversal." (P. 105.)

"When a muscle is made to contract by means of its nerve, there is reason to believe that the electrical discharge (analogous to that of the torpedo) which accompanies nervous action, has reversed the electrical relations of the exterior and interior of the muscular fibres in the part acted on; that this reversal has led to the discharge of the electricity which is present in the muscular fibres during the time of rest, and which keeps these fibres in a state of relaxation so long as it is present; and that this discharge of electricity brings about muscular contraction by leaving the muscle free to yield to the action of the attractive force which is inherent in the physical constitution of the muscular molecules." (P. 110.)

The convulsions arising from hæmorrhage and suffocation, and also nervous action arising from mechanical or other local causes, may be, Dr. Radcliffe believes, reasonably explained by supposing that the hæmorrhage or the local cause has produced a reversal of the electrical conditions of the exterior and interior of the nerve-fibres. The state known as "irritation" also is supposed by him to be due to a similar reversal of electrical relations in some part of the nervous system.

Nerve-electricity, then, according to Dr. Radcliffe, plays a very important part in muscular action. What, then, of the will, and of so-called "nervous influence"? As to the will, Du Bois-Reymond and Dr. Radcliffe have observed that voluntary action is attended by a disappearance of natural electricity; and hence,

"After what has been said, there is reason enough for the assumption that the will may avail itself of the help of the natural electricity of the nervous system in the production of muscular motion. And, so far as I can see, there is nothing in this view which in any sense compromises the dignity of the will as the paramount expression of vital power." (P. 124-5.)

As to the existence of nervous influence, Dr. Radcliffe has been led to the conclusion that "nervous influence", apart from electricity, is, to say the least, a very indefinite idea; and he winds up this division of his subject with the following remarkable words.

"At the same time .... I fully believe that what is called electricity is only a one-sided aspect of a law which, when fully revealed, will be found to rule over vital as well as physical phenomena—not materialising the former, but spiritualising the latter, and ennobling both; for the law which is sufficient for both purposes is more universal, and therefore more spiritual and noble, than that which is only sufficient for one purpose." (P. 125.)

Dr. Radcliffe now goes on to frame from the preceding premises a theory of muscular action; and this theory, in his opinion, must be a purely physical one—connected altogether with the state of the natural electricity in muscle and nerve, and altogether independent of the existence of a vital property of irritability in motor nerve, or of irritability or tonicity in muscle. Adopting this theory provisionally, he goes on to examine whether it is contradicted or supported by certain facts. And he finds that it is not contradicted by any facts necessitating the idea that the natural electricity of the muscular system is converted into contractile force—an idea which has arisen out of the doctrine of the correlation of physical forces; nor by any peculiarity in muscular contraction that cannot be explained on physical grounds; nor by the fact that dead muscle is less strong than living muscle; nor by the fact that muscle cannot act without intervals of rest; nor by the fact that muscle may contract and relax without change of volume or loss of time; nor by any fact "which renders it necessary to suppose that an increased disposition to muscular contraction is connected with a state of exalted functional activity in a vital property of irritability in motor nerve or muscle." These facts are capable, as Dr. Radcliffe shows by reference to collateral phenomena, of being explained on physical grounds; and therefore cannot be adduced in opposition to a physical theory of muscular motion. On the other hand, the physical theory is shown to have the great merit of comprehensiveness—to be capable of explaining phenomena in which the purely vital theory fails.

"This theory of muscular motion would seem to derive no small amount of confirmation from the fact that it explains muscular relaxation no less than muscular contraction; that it is equally applicable to ordinary muscular contraction and to *rigor mortis;* and that it brings the phenomena of muscular motion into subjection to physical law.

"The current theory of muscular action makes account of the state of muscular relaxation; and is obliged to assume the existence of two differe vital properties of contractility—irritability a tonicity—in order to explain the differences betwe ordinary muscular contraction and *rigor mort* Hence the current theory fails in comprehensivene when it is compared with the theory under conside ation." (P. 142.)

Having disposed of ordinary muscular motion, D Radcliffe now goes on to comment on *Rhythmic* Motion, as manifested in the beating of the hear the peristaltic movements of the intestines, and th respiratory movements of the chest. In all these in stances, after a study of the researches which hav from time to time been made, the author conclud that the blood- and the nerve-influence play one an the same part as in ordinary muscular motion; tha "the theory which is applicable to ordinary muscula motion is applicable also to rhythmical muscular mo tion, and that an insight into the cause of the rhythm is a result of so applying it."

Summing up his remarks on the physiology of mus cular action, Dr. Radcliffe observes:

"To my mind, the very strongest argument i favour of the theory of muscular motion set forth i these lectures, is to be found in the fact that it lead nearer to the discovery of a common law for organi and inorganic nature—a law to the existence of whic the instincts and discoveries of science alike bea testimony—a law which does not entomb life i matter, but which quickens matter into life, and sur rounds life with a halo of divinity; for it is but a step from the discovery of a common law to the cen tral point in which the immediate operation of th One Divine Lawgiver becomes visible in the law. To my mind, I say, the fact that this theory of muscula motion tends to bind a certain number of vital and physical phenomena together in a common bond, is the very *experimentum crucis* in its favour." (Pp. 168-9.)

Dr. Radcliffe's remarks on Sensation are brief, but important. They amount to this: that the same views regarding natural and artificial electricity which have been adduced in explanation of muscular action are capable of being equally applied to sensation; and that "there is reason to believe that there is no essential difference between the action which issues in sensation and the action which issues in muscular contraction."

Thus far we have endeavoured to follow Dr. Radcliffe through the very interesting and important physiological remarks which form the first four of his lectures. We must reserve the notice of the pathological and therapeutical part of the work to our next number.

[*To be continued.*]

On the Nature, Pathology, and Treatment of Puerperal Convulsions. By Richard Hodges, M.D., F.R.C.S. Pp. 96. London: 1864.

There is no special originality in this work; but the author offers it to the profession as the result of more than twenty years' obstetric practice, on the ground that "each physician and surgeon should record the results of his experience".

Dr. Hodges recognises two forms of puerperal convulsion—the apoplectic, and the hysterical; the

former being distinguished by the complete and persistent coma, and by the absence of repeated paroxysms; and the latter by the absence of complete insensibility, and, generally, of frothing at the mouth, biting of the tongue, stertorous breathing, and distortion of the features.

In the treatment of puerperal convulsions, Dr. Hodges advocates free and early blood-letting; that is to say, in young robust women, whose general health is good, and who are free from organic disease. In weak patients, and in convulsions of the hysterical kind, "the application of leeches, or, at the most, a small bleeding, with the careful inhalation of chloroform, will accomplish the end in view." Chloroform is regarded by Dr. Hodges, not as an agent to be mainly depended on, but as being a possibly useful agent after venesection has been employed, and in cases where the convulsions "appear to be the result of pain, or mental emotion, or excitement."

This little work will, no doubt, aid practitioners, either by confirming them in the practice which they have habitually followed, or by removing doubts from their minds as to the course which they should pursue in cases of puerperal convulsion.

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SATURDAY, JUNE 18TH, 1864.

THE ARMY MEDICAL SERVICE.

A VERY important meeting of the members of the Metropolitan Counties Branch of the British Medical Association was held on the 13th inst., in Soho Square. The object was to discuss the present lamentable condition of the army medical service. As will be seen at another page, after a very interesting discussion, a series of resolutions were passed, and are to be presented to the Government and in other quarters.

These resolutions touch upon the injustice done to the army surgeon by the frequent alterations and non-fulfilment of the Medical Warrant of 1858; but it should be known that there was a strong opinion expressed at the meeting that the Director-General was very much to blame, and was in fact responsible, for many of the evils under which the medical service of the army is now suffering.

The grievances, indeed, under which the army medical officers at present labour are, we are satisfied from evidence which lies before us, not solely such as result from the Horse Guards' breach of faith. There are also certain serious strictly professional grievances under which these gentlemen suffer, which have been too much overlooked in the discussion of this question.

The grievances of the army medical officers are twofold. There are grievances from without—*i. e.*, non-professional—which lie at the door of the Horse Guards, and which can be removed only by the action of the Government; and there are grievances within, attaching to the internal administration of the service, which can be removed only by the action of the Medical Direction.

What is mainly required of the Government is this:

1. That a definite period of service—say ten or twelve years—shall be fixed, at the expiration of which assistant-surgeons shall become surgeons, with the pay and allowance of surgeons.

2. That surgeons shall have the right of retiring after twenty years' service, at a rate of pay at least equivalent to what is now given after twenty-five years' service.

3. That Clause 17 of the Medical Warrant of 1858 shall be restored and acted upon in the spirit in which it was originally framed by General Peel. This clause, be it remembered, was made at the recommendation of the Royal Sanitary Commissioners, after a most thorough and searching investigation into all matters concerning the army medical department. Their Report still exists.

Unless these terms be granted, we are convinced that no permanent state of contentment will be established in the service; and, of course, so long as dissatisfaction exists in the ranks, it is useless to expect that medical men will enter the service, and much less that such talent as is indicated by the term competition will apply for admission.

Now, what we call the strictly professional grievances of the army medical officer are those under which he suffers through the inadequate management or the incapacity of the Army Medical Direction—of those who come between the Horse Guards and the army medical officers; and it is for these grievances in particular that the Direction-General is responsible. We are, in the first place, informed on excellent authority that the *military* authorities are to this moment incredulous as to the difficulty of procuring medical officers for the service. Military authorities, again, have never been taught to see any distinction between the medical officer of liberal education and well-grounded professional attainments and the medical officer who is destitute of all these things. To most *combatant* officers, the "doctor" who visits his hospital regularly and "gives the least trouble" is the best man.

Now, are we to believe that such evils as these (for great evils they surely are) could exist if sufficiently forcible representations on the points in question had been made to the Commander-in-Chief by the authorities whose business it is to make them—by the Medical Direction? Had the Commander-in-Chief been made sufficiently alive to these things, common sense assures us that he would never have allowed the Direction-General to make the fatal mistake of issuing advertisements for *acting* assistant-surgeons for home service.

Again, army medical officers complain that they meet from their medical head neither professional sympathy nor encouragement; that they are subjected to a dull uniformity of routine, which discourages all free scientific action; that their actions are cramped by a burdensome economy, which meets them at every turn; that every other branch of the service except the medical has resisted the economising pressure from without; that the army medical expenditure in 1863 was less by about one-fourth than it was in 1862, having been reduced from £327,000 to £255,000 in one year; that the result of this has been wretched economies in diets, medicines, and instruments; that at present the most legitimate demands of the army surgeon are met with questioning and carping, and that a system of worry and harrass is exercised on those gentlemen who do not consider the practice of such economies on all and every occasion as *their* title to honour; that medical officers are surcharged the price of extras given in those instances in which records of the cases have not been taken—a system which has set the welfare of the sick in direct opposition to the interests of the medical officer, inducing indolent and unconscientious medical officers rather to leave the sick without the extras than comply with the tedious and often frivolous forms which case-taking, etc., requires; that surgeons have been called upon by the Direction-General to make confidential reports upon their assistants, stating, *inter alia*, the estimation in which they are held by their commanding and brother officers; that, under the present Direction, regimental surgeons from India are prevented from exchanging by private arrangement, as do officers of all other ranks; that the medical staff, who are more under the Director-General's control than regimental surgeons, are unfairly subjected to removes and changes, and the expenses attaching thereto, and solely through the present deficiency of medical officers; that there are special orders (not, however, issued by the present Direction-General) to boards held on sick medical officers, which differ from those affecting other officers—other officers, as a rule, getting from six to twelve or eighteen months' leave, whilst the medical officer has from two to four months only; that the *fiat* of the Director-General can interfere with the deliberate opinion of the medical board. Thus, for example, a medical officer who has suffered severely from illness, after many years' service in India, has eighteen months' leave in England. At the end of that time, being still unwell, he is ordered to return to India. He demurs, and asks for an extension of leave, and is thereupon put on half-pay, though perhaps able and willing to serve in a temperate climate. No other officers are thus treated.

The army surgeons also complain that medical officers in general, if seriously ill, are removed from their regiments and put on half-pay at a much earlier period than *combatant* officers; that in all the things the army medical officers require protection against their own chief, who should be their natural protector; that at the present time promotion goes on so slowly, that men entering must look to remaining assistant-surgeons all their lives; that many medical officers often pay for jelly and extras out of their own pocket, either when the extras are not allowed, or rather than go through the drudgery of sending in returns—*of watching and reporting the results of administering jelly*; that, as the result of all this wretched economising supervision, the sick soldier suffers; that medical officers, seeing the drift of all these things, are naturally tempted to trim their sails so as to float in the direction of the Direction-General's bark—so that, indeed, at length some have become *plus royalistes que le roi*; extras having in some corps sunk nearly down to zero. Our readers may remember that, at the voting of the army medical service money in Parliament this year, our Director-General could boast a splendid economy of some £2,000 or £3,000 in the matter of "comforts etc., to the soldier".

We have mentioned all these griefs of the army surgeon, because they seem to us to show to demonstration that the medical executive in the army is not equal to its work.

THE COLLEGE OF SURGEONS OF ENGLAND: ELECTION OF COUNCILLORS.

Our readers should by this time be well acquainted with the constitution of the Royal College of Surgeons; of its Council and its Court of Examiners and their mode of election. Year after year we have pointed out the faultiness of its constitution; year after year have the words "reform! reform!" resounded at the annual election of Councillors. But notwithstanding, has run and still runs on the College in its old path of unchangeableness. Change of men, new men of reforming tendencies, infusion of new blood (as the term goes), have still kept things and facts where they were.

But something has been done. We have reason to know that our pen has not been plied in vain. Men's minds have been opened to the Council's improper conduct of the College affairs. Men, even in high places in the College, have begun to lend a gracious ear to the voice of the Fellows without, feeling that they can no longer wrap themselves up complacently in the cloak of office. Verily, we believe that there is awakened, in what was once the most conservative of old corporations, a spirit which gives hopes for better things.

Nothing has, however, yet been done, actually done, as a sign of progress. Up to this time—we have again to proclaim the fact—the Council has not in one single instance carried into act the words—the

xpress injunctions—of their new Charter. They ave never elected an Examiner who was not one of iemselves; nor elected a President or Vice-President ho was not in the Court of Examiners.*

Well, then, are we to be driven by the force of cts to the conclusion, that a radical change is still quired; that an alteration of the Charter must still e made before any practical reform can be carried ut? For ourselves, we must confess, after long onsideration of the subject, that we see no hope for ny real reform in the College until its present con-itution is altered. What is required is this: First, hat the members of the Court of Examiners, as at he Royal College of Physicians, shall cease to be iembers of Council; and secondly, that the country ellows shall have the privilege of voting by proxy.

So long as the election of Councillors resides virtu-lly in the hands of the London Fellows, so long will orruption in election prevail; so long will private anvassing be carried on; and, in a word, so long vill elections be influenced by private motives. That n alteration in the Charter is required, to give ountry Fellows a vote, is doubtless true; but what arthly objection is there to the Council applying, as)xford and Cambridge have done, for such an altera-ion? It is a mere matter of money; and surely a oble corporation, with an income of £9,000 or 10,000 a year, can afford to spend a hundred or two doing a great act of justice to the great body of its ellows.

True, we had an election of *reforming* Councillors st year. But what have they done towards carry-ng out the principles of the Charter? On the very irst occasion which was offered them, did they dis-lay any reforming tendencies? Did they fight the attle, for example, of electing Examiners from out-ide the Council? No, nothing of the sort! All the vorld knows that the last election of an Examiner vas simply a fight in the Council between two Lon-lon hospitals.

But how, indeed, can the College refuse to do this ct of simple justice to the country Fellows? Let he country Fellows only demand their rights loudly nough, and we promise them that they will not lemand in vain. The College is condemned of doing n injustice in resisting such a reasonable claim.

Baron Bramwell, a few days ago, in a court of aw, volunteered an opinion touching the value of nedical evidence in insanity.

"Mr. Baron Bramwell observed that, for his part, although medical men were often heard in courts of justice to define insanity and lunacy, he thought or-linary men of the world were just as well qualified to form an opinion on those matters as they."

* Mr. Cæsar Hawkins, it is true, is no longer a member of Coun-il, though still an examiner; but his rejection from the Council was effected by the Fellows, who could not touch his examinership. But here in this very case we have a proof of the fact, that a man may be a very excellent examiner though not a member of Council

The Horse Guards *animus* exhibited against army medical officers may be in part gathered from the fact that, in the United Service Club, surgeons, though ranking as field officers, have not yet been allowed to offer themselves as candidates. We may also add that, only a few days ago, three medical officers were blackballed at the Junior United Service Club.

We beg to call the attention of our readers to the following statement, as illustrative of the article which appeared in last week's Journal.

"At Downing College, Cambridge, Collins and Schroeder, of the third and first years respectively, have been elected Foundation Scholars, at £50 a year, with rooms and commons; and Brailey (distinguished in Natural Science), Hare (in Classics), Lankester (in Natural Science), and Payne (in Law and French), Minor Scholars (£40 annually, with prospect of foundation scholarships, if successful in future examinations). A gratuity of £20 was awarded to Dickson for proficiency in Natural Science."

Although no official announcement has yet been made of the candidates in the field for the office of Councillors to the Royal College of Surgeons, it has been ascertained that, up to the last day for receiving names, the following gentlemen had complied with all the regulations, and would offer themselves: Mr. Thomas Turner, of Manchester; Mr. Andrew Melville McWhinnie, of Serjeant's Inn; Mr. Thomas Blizard Curling, of Grosvenor Street; Mr. Frederick Le Gros Clark, of St. Thomas's Street; and that Messrs. George Gulliver and Henry Hancock would offer themselves for re-election. From all we hear, we have every reason to believe that Mr. Turner will be one of the successful candidates.

Certainly they do very often "manage these things better in France." Marshal Randon, in a report to the Emperor on the medical service of the French army, says that, in definitively settling the regulations for this branch of the service, he caused a report to be drawn up by a commission appointed for the purpose; "the commission being composed of a body in which science, the traditions of the schools, and the administration, were equally represented." We give the names and qualities of the members of this commission, in order that the profession may compare the English and the French systems of administration. In England, neither science nor the traditions of the schools are represented, or have any force, at the Army Medical Board. The unscientific administration is the only active agent presiding over the health of the army. Medicine is merely an office-clerk of the Horse Guards. In France, when the Minister of War desires provisions to be made for the service of the health of the army, he calls together men of the following stamp to advise and tell him what to do: MM. Michel Lévy, Medical In-

spector of the Army, Director of the Imperial School, etc., President; Hutin, Medical Inspector, Member of the Council of Health; Poggiale, Medical Inspector, Member of the Council of Health; De Lavalette, Military Sub-Intendant; Vigo-Roussillon, Sub-Intendant, Professor at the School of the *Etat Major;* Laveran, Physician of the First Class, Sub-Director of the *Ecole Supérieure* of Military Medicine and Pharmacy; Mears, Surgeon-major of the First Class and of the same School, Secretary. Such is the experience, and wisdom, and science, which regulate the health of the French army. Where is the experience, where the wisdom, where the science, which regulate the health of the English army?

In the report of the meeting of the Metropolitan Counties Branch on the army medical service, reference is made to the seventeenth clause of the Warrant of 1858, and to the Warrant of May 1st, 1863, substituted for this (and other) clauses. In order that the difference between these may be perceived, we subjoin copies of the clause referred to, and of the newer partial Warrant.

1. *Warrant of* 1858. "17. Such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds (except as regards the presidency of courts-martial, where Our Will and Pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel, and light, or allowances in their stead, detention and prize-money. But when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters."

The Warrant of May 1st, 1863, after a preamble revoking a Warrant assigning the rank of junior major to surgeons, and stating that it is desirable to make new regulations regarding civil and non-combatant military officers, runs as follows:

"Relative rank shall carry with it all precedence and advantages attaching to the military rank with which it corresponds, and shall regulate the rate of lodging money, number of servants, rations of fuel and light, or allowances in their stead, except for officers and others to whom special rates have been assigned, detention and prize money, according to the regulations, and upon the conditions, in force from time to time; but such relative rank shall not entitle the holder to military command of any kind whatsoever, nor to the presidency of courts-martial, courts of inquiry, committees, or boards of survey, but when the president of such courts, committees, or boards shall be junior to the officer of the civil department, then such member of the civil department shall attend as a witness, and not as a member.

"Choice of quarters shall be regulated by relative rank according to date of commission; except in the case of commanding officers' quarters, and in cases where special quarters shall be permanently appropriated, with the approval of the Secretary of State for War.

"Relative rank shall not entitle the holder to salutes from ships or fortresses, nor to the turning out of guards; but it shall entitle him, if commissioned, to salutes by sentries, or by individual s... diers.

"Honorary rank of paymasters shall carry with... all the privileges and advantages attaching to re... tive rank of corresponding degree.

"All commissioned officers, serving with the troo... shall be entitled to funeral honours, according... their relative military rank."

The young women employed in a shop in Pa... having been continually falling ill, an inquiry w... made into the cause, and it was found that a lar... quantity of anhydrous sulphate of copper in fi... powder was continually flying about the work-roon... This powder was derived from the copper chimne... used for carrying off the vapour of the gas. T... sulphuretted hydrogen of the impure gas decompos... the copper. A fine dry powder was formed in t... copper tubes, and this powder was readily distribut... by currents of air through the room. On the r... moval of the copper tubes, the poisoning accide... ceased.

Dr. Kalb, surgeon of the military hospital ... Chiari, recommends, as the most economic and i... fallible method of curing itch, a bath, to which ... added from one to two *kilogrammes* of sulphuric aci... The patient, on entering the bath, soon feels an itc... ing, which causes him to scratch himself; and, ... this way, the scabs, etc., are removed, and the ac... allowed to operate on the acarus, its larvæ, and i... eggs. In the course of a few minutes more, t... stinging sensation caused by the acid is replaced ... a most agreeable feeling, so that the patient glad... remains in the bath during the thirty or six... minutes required for his cure. One bath usual... suffices; but Dr. Kalb finds that a repetition of t... bath every second day is an excellent means of cu... of the ecthyma, ulcers, impetigo, and eczema, whic... so often accompany itch. By way of economy—a... we would recommend this fact to the economic co... sideration of Dr. Gibson—Dr. Kalb adds, that th... same bath may be used for several soldiers, as its ef... cacy is not readily destroyed.

Professor Sigmund of Vienna, as the results ... sixty-one cases, tells us that when the mother ... syphilitic, the child is almost invariably syphilit... also. The intensity of the disease in the child is i... proportion to its intensity in the mother, and to th... recency of the poisoning of the mother. Infanti... syphilis thus acquired is of great gravity. In D... Sigmund's sixty-one cases, there were seventeen pr... mature births; and of these, eleven were born dea... Of the forty-four children born at full time, fou... were born dead. Of the forty-six born alive, fou... only survived three months. The mean length ... their lives was twenty-six days; ninety days bein... the longest, and one hour the shortest period.

Dr. Mourier has been sent on a scientific missio... to Japan by the French Government.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

HE Thirty-second Annual Meeting of the British edical Association will be held at Cambridge, on ednesday, Thursday, and Friday, the 3rd, 4th, and h days of August next.

T. WATKIN WILLIAMS, *General Secretary.*

3, Newhall Street, Birmingham, May 10th, 1864.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

HE Committee of Council will meet at the Queen's otel, Birmingham, on THURSDAY, the 30th of June, a quarter before Three o'clock P.M., *for Three pre-ely.*

Business.—To receive communications from the esident.

To prepare the Report to be presented at the nual Meeting.

Any other business which may be brought forward.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, June 15th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
MIDLAND. [Annual.]	Exchange Rooms, Nottingham.	Thursday, June 23rd, 2.30 P.M.
SOUTH MIDLAND. [Annual.]	Woburn.	Thurs., June 23, 1 P.M.
NCASH. & CHESHIRE. [Annual.]	Town Hall, Lancaster.	Wednesday, June 29th, 12 noon.
NORTH WALES. [Annual.]	Black Lion Hotel, Mold.	Tuesday, July 5, 1.30 P.M.
WEST SOMERSET. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.
ETROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 12, 3.30 P.M.

MIDLAND BRANCH.

HE Annual Meeting of the Midland Branch will be ld at the Exchange Rooms, Nottingham, on Thurs-y, June 23rd, at 2.30 P.M.; W. H. RANSOM, M.D., esident.

Dinner at the George Hotel, at 5 o'clock.

JOSEPH WHITE, *Hon. Secretary.*

SOUTH MIDLAND BRANCH.

HE Annual Meeting of the South Midland Branch ll be held at Woburn on Thursday, the 23rd of ne, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases are quested to forward the titles of same to Dr. Bryan, orthampton.

JOHN M. BRYAN, M.D., *Hon. Secretary.*

LANCASHIRE AND CHESHIRE BRANCH.

HE Twenty-eighth Annual Meeting of this Branch ll be held in the Town Hall, Lancaster, on Wed-sday, June 29th, at Twelve o'clock, noon: E. D. E VITRÉ, M.D., President.

Gentlemen intending to read papers are requested transmit the titles of the same to the Honorary cretary, Dr. Wm. Roberts, Chatham Street, Man-ester, not later than June 16th.

WILLIAM ROBERTS, M.D., *Hon. Sec.*

METROPOLITAN COUNTIES BRANCH: SPECIAL GENERAL MEETING.

A SPECIAL General Meeting of the Metropolitan Counties Branch was held at 37, Soho Square, on Monday, June 13th, at 4 P.M.; FRANCIS SIBSON, M.D., President, in the Chair. There were also present, Drs. Risdon Bennett, Camps, Harley, Henry, Kirkes, Markham, Merriman, Ramsay, Routh, Semple, Sieveking, Stewart, and G. Webster; and Messrs. Holmes Coote, Gant, H. Lee, Lord, W. Martin, C. H. Moore, and Propert. The object of the meeting was "to consider the present position of the Army Medical Department, and to take such steps in the matter as might seem advisable."

The PRESIDENT, in opening the proceedings, remarked that the meeting had been called to consider a subject of the greatest importance. The state of the medical service of the army had become such, that for about two hundred vacancies, there were but few or no candidates; and the authorities, in this state of things, had applied an extemporaneous remedy, by appointing acting assistant-surgeons for home duty. It must be plain that, when a service of such high position as the medical department of the army was not supplied, there must be some fault at the bottom. The army medical officers were placed in a disadvantageous position, in being disabled from standing on their own defence; and, therefore, they had a special claim to such protection and advocacy as could be afforded them by this Branch, and by their professional brethren in all parts of the kingdom. He would remind the meeting, that the British Medical Association had had a great share in obtaining for the naval medical officers the Warrant of 1859; the provisions of which, he believed, were still carried out. He called on Dr. Stewart to move the first resolution.

Dr. STEWART, before speaking on the resolution to be proposed, said that he had received letters from Drs. Burrows, Begley, Andrew Clark, Cotton, Dobell, Habershon, and Hyde Salter, and from Messrs. Brodhurst, Curling, De Morgan, Hird, and Lawson, regretting their inability to attend the meeting, in the object of which they fully concurred. He supposed that the members were well aware of the dissatisfaction which existed among the medical officers of the army, arising out of the circumstance that the distinction between combatant and non-combatant officers was kept up resolutely, and very injuriously to the position of the medical men and interests of the soldier. The disastrous results of the conflict between the military department and the medical had been shewn in the Crimean war, where the military authorities had positively refused to give effect to the recommendations of the medical officers. In the Peninsular war, the recommendations made by Sir James McGrigor to the Duke of Wellington were carried out; for, if there was any hesitation, Sir James used to remark that he had advised what he thought right, and that the responsibility of carrying it out or neglecting it lay with the Duke. But now the position of the medical department of the army was such, that the lowest step had been reached; at least, it was by many hoped that matters had become so bad, that the intervention of the medical profession could not but be successful. After the Crimean war, a commission had inquired into the state of the medical department of the army; and the result of their labours was the granting of the Warrant of 1858. This warrant placed matters on such a footing, that universal satisfaction prevailed both among medical men in the army and in civil practice. It was thought that there would

be no recurrence to the former unsatisfactory state of matters; but the warrant had been obtained in spite of the army authorities; and these, by a series of partial regulations, had retracted that which was most valuable in it. Dr. Stewart dwelt, *inter alia*, upon the alterations made in Clause xvii of the Warrant; and observed that he thought enough had been said to make it by no means wonderful that there should be a deficiency of candidates. As to the employment of civilians to perform the duties of military medical officers, this was thought bad enough during the Crimean war; but what could be said, when the army medical staff was not sufficient even in the time of peace, and recourse was had to an expedient which should be regarded only as an extreme war-measure? The true reason why men entering the medical profession would not look to the army as a career, was a want of confidence in the good faith of the army authorities. The Warrant of 1858 had been so often altered, and so extensively abrogated, that medical men were unwilling to place themselves in a position in which they could be subjected to indignity. It was a remarkable fact that, while the army authorities had raised the standard of medical education for the army, they had diminished the inducements to enter the service; so that, as was lately shewn by Dr. Parkes, a considerable proportion of the few candidates who applied for admission were men of such inferior attainments, that it was impossible to admit them. It was to be hoped, however, that there would be an improvement, and that the eyes of public men would be opened to the truth of the sentiment expressed by Homer, and rendered by Pope, in the lines,

> "A wise physician, skilled our wounds to heal,
> Is more than armies to the public weal."

He moved the following resolutions—

"That, owing to the successive changes in the Warrant of 1858, which gave general satisfaction, and to the practical departure from that warrant by the Executive, the medical profession have lost confidence in the good faith of the military authorities, and have, in consequence, ceased to apply for admission to the medical department of the army.

"That the frequent non-enforcement of the precedence granted by the Warrant of 1858, and its modification by the Warrant of 1863, which disqualifies the medical officer from presiding at boards (although on other than purely military matters), even when he is the senior officer present, have, by lowering his status, done more than any other grievance to deter the profession from joining the service."

Dr. Markham seconded the resolution. He hoped, however, that the meeting would not be satisfied with merely attacking what the government had done. He had good evidence that much of the fault lay with the heads of the army medical department. The grievances to be amended were not only those which drove men from joining the army, but also those which were suffered by medical officers in the service.

Mr. Holmes Coote, having had an opportunity of witnessing the services of the army medical officers during the Crimean war, felt deeply for the grievances under which they laboured. As a lecturer in a large medical school (St. Bartholomew's), he had always exerted his influence with his pupils to prevent them from entering the army until the grievances complained of should be redressed; and, he believed, other lecturers acted in a similar manner. The idea had been expressed, that the diminution in the number of applications for the army medical service arose from a lessening in the number of students; this, however, was quite incorrect. The reason why more medical men did not enter the army was, that many other and more attractive fields of occupation were open to them. As to the annoyances to which army medical officers were subjected, he was well acquainted with them. The authority possessed by the army medical department was not sufficiently independent and ought to be increased. He hoped that this meeting would be but the prelude to larger meetings of medical men for the purpose of advocating the claims of the army medical officers.

Mr. Gant supported the resolution.

Dr. G. Webster observed that on a former occasion—during the Russian war—the Branch had appointed a Committee in regard to army medical matters. He had himself taken much interest in the matter, and had had an interview with the then Director General, Dr. Andrew Smith; who acknowledged to him that, although nominally director, he had four or five masters. The result of the inquiry of the parliamentary committee had been to find that the disasters of the Crimean war did not arise from the fault of the medical officers, but from the manner in which they were impeded by other departments. As to the effect produced by the Branch Committee, he believed that, out of about eight or ten grievances pointed out by a deputation to Lord Panmure, six or eight had been amended in the Warrant.

The resolution was carried unanimously.

Dr. Sieveking moved—

"That, in the opinion of this meeting, in future the warrants which express the terms of service under which medical men enter the army shall be perfectly defined, so that no misapprehension can arise; and that no alteration shall be made in such warrants without an inquiry, which shall be open to the medical service, of the same extent and care as that which led to their first promulgation; and, moreover that any such alteration shall be made with formality and publicity, and after an explanation to the medical officers of the grounds on which it has been considered necessary to alter the terms of service."

He said that, if there were any lukewarm persons in the meeting, it might be necessary to remind them that the army medical officer had no alternative but to associate with a particular class of men; and that his very life depended on the manner in which he was treated. He believed that the army medical service was generally entered for the purpose of avoiding the harass of ordinary practice; and, unless a medical man in the army could have a proper position secured to him, he lost all that for which he entered the service—for his pay and provision were but small, and his means of bringing up his family were limited. If, too, the value of the British soldier were remembered—a value which exceeded that of the soldiers of other nations—we ought to take care that the army medical officer was properly supported. He held that it was the privilege and duty of himself and the meeting, not only as members of the British Medical Association and as medical men, but also as Englishmen, to support any measures which aimed at improving the condition of the medical officers of the army.

Dr. Webster seconded the resolution. He concurred in the opinion that the question was one which ought to be taken up by the Association, and by this Branch in particular.

The motion was carried unanimously.

Mr. W. Martin proposed the following resolution—

"That, in the opinion of this meeting, the Warrant of 1858 should be the basis of future regulations for the Army Medical Department, subject to the following modifications:

"1. The proper definition and enforcement of the precedence of the medical officer, in accordance with

rank, at boards, mess, and committees of all
ıds.
"2. Increased pay of assistant-surgeons and sur-
ons.
"3. Promotion to the rank of surgeon after, at
st, ten years' full-pay service.
"4. Optional retirement after twenty years' full-
y service on an adequate pension.
"5. Controlling power and free agency in his own
partment, especially in times of emergency.
"6. Regular leave for medical officers, and sick
ve on the same footing as is granted to all other
icers.
"7. Non-deduction of pay for expenses incurred in
e execution of his duty.
"8. The abolition of the system of 'confidential
orts' on the conduct of medical officers.
"9. That all punishment inflicted by order of the
litary authorities should be carried out by them;
e medical officer's duty on such occasions being
ited to the protection of the soldier."

Mr. Martin said he would enter into but few de-
ls. There were two warrants at present in opera-
n; that of 1858, which had been partially altered;
d that of May 1st, 1863, which had been substi-
ted for the seventeenth clause of the warrant of
58.* He read the clause and the new warrant; and
served that, while the former was clear and pre-
e, the latter was very unintelligible, and appeared
deprive the medical officer of the presidency, not
ly of courts-martial (which no one wished him to
ve), but of boards of all kinds. This was the first
int suggested for improvement, and it was very
portant; but he feared that the medical officers of
e army would not now be contented with such a
nple redress of grievances as would have satisfied
em in 1860. The pay of assistant-surgeons might
sufficient at the commencement; but it was not so
them, nor for surgeons, when they had been some
ne in the army. With regard to the third point,
observed that promotion was sometimes very
pid, at other times very slow; and must always be
tarded if made dependent on the occurrence of va-
ncies. If, too, a reduction in the army medical staff
ere made, the chance of promotion would be thereby
minished. It was therefore suggested that, in all
ses, promotion should take place after a maximum
riod of ten years' service. The question of retire-
ent was a very important one. Medical men entered
e army late in life, as compared with ensigns; but
ere required at present to serve twenty-five years.
ne importance of the sixth recommendation was
ident. As to leave, it was a very great grievance
at, from the small number of medical officers in
e service, leave could not be obtained by them.
ne army medical officer was, he considered, speci-
ly entitled by the nature of his duties to fixed
rms of leave, and especially to a more liberal allow-
ce of sick-leave. The explanation of the seventh
commendation was that, in many cases, where
tras for the sick soldiers had been ordered by the
edical officers, these had been disallowed on frivo-
us pretences, so that the medical men were
ed for expenses incurred by them in performing
eir duty. As to the eighth recommendation, a
stem of confidential reports on the conduct, so-
iety, etc., of the assistant-surgeons, was expected
be carried on by the surgeons; but this was often
ought to be so great an injustice and hardship, that
ny surgeons had refused to perform it, and had
sequently fallen into disfavour. The ninth and
t recommendation was intended to include the
eration of branding deserters, which was required
be performed under the superintendence of the medical officer. The special points to be borne in mind were: first, that the rank of the medical officer ought to be strictly defined; and secondly, that, as the soldier was entitled to the best surgical aid, every means should be taken to ensure this for him.

Dr. Henry seconded the resolution.

Dr. Sieveking asked whether it was desired that army medical officers should have the privilege of being presidents of courts-martial.

The President replied, that this was certainly not desired.

Dr. Henry said that the Warrant of 1863 appeared to prevent the army medical officer from being president of any board whatever, such as one of sanitary inquiry, etc.

The resolution was unanimously carried.

Mr. Martin also moved, and Dr. Henry seconded, the following resolution, which was carried unanimously.

"That it is deemed inexpedient that the systematic employment of deputy or acting assistant-surgeons without examination be continued; since it will inevitably introduce an inferior class of medical men into the service, and at the same time inflict great hardship on the military medical officer by increasing indefinitely the period of foreign service; and so still further deter medical men from entering the medical department of the army."

Mr. Propert moved, Mr. Henry Lee seconded, and it was resolved—

"That every means should be taken, through the medium of the military journals, and otherwise, to explain to the combatant officers that, if they desire to secure, for the promotion of the soldier's welfare, the services of the better members of the profession, they must receive as one of their own body, and cease to treat with jealousy, the medical officer, who, equally with themselves, is a gentleman, and is exposed in time of war to the risks of the field."

Mr. Lord moved, Dr. Harley seconded, and it was unanimously resolved—

"That these resolutions be embodied in a memorial, to be presented (as a petition) to the Houses of Lords and Commons, and to the Prime Minister, the Secretary and Under Secretary for War, the Commander-in-Chief, and the Director-General of the Army Medical Department; and that the members of both Houses be personally requested to support the prayer of the petition.

"That these resolutions be communicated to the Executive Committee of Council; and that the other Branches of the Association be invited to take early steps towards the promotion of the movement."

Dr. Camps proposed, Mr. Gant seconded, and it was resolved—

"That the Council of this Branch be requested to carry into effect the resolutions carried by the meeting."

* See page 670.

Medical Portraits. This year at the Royal Academy, the late Sir J. W. Gordon has contributed two portraits—Professor Christison and Dr. W. Sellers—both for the Hall of the Royal College of Physicians in Edinburgh. The portraits of Dr. Brinton and that of Alexander Guthrie, Esq., of Brechin (on his completing his fiftieth year of professional life in that town), deserve notice. Weekes has contributed two fine marble statues—one of John Hunter, which is to be placed by public subscription (for which a thousand guineas are already subscribed) in the Hall of the London College of Surgeons; the other of W. Harvey, for the Hall of the new Museum at Oxford. There are statues of Dr. Babington and Mr. W. Cock, and a statuette in bronze, by Halse, of the late H. C. Johnson. (*Dublin Medical Press.*)

Reports of Societies.

ETHNOLOGICAL SOCIETY.

TUESDAY, JUNE 7TH, 1864.

ON CIVILISATION AND CEREBRAL DEVELOPMENT.

BY R. DUNN, ESQ., F.R.C.S.

MR. DUNN began by premising, as a basis for his observations, the following postulates.

1. That the brain or encephalon is the material organ of the mind.

2. That there exists a close correspondence in form and size between the cerebrum and its outward bony covering—the skull; so that the varying forms of the human cranium indicate, as outward and visible signs, with certain well understood qualifications, corresponding differences or changes in the shape and size of the cerebral substance within.

3. That the genus *homo* is one; and that all the races of the great family of man are endowed with the same intuitions, sensational, perceptive, and intellectual—the same mental activities, however they may differ in degree; and that they all have the essential constituent elements *in common* of a moral, religious, and intellectual nature.

He waived the question as to the monogenesis or polygenesis of man; but asserted that from all historic times there have existed, and do still exist, aboriginal and typical races of men, widely differing from each other, and easily distinguishable by well-marked physical and psychical characters: such, for instance, are the Negroes of Africa, the Mongols of Asia, the red men of America, and the white men of Europe. From time immemorial, he said, there have always existed, besides the rude and savage hordes of hunters and fishers, two forms or phases of civilisation—the *nomadic* or the pastoral, and the *agricultural;* the former essentially *stationary* in its character, but the latter eminently and strikingly *progressive;* the nomadic tribes of Asia at the present day differing so little in their habits from those of their ancestors, that the Turkoman or Arab chief still welcomes the stranger after the same way which Abraham of old is reported to have done. The earliest traditionary record we possess of the state of the world when the earth was first peopled shows that there existed a *nomadic population,* who lived in tents; and *artificers,* who built cities—the earliest of all manufacturing towns. These two schemes of life, so far as we know, were contemporary. The dwellers in tents had seen the dwellers in cities, but preferred their own wild independence.

Now, among the purely nomadic races, Mr. Dunn observed, where civilisation is stationary, there exists, as might be expected, an *uniform sameness* and *characteristic fixity* in the shape of the head, strikingly in contrast with what is seen to prevail among the agricultural races and cultivated Europeans. For, where civilisation is progressive, there is increased mental activity among the faculties of the perceptive and intellectual consciousness, and, in consequence, a corresponding development of the nervous apparatus—the cerebral substance, through which they are manifested. He dwelt on the importance of viewing, in contrast, the typical crania of the Negroes or Australian savages, the Mongolian nomades, and the cultivated Europeans; maintaining that, as the skull is the outward measure and index of the brain's development within, we are able fairly to estimate the relative size and comparative development of its three great divisions, the anterior, middle, and posterior lobes; nay, among the typical races, to recognise *distinctive characters* impressed and stamped upon their varying crania, as indisputable evidence of *degradation* and *elevation* of type. In proof of this he adverted to the *prognathous* type as one of *degradation;* and remarked that cranial configurations such as these, and where the face, nose, and jaws, ape-like are all protuberant and projecting, speak a language and point to a destiny which cannot be mistaken for wherever and whenever ignorance and brutality destitution and squalor, have for a long time existed this prognathous type is invariably found to prevail. In striking contrast to this, he adduced, as a type of *elevation,* that of the *orthognathic,* seen among the European nations, the Saxons, Celts, and Scandinavians, where the jaws are upright, and not projecting the face scarcely, if at all, protruding beyond the forehead; and where, in place of the narrow, low, and retreating forehead, associated with largely developed, massive, and projecting bones of the face and jaws, we are struck with the symmetrical contour of the head, its size, and lateral fulness; but, above all with the elevation of the forehead in proportion to the size of the face; and, with its broad, expansive and towering height, clearly indicating a harmonious development of the whole brain, and a special fulness in the intellectual and moral regions.

From the skulls he proceeded to the comparison of the brains themselves, of which they are the bony coverings, after stating that all physiological psychologists were agreed that the great hemispherical ganglia are the sole and exclusive seat of all intellectual action and volitional power. But then, he remarked, to be able to interpret and duly to appreciate the structural differences which we meet with in the brains of the typical races, involves and implies more exact and complete knowledge of the functions of these different cerebral parts, and of the nervous apparatus of the perceptive and intellectual consciousness, than that to which, he was free to confess we had yet attained. Still, he affirmed, we are not without some definite knowledge of the functions of the cerebral lobes as psychical instruments; and stated what were the views and convictions of his own mind, not hastily taken up, not merely founded on the multiplied cranioscopical observations of Gall, Spurzheim, Combe, and Carus, but on the facts of pathology, and of developmental anatomy, comparative and human; viz., that the anterior lobes are the seat of the intellectual, the middle of the personal or individual, and the posterior of the social and affectional, activities or attributes of the human mind. He recognised throughout the hemispheres of the brain, and in their tripartite division into anterior, middle, and posterior lobes, with Gratiolet, three stages or planes of development: 1. The inferior or lowest, the *basilar* and *superciliary;* 2. The middle, or *median frontal;* and 3. The highest, the *coronal* or *superior frontal,* the sole and exclusive prerogative of man. He then hazarded the opinion, that on the comparative evolution and size of the different cerebral lobes, in these stages or planes of development the individual character is mainly dependent; and that, while the *middle* or personal are the dominating lobes of the brain, as to the animal, moral, and religious activities of the man, it is the *anterior* which indicate the character of his intellectual bearing and attributes, and the *posterior* that of his social tendencies, propensities, and affections.

After a lucid exposition of his views, and as subservient to the better appreciation of the psychological significancy and importance of the *structural differences* which are noticed in the convolutions of the brain of civilised and savage man, he remarked that, as the anterior lobes of the brain are the seat of the intellectual activities of the mind, fulness of development and complexity of structure are sure indi

ons of elevation of type; and that the converse, Gratiolet, from extended observations, has amply wn, is equally true—viz., that simplicity of struc- e and perfect symmetry of shape and arrangement he convolutions on both sides of the hemispheres indisputable marks of degradation of function. atiolet, he said, had dwelt on the striking contrast ich is presented between the simple, smooth, and nmetrical convolutions on both the hemispheres, the superior frontal region of the brain, in the in- ior races, and that of the unsymmetrical character; d of the great and intricate complexity of the same volutions among those of the highest. After nmenting upon and contrasting the brain of the gro and the Hottentot Venus with that of the ltivated European, Mr. Dunn gave expression to regret that, among the other aboriginal and pical races, so little had hitherto been done in the amination and comparison of their cerebral organi- tions. Ethno-psychology, he said, was still a *desi- ratum*.

He looked forward to the microscopical examina- on of the ultimate structure of the grey matter of e brain in the typical races of man as pregnant th the most interesting and instructive results. ready his friends Dr. Beale and Mr. Lockhart arke, he said, had proved to demonstration that *rceptible differences* exist in the minute anatomy of ne grey matter of the convolutions in the brain of an and that of the monkey and the highest an- ropoid apes. Dr. Beale had succeeded in demon- rating the connexion between the nerve-cells and ne very finest fibres in the grey matter of the convo- tions; and he maintains that the central cells of very nervous instrument form, with the peripheral erve-cells and connecting nerve-fibres, *uninterrupted rcuits;* and that all nerve-cells are connected with, r give origin to, at least two fibres. Mr. Lockhart larke had shown that certain *structural differences* re seen in the grey matter of the convolutions of the nterior, middle, and posterior lobes; and this fact, Mr. Dunn observed, was highly interesting and signi- cant, when we bear in mind that it is upon the vesi- ular substance or grey matter of the brain, as its ubstratum, that the mind is dependent for the mani- estations of all its activities in this life; and, more- ver, that it is here that the ultimate molecular hanges take place, which are so intimately connected vith the manifestation of mental phenomena. Nay, nore, that as complexity of function necessarily im- plies, and is connected with, complexity of structure, nd as the anterior lobes of the brain are the seat of he highest and most complex psychical activities, he said, it is but reasonable to expect that, in the ma- hinery of their action, as Mr. Lockhart Clarke has demonstrated, the greatest complexity should, in the grey matter of the anterior lobes, be found to exist; hat is, in the nerve-cells, nerve-fibres, and circuits.

He concluded by adverting to the historical bear- ngs of his subject—to the evidence which is pre- sented by history of the conversion, in *time*, of one type of humanity into that of another, under the in- fluence of outward circumstances, social states, and intellectual culture. As illustrative instances, he adduced the case of the transplanted Negroes in America and the West Indies; amongst the Asiatic or Mongolian races, the Turks of Europe and the Ma- gyars of Hungary; and amongst ourselves, as instances of degradation, the Irish of Leitrim and Sligo, and the vagabond nomades who infest our large cities and towns.

In proof of cranial alterations for the better, from the influence of improved social conditions and higher intellectual activities, he directed attention to some casts on the table, taken at different periods from the same individuals. In each case, the interval was not a period of leisure, but of great mental activity; and the result in each was seen in the decided enlarge- ment and development of the anterior part of the forehead. In the museum of the late Mr. De Ville, in the Strand, there were upwards, he said, of fifty such illustrative examples, highly interesting and instructive, as pointing out and recording, beyond all controversy, certain changes in the form and relative positions of the anterior lobes of the brain, in con- nexion with certain intellectual pursuits.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 26TH, 1864.

W. R. BASHAM, M.D., Vice-President, in the Chair.

A DESCRIPTION OF THE FIRST LARYNGOSCOPE, AS INVENTED AND EMPLOYED BY DR. B. G. BABINGTON, F.R.S., IN THE YEAR 1829.

BY MORELL MACKENZIE, M.D.

THE author stated that in this communication it was not intended to trace the successive steps which finally led to the more general use of the laryngo- scope in practical medicine. This had already been done in an able article by Mr. Windsor, in the *British and Foreign Medico-Chirurgical Review*. The object of the present paper was to fix distinctly the epoch of the first employment of the laryngoscope in the in- vestigation of laryngeal disease. In considering this question it was necessary to bear in mind the essen- tial conditions under which laryngoscopy is practised. These were—

1. The visual ray from the observer's eye has to be directed to a part which, when the mouth is open, is hidden from direct view by the projecting angle formed by the base of the tongue and the epiglottis.

2. The part to which the visual ray is directed—that is to say, the larynx—is not penetrated by light.

To overcome these obstacles to laryngoscopy there are required, then, (1) a small mirror placed at the back of the throat at such an angle that the visual ray can be directed into the larynx; (2) an apparatus for concentrating the luminous rays, and projecting them upon the small mirror, so that they can be re- flected into the larynx. For this latter purpose modern laryngoscopists generally use a second mir- ror (the ophthalmoscopic mirror of Rüete.)

The essential requisites of a laryngoscope were clearly perceived by Dr. Babington as early as the year 1829. At that period his inventive genius was directed to the subject, and he contrived a laryngo- scope very similar to the one now in use. It consisted of a small laryngeal mirror, and a hand-mirror for concentrating the light. The patient sat with his back to the sun, and while the illuminating mirror (a common back-hair glass) was held with the left hand, the laryngeal mirror was introduced with the right. Dr. Babington's labours did not end here. By a very simple mechanism, a tongue-depressor was united with the laryngeal mirror, and thereby one of the most serious obstacles to laryngoscopy was at- tempted to be overcome. This ingenious laryngo- scope [instrument shown] was exhibited at the Hun- terian Society on March 18th, 1829; and a report of the meeting was published in the *London Medical Gazette* of March 28th, 1829. It was made by an op- tician named Elsworthy, and the invoice [shewn] was dated June 23rd, 1829. In this laryngoscope a spring between the shanks of the laryngeal mirror and the spatula was fixed in such a way that by pressing the two handles together the tongue was depressed. Afterwards (between the years 1830 and 1835) Dr.

Babington gave up the tongue-depressor, and had two instruments made very similar to those now in use, except that instead of being of glass they were of steel. The maker's name (Laundy) is stamped on one of the mirrors.

In rendering justice to a distinguished physician, the author did not wish to detract from the credit fairly due to others who, at different times and independently of one another, had contrived an apparatus for inspecting the larynx. Dr. Czermak's great merit consisted in his having so simplified the instrument that it could be used by the many; and his talent and enthusiastic teaching had so prominently associated his name with the laryngoscope that his reputation would not suffer from a due recognition of Dr. Babington's claims. The author said it could not be denied that as early as 1827 Dr. Senn, of Geneva, tried to make use of a small mirror to examine the larynx of a child in whom he was about to perform tracheotomy. Dr. Senn was unsuccessful because he only employed one of the factors in laryngoscopy; and whilst he attributed his failure to the small size of the mirror, it really depended on the non-illumination of the larynx. Dr. Senn's case, moreover, was not published in the *Journal de Progrès* till the year 1829, a short time after Dr. Babington's description had appeared in the *London Medical Gazette*.

TWO CASES OF STONE IN THE BLADDER OF THE FEMALE TREATED BY RAPID URETHRAL DILATATION; WITH REMARKS ON THE OPERATION. BY THOMAS BRYANT, ESQ., SURGEON TO GUY'S HOSPITAL.

The author commenced by giving the history of two cases, of which the following are brief notes:—

Case I. H. C., aged 52, admitted October 13th, 1862, had had symptoms of urinary irritation for eight months, and for three had been quite unable to retain her urine. On November 19th the stone was removed by rapid urethral dilatation, and it measured 1¼ in. by 1 in. in diameter. The operation was followed by immediate relief. On the day following the patient could hold her urine for twenty minutes, and in a week for many hours, and in three weeks she left well.

Case II. Ann C., aged 35, was admitted on February 17th, 1864. Urinary symptoms had existed for seven months, and were very severe; the urine was full of pus, mucus, and was intensely fetid. The least examination caused her great pain. After rest in bed for several weeks these symptoms had improved, and on March 5th the operation was performed. Chloroform was given, and the urethra rapidly dilated by Weiss's dilator. The stone was then removed, but little difficulty being experienced in its removal. The calculus measured 2 in. by 1½ in. in diameter, and 5¼ in. by 4½ in. in circumference, weighing 2 oz. 2 dr. The next day the patient could hold her urine for fifteen minutes; on the second, for forty; on the third, for two hours and a half; and on the fifth day, for five hours. A small slough separated on the sixth day from the urethra, and during an examination the finger was introduced again into the bladder, which caused some little incontinence; but this gradually disappeared, and on April 5th she was able to retain her urine for five hours. She left the hospital cured.

The author then passed on to the consideration of the dilatability of the female urethra; and quoted many interesting cases, which were tabulated, in which a calculus had been expelled by natural efforts, in which *no* incontinence of urine was the result. He then proceeded to consider the operation of urethral dilatation as a means of removing a calculus or foreign body; and gave an analysis of twenty-eight cases, which he had tabulated, in which he proved that incontinence of urine resulted in only four out of the twenty-eight examples, and that in these four t dilatation had been *slowly* performed. He then co sidered in detail many of the cases, and enlarg upon the best mode of performing the operation.

The subject of urethral lithotomy next obtained notice; and it was proved that an incontinence urine was a common result of the operation—ni cases out of twenty being left in such a condition.

Removal of a calculus by lithotrity was then touch on, and the subject of vaginal lithotomy introduce the author indicating the exceptional cases in whi either operation may be required.

The following conclusions were drawn up:—

1. The female urethra may be dilated to a conside able extent with facility, and without danger.

2. *Slow* and tedious dilatation of the urethra, sponge tents or other means, appears to be injurio

3. *Rapid* urethral dilatation, with the patient und the influence of chloroform, is the safest and most e peditious method of removing all average-sized ca culi and foreign bodies from the female bladder; f calculi one inch in diameter in children, and even tw inches in adults, have been safely extracted by th practice.

4. The operation of incising the neck of the bladd and urethra is one of danger, and should be laid asid

5. Lithotrity is a valuable operation in cases in whi a stone cannot be safely removed by rapid urethr dilatation—that is, when the stone is very large, ar when the bladder is healthy; and that it is the be practice to remove the broken fragments by the fo ceps as speedily as possible.

6. Vaginal lithotomy is an operation of value whe the other modes of operation are inapplicable; bu that, as a general practice, it is not required.

Correspondence.

PRACTICAL DETAILS IN OVARIOTOMY.

Letter from T. Spencer Wells, Esq.

Sir,—At page 632 of your last number, Mr. Fu neaux Jordan, after a very kind allusion to me, is r ported to have said (in a way to imply that I sti close the wound in the abdominal wall with hare-l pins) that wire sutures are preferable. Will yo therefore, allow me to say, it was only in my earli cases that I used hare-lip pins? I never found th "sloughing of the tissue included between the pi and the twisted hemp or silk", which Mr. Jorda fears; because I never twisted the silk or hemp tigl enough to cause sloughing. But I did very soon fin when the abdominal wall was thick, that it was im possible to bring the opposite divided surfaces even into apposition. I then began to use wire sutures different kinds—silver, platinum, and iron—as we as catgut, horsehair, India-rubber, and gutta percha but I found nothing answer so well as fine, strong pure silk. It is easily applied, easily removed, an if not drawn too tight nor left too long, causes n sloughing of the circle of tissue which it encloses. seldom leave the sutures more than forty-eight hours and often remove them at thirty-six or forty. Dr Keith of Edinburgh has recorded one case in th *Edinburgh Journal* for October 1863, which so strik ingly shows one of the great advantages of silk ove wire, that I make no apology for asking you for spac for his account of the *post mortem* examination. H says:

"On carefully examining the line of incision, whic had been secured by seven wire sutures passe through the whole thickness of the abdominal wal

ıding nearly half an inch of peritoneum, it was erved that the peritoneal line of union was so uniıly perfect that it was impossible to tell where the of incision had been. The wires were felt under peritoneal surface; and on cutting one of these ı the outside, in order to see how the cut exnity of the wire would behave when passing over freshly united serous surface, I was surprised to l, though it was withdrawn with the utmost genıess, and the point kept as much as possible inst the upper surface of the wall, that the *point the wire tore the peritoneal membrane right across,* ving it ragged, and allowing a *drop of matter* ch lay along the track of the wire to *appear on the itoneal surface.*"

t is the fashion to sneer at "petty details"; but a like this shews that it may be of immense imtance to a patient whether her wound has been ed by wire or by silk.

n the other valuable communications on ovarioıy in the same number by Messrs. Gamgee, Clarke, l Marshall, there are a number of practical quesıs raised which I should very gladly discuss; but pect for your space compels me to conclude with y one remark upon the statistical argument used Mr. Clarke in his comments upon different modes dealing with the pedicle. Nothing is more likely lead to error than statistical conclusions based on a small number of facts. It is assumed that, one operator who generally returns the tied pele into the abdomen only lost four cases out of enty, this great success implies some superiority of s practice over the use of the clamp. In reply, I y say that, between June 1862 and March 1863, I d twenty-three cases—of which only two died and enty-one recovered—and in twenty-two of these es the clamp was used.

The question, "what to do with a short pedicle," is e of the most important which can engage our atıtion; but it can only be determined by the experice of a large number of cases accurately observed d faithfully recorded.

I am, etc.,
T. Spencer Wells.

Upper Grosvenor Street, June 11, 1864.

P.S. As some of your readers may wish to know e result of my entire practice of ovariotomy, I may ıte that I did my hundredth operation on the 2nd of is month. If the patient recover (as, in all probility, she will, though both ovaries were removed), e result will be sixty-six recoveries and thirty-four aths.

ARMY MEDICAL GRIEVANCES.

Sir,—I trust that some of the other representative dies in our profession may follow the example set em by the Edinburgh College of Physicians, in eir memorial to Government on the subject of the rmy Medical Service. On a re-perusal of this docuent, I find that it contains a very fair summary of e grievances which have been laid bare in your lumns from time to time, and which have culmined in the scheme, so degrading to the chief medical d military authorities, of advertising for civil practioners of age up to forty years, to take the place of e military assistants in this country; but it does ot insist upon the point, the most urgent, in my pinion; viz., the establishment finally and without serve of the rank of the army surgeon.

I think that the Warrant of 1858 was chiefly valuble, as respects the *rank and its concomitant advanıge* held out for the future. No arrangement will, I m assured, be effectual which does not finally deterine this point. Rank carries with it regimental authority and social consideration, all-important in a service to which men are impelled to enter rather for honour than for lucre. The rank of the surgeon and assistant-surgeon should be as well defined and as incontestible as that of a colonel in the army or of a captain in the navy. Nothing less than the rank assigned by the Warrant of 1858 will content the profession. At the same time, I am certain that the War Office would find it expedient to adopt most, if not all, the suggestions now urged as to pay, retirement, the question of branding deserters, of confidential reports, etc.

The Army Medical Service may become a vital question sooner than the War Office calculates. In such a case, the friends of the private soldier will demand that the nation in whose service his life, liberty, and health are staked, should secure to him the best surgical talent that can be procured.

I am, etc., A. M.

THE LORD CHANCELLOR'S NEW COUNTY COURT BILL.

Letter from T. L. Walford, Esq.

Sir,—I yesterday read the letter from Mr. Norris in the British Medical Journal for June 11th, and was much surprised at the dark picture of consequences, drawn by that gentleman, if the Bill should pass.

A leading article in the *Times*, published on the introduction of the Bill, led me to suppose it was calculated to effect a great moral reform upon the present practisers of long credit. It appeared to me, that the limiting to one year the right to recover bills under £20, would give to medical men, amongst others, the most powerful argument for urging the settlement of such claims as were in any degree doubtful, and would deprive the debtor of the power of retaliating upon us, that we were hard and impatient.

As the *Times* also showed, it would tend to bring about a system of ready money payments, or of much shorter periods of credit, and so would become a schoolmaster to those who contract debts without due consideration.

Credit is to many unavoidable, and to some unnecessary; the Lord Chancellor's Bill, by abridging its duration, would have been a kindness instead of a harshness. But it seems we are not to have it as it originally stood, which I, for one, am sorry for.

I am, etc., T. L. Walford.

Reading, June 14th, 1864.

The Negro in Disease. In the department of the South there are a number of regiments of coloured troops, and it is a well ascertained fact that they are more liable to disease, and that the mortality is greater than among the white regiments. They rarely ever recover from a severe wound, and when attacked by disease they seem to care but little for life, and die in spite of all remedies and attention. These facts are particularly true of the North Carolina and South Carolina coloured soldiers, the sick reports of which are fifty per cent. larger than those of the white troops; and I find, on referring to my notes, that there were, during the months of November and December, thirty-eight deaths from disease in thirteen regiments, three of which were coloured. The latter lost seventeen men of the thirty-eight. The coloured troops recruited in the Northern States do not suffer to the same degree. (*Dr. Goss, in American Medical Times.*)

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board, on the 8th instant.

Akerman, William, St. Just, Cornwall; diploma of membership dated April 28, 1864
Baker, George Benson, Bayswater; April 26, 1864
Broughton, Henry Todd, Bradford, Yorkshire; May 10, 1864
Lucey, William Cubitt, Bermondsey; January 26, 1864
Mills, Samuel, Consumption Hospital, Brompton; April 23, 1863
Oliver, George, Bourne; July 30, 1863
Puzey, Chauncy, Surrey Square; July 31, 1863
Reade, Albert Comberbach, Congleton; April 27, 1864
Richards, Frederick William, Winchester; April 26, 1864
Salter, John Henry, Arundel, Sussex; April 27, 1864
Viant, Henry, Totton, near Southampton; April 26, 1864

UNIVERSITY OF CAMBRIDGE. At a Congregation holden on June 9th, the following degrees were conferred.

Master in Surgery.
Godson, Alfred, Trinity College

Bachelors of Medicine.
Godson, Alfred, Trinity College
Hoffman, Henry Westwood, Trinity College
Leighton, Edmund Thomas, Caius College

APOTHECARIES' HALL. On June 9th, the following Licentiates were admitted:—

Broughton, Henry Todd, Bradford, Yorkshire
Holden, John, Ardwick and Ancoats Dispensary, Manchester
Maundrell, Edward, Rutland Street, Hampstead Road
Pearse, George Edmund Legge, Regent Street, Westminster

At the same Court, the following passed the first examination:—

Tidy, Charles Meymott, London Hospital

APPOINTMENTS.

ARMY.

CLERY, Assistant-Surgeon G. C., 9th Lancers, to be Staff-Assistant-Surgeon.
CLUTTERBUCK, Staff-Surgeon J. E., M.D., to be Surgeon 42nd Foot, *vice* J. S. Furlong, M.D.
FINUCANE, M., Esq., to be Staff-Assistant-Surgeon.
FURLONG, Surgeon J. S., M.D., 42nd Foot, to be Surgeon 6th Dragoons, *vice* C. A. Turnbull.
HEATHER, D. D., Esq., to be Staff-Assistant-Surgeon.
HEFFERNAN, Surgeon-Major N., M.B., 11th Foot, to be Staff-Surgeon-Major, *vice* W. G. Trousdell, M.D.
HINDE, Staff-Assistant-Surgeon B., to be Staff-Surgeon, *vice* W. K. Chalmers, M.D.
M'DONALD, Staff-Surgeon-Major D. D. M'Cay, to be Surgeon 25th Foot, *vice* R. Browne.
MASON, Honorary Assistant-Surgeon S., in Medical Charge of the Lunatic Asylum at Madras, to have the honorary rank of Surgeon.
SPRY, Staff-Assistant-Surgeon G. F., M.D., to be Assistant-Surgeon 9th Lancers, *vice* G. C. Clery.
TROUSDELL, Staff-Surgeon-Major W. G., M.D., to be Surgeon 11th Foot, *vice* N. Heffernan, M.B.
TURNBULL, Surgeon G. A., 6th Dragoons, to be Staff-Surgeon, *vice* J. E. Clutterbuck, M.D.

ROYAL ARTILLERY. To be Assistant-Surgeons.

BOUCHIER, Assistant-Surgeon G., 93rd Foot.
BOYD, Staff-Assistant-Surgeon W. C.
CALDER, Staff-Assistant-Surgeon W. M., 33rd Foot.
COLLIS, Assistant-Surgeon W., 98th Foot.
FFOLLIOTT, Assistant-Surgeon F., 18th Foot.
GAYE, Assistant-Surgeon A. C., 4th Foot.
HULSEBERG, Assistant-Surgeon J. W., 33rd Foot.
JARDINE, Staff-Assistant-Surgeon J., M.D., 33rd Foot.
KILROY, Assistant-Surgeon A. R., 33rd Foot.
KINAHAN, Assistant-Surgeon J., M.D., 44th Foot.
M'FARLAND, Assistant-Surgeon F. E., 77th Foot.
MOORHEAD, Assistant-Surgeon G. A., 66th Foot.
O'BRIEN, Assistant-Surgeon T. M., 95th Foot.
O'HALLORAN, Assistant-Surgeon W., 74th Foot.
RAMSBOTHAM, Staff-Assistant-Surgeon W. B., M.D.
RUSSELL, Assistant-Surgeon A. S., M.D., 27th Foot.
SLY, Assistant-Surgeon W., 34th Foot.
YATES, Staff-Assistant-Surgeon W. H., 33rd Foot.

ROYAL NAVY.

ALPIN, William J., Esq., Assistant-Surgeon, to the *Implacable*, for the *Martin*.
DEVONSHIRE, Charles J., Esq., Assistant-Surgeon, to the *Warrior*.
FEGAN, Henry, M.D., Assistant-Surgeon, to the *Dauntless*.
O'MALLEY, James V. J., Esq., Assistant-Surgeon, to the *Boscawen* for the *Ferret*.
SCOTT, Alen, Esq., Assistant-Surgeon, to the *Impregnable*, for the *Sparrow*.

MILITIA.

HYDE, G. E., Esq., to be Assistant-Surgeon Worcestershire Militia.
MORRIS, E., Esq., to be Surgeon 2nd or South Devonshire Militia.
WHIPPLE, C., Esq., to be Assistant-Surgeon 2nd or South Devonshire Militia.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

STEPHEN, W., M.D., to be Assistant-Surg. 1st Aberdeenshire A.V.

DEATHS.

CARTWRIGHT, S., Esq., F.R.S., at Tunbridge, aged 75, on June 11.
CROASDAILE. On June 3rd, at Putney, Elizabeth Dillon, widow of Edward Croasdaile, M.D., of Boulogne-sur-Mer and St. David's, Jamaica.
DAVIDSON. On April 29th, at Mhow, Catherine W. J. M'Ghee, wife of Robert H. Davidson, M.D., Acting Deputy Inspector-General, Mhow.
M'GILL. On June 14th, at Tunbridge, aged 15, Kenneth John, youngest son of the late William M'Gill, M.D.
MAY. On June 10th, aged 74, Elizabeth, wife of George May, Esq., Surgeon, Maldon, Essex.
PHILBRICK. On June 12th, at Ipswich, Hannah, wife of Cornelius J. Philbrick, M.D., of Toronto.
PRANCE, James C., Esq., Surgeon, late of Maidstone, at Richmond, aged 76, on June 14.
SMITH, Edmund, M.D., of Ilkley Wells, near Otley, at Richmond, Yorkshire, aged 59, on June 5.
WALLACE, William, M.D., late 14th Regiment of Foot, at Morningside, Edinburgh, on June 7.

LUNACY COMMISSION GRANT. The sum of £5,173 has been voted by Parliament to defray certain expenses of the Commissioners of Lunacy in England and the Board of Lunacy in Scotland.

POISON BILL. Mr. H. Berkeley has given notice in the House of Commons that, on the 7th of next month, he shall ask leave to introduce a bill to amend the Act prohibiting the sale of poisoned seed, passed last session.

THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION. At a congregation held at the University of Cambridge on June 9th, a grace was passed to grant the use of the Senate House and schools for the forthcoming meeting of the British Medical Association, under the superintendence of the vice-chancellor, Dr. Bond (Regius Professor of Physic), and Dr. Paget.

FATAL ACCIDENT TO DR. LYNCH OF BELFAST. Dr. Lynch of Belfast, whilst going to take possession of a mansion near Antrim, which he had lately purchased, was thrown out of his phaeton, and so injured that he died in consequence. Dr. Lynch, who was paralysed on one side, was a highly respectable physician, and for many years one of the medical staff of the General Hospital. He was about fifty years of age. (*Dublin Medical Press.*)

NARROW ESCAPE FROM POISONING. Between thirty and forty boys narrowly escaped last week being poisoned at Birmingham. The London and North-Western Company were having a sale of unclaimed goods; and among the articles were several sacks of Jatropha nuts, which are pleasant to the palate, but poisonous. These nuts were scattered about the floor in a warehouse, and were picked up by the boys in passing; they distributed them among their companions. All who ate them were speedily seized with illness, such as vomiting, pains in the stomach, and torpor. The sufferers were sent to the General Hospital, and by the employment of prompt means they were restored, but in several instances death had well-nigh been the consequence.

SPITAL FOR INCURABLES. The first stone of a wing to the House for Incurables at Putney h was lately laid. The building, it is expected, e finished before next winter.

YAL COLLEGE OF SURGEONS. The annual dinner ake place on July 7th, at the Albion Tavern. A politan Fellow, Mr. J. M. Arnott, will this year the chair; and the meeting, judging from the list of stewards, will be large.

NACY (SCOTLAND). The Lord Advocate has ob- d leave to bring in a bill to continue the Deputy nissioners in Lunacy in Scotland, and to make er provision for the salaries of the deputy com- oners, secretary, and clerk of the General Board nacy, and the bill was read a first time.

NDON HOSPITAL. The laying the foundation- of the wing about to be erected at the London ital, will take place on July 4th. The Prince of s intends to be present, and the Duke of Cam- e will take the chair. The estimated cost of ew wing is £27,000.

ETROPOLITAN DISPENSARY. At the last annual ing of the Metropolitan Dispensary, Fore Street, s resolved that "the plan adopted at the Royal eral Dispensary, and at the Islington, Liverpool, other Dispensaries, of requiring from the patients nominal sum of one penny for each supply of cine, should be adopted."

NON-REGISTERED PRACTITIONER: Alvarez de la *v.* Prieto. This was an action by a foreign me- man, employed by another medical man to d the crew of a Peruvian frigate who were uring under a bad fever while in the Thames, for fees, to which the defendant replied that the ntiff was not registered as a medical man, as re- ed by statute, and could not, therefore, sue for ees; a rule having been obtained to enter a non- and to set aside the verdict for the plaintiff. Court (of Common Pleas) were of opinion that rule ought to be made absolute.

EALTH OF SCOTLAND. The Registrar-General has n to report for May, as for April, that in the t principal towns of Scotland, births, deaths, and riages have all been more in number than he has stered in any May since his office was established, he beginning of 1855. The rate of increase was ter in deaths than in births, but greatest of all marriages. In Paisley and Dundee, half the hs were of children under five years old; and in gow, very nearly half. A fourth of the deaths e due to zymotic (epidemic and contagious) dis- s. Typhus was epidemic, and in Paisley small- also; and whooping-cough was fatal in many in- ces.

OSSIL REMAINS. There has just been deposited he British Museum a large collection of fossils n the cave of Bruniquel, in the department of n et Garonne, which was first opened by its pro- tor, the Vicomte de Lastic St. Jal. The cave a floor which was a perfect mosaic of remains, taining flint and bone instruments, remains of ting and extinct animals, with skulls and other es of man. Professor Owen was invited to visit and he observed and excavated most interesting cimens, which he advised the trustees of the Mu- m to purchase. The Viscount had offered it to own Government, but the prize was let slip. erwards, when Professor Owen had secured the cave- tents for London, Paris made a higher bid; but promise was honourably observed. These silent ofs of primeval man are now in process of exa- nation and description by Mr. Owen.

EXTRAORDINARY SUICIDAL MANIA. In Cheltenham within the past month no less than six persons have committed suicide.

PRIVY COUNCIL EXPENSES. In the House of Commons, Mr. Augustus Smith asked for explanation of £10,600 charged for contingent expenses. Mr. F. Peel stated that of this sum £3,000 was annually placed at the disposal of the Privy Council to pay medical and other officers who were from time to time deputed to conduct inquiries and experiments; £2,000 was for the national vaccine establishment; £2,000 for vaccination inspection; and the remaining £3,600 was a matter of account arising from the medical department of the Privy Council having been unaware of the rule that payments should only be made out of the votes for the current year.

VACCINATION. In the House of Commons Sir J. Pakington asked whether, in accordance with the statement of the Lord President last year, that "the Government were considering the best means of effecting an improvement in the vaccination law." Mr. Bruce believed a very large and unnecessary loss of life arose from neglect of the provisions of the Vaccination Act. Though the provisions of the Act were obligatory, the enforcement of them depended upon the co-operation of boards of guardians, the vaccinating surgeon, and the parents of the children. Where that was given the Act had been tolerably successful, but where that was wanting the result was lamentable. When a similar question was put to the President of the Council in another place, he stated that in his opinion there were only two methods by which the defects of the present law could be corrected. One was the increasing of the compulsory powers of the Act, and the other was by increasing the pecuniary inducement to the vaccinating surgeons, and stated as his opinion that Parliament would not consent to greater compulsory powers, and he did not see his way to the accomplishment of the other alternative. He understood the noble lord in the other House had given notice of his intention to introduce a bill to Parliament which would be referred to a select committee.

DISEASED MEAT. In the House of Commons lately Sir J. C. Jervoise called attention to the charge for expenses connected with the inspection of sheep to prevent the spread of disease, and maintained that the statements in the blue-book were calculated to create a panic among agriculturalists. Every fifth animal, and by consequence every fifth mutton chop, was stated to be diseased, while there was not only death in the pot but in the pail. The total loss by preventible diseases in cattle was estimated at £6,000,000 yearly. He wished to know who was to be held responsible for such statements, inasmuch as the medical officer who had despatched eminent veterinary surgeons on commissions of inquiry, not only through this country but abroad, disconnected himself in a note at the end of his report from the opinions put forward by them. The epidemic diseases were attributed in the blue-book to contagion originally of foreign origin, whereas the medical officer attached to the Customs Department reported that not a single case of small-pox in sheep had entered this country.

MEMORIAL TO SIR HUMPHRY DAVY. On the 10th instant, a large meeting of the inhabitants of Penzance, the birthplace of Sir Humphry Davy, was held in the Guildhall to consider the subject of erecting a memorial to his memory. Mr. Coulson, the ex-High Sheriff of Cornwall, took the chair, having, at the solicitation of the working men, come specially from London for the purpose of presiding, and of paying his eloquent tribute to the memory of Sir Humphry Davy. In the course of the proceedings it was stated

that £1,000 had been offered by two maiden ladies of Penzance towards the memorial, on condition that it should assume the form of almshouses for persons of respectability who had been reduced to poverty through unforeseen circumstances. The committee had accordingly determined to adopt this form of memorial, in combination with a statue, and it was calculated that £10,000 would be required to carry out the idea in a fitting manner. Of this sum about £1,500 has already been subscribed in the town. Resolutions were unanimously adopted in favour of the scheme propounded, and the carrying out of the details was intrusted to the committee already formed. The movement was set on foot by working men. Mr. Coulson delivered a very eloquent address on the occasion, setting forth in detail all the great deeds of the chemist, and giving an interesting biography of him.

Mortality of the French Army. A report on the sanitary condition of the French army during 1862 states that the public health was in general good during that period. No great epidemic had been observed in France. There were 2,871 deaths among the army in France, being an average of 9·42 in 1,000 of the effective force; there were 666 deaths in Algeria, being 12·21 in 1,000; in Algiers 337 deaths, being 17·69 in 1,000; altogether, 3,874 deaths, or an average of 10·14 on the entire effective force. In the year 1846 the average number of deaths in the army was officially announed at 19 in 1,000 for France, and 64 in 1,000 for Algeria. "Such," says the report, "is the progress accomplished within sixteen years in the health of the army." The report further states that the mortality in the year 1860 among men of from 20 to 30 years of age, being civilians, was 11·09 in 1,000, being greater than among soldiers serving in France. The average deaths by disease among soldiers having served less than seven years are 10·46 in 1,000. It is but 5·28 in 1,000 among men serving from seven to fourteen years, and 5·85 in 1,000 among men serving above fourteen years. The greater number of veterans in the army, the less, consequently, the mortality.

Sanitary Science in India. "For many years a fever of a terrible type has been raging over a great part of Lower Bengal, but not until a few months ago did the government deem it necessary to take any steps to check its further progress. It has been estimated that 36 per cent. of the population of the infected district have fallen victims to it. In one part 12,000 out of 18,000 inhabitants died within six years. Medical skill seemed unavailing in its treatment; it comes on suddenly, and commonly kills the patient in from thirty-six hours to four or five days. The doctors call it a 'congestive remittent fever,' and the natives say that it is a new disease, and call it *nutan jwar*. Any one who has seen village life in Bengal will understand the conclusion of the Commissioners, that the fever has been generated by the utter neglect of the most elementary sanitary laws. Close to the mud hut of the ryot is a hole where he places all filth and refuse. The hut itself is surrounded with jungle or bamboo, through which scarcely a breath of fresh air can ever penetrate. There is, perhaps, a tank near, covered with slime and vegetation, in which the people bathe aud wash their clothes, and the water of which they daily drink. They have no other. In the Mahomedan quarters the dead are buried on the borders of these tanks. Or the water is obtained from the river, into which dead Hindoos by the hundred are thrown, and are washed up and down by the tide. Thus the appalling disease is generated; and Dr. Elliot, who has lived in the midst of the district, tells us part of the result. 'Many large *baries*, in which there were formerly thirty or forty residents, have now been left with perhaps one solitary occupant; whole mohullas and streets have been deserted, and large villages, which formerly told their residents by thousands, can now almost number them by hundreds.' The unborn child is infected with it, and dies; old and young, rich and poor, perish like sheep, and it might almost be said that no man regardeth them. The Commissioners evidently do not know what to recommend. The inhabitants of the villages are satisfied with their mode of life and will not change it, and the Commissioners say they are not prepared to advise that they should be compelled to do so. Every year the epidemic becomes worse, and must continue to spread under the present conditions."

Year's Work of a Coroner. Dr. Lankester has just given at a meeting of the Social Science Association, a sketch of his work as coroner for the central district of Middlesex in the year ending July 31st, 1863. The population of the district is stated at 805,975 (meaning probably at the census of April 1861), and he held 1,080 inquests (203 of them at hospitals, prisons, or asylums), one for every 74 persons. The proportion is very much higher in St. Giles's; yet the medical officer of that parish has to state that in 1862, 45 bodies were interred without an inquiry when there ought to have been one. "This is intolerable in a civilised country," he says, "that persons dying in this way should be interred without inquiry; in at least two cases there was *primâ facie* ground for suspecting poison." Dr. Lankester states that "the registration of death and the burial of the body without any medical certificate, is of very common occurrence in London." Very unsatisfactory medical certificates are also accepted by some registrars; sometimes the medical man never saw the deceased either alive or dead. Irregular certificates ought always to be referred to the coroner. In the course of the year there were 53 deaths of new-born children with verdicts of wilful murder or neglect very often on the part of some person unknown; there were besides eight deaths of new-born children from "unknown causes" and eight "accidental deaths," making 69 inquests on new born children. It is, says the coroner, a fearful picture of the moral condition of the district. The crime of infanticide is very much more frequent in some parts of central Middlesex than in others, and the subject seems one that demands investigation. The crime appears to be most frequent among women in domestic service. Sixteen children were picked up in the streets that had never breathed. The absence of any registration of stillborn children is undoubtedly a source of crime. Children are often brought to the undertaker for burial as stillborn without any guarantee for the fact, and where women can find accomplices this presents a very ready method of getting rid of children without any inquiry as to the cause of their death. As many as ninety children were suffocated in bed, some of them first-born children of young mothers ignorant of the necessity of fresh air for the life of their offspring, others the children of parents who had gone to bed not sober and caused their child's death by culpable neglect. With regard to inquests on adults the coroner reports that 70 of the 1,080 deaths were suicides. The largest number of the suicides was by poison, and this is effected often by articles extensively used in various branches of industry, and therefore easily procured for an improper purpose. The year's inquests imply that the tendency to commit suicide is more than twice as great among men as among women, and that men prefer hanging or the knife, women poisoning or drowning. In a large proportion of these cases, habits of intoxication had preceded the act of suicide.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

LECTURE II (*concluded*).

ON SOME POINTS HAVING REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF FIBROUS TUMOURS OF THE UTERUS.

Ovarian Diseases. It is with *ovarian* cases hat the diagnosis is often very difficult. The dif-erential symptoms on which most reliance is usually laced are the following. Ovarian tumours generally ise from one side; fluctuation is felt in them; the hape of the tumour is symmetrical and pyriform; the and can be passed between the parietes of the ab-omen low down and the tumour; and the uterus has shorter cavity. Now, I believe that every one of hese symptoms may be present, and the tumour after ll prove to be a fibroid.

1. The ovarian tumour *grows from one side.* This ay be true in many instances; but fibrous tumours e not unusally found to begin on one side. I have iet several such, more particularly where they contain uid or are situated in the latter walls. Moreover, i the case of pediculated tumours and pelvian bodies,) which I have before referred, these tumours are ommonly found on one side.

2. *Fluctuation* may also be absent in ovarian dis-ase. Though the tumour be ovarian, it may be fibrous. uch a case occurred to Dr. Murphy; and was suc-essfully operated upon by Mr. Erichsen.

Two cases where this occurred are also mentioned y M. Liègeois. (*Bull. Soc. An.*, xxix, pp. 140-41.) In ie first, there was found after death a large tumour f the size of a fist in each ovary, of a fibrous nature. ficroscopically, both exhibited fibro-plastic charac-ers. In the second case, there was a large fibrous umour weighing eight pounds. Another case is ientioned by M. Icery (*Ib.*, xxviii, p. 135), where a rge uterine fibroid co-existed with fibroids of both varies.

But we may have a sensation of fluctuation in a broid produced by four causes: *a.* A comparatively oft, fleshy, flabby condition, quite irrespective of uid; *b.* Unusual vascularity; *c.* The presence of edema; *d.* Uterine false or real cysts, as before een.

a. The following is an example of the first variety, here an extrauterine fibroid, and withal solid, fluc-uated, and was, besides, diagnosed to be ovarian. It related by M. Bourcy. (*Bulletin Soc. Anat.*, xxx, . 160.)

A woman, aged 45, was admitted into the Hôpital ochin, under M. Gosselin. She had had children, and as in good health up to two years back. On admission, ie symptoms were, tumefaction and pain of the ab-omen since the cessation of the catamenia ten or welve months previously. The pains had become reatly worse during the last two months; they were ery severe, like labour-pains. Micturition and de-fæcation were very difficult. She had kept her bed two months, and was only able to stand and walk by using a belt. Abdominal palpation detected a hard, non-fluctuating tumour of the size of a fœtal head, bilobed, larger on the right side. There was an in-dolent hard tumour in the right breast. Vaginal examination revealed the tumour at the bottom of the vagina. No cervix was to be found (which led to the belief that the tumour was external to the uterus). This patient, after suffering agonising pains, only re-lieved by opium, and losing flesh rapidly, died two months after admission.

A *post mortem* examination was made twenty-four hours after death. Palpation made through the ab-domen revealed fluctuation. On opening it, the intes-tines were found to be pushed upwards and backwards, and were contracted in diameter. A large fibrous tumour, rounded, much larger than an adult head, was situated behind the uterus, between it and the rectum, which it compressed behind. The tumour was encysted; it might have been enucleated. The cyst envelope was hard, thick, fibrous, and closely attached to the posterior part of the uterus. The tumour itself, when cut, appeared marbled, here and there tinged with ecchymosis, varying in consistence, friable; percussion of it produced tremblings (*trem-blotements*) in the mass. The union with the uterus was remarkable. It was attached firmly to the tu-mour, and on the right side. The cervix was thinned and elongated. The body, the curvature of which was preserved, was normal, firmly adherent to the en-veloping membrane. On a level with the union of this membrane and the posterior face of the uterus, there was a notable thickening, a hard tissue, fatty, and intermixed with some osteo-calcareous produc-tions. The uterine appendages were healthy. The kid-neys were large, and the ureters dilated, by reason of the pressure of the tumour, to the size of the small intestine.

A more remarkable case still was that of Kœberle's.

It was one of enormous tumour, weighing above sixty-six pounds, which, before the operation, was, by himself as well as others, found to fluctuate. "The sensation of the wave of liquid seemed so evident, that no one could doubt at all that fluid existed in it. This fluctuation was most evident on the left side, and gentle taps could be transmitted through it very clearly to twenty, and even thirty, *centimètres.*" On tapping before the operation, only blood exuded. During the operation, when the abdominal parietes were cut through and the tumour exposed, "at the slightest tap of the finger, the tumour undulated as a mass of jelly, or like a bladder incompletely filled with fluid"; and yet this tumour turned out to be a solid fibrous tumour.

In both these instances, fluctuation was so manifest during life, that a mistake was certain to be made. The great test, however, of the transmission of the aortic sounds, was not tried.

b. The second variety of deceptive fluctuation, from excessive vascularity, is more common; and I have met several examples of it. They are eminently the vascular fibroids. Mr. Brown lately mentioned an example of this kind in his lecture, where a fibroid was complicated by pregnancy; and, no doubt, the false fluctuation here felt was due to this cause. In another case, also of Mr. Brown's, the particulars of which he has kindly forwarded to me, this same feeling of fluctuation existed; and here, also, an exploratory incision was made. When the tumour was cut into, it bled profusely, and then was found to be made up of a number of engorged vessels,

The patient ultimately did well. When so experienced an operator as Mr. Brown is deceived, you may imagine the difficulty of a correct diagnosis in these cases. Yet I think they may often be made out. The souffle, amounting almost to a splenic murmur, sometimes accompanied by a thrill, in them betrays their vascularity. An exploratory puncture will bleed very freely, and often require the actual cautery to be applied to arrest its flow; but if it be small, and made through the vagina, it is not attended, as I have seen, with any objectionable results.

I saw a case of the same kind, which Dr. Greenhalgh kindly shewed me at St. Bartholomew's, in which also this pseudo-fluctuation existed, and where an exploratory puncture was followed by excessive bleeding, which was checked only by the actual cautery; and I have met other cases.

c. The third cause of fluctuation is œdema of fibrous tumours, and it is a symptom which is far more common than is generally believed. I have met with it several times. Once or twice it has appeared to me to have been induced in a previously solid tumour by the very examinations made to diagnose its nature. Occasionally, it has originated from a blow.

In these instances, although fluctuation may be absent, the feel is so elastic that you cannot believe it to be solid. And what adds to the difficulty is, that the single or double cardiac sounds before referred to may be destroyed. Here the previous history, and it may be an exploratory puncture, is the best means of diagnosis.

d. It is, however, with fibroids containing cysts, or fibro-cystic tumours, that the greater difficulty lies. The following example, given by M. Holaire (*Bull. Soc. Anat.*, xxvii, p. 319), and which occurred to M. Rostan, is interesting in illustrating this error of diagnosis.

A woman, aged 46, two years ago, began to enlarge in the abdomen. The tumour began on the right side. At first slow in development, its growth gradually became more active, and she was admitted into the hospital. Rostan diagnosed ovarian disease, and tapped her in the right side. A yellowish urine-coloured fluid came away. The belly now became straight again. No tumour could be felt by palpation. She was much relieved, and no bad consequences followed this puncture. The abdomen was found to enlarge again. She was tapped again, with the same relief. But this was only temporary; for soon the abdomen began again to enlarge, and a tumour could now be felt, which, in a short time, grew to the size of a child's head. Digestive troubles followed. Icterus made its appearance, and marasmus. Finally, she died.

The *post mortem* examination revealed adhesions in the abdomen and partial peritonitis. The broad ligaments, ovaries, and Fallopian tubes, were all healthy. It was the uterus which was the seat of several encysted multilocular tumours, varying from the size of an orange to that of eggs and smaller still, in various degrees of development. There was no cancerous juice. Microscopically, M. Verneuil discovered only fibrous tissue of new formation. It was, therefore, most probably a recurrent fibroid.

I have already alluded to several of these cases in speaking of the softening of fibroids by cystic transformation. The great majority of these were mistaken for ovarian disease, and treated accordingly. I myself have known two instances, at least, where very large fibroids contained much fluid. The diagnosis in the one was correct; that in the second, altogether at fault.

It is in cases like these that the points to which I have before referred, in the necessity of knowing fully the previous history and making a most minute examination, becomes so important. It is here, also, that, short of an exploratory incision, it may be wise to make use of an exploratory needle. The remarkable epithelial bodies and compound cells found in ovarian cysts, and the absence of fibrous *débris*, will at once indicate that we have to do with an ovarian cyst and not a fibroid. This is an important point, and one which I believe has not been before sufficiently dwelt upon. More inquiries, microscopical as well as chemical, are needed to enable us accurately to tell the difference between fluid contained in a fibroid and that contained in an ovarian tumour. Years ago, Dr. Hughes Bennett did do so. In a case submitted to him, he was able to say that the tumour was fibroid in character.

There are two other symptoms upon which I wish to dwell, in connexion with the diagnosis of ovarian disease and fibroids. One is the state of the catamenial function; the other, referred to by Dr. M'Clintock, is derived from the position of the tumour and the inner wall of the anterior part of the abdomen. The disturbance of the catamenial function is not believed to afford much indication in the diagnosis of ovarian dropsy as opposed to the presence of fibroids. Mr. Brown says:

"That we may have irregularity of the menses, an excessive flow, or dysmenorrhœa; but suppression is rare. Nevertheless, we may not be able to discover any such catamenial derangements; and menstruation may have been regular throughout the disease, or become so after its definite establishment. Likewise, suppression attends the development of cancerous disease; and is common where a cyst rapidly developes, or where there has been a large drain of its serous contents. Kiwisch says the arrest of menstruation by the latter causes mentioned, is more frequent in compound than in simple cystic disease; and that, as a symptom, it is not without its value in diagnosis and prognosis." (Brown on *Ovarian Dropsy*, p. 29.)

In bringing these opinions to the statistical test, I obtained the following results. In 150 cases, selected from my own experience and from that of others, and including several cases kindly furnished to me by Dr. Greenhalgh, I have noted the state of the catamenial function.

In 64, or 42.6 per cent., it was regular. In 44, or 36.6 per cent., it was arrested; but this number is too high; for in seven only was the suppression directly traceable to the development of the tumour. In 17 again, the women were about 45, at which age the catamenia cease normally.

In 14, or 9.2 per cent., menorrhagia or profuse menstruation existed.

In 16, the catamenia were irregular; but 3 were about 45 years of age, and 4 had always had irregular menstruation; the percentage under this head would, therefore, be about 8 per cent.

3 women had never menstruated; 2 had dysmenorrhœa; and 9 had scanty menstruation.

In most cases, therefore, if we exclude extrauterine fibroids, the differences in this function are sufficiently broad materially to exclude error. The state of menorrhagia is normally that of fibroids; quite exceptionally that in ovarian disease.

Dr. M'Clintock states that, where we have an ine tumour, the hand, say in its ulnar edge, not be passed down but to a very small extent ween the internal abdominal wall and the tumour. ovarian tumours, the ulnar edge of the hand can passed deeply between them. However unplea- it is to differ from so high an authority, I am pelled to say that my experience cannot confirm statement. This is particularly the case in those nples where the uterus is lengthened by the ous growth and the bladder pushed up with it. erever, also, in an ovarian case, or even in an or- ary abdominal tumour, there are adhesions, the fails. But, even without such adhesions, and in rian tumours, it cannot be done.

n conclusion, I must say that there are a class of s which are still more puzzling; I mean those mples of fibroid coexisting with ovarian dis- and solid ovarian tumours. I have collected s of several such cases.

he case before quoted of M. Bouchet (*Bull. Soc.* xxviii, p. 10) was an instance of a fibroid of the rus with ovarian cysts. M. Jury's case (*ib.*, p.) was also an example of fibroids in both uterus ovaries. M. Jules Simm (*ib.*, 2nde liv., iii, p. 69) recorded a case of fibrous tumour complicated h hernia and with ovarian cysts. This patient operated upon for hernia. An artificial anus was result, of which, with gangrene of the parts, the ient died.

he *post mortem* examination revealed an uterus dded on its whole surface with fibrous tumours, n the size of a lentil to that of an apple. One of se was encysted, and contained an unctuous low liquid. The uterine cavity was the shape of letter S. The two ovaries were replaced by two ts of the size of an egg. Another case is men- ed by M. Bouchet (*ib.*, xxix, p. 136), in which two rmous fibroids, one on each side of the uterus, ger than the fists, interparietal, existed, and the t ovary contained a cyst as large as the two other iours conjoined.

Without question, the diagnosis in such cases is y difficult; nor have I anything now to advance this point.

NIVERSITY COLLEGE. The Atkinson Morley Sur- al Scholarship has been awarded to Mr. Alexander ace, of London. The scholarship is of the value of *per annum*, for three years.

HE EXODUS OE MEDICAL OFFICERS FROM INDIA. e *Bengal Hurkaru* states that a large number of most distinguished of the medical officers of the East India Company are leaving India.

MALL-POX IN BERLIN. The small-pox is at present ing in Berlin, and carrying off numerous victims ry week. A panic has begun to seize the popula- on this account, and every morning the public dical institutions are besieged by crowds of adults ious to be revaccinated, as well as by infants in arms of their nurses who are to be subjected to process for the first time.

APE COAST CASUALTIES. Returns just issued shew t amongst the many deaths of soldiers which have urred on this fatal coast—of sixteen officers—are names of Assistant-Surgeons Rutherford and oper. And amongst twenty-two officers invalided ne are Surgeon Skeen, Assistant-Surgeon Sandi- , Assistant-Surgeon Crow, Assistant-Surgeon ghton, and Assistant-Surgeon Lewis.

Original Communications.

THE THERAPEUTICS OF CONSUMPTION.

By RICHARD PAYNE COTTON, M.D.; Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

[*Read before the Medical Society of London.*]

THERE are few maladies in which Medicine has borne so variable a reputation as in consumption. We have heard over and over again of "specifics" for this disease; and over and over again has the honest but disappointed physician expressed his conviction that phthisis is scarcely, if at all, under his control.

In the present communication, I shall endeavour to show that whilst, on the one hand, we may confidently assert that at present, at least, we have no *specific* remedy for consumption, we may, on the other hand, as confidently assert that our materia medica offers a number of auxiliaries of more or less value and importance in the treatment of this disease.

With a view to determine experimentally the comparative value of different therapeutic agents in consumption, I resolved, some five or six years ago, to prescribe certain substances to a given number of my hospital in-patients, taking care that such cases were free from all acute symptoms, as well as from any particular complications requiring special treatment. Each of the following substances was thus administered to twenty-five patients, this number having been chosen as sufficient, perhaps, for the purpose, and as possessing the advantage of at once showing a *percentage* simply by multiplying by four; viz., phosphorus; liquor potassæ; hydrochloric acid; iodide of iron; iodide of potassium; chloride of sodium; vinum ferri; glycerine; sesquichloride of iron; chlorate of potassa; quinine; phosphoric acid. The experiments were published from time to time in the *Medical Times and Gazette;* but hitherto they have not been compared with each other, neither has any attempt been made at a general conclusion.

Here I may as well anticipate one or two very possible objections to my experiments. Some may consider that the number of cases was too small to show any satisfactory result; whilst others may suggest that there could not have been sufficient similarity in the cases themselves to render the several conclusions trustworthy. To the first objection I would reply, that it has taken me five years to observe the effects of these twelve substances upon the number of cases I determined upon; and as there is a limit not only to life, but also to the time and capacity for working out such observations, I felt it was impracticable to augment the number of patients for each experiment. And to the second objection I would remark, that, as it is no inconsiderable difficulty to discover even *two* consumptive persons strictly alike in all their symptoms, the attempt to find *twenty-five* parallel cases would have been fruitless. I may, however, at once state that I am desirous that my experiments should be taken only for what they are worth. They do not profess to be absolutely conclusive, but are simply intended as certain additions to that general stock of therapeutical facts which, when put together and thoroughly sifted, may, some day or other, lead to the discovery of important truths.

Phosphorus in many cases proved a good tonic and stimulant, increasing both the appetite and strength

of the patients. In a few instances, however, it obviously disagreed, producing nausea, a distaste for food, and abdominal derangement. Four of the patients (three of whom were in the first, and one in the last stage of the disease) left the hospital materially improved in every respect, and apparently with their general health restored; but several of those who derived no benefit from the phosphorus improved afterwards under other treatment. It was administered according to the formula of the Prussian *Pharmacopœia*, in which four grains of phosphorus are held in solution by an ounce of olive oil. Of this solution, from five to eight minims were given in a little mucilage twice or three times a day. Five minims contained one-twenty-fourth of a grain of phosphorus.

Liquor Potassæ, given in doses of fifteen minims two or three times a day, altogether failed to support its ancient reputation as a "deobstruent" in phthisis. It seemed generally to be inoperative; and a considerable number of patients, in whom it had produced no visible effects, improved afterwards under different treatment.

Hydrochloric Acid, on the other hand, was productive of very marked benefit. In doses of ten or fifteen minims of the dilute acid two or three times a day, it generally increased the appetite, and lessened many of the urgent symptoms, especially excessive perspiration and pulmonary secretion. Under its continued use for several weeks, many of the patients materially improved.

Although, in certain dyspeptic conditions, the alkalies, in various combinations, are oftentimes of very great use in the treatment of phthisis, it appeared that the acids *separately* are far better suited to the so-called tubercular "crasis" than the alkalies *separately*. Several patients, who had made no progress under the liquor potassæ, improved very much when this was changed for hydrochloric acid; and four, who had been taking the acid with advantage, but to whom liquor potassæ was given as a change, urgently begged to return to the acid. In very few instances did the hydrochloric acid disagree; now and then it appeared to cause a little gastric pain, but it was never necessary permanently to abandon its use. I have reason to believe that the other mineral acids will be found as effective as the hydrochloric. The circumstance, however, that the free acid frequently occurring during healthy digestion is the hydrochloric, and that this acid is the well-known solvent of the plastic constituents of the food, made me select it in the present experiments; but I have often prescribed both the nitric and the nitro-hydrochloric acids in the wards of the hospital at Brompton with the same good result.

Iodide of Iron, in doses of a drachm of the syrup two or three times a day, appeared greatly to benefit several of the very early cases, and was particularly serviceable in some which exhibited evidence of chronic secondary pneumonia. In a few instances it was discontinued, on account of its producing headache, with dyspeptic symptoms; but, as a general rule, it seemed to agree with the patients. Under its influence, many gained materially in weight.

Iodide of Potassium, which was at one time held in great repute in the treatment of phthisis, seemed remarkably ineffective in most of the twenty-five cases in which it was employed. Occasionally it gave rise to some dyspepsia, but more commonly its administration was unattended by any decided result. Only six cases materially improved during its use; and, in nearly every instance in which it was given, the patient's weight sensibly diminished.

Chloride of Sodium was prescribed in doses of from one to three drachms dissolved in water, two or three times a day. It was observed that one drachm could generally be taken without producing nausea; tha in a few instances, two drachms caused a slight d gree of sickness; whilst three drachms sometim gave rise to actual vomiting; although, as a gener rule, these larger doses, when gradually arrived did not disagree with the stomach. A larger do could be taken after meals than when the stoma was empty. In only three cases out of the twent five was thirst complained of. In this experiment, fair number of patients increased in strength a appetite, justifying the conclusion that, in many su cases, common salt deserves to rank as a tonic.

A large amount of chlorides was always found the urine of those who were taking the salt; but little in relation to the quantity administered, th much must either have passed off by the bowels, remained in the system. The search after chlorid led to the discovery that the urine of all consumpti patients, even of those in the last stage of the d ease, contains such compounds in considerable qua tity.

Steel Wine proved a most useful auxiliary in t treatment of a considerable number of patients. seldom disagreed, but tended rather to increase t appetite and improve digestion. In the cases children and young persons, especially when co bined with cod-liver oil, it was remarkably effi cious. The dose varied from two drachms to half ounce, and in a few cases to an ounce, once or twi a day. From half an ounce to an ounce of the vin ferri, taken immediately after dinner, is, I belie one of the best means of administering steel in pht sis. In this way, it seems to interfere less with t function of digestion, and to be more easily absorb into the system.

A well-known French author, M. Trousseau, h recently asserted his belief that steel, so far fr benefiting, not unfrequently engenders phthisis. H he not here failed in the distinction between the *p* and *propter hoc?* Unquestionably, many beco consumptive in spite of all the steel we can get th to take; but, if consumption were connected w steel-taking, assuredly this disease would be ev more common than it is!

Glycerine has been much extolled by some writ as a remedy for phthisis. I gave it in doses of fr one to two and occasionally three drachms twice a sometimes three times a day. In five of the twen five cases, it either caused sickness or otherwise agreed. Sometimes it seemed to relieve the cou but few of the patients derived any material ben from its use, and very few of them gained anyth in weight whilst taking it. Several, who made progress under the glycerine, improved subsequen under cod-liver oil. Many observations were m in reference to the comparative usefulness of th two agents, the result being invariably and very c siderably in favour of the oil. In ordinary case phthisis, indeed, I believe glycerine to be of little

Sesquichloride of Iron conduced to some very ha results. A large number of cases improved under use; and six patients in whom the disease was cidedly established, after having taken it for sev weeks, left the hospital with their health resto and in a condition to resume their respective occu tions. Were I to be asked which of the twelve re dies I had found most generally adapted to the o nary run of consumptive cases, I should say sesquichloride of iron. For several years I have b in the habit of prescribing it in doses of from te fifteen minims twice a day; and the mixture of sesquichloride of iron is one of the most freque employed formulæ of the Consumption Hospital *P macopœia*. In private practice, it may be agree taken in combination with lemon or orange sy

l in this way it may be continued with advantage many weeks, and even months.

Chlorate of Potassa, like glycerine, has won various nions as to its influence upon consumption. By e physician it has lately been considered even as a *cific*, whilst by others it has been deemed altoher a failure. After a careful analysis of its effects the twenty-five cases, I came to the conclusion it it was very far from a *specific;* and that its useness was seldom apparent, except in those caectic cases in which it and allied remedies are frently serviceable.

Quinine, in doses of one or two grains twice and netimes three times a day, although well suited parently to a few of the twenty-five cases, gene-ly produced disappointment; its effects being, as a le, inferior to those of many other tonics. It would em that quinine, like chlorate of potass, is chiefly eful in a certain class of cachectic patients, in ich, irrespective of the tubercular condition, such ents are very generally prescribed. Several of the tients, however, who had scarcely benefited by the inine alone, improved subsequently under the comned influence of quinine and iron.

Phosphoric Acid was prescribed in doses of fifteen inims two or three times a day. In three or four ses, it seemed to produce pain in the bowels, with usea and loss of appetite; although, as a general le, it agreed very well. Only three cases improved aterially under its influence; whilst several of those whom there was a moderate improvement benefited much more under other treatment. Phosphoric id may be classed amongst the mineral acids as a eneral tonic in phthisis, but seems to me inferior to me of them, especially the *hydrochloric*.

The following table shows the general effect of ese various agents upon the twenty-five cases in hich they were administered.

	Considerably improved.	Slightly improved.	Not improved.
1. Phosphorus	4	5	16
2. Liquor Potassæ	1	2	22
3. Hydrochloric Acid	11	6	8
4. Iodide of Iron	10	4	11
5. Iodide of Potassium	6	5	14
6. Chloride of Sodium	8	6	11
7. Vinum Ferri	13	3	9
8. Glycerine	4	2	19
9. Sesquichloride of Iron	12	5	8
10. Chlorate of Potassa	5	4	16
11. Quinine	7	5	13
12. Phosphoric Acid	3	8	14

It must not be forgotten, in estimating the therapeutic value of these different substances, that this s illustrated by the table rather *comparatively* than *bsolutely;* since we must not exclude from its proper hare in the result the combined influence of hope, est, good diet, and general hygiene, under which, ven by itself, many phthisical cases are well known o undergo very considerable improvement. The igures, indeed, can only be taken as a fair expresion of the *comparative* usefulness of the various gents as therapeutical auxiliaries to general treatnent.

The experiments to which I have thus briefly alluded, and which will be found more fully described n my papers in the *Medical Times and Gazette*, appear to be suggestive of the following general conclusions.

1. Since, during the administration of each one of he agents described above, several cases of phthisis were observed to run through the various phases of he disease, some even to a fatal termination, it is bvious that, whatever the amount of benefit which n some cases followed their use, no one of such gents deserves the title of "*specific*".

2. It may, therefore, fairly be concluded that the good effected by any of these agents was due to their respective tonic and upholding influence upon the general system.

3. In the majority of phthisical cases, steel (especially the sesquichloride of iron) and the mineral acids appear to be the most effective; but tonics generally are productive of more or less improvement.

4. Since, however, even steel and mineral acids, as well as other useful tonics, are undoubtedly inert in a certain proportion of cases, it is not improbable that there are varieties or modifications of phthisis, each of which may require a particular treatment. As there are special varieties of many other diseases, requiring special modes of treatment, and yielding to none other, it is possibly the same with consumption.

I would observe, in conclusion, that I think we are too apt to consider and to treat phthisis as a separate and always similar disease, disregarding the almost endless varieties it presents. Whether such varieties are dependent upon original differences in the nature of the disease itself, or are determined by peculiarities in the individuals it may attack, we at least have before us a large field for experimental therapeutics. My own idea is, that the time is not distant when observation and experiment will show that, under certain at present obscure conditions of system, phthisis assumes definite and special forms, each of which requires definite and special management; and that the "therapeutics of phthisis", which many may now consider both unsatisfactory and unpromising, will contribute, some day or other, to great and unexpected results. I am not so sanguine as to look for a *specific* in consumption; but that the disease will ultimately prove as amenable as many others to proper management, is, I hope, not a mere day-dream.

TARTARISED ANTIMONY AS A REMEDY IN STRUMOUS OPHTHALMIA.

By William Price, M.D., Surgeon to the Metropolitan Infirmary for Scrofulous Children; Surgeon to the Metropolitan Establishment for Scrofulous Adults, Margate.

A short but valuable notice, from the pen of Mr. Edwin Chesshire, appeared in a recent number of the British Medical Journal, on Tartarised Antimony as a Remedy in Strumous Ophthalmia. That the plan of treatment therein recommended is both little known and little practised, I am fully convinced; and my object in again bringing the subject forward in these pages is to endorse the statements of Mr. Chesshire, in the hope of inducing practitioners to follow this mode of treatment on a more extended scale.

During the past six years, 109 cases of strumous ophthalmia, occurring in children under 15 years of age, have been admitted into the Metropolitan Infirmary at Margate. Out of this number, thirty-eight suffered with photophobia; and twenty-five had either vascular corneæ or phlyctenular ophthalmia. They had been all, or nearly all, treated by the administration of tartarised antimony in small but repeated doses; and, save in a few instances, with the most marked and decided benefit.

My attention was first directed to this plan of treatment in the Paris schools; and the success I there witnessed attending its employment, induced me early to forsake the more routine practice of giving cod-liver oil and tonics. It must not be supposed that I have overlooked the beneficial effects of sea-air and a liberal diet upon the London poor when removed to this salubrious climate; for the cases mentioned have been generally those in which the children had resided some short time by the sea-side.

Amongst a large number of private cases annually coming under my care, I cannot call to mind a single instance in which tartarised antimony has been prescribed. From this circumstance I gather, too, that surgeons rarely resort to, or do not sufficiently appreciate its singular efficacy in certain cases of ophthalmia occurring in scrofulous subjects, in the adult as well as in the child.

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

LACERATION OF THE PERINÆUM.

By William Hoar, Esq., Maidstone.

[*Read at Dartford, April* 29, 1864.]

I have made choice of the subject of Laceration of the Perinæum during Labour, not because I have anything of my own to relate concerning it, but in order to draw from those around me their experience and practice; and I think all will agree that it is a matter of no small importance.

There are, of course, various degrees of laceration; from the merest "nick" in the fourchette, to the terrible rent passing through the sphincter ani into the rectum; but, having regard to treatment, I divide them into two classes; viz., 1, that extending as far as (not through) the sphincter; 2, through the sphincter into the rectum.

We will consider: 1. When it occurs; 2. How it occurs; 3. The best means of preventing it; 4. Treatment.

Before proceeding to these points, it is hardly necessary for me to allude to the anatomy of the part, which is very simple; but we must not forget the semilunar membranous fold, a little behind the fourchette, which, however it may be torn in the first days after marriage, is not unfrequently a distinct item in the resistance offered to the passage of the fœtus in a first labour, and in which one form of laceration commences.

1. The most usual occasion on which laceration of the perinæum occurs is, of course, a first labour; although, in cases where the first child is small and the labour much protracted, it may occur at subsequent labours for the first time, if the fœtus be very large and the labour rapid.

2. How does it occur? What is its cause?

It is generally laid down that the most frequent—nay, almost the only—cause of laceration of the perinæum, is the passage of the head through the vagina, and the vulva especially; and, no doubt, that is sometimes the cause when the head is large and hard, the perinæum rigid and unyielding, and the pains rapid and powerfully expulsive. In such cases, I believe, the rent first begins in the semilunar membranes on the inner surface of and within the vagina; and extends outwards and forwards to the margin of the perinæum, and backwards towards the anus.

I am of opinion, however, that there is a far more frequent cause of laceration, whenever it does occur, which acts subsequently to the expulsion of the head. I make it a rule, immediately after the head has passed through the vulva, during the lull that almost always occurs after those terrific pains that have expelled it, to ascertain that the margin of the perinæum is entire; and having satisfied myself that such is the case, I have been astonished to find, when the whole fœtus has been born, a laceration of the perinæum. I could not, for a long time, make up my mind as to how this state of things was produced. I thought it must arise from the passage of the pelvis of the fœtus; but, after close observation in the few cases that have come before me, I am convinced that, in most, if not all, it occurs at the moment when the hands, folded over the chest, emerge through the vulva. And it is not difficult to understand how this may happen; the chest, we know, is not much less in girth than the head; it well-nigh fills the calibre of the vagina; by itself, it would readily and easily follow the head, without damage to the wall of the vagina; but, upon it, increasing its dimension considerably, and that not equally, but at one point especially, with a sharp angular projection, are the hands; which, I believe, when the perinæum is not soft and yielding, or when the chest of the fœtus is unusually large, cause the tissues, tightly stretched over them, to give way.

3. How is the accident to be prevented?

I do not hesitate to say that, occasionally, laceration of the perinæum is inevitable, and its occurrence does not necessarily indicate want of either skill or attention.

In unusually rapid labours, where you have a wide shallow pelvis and an os uteri that dilates quickly, with a rigid unyielding perinæum, a large fœtal head, and powerfully expulsive, quickly recurring pains, the occiput comes down upon the perinæum in a few hours; there has been no time for preparation of the external parts, as it were; and, with the most vigorous efforts possible to restrain and hold back the head from making a hasty exit into the world, you cannot succeed, but find, to your disappointment and annoyance, a considerable rent in the perinæum. These cases do and must occasionally occur. In ordinary labours, I believe, there is no better plan than using the left hand, protected by a napkin, to steadily and gently support the perinæum; at the same time, during each pain, when the head is pressing on it, drawing it forwards so as to stretch and elongate it. In the subsequent stage, after the passage of the head without damage to the perinæum, the prevention of laceration is easy, but not practicable, by the same means of supporting with the hand; the shape of the parts over which the tissues are stretched forbids it. The most efficient means is to take advantage of the interval of ease which almost always occurs after the expulsion of the head, and hook down the arms, one after the other, by sweeping them over the chest, thus removing the prominence over the sternum entirely or rendering it less salient. This proceeding is, of course, rarely necessary after the first labour, except in cases where the perinæum is rigid or the fœtus very large.

4. Treatment of laceration when it has unfortunately occurred.

We need not be over much disturbed at the appearance of the rent, unless it extend into the rectum through the sphincter (a very serious case); for that which, directly after labour, appears a terrible slit of enormous extent, in the course of a few days will seem a trifling lesion, which, with care and attention, readily heals, and is of no material consequence; the only points to insist upon are quiet, rigid cleanliness to be observed by the nurse, and care to ensure that the evacuation from the bowels be soft and lax. Sutures are of no use, but rather undesirable; they soon ulcerate out, and only alarm the patient and her friends.

In the more formidable case, where the rent extends into the rectum, one need not despair. I have never had such cases; but records of them exist. The last that I have found is recorded in our Journal in 1861 by a Dr. Robertson. He kept the patient per-

ctly still, ensuring apposition of the parts by tying e legs together, and preventing action of the bowels r seventeen days by repeated doses of opium, and ie result was a perfect cure. The vagina was washed it daily.

Reviews and Notices.

ECTURES ON EPILEPSY, PAIN, PARALYSIS, AND CERTAIN OTHER AFFECTIONS OF THE NERVOUS SYSTEM, delivered at the Royal College of Physicians in London. By CHARLES BLAND RADCLIFFE, M.D.; Fellow of the Royal College of Physicians; Physician to the Westminster Hospital; etc. Pp. 340. London: 1864.

[*Concluded from page* 666.]

VE now come to the pathological and therapeutical iews enunciated by Dr. RADCLIFFE in the last four ectures of his work; and these views, as will be anicipated, are in accordance with the physiological loctrines propounded in the preceding lectures.

The first subject on which he offers observation is Convulsion; and of this he considers the pathology, is deduced from the condition of the respiration, of he circulation, and of the innervation. The types of convulsion selected are those of epilepsy and epieptiform disorder, hysteria, and chorea.

The convulsive paroxysm in epilepsy and hysteria, Dr. Radcliffe says, is preceded by or associated with lefective respiration. In regard to epilepsy, the proof of this is not very complete; but Dr. Radcliffe thinks that the sighing, which is frequent in epileptics, indicates a want of breath; and he has also observed that, in some cases of convulsion during sleep, the fit has been preceded by a complete arrest of respiration for some moments. In hysteria, the breathing, though not absolutely arrested, is shallow and embarrassed. Again, during the epileptic or epieptiform convulsion, grave interruption to the respiration is indicated by the symptoms of suffocation which present themselves—symptoms which "suggest he idea of death by the bowstring of some invisible executioner."

Regarding the circulation, Dr. Radcliffe's first proposition is that, "in the *chronic* form of convulsive disorder, the interparoxysmal condition is usually narked by evident signs of a feeble circulation." This he finds to be the case in all the chronic forms of epileptic and epileptiform disorder, in hysteria, and n chorea. Again, the corpse-like paleness of the countenance—first noticed by M. Delasiauve—which precedes an epileptic or epileptiform paroxysm, is nother evidence of failure in the circulation.

Dr. Radcliffe now notices the state of the circulaion during a convulsive paroxysm. Here the pulse s usually full, strong, and frequent; but, as to the ause of this condition, there are two opinions. It s generally believed, that an increased quantity of *ed* blood is then thrown into the arteries; and this loctrine has been especially developed by the late Schroeder van der Kolk, in his work on Epilepsy, ranslated by the New Sydenham Society. On the ther hand, Dr. Radcliffe holds that, during the epieptic paroxysm, the arteries are labouring under a oad of *black* blood; that, as in suffocation, "the arerial system becomes gorged at the expense of the venous system, and that the pulse in the arteries becomes stronger and stronger, as the blood within these vessels becomes more and more venous." In proof of this opinion, he refers to some experiments on the state of the circulation during suffocation, performed by the late Dr. John Reid, and by Professor Draper, the younger, of New York.

"In a rabbit in which he had laid bare the great vessels of the neck and tied the windpipe, Dr. Reid saw the blood in the carotid artery change from red to black as the process of suffocation went on, until its colour became indistinguishable from that of the black blood in the neighbouring jugular..... The force of the pulse in the carotid..... became greatly increased, perhaps doubled, during the time that the process of suffocation was in progress."

From this fact, and from a similar one observed by Dr. Draper, Dr. Radcliffe opines that the powerful pulse of convulsion may be merely the pulse of suffocation—"the *apnœal pulse*, as it may be called." These considerations, he observes, explain some apparent anomalies; such as the frequently black colour of blood drawn from the temporal artery during a fit, and the power of the pulse in cases of pulmonary congestion and other conditions where aëration of the blood is impeded.

Conversely, Dr. Radcliffe holds that "convulsion is never coincident with a state of active febrile excitement of the circulation." In the fevers of early childhood, convulsion not unfrequently takes the place of the rigor of more mature age; and is confined, according to the author, to the cold stage—except where there are certain brain or kidney complications. It never, he says, occurs during the hot stage of fever; and further, he believes that there is "something uncongenial between convulsion and the hot stage of the sympathetic fever connected with inflammation"; for cases of epilepsy have come under his notice, in which the fits were suspended during the presence of fever produced by a burn or fracture.

As to the immediate cause of the convulsion attending the close of Bright's disease, Dr. Radcliffe leaves the question open, whether they arise from anæmic poisoning, or (as Dr. Watson is of opinion) from the pale and watery condition to which the blood is reduced. All he lays down as certain is, that in such instances the circulation is enfeebled.

Finally, in evidence of the connection of convulsion with enfeebled circulation, he refers to the production of epileptiform convulsion by direct and sudden loss of blood.

As to the innervation, Dr. Radcliffe first comments on the fact that signs of defective brain-power are scarcely ever absent in persons who are liable to chronic convulsive disorder; and, in so doing, he notices the deficient mental power in persons subject to epilepsy, hysteria, and chorea. In epileptics, however, the state of the mind is that of dulness; while, in the hysterical and choreic, there is an excess of sensitiveness—a more or less marked morbid vivacity, conjoined with a defect in the controlling power of the will.

Dr. Radcliffe then goes on to comment on the facts, that all signs of mental life are abolished, or nearly so, during the convulsive paroxysm; and that the appearances after death are not such as denote a necessary connection between convulsion and inflammation of the nerve-centres. He also shews that con-

vulsion is not a symptom of congestion of the cerebral veins; and then goes on to observe, that the state of the nervous system known as "irritation" is not the equivalent of inflammation. This "irritation" has already been shown in the physiological portion of the lectures to be probably equivalent to a state of action on the part of the nerves; and, according to the part of the nervous system affected, it may, Dr. Radcliffe observes, produce very opposite results, such as "paralysis of ordinary muscles, or anæsthesia or some analogous condition of the special sensation, or congestive and inflammatory changes"; these conditions being, not direct effects of the "irritation", but results of the relaxation of muscles or of blood-vessels, following a prolongation of the state of action.

Dr. Radcliffe's main conclusion as to the state of the nervous system during convulsion is this:

"The condition of the respiration and circulation during convulsion is one which necessitates the conclusion, that the convulsion is connected with a state of depressed nervous energy, and not with a contrary state of things."

Having expressed his opinions on the pathology of convulsion, Dr. Radcliffe goes on to speak of its treatment. The first point on which he insists is, that "the diet in many cases of chronic convulsive disorder ought to contain somewhat more than an average quantity of oily and fatty matters, and somewhat less than an average quantity of lean meat." He also believes that, in such conditions, suitable gymnastic exercises (such as increasing the respiration by raising the arms) are often useful; that the frequent use of purgatives may do more harm than good; that bromide of potassium is an invaluable remedy in many cases; that cod-liver oil is also very beneficial; that phosphorus is suitable in many cases; that the efficacy of belladonna is to be doubted, but that opium may be a more suitable remedy; that the efficacy of zinc in ordinary epilepsy and cognate cases is doubtful; that alcoholic stimulants are very trustworthy in the prevention and treatment of convulsion; that blood-letting may sometimes be permitted, not to prevent convulsion, but to prevent certain consequences of the convulsion, as when the cerebral veins may be so gorged with black blood as to put the patient in imminent danger of apoplexy.

Dr. Radcliffe was led to employ bromide of potassium, in consequence of a remark made at a meeting of the Royal Medical and Chirurgical Society in 1853 by Sir Charles Locock, who had found this remedy useful in several cases of epilepsy connected with uterine irritation. During the next four or five years, Dr. Radcliffe used the bromide of potassium in similar cases with satisfactory results; and subsequently he extended its application.

"In the summer of 1858, I began to give this medicine almost promiscuously in cases of epilepsy and epileptiform disorder, and from that time to this I have been continually finding fresh reasons for persevering in the practice. I have given it in cases the most dissimilar in their character—almost promiscuously, as I have said; and the conclusion at which I have arrived is, that bromide of potassium is the one remedy in epilepsy upon which most dependence can be placed, and that a brighter future in the fortunes of epileptics may be dated from the evening when Sir Charles Locock gave utterance to the words which have just been quoted." (Pp. 233-4.)

The *modus operandi* of bromide of potassium is not positively determined; but Dr. Radcliffe opines that it has an alterative action on the blood, somewhat analogous to that of iodide of potassium. He admits that, before he began to use the bromide of potassium, he had "found decided benefit in many cases of epilepsy from occasional doses of bicarbonate of potass or sesquicarbonate of ammonia, with or without a little iodide of potassium, or tincture of colchicum, or wine of white hellebore." Bromide of ammonium he finds to act like bromide of potassium; but bromide of iron, as far as his experiments on about thirty cases denote, is decidedly inferior.

Fatty and oily articles of diet, and cod-liver oil, are used by Dr. Radcliffe on the ground that fatty matter is an important ingredient of brain- and nerve-tissue; and he has "no reason to be dissatisfied with the results." Phosphorus he has given for the same reason, and with a similar conclusion as to the result. When the lectures were delivered, he used to give, in conjunction with cod-liver oil, the phosphorated oil, or the ethereal tincture of phosphorus, of the French Codex; but subsequently he has almost entirely discarded these for the hypophosphites.

Dr. Radcliffe's reasoning in regard to the pathology of Tremor is similar to that which he has employed in regard to convulsion; and his conclusion is the same—viz., that the "condition of the three great functions of respiration, circulation, and innervation, is one which warrants the conclusion that the morbid muscular contraction is the sign of depressed and not of exalted vital energy." In this disorder, too—as illustrated in delirium tremens and paralysis agitans—Dr. Radcliffe attributes benefit to the use of cod-liver oil and of an increased quantity of butter and fat.

The next subject treated of is Spasm; and the author arrives, as to the pathology and treatment of this condition, at similar conclusions with those already described. In the course of his remarks, he discusses at some length the question whether spasm is antagonised or favoured by inflammatory excitement in the nervous system. In tetanus, he observes that changes are sometimes found in the spinal cord, which point to the existence of inflammation. Such changes were found in eleven out of nineteen cases at Guy's Hospital, recorded by Mr. Poland; but the fact that the cord was healthy in eight of the cases shews that "inflammation is not essential to the existence of the tetanic symptoms". On the other hand, again, it is not "altogether certain that spasm is an essential accompaniment of primary myelitis or primary spinal meningitis". He gives a sketch of the features of these two diseases, principally derived from the writings of M. Ollivier. In pure acute myelitis, spasm in any form does not appear as a symptom; when it does so, it is probably due to the concomitance of spinal meningitis. In the last named disease, spasm is looked on as a conspicuous symptom, and as the characteristic symptom. This view, however, Dr. Radcliffe calls in question. He doubts, indeed, whether the spasm of spinal meningitis is true spasm at all.

"Not only are there remissions—often wide remissions—in the spasmodic accompaniments of acute spinal meningitis, but the contraction which is called spasm may be looked upon as an instinctive or semi-voluntary act of muscular contraction in the muscles

ıe spine, of which the object is to fix the spinal mn immovably, and in this way to prevent the ı which the inflamed cord must experience at y movement of the column." (P. 276.)

urther, supposing this to be true spasm, the oc- ence of the contractions in tetanus independently nflammation; the limitation of the contractions spinal meningitis to a particular set of muscles— se of the back; and the absence of spasm in acute elitis—point, in Dr. Radcliffe's opinion, to the -connexion of spasm with inflammation. But he s further; and, arguing as in the case of convul- ı, he observes that

"It is difficult to repress the thought that spasm y be antagonised rather than favoured by inflam- tion of the spinal cord—that the place of spasm y be in the cold stage before the hot stage of this ammation; in the stage of anæmia, and not in the ge of hyperæmia; in the stage of irritation, and in the stage of inflammation, properly so called. d this difficulty becomes well-nigh insuperable en the history of spasm is taken in connexion with at has been said in these lectures respecting the hology of convulsion and tremor, and the physio- y of muscular motion." (Pp. 277-8.)

In his last lecture, Dr. Radcliffe speaks of Pain; l this he describes as being of two kinds—neur- ic or essential, and accidental or dependent on derness. The latter kind of pain is generally ociated with congestion or inflammation, and is oked by pressure; the former, the neuralgic or ential pain, is mostly relieved by pressure, and in st cases is unassociated with excessive vascular ction. This line of distinction, however, Dr. dcliffe admits not to be constantly observed in ture; it "seems to be broken in some parts, and two forms of pain interblend at these parts and e their distinctive characteristics".

The pathology of pain, as of the morbid conditions eady noticed, is examined in its relations to the culation, respiration, and circulation.

Neuralgic pain, like convulsion, may be associated th a deeply depressed condition of the circulation. proof of this, Dr. Radcliffe refers to the well- own fact of the occurrence of neuralgia in its most ere form without fever or inflammation; to the quently observed debilitated state of neuralgic bjects; and to the resemblance between neuralgia d the cold stage of ague, especially in cases occur- ıg in malarious districts. Neuralgia and rigor, in- ed, appear to be closely associated. Again, as th disorders where muscular mobility is manifested excess, neuralgia seems to be antagonised by an er-active circulation. To prove this, Dr. Radcliffe fers to rheumatism and gout, where, in the deve- oment of local inflammation, the *pain* diminishes, hough the *tenderness* may be increased. It seems him, indeed, as if the pain of gout went hand in nd with the rigors which are "preliminary to the velopment of the inflammation". He believes, rther, that pain holds the same relation to other nds of inflammation and fever; and he refers to is head the pains in the back and loins premonitory small-pox and other fevers, and the pain attending slocations and sprains.

But there are well-known instances where pain ntinues after the establishment of inflammation; ch as inflammation of the mamma in the female, chitis, and inflammation of the hip-joint. These cases Dr. Radcliffe explains on the ground that the "persistent pain is an accidental accompaniment of the inflammation—a consequence of tension or stretching of the tender tissues", and that it is relieved by measures which diminish the tension.

Further, Dr. Radcliffe brings forward, in proof of the antagonism between pain and inflammatory excitement of the nervous system, the phenomena which he has observed in facial neuralgia; first in his own person, and then in several other patients. The order of changes observed by him has been this:

"First, neuralgia without local tenderness and swelling and redness, and with frequent chills and shivers, and a decidedly depressed state of the circulation; and, afterwards, local tenderness, redness and swelling, with general feverish reaction, without chills and shivers, and without neuralgia." (P. 299.)

In all the forms of neuralgia, Dr. Radcliffe observes, it is universally agreed that neuritis is not necessary to its production. But there is not so general an agreement as to another point—that severe pain is not a necessary accompaniment of cerebral or spinal meningitis or of neuritis. This view Dr. Radcliffe seeks to support by argument; and he makes pain occupy the same relation to the disease as has been already assigned by him to spasm.

But while, according to Dr. Radcliffe, neuralgic pain—essential or spontaneous pain—is independent of inflammation or fever, pain the result of tenderness would seem to be associated with inflammatory excitement in the nervous system. It is accidental, and only the sign of exalted sensibility—a result of the nerves having participated in the inflammatory change. Moreover, "there is reason to believe that inflammatory excitement of the nervous system is a consequence and not a cause of the state of which neuralgic pain is the sign." "All that has been urged to shew that inflammation is the consequence of that state of irritation which leads to convulsion, tremor, or spasm, may be urged to shew that inflammation may be the consequence of that state of irritation which leads to pain of a neuralgic character."

Finally, Dr. Radcliffe arrives at the conclusion that, in regard to its pathology, pain is the exact equivalent of convulsion, tremor, and spasm—a state denoting defective vital power in general, and defective nerve-power in particular.

After some observations on the therapeutics of pain, Dr. Radcliffe speaks briefly of Paralysis under certain aspects.

Having thus far endeavoured to give an outline of the views held by Dr. Radcliffe in regard to the physiology and pathology of muscular motion and of sensation, we must conclude. The author has enunciated doctrines which are more or less at variance with those generally received; but these doctrines are, as a general rule, apparently so well supported by argument, and, in any case, so unmistakably the result of profound study and observation, that they deserve at least to be thoroughly examined. Dr. Radcliffe's object, too, is not to be a mere scientific theorist; his aim throughout is to improve the therapeutics of the morbid conditions of which he speaks; and thus he has produced a volume which, while there is room for a further examination and development by him of some of the doctrines contained in it, is certainly a highly valuable contribution to the improvement of the science and practice of medicine.

British Medical Journal.

SATURDAY, JUNE 25TH, 1864.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND: ELECTION OF COUNCILLORS.

OUR motto in the matter of these elections is, "Measures, not men." We do not intend to undertake the invidious, and indeed superfluous, task of signalising the virtues, or of obliquely hinting the defects, of any of the present candidates for office. We have mentioned Mr. Turner's name, because, to the common sense of all, it must be evident that the presence of a country Fellow in the Council is not only equitable, but very desirable. We will at once admit, that all the many candidates whose names have been presented to the profession are excellent men, and bear within them the germs of good and faithful Councillors *in futuro*. We will admit even, that no better men could be found for the purpose.

But, granting all this, still we must proclaim, taught by a very unfortunate and unmistakeable experience, that their election will produce none of those good things which so many Fellows expect of it, and which we ourselves once hoped might result from the entrance of reforming spirits into the Council.

"*Les choses sont plus fortes que les hommes*", is a proverb strongly illustrated in this matter. Men cannot choose but bend before the force of the facts which meet them in the council-room. Imbued with the spirit of reform, and resolved to be stoically incorrupt, they may enter there. But, alas! the atmosphere of that room is overwhelming; soon the best resolves, and a firm faith, and fair intentions, melt away, and are consigned to the limbo notorious for its lining of good intentions. The Councillor's eyes then no longer behold the candidate's hopeful visions. The reforms which were so urgent to him outside the chamber, show far less pressing within the magic walls.

And why is this? In the faulty constitution of the College, we have the key to the unfortunate conclusion. Let us see. The Council is the stepping-stone to the Court of Examiners. The Court of Examiners is the golden fleece, and the honour which all Councillors have before them in their distant hopes. Men naturally wish to become Examiners. But, to become an Examiner, the Councillor soon finds that he must be discreet. Reforming Councillors are *de facto* never discreet. Let a Councillor, therefore, give indications of reforming proclivities; and his hopes of an Examinership proportionately vanish.

A wise Councillor, therefore, is he who practises the art of that σιωπη μεγαλη of the ancients—who knows how to be silent and to wait.

But cannot the Council elect whom they please to the Examinership? Yes and no. With an admirable wisdom of conservatism, the Original Council—the first Council, we mean, which sprang out of and first took office under the new Charters—introduced into the new order of things the spirit of the ancien order of things. In fact, the men who were called upon to carry out the reforms of the new Charter were the very men who had ever strenuously resisted the reforms contained in it. Instinctively they did their very best to elude all the liberal action which had been forced upon them; and they have been very successful.

The new Charter, unfortunately, did not enforce on them the doing of all its intended deeds of liberality. It left much to their honour. And how have the Council responded? In no single instance in which they were able to act otherwise, have the Council obeyed or listened to the liberal directions of the Charter. Never in one single instance, for example, have the Council elected an Examiner who was not a member of the Council, although they are directed by the Charter to do so.* Never have they in one instance, elected a President or a Vice-President from outside the Court of Examiners, although directed by the Charter to do so.† Again, by their Charter the election of Examiners is quinquennial; but by the constant and invariable system of re-election adopted by them in close conclave, they have virtually made the office of Examiner a permanent one—on every quinquennial occasion they have invariably re-elected their man, *i. e.*, themselves.‡

See, then, how all this has worked, and of necessity works, to the repression of the reforming tendencies of incipient Councillors. Every Examiner is, by this Old Sarum system, a Councillor. All Examiners are old hands in the Council, and, therefore men of power and influence; and, thus, the Court of Examiners rules the very Council which nominally elects it. In other words, the Court of Examiners virtually elects itself; and, naturally, in making its choice, it chooses only those of the Council who it considers likely to prove congenial to its own quality. It is an *imperium in imperio*.

This is the key to the whole position. Men see the Councillorship, because it bears in its pocket the only possible *billet d'entrée*—or, at all events, is made the only possible *entrée*—to the Examinership. But as the Court of Examiners elects (virtually) its own

* "All future Examiners of the said College shall be elected by the Council of the College, either from the Members of the Council or from the other Fellows of the College, or from both or either of them." (Charter, 1843, Sect. 20.)

† "The President and Vice-Presidents of the said College shall no longer be chosen exclusively from or out of the Examiners of the said College, but from or out of all the Members of the Council indifferently, and whether Examiners of the College or not." (*Ibid.* Sect. 21.)

‡ "Every Fellow of the said College who shall from henceforth be elected to the Office of Examiner of the said College, shall go out of office at the end of Five Years from the day of his election, but it shall be lawful for the Council of the said College immediately to re-elect such person to the said office." (Charter, 1852, Sect. 16.)

it naturally takes care that those only of the ncil who promise well, and find favour in its shall enter there.

he circle is evidently what mathematicians d properly call a very vicious one ; and we need ely say that the results of operations in such sort rcles must of necessity be also very vicious, or, y the best of them, indifferently good.

re we not right, then, in proclaiming that in this "the things are too powerful for the men"; that best intentions, under such pressure—under such a us system—must go to the wall? Are we not right ying out for the only possible means of reform—measures, instead of new men? The Charter be revised. It stands condemned by its results. as been tried, and found wanting. So plain, in-, so absolutely necessary, is the alteration of the rter, that we will venture to say the College can-resist the alteration, in the face of the inevitable of facts. Can anything be more utterly incon-nt, more thoroughly opposed to the intentions of Charter, than that a Court of Examiners should ually elect itself—should virtually have the power putting itself, and of keeping itself for life, in e—in an office declared by the Charter to be quennial? What can be more absurd than that Council—the managing body of the College—uld be a passive instrument in the hands of the rt of Examiners, which nominally elects it?

Ve pin our faith in a College reform only through ange of measures, and they are these. There be no mistake about them. What is required is lain as the writing on the wall. Let no member he Court of Examiners be a member of Council, pt, perhaps, the President of the Court; let Examiner hold office longer than five years ; and, ly, for once and all abolish canvassing and cor-tion and favour at elections of Councillors, by ng to every country Fellow a vote by proxy.

MORTALITY IN LONDON HOSPITALS.

E mortality of patients in the hospitals of large crowded cities is a subject which deserves much e serious attention than has yet been bestowed n it. We may safely affirm, that the question never yet been fully investigated ; and that it is about which the profession even has still a great l to learn.

Modern sanitary science, it was supposed, would e purged our hospitals of all the evils to which excessive mortality was in part attributed. We e led to think that, if a hospital were constituted er the teachings of a scientific health-culture, the rtality in it would be reduced to a reasonable mini-m. But what appears to be the fact? In hospi-s of quite modern construction, built under the erintendence of the most advanced sanitary law-givers, the mortality, we are told, is just, or very nearly, as great as it was under the old system, where hygienic laws were grievously disregarded! The facts brought forward by Dr. Brodie, and elicited by Mr. Charles Hawkins, at a late meeting of the Royal Medical and Chirurgical Society, are, in our opinion, facts of extreme gravity. They are, in some sense, a bill of indictment drawn up against the hospitals of large cities, and require an answer. Mr. Hawkins said that he was so much struck by the mortality of the patients in Queen Charlotte's Lying-in Hospital, that he really began to doubt the propriety of the existence of such hospitals. At one time, the ill-construction of the old hospital, he said, might have explained the mortality, but the new hospital was perfect in its arrangements ; and, therefore, we must look beyond mere construction for an explanation of the mortality.

Mr. Charles Hawkins also referred to King's College Hospital ; and, in answer to a question put by him, Mr. Fergusson stated he was under the general impression that the mortality was as great in the new as it was in the old King's College Hospital. The old hospital, as Mr. Hawkins said, was remarkable for being every thing which it should not have been, in a hygienic sense ; but the new hospital was, doubtless, perfect in its construction and hygienic arrangements, and yet the mortality was not diminished.

Is it, then, to be concluded, that all great sanitary efforts are quite unavailing in touching or removing the causes of the mortality of our city hospitals? Is it true that the causes which are effective in producing this city-hospital mortality are beyond the reach of sanitary science? Is it true that there exists in all large and crowded hospitals of cities, an atmospheric or some other condition highly prejudicial to the health of the sick, which is irremovable? Or, in other words, has the patient who enters a London or Parisian hospital for the purpose of undergoing operation or for lying-in, a less chance of recovery than he or she would have in a provincial hospital—in a hospital situated in the country?

We venture to think that the London hospital surgeons could not enter into a more important investigation than is involved in these questions ; and we must add, that we think they are bound to entertain them in the cause of humanity, because a very practical conclusion would be involved in the answer to it. We would suggest to the Royal Medical and Chirurgical Society that it might well take up this subject. If it be determined, as the result of careful inquiry, that the mortality of patients in hospitals of crowded cities is greater than the mortality of patients in hospitals situated in the country ; if it be determined that patients in city hospitals are necessarily subjected (by the mere fact of their being in city hospitals) to certain deteriorating influences, which are irre-

movable by any kind of sanitary artifices, then it most assuredly must follow, that no patients should be treated in city hospitals who could with equal facility be treated in hospitals situated in the country. More than this. It follows, also, that all our city hospitals should become semi-country hospitals; that accidents and urgent cases alone should be provided for in city hospitals; that city hospitals, with their three hundred, and four hundred, and five hundred beds, should be reduced so as to meet the wants of accidents and urgencies only, and that the surplus balance of their beds should be sent into the country. If the above supposition be true, it is evident, for example, that St. Thomas's Hospital would be greatly advancing the interests of humanity, if it were to content itself with some hundred and fifty beds in London, and expend the balance of its enormous wealth in the erection of a hospital out of town.

We must again repeat it, the surgeons and physicians of London hospitals ought, in the interests of humanity, to hold a grand inquest on this very important question. If it be to the interest of the sick that they be treated in the country, we are bound to encourage the rise of convalescent suburban and country hospitals, and to discourage the rise of hospitals in the crowded centres of population. It may very probably turn out that any advantage which the patient may hitherto have supposed he gained in a London hospital, through metropolitan surgical skill, is more than counterbalanced by the injurious influences to which he is subjected in the city hospital.

St. George's Hospital, as we lately stated, has begun a movement in the direction which seems to be indicated. The plot of land which they have acquired for the erection of their convalescent hospital is near enough to London to admit of the removal to it from London of both surgical and medical cases. And we might argue on the fact, that, if the Governors of St. George's Hospital—a hospital placed in the most advantageous and healthy site possible in a large city—need such an addition as this new convalescent hospital is to it, how much more necessary must an appended country hospital be to Guy's, and St. Thomas's, and St. Bartholomew's Hospitals, situated in the heart of the city; and how much more readily could these institutions, with their enormous resources, secure a country asylum, than St. George's, with its precarious income.

On this score, we may usefully quote the words of M. Broca, lately spoken at the Parisian Surgical Society. "Capital amputations performed in the country," he said, "or in small provincial hospitals, are of much less gravity than when performed in the great centres of population, as in Paris. In small provincial hospitals, amputation of the thigh is generally successful; but in Paris, death is, as a rule, the result, and cure the exception." M. Broca's statistics show that, in the hospitals of Paris, the deaths after amputation of the thigh for traumatic caus are 100 per cent.—*i. e.*, that the operation is alwa fatal!

With regard to the other subject touched upon Mr. Charles Hawkins—namely, the reception *single* women into lying-in hospitals, and the cons quent advantages to them in their future career life—we will take another opportunity of referring it. Mr. Hawkins's remarks on the question a worthy of serious attention.

COUNTRY COUNCILLORS.

We support Mr. Turner as a candidate for the offi of Councillor of the College of Surgeons mainly the ground that the country Fellows have a right be duly represented in Council. It has been o liquely hinted by the *Lancet* that Mr. Turner mig not be able to do his duty as a Councillor in cons quence of his residing in the country; we therefo beg to state authoritatively, that Mr. Turner pledg himself, if elected, to discharge faithfully the duti of office. We have never heard any one hint th Mr. Paget of Leicester neglects his duties; but have heard it stated that there is not within t Council a stauncher and truer reformer, or one w has worked more unflinchingly in the cause of refor than he. We have heard it whispered that men his stamp are wanting in the Council; and for th reason, therefore, because he is a country Fellow, we sincerely trust Mr. Turner may find a seat the Well are we assured that Mr. Paget will no long want a backer in the good cause, if Mr. Turner by his side in the council-room.

We cannot, indeed, help referring to one especia forcible argument in favour of Mr. Turner. Men his age and position, and of the age and position Mr. Paget, are thoroughly independent. They, fr the very fact of their age and position, are not like ever either to seek or desire a seat at the Board Examiners; and, therefore, that dread of future c tingencies which silences younger Councillors, a especially London men, can have no influence o them. As we have already said, if a little bird sung to us not untruly, there is not in the Council this moment a more independent and stoutly o spoken man than Mr. Paget.

THE ACTING ASSISTANT-SURGEONS.

The Director-General has been more than success in his late effort to raise a new class of surgical ca didates for army medical honours. He has receiv we understand, nearly three hundred applications fr gentlemen at present out of place and under fo years of age, who are desirous of accepting servic acting assistant-surgeons. These gentlemen are rea to accept the Director's terms; viz., to sign a o sided agreement, by which they bind themselves

ve as long as they are wanted, and at the same ne to quit at an hour's notice—at any moment the irector pleases to be rid of them—without even the onth's wage or warning of a decent menial. Three ndred applicants have, as we hear, offered themlves for the questionable honour of service on such rms; but, like Frankenstein, the Director appears ightened at his own success; so that, indeed, he ars to use his own invention. These candidates ill remain in the perturbed state of expectant candates for office. The Director will and he won't. e accepts their candidatures, but he appoints them ot. Not one per cent. of the three hundred, we elieve, has yet mounted Her Majesty's acting ssistant-surgeons' uniform. Why this hesitation? everal answers suggest themselves. We will in the eantime assume the one most creditable to the Army ledical Direction. We will believe that it sees the tal error which it has made; that it begins at last understand that a soldier's life is too expensive an rticle to be trifled with; and that out of the raifs and misfits and strays of the profession the ledical service of the army cannot be properly recuited. Perhaps, also, the public expression of proessional opinion has begun to operate upon the dulness of official surdity and quietism. At all events, e congratulate the Army Medical Direction that it as paused in the midst of its triumphant advertising uccess; that, out of its three hundred candidates, it as not yet had courage to select even three.

THERE is clearly little hope of Poor-law medical fficers obtaining any redress of their grievances at he hands of Parliament. The Committee, which has been sitting on "Poor Relief", have come to the onclusion "that there are no sufficient grounds for nterfering with the present system of medical relief." They, however, think that "the suggestion nade by some of the witnesses, that the guardians hould provide at their own cost cod-liver oil and ther expensive medicines, is one of considerable importance;" and they, therefore, recommend that in uture cod-liver oil, quinine, and other expensive nedicines, shall be provided at the expense of the guardians, subject to the orders and regulations of he Poor-law Board. We will further notice this Report next week.

MR. COULSON, as we last week mentioned, delivered an admirable eulogy on Sir Humphry Davy, on the occasion of a meeting held at Penzance for the purpose of establishing a memorial in honour of the philosopher, poet, and philanthropist. We now learn from the *Western News*, that Mr. Coulson subscribed one hundred guineas to the memorial. We may add, that we sincerely trust Mr. Coulson will put on more permanent record the historical address which he delivered on the occasion.

IN the JOURNAL of last March 19th, we said that "the conduct of Mr. E. Hooper, coroner at West Bromwich, seemed to us to be wanting in common sense and common courtesy towards Mr. Manley." We are glad to find that our words have been endorsed by a county court judge. The thanks of the profession are due to Mr. Manley for so well sustaining his position on the occasion. Mr. Hooper has been taught a lesson, which we here reproduce for the benefit of any one who may need it.

"OLDBURY COUNTY COURT, *Friday. Manley* v. *Hooper*. The action was for the recovery of one guinea, being the fee claimed by Mr. Manley for attending an inquest on the body of a woman of the name of Elizabeth Collins, in pursuance of a summons issued by the coroner. The case is of considerable importance to the medical profession, because it raised the question whether the coroner by issuing a summons, instead of an order of a special kind as provided by the Act of Parliament, could deprive a medical witness of his fee of one guinea to which he would be entitled, *quâ* a medical witness, and remunerate him by payment of 2*s.* 6*d.*, the remuneration allowed to non-medical witnesses. Mr. Fitter pointed out that there was, in the first instance, an imputation of negligence by the coroner against the plaintiff or his assistant, accompanied by strong personal observations; and that, finally, the defendant summoned the plaintiff to give evidence at the adjourned inquest. The plaintiff attended in pursuance of the summons, and demanded the statutory fee of one guinea, which defendant refused to pay, and tendered him 2*s.* 6*d.*, which the plaintiff refused to receive. His Honour observed in strong terms upon the fact that the plaintiff was summoned either to explain away an alleged charge of negligence on his part or that of his assistant, for which there did not appear to be any foundation, or to give medical testimony as to the cause of death. As to the former, his Honour observed that the coroner had no jurisdiction to inquire into the mode adopted by him; and, for the credit of the coroner, he would take it that he summoned the plaintiff to give evidence as a medical witness as to the cause of death, and he would in the latter case be entitled to his guinea. His Honour gave plaintiff a verdict for the amount claimed, with costs."

AT the annual meeting of the South-Eastern Branch on Thursday week, a memorial praying for a redress of the grievances suffered by the army medical officers was adopted. The subject of a memorial in honour of the late Mr. Peter Martin was discussed; and it was resolved to raise a subscription for the institution of prizes in the Royal Medical Benevolent College.

Dr. Lithner recommends the following as a capital and pleasant purgative. Macerate your senna leaves in water over-night, and next morning make your coffee with the senna infusion; and you will have a laxative which tastes only of coffee.

"Gratuitous medical services," says the *Gazette Médicale de Lyon*, "the traditionary honour of the medical profession, unless subjected to certain restrictions which are absolutely demanded, become at last a burdensome and ridiculous abuse."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

Gentlemen intending to read papers, cases, or any other communications, are requested to furnish, at their earliest convenience, the titles thereof to the General Secretary.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on THURSDAY, the 30th of June, at a quarter before Three o'clock P.M., *for Three precisely.*

Business.—To receive communications from the President.

To prepare the Report to be presented at the Annual Meeting.

Any other business which may be brought forward.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, June 15th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
LANCASH. & CHESHIRE. [Annual.]	Town Hall, Lancaster.	Wednesday, June 29th, 12 noon.
YORKSHIRE. [Annual.]	Philosophical Hall, Leeds.	Thursday, June 30, 2.30 P.M.
NORTH WALES. [Annual.]	Black Lion Hotel, Mold.	Tuesday, July 5, 1.30 P.M.
WEST SOMERSET. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.
BATH AND BRISTOL. [Annual.]	Mineral Water Hospital, Bath.	Thurs., July 7, 4.30 P.M.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 12, 3.30 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

THE Twenty-eighth Annual Meeting of this Branch will be held in the Town Hall, Lancaster, on Wednesday, June 29th, at Twelve o'clock, noon: E. D. DE VITRÉ, M.D., President.

Gentlemen intending to read papers are requested to transmit the titles of the same to the Honorary Secretary, Dr. Wm. Roberts, Chatham Street, Manchester, not later than June 16th.

WILLIAM ROBERTS, M.D., *Hon. Sec.*

YORKSHIRE BRANCH.

THE Annual Meeting of the Yorkshire Branch will be held at the Philosophical Hall, Leeds, on Thursday, June 30th, at 2.30 P.M.

Communications have been promised by the President (S. Hey, Esq.); W. D. Husband, Esq.; T. P. Teale, jun., Esq.; etc.

The members and visitors will afterwards dine together at the Queen's Hotel.

GEORGE HORNBY, *Hon. Secretary.*

NORTH WALES BRANCH.

THE Fifteenth Annual Meeting of the North Wales Branch will be held at the Black Lion Hotel, Mold, on Tuesday, July 5th, at 1.30 P.M., under the presidency of W. WILLIAMS, M.D.

Gentlemen having papers or cases to communicate, will please to forward the titles of the same to Mr. Kent Jones, Beaumaris.

Luncheon at 12.30, at the house of Dr. Hughes.

Dinner at the Black Lion Hotel, at 4 P.M.

D. KENT JONES, *Hon. Secretary.*

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 7TH, 1864.

W. ADAMS, ESQ., F.R.C.S., President, in the Chair.

Dislocation of the Patella outwards. The PRESIDENT exhibited casts of the knee-joints of a young gentleman aged 10, one of which showed a complete dislocation of the patella outwards. There was no knock-knee. Some years ago, the boy, when playing, met with an accident; and since then he had no longer been able to play, and his parents dreaded his going out, as he was liable to fall down suddenly. Mr. Adams observed that it was his intention to prevent all motion of the joint for eighteen months or thereabout, by keeping the leg straight, and thus to produce partial anchylosis of the knee-joint. There was no difficulty in reducing the patella.

Diphtheria. Dr. CLEVELAND had lately had two cases of diphtheria, which recovered under a stimulating treatment and sponging the fauces with a solution of borax.

Dr. GRAILY HEWITT had, in cases of diphtheria, recently observed that the patches of effusion occurred at a somewhat advanced state of the disease, often out of sight of an ordinary inspection of the throat. The upper part of the pharynx, above the uvula, or the posterior nares, was the primary seat of the disease in some cases. A discharge from the anterior nares, causing excoriation, was an early symptom. He had seen great benefit from topical application, made by means of a piece of cotton wool dipped in an astringent fluid and tied round the end of the finger, to the upper part of the pharynx. In all cases, very large doses of stimulants appeared to him absolutely essential, together with nutritious food frequently administered.

Dr. GREENHOW considered topical applications of no great importance in the treatment of diphtheria. In fifteen *post mortem* examinations which he had made, he had found the mischief by no means confined to the surface of the diseased parts, but extending deeply into the tissue beneath. The membrane approached the condition of sloughing, and abscess was sometimes found in the centre of the tonsil. Sometimes there was ecchymosis into the muscles of the neck. Any violent local means, indeed, were counter-indicated, and deodorants alone were serviceable. The remedy to be preferred, when hæmorrhage came on early, was tincture of sesquichloride of iron; it penetrated into the membrane. He had abjured local medication, such as nitric acid; and had seen cases where strong applications had done much mischief.

Dr. FULLER observed that in itself a patch of membrane on the pharynx was of no great consequence; and patients died when no such patch occurred. In the case of a child that died of diphtheria in St.

George's Hospital, on making a *post mortem* examination, no exudation was perceived. Patients died poisoned; and the tearing off of the patches did no good. Entire rest was absolutely necessary; and sponging out the throat might kill the child, by causing it to move. By following this rule, he had not lost a case for five years past. Iron, quinine, wine, and chlorate of potash were the best remedies.

Dr. HARE quite agreed that topical applications were worse than useless in diphtheria, except when the discharge was very offensive, in which case a lotion containing Condy's fluid might be snuffed up the nostrils with advantage.

Dr. COCK observed that some disinfectant ought to be placed in the utensil into which the patient spits.

TUMOURS AFFECTING THE FEMALE BREAST.
BY WEEDEN COOKE, ESQ.

Dividing these tumours into the solid and the cystic, the author explained the methods of diagnosis by manipulation and by the grooved needle, and related cases of unilocular cystic tumours successfully treated by iodine injections. He then referred to multilocular cysts, which grow to an enormous size; and advised excision, stating that these tumours yield the best results to the knife of any of those which affect the mamma. The proliferous cysts are those within whose walls solid matter is developed, which eventually fills the space previously occupied by serum. Mr. COOKE regarded these as undoubtedly cancerous, which will return after excision. He then spoke of the cysts that are sometimes formed in the substance of a scirrhous tumour, and considered this change indicative of rapid growth of the decayed mass. It is in this form of tumour that spontaneous evolution of the disease by sloughing most frequently takes place; and when it happens, if the constitution can be supported, cicatrisation may be obtained, and the disease remains in abeyance for a very long period. Stimulating injections into the cysts will sometimes bring about this process of evolution.

Solid tumours of the breast may either be simple or malignant. The results of common inflammation may be sometimes so severe and lasting that doubts may readily arise as to the true nature of the swelling. In the first place, age has much weight in the question of diagnosis, inasmuch as cancer does not make its appearance generally during the child-bearing period. The induration of simple inflammation is more diffused than in cancer; neither is there that strong hardness so characteristic of the scirrhous tumour. The pain in cancer is sharp and plunging; in simple induration, it is constant and wearying. Cases, showing that these distinct diseases are sometimes confounded, were related. Induration, the result of injury, was then referred to; and the points of difference and the results of treatment shown. The adenoid tumour, or adenocele, is an hypertrophy of the absorbent glands frequently found in the neighbourhood of the mammary gland, and not unfrequently mistaken for enlargement of the mammary gland itself. They are generally found in very slender persons, and in those who have an hereditary tendency to phthisis. These tumours sometimes attain the size of an orange, are exquisitely tender, very moveable, and are attached to the skin or subjacent muscle. They are, when removed by operation, found to be inclosed in an investing capsule. Bound by a soft leather plaster to shield the part from irritation, and the constitution being improved by treatment and cod-liver oil, these tumours will frequently disappear; but it occasionally happens that a further degeneration ensues, and the adenoid tumour becomes cancerous. Two sisters were mentioned, who had an hereditary phthisical constitution. Both had had adenoid tumours in the breast for many years; and in one cancer had developed itself within the last two years. From this and various other experiences, Mr. Cooke disputed the doctrine that an innocent tumour is innocent to the end, and a malignant tumour malignant from the beginning. He also believes that phthisis and cancer are but different expressions of a common hereditary dyscrasia; the first showing itself principally at the commencement of life, and especially at the commencement of the catamenial period; and the last cropping out gradually at the cessation of this periodical salutary and sanitary efflux.

The author then passed on to describe cancer itself in its various forms, as affecting the female breast. After minutely describing the progress of a scirrhous tumour, he asked and answered some important questions connected with this lesion. Is it derived from an hereditary predisposition? Is it a constitutional, or a local disease? Is it capable of being caused by an injury? Are the married or the celibate most prone to it? Has suckling, or the avoidance of this maternal duty, any influence in its development? Has the cessation of the menstrual secretion any influence over it? Is it possible that tubercle and cancer may have the same origin? After considering these various questions, Mr. Cooke went on to describe two modes by which the system purged itself of the cancer: first, by spontaneous sloughing out of the whole tumour; and, secondly, by a gradual atrophy. In reference to the question of operation, the author states that each case is to be studied for itself; the moral as well as the physical condition of the patient requires a careful analysis. Statistics are not favourable to operation, but, if they were, would be an unsafe guide, taken alone. The medullary form of cancer in the breast was then described; and, in connexion with this, the comparative value of the various deodorising substances was discussed. A chlorine wash, made by adding hydrochloric acid to chlorate of potash, Mr. Cooke had found the most efficient; and next to this, the permanganates. The hydrocarbons, including the carbolic acid, came next in value; and then the charcoal and carrot poultices. But each might at times be substituted for the other with advantage.

Mr. DE MÉRIC observed, that all that fell from Mr. Cooke on the question of cancer was to be listened to with the greatest interest, as that gentleman had devoted so much time to the clinical study of this fearful disease. The question which patients desire most to have answered is, whether a tumour which they are subject to is a cancer or not. His impression was, that cancer was, like diphtheria, a disease of the whole system. As to how cancer and phthisis are connected is a difficult question to answer. A woman, aged 52, had cancer; four years ago, one of her daughters died of phthisis. In this case, the cancer in the breast seemed to act more like a foreign body than like an ordinary cancer. The skin became much distended, and at last reddened; and then the destructive process and effusion commenced, terminating in ulceration. At an early stage of the tumour, there was a lardaceous hardness of the arm. The whole arm ran into rapid destruction and mortification.

Mr. ADAMS remarked, that he had not seen anything to make him arrive at the conclusion that simple tumours might turn into cancerous growths. There was no microscopic form of cell indicative of cancer; still the microscope had done a great deal. It had helped us to group together varieties of tumours. Thus one group, which Sir A. Cooper and others looked upon as hopeless—namely, fungus hæ-

matodes—the microscope had shown not to be malignant. The large gourd tumours are of the cystic class. Their bleeding exhausts the patient; but *post mortem* examination does not show any internal cancer. He instanced a case of a lady at Richmond, who in 1844 was operated on by Mr. Travers. Liston, Stanley, and the older surgeons had thought the operation not suitable, and refused to operate. The lady, however, insisted, and is alive at this moment. As to removing true cancerous growths, by removing the fœtor the death is rendered less horrible, and in some cases the patient will live longer for the operation.

Dr. POLLOCK remarked as to the possibility of the same diathesis developing tubercles and cancer. He was inclined to agree that it might be so. He had at the present time some cases in his recollection where cancerous parents had phthisical children. The diseases, too, occur simultaneously, in rare cases, in the same person, as he had shown in some papers read before the Pathological Society.

Dr. HARE remarked, that the extreme frequency of phthisis made it difficult to judge of the hereditary connexion between that disease and cancer. Tubercle and cancer very rarely concur, and cancerous parents are likely to have cancerous children. In 1861, he saw a lady who had a nodule of suspicious character in her breast. There was a rather bloody exudation from the nipple; but the patient is now perfectly free from all tumour.

Dr. GREENHOW remarked, that cancer sometimes occurs in young people; whilst, again, phthisis pulmonalis appears in advanced life. For example, he had lately had a case of phthisis in a woman aged 65, which he had at first taken for cancer.

Mr. COOKE had so frequently seen examples of phthisical children being the offspring of cancerous parents, that he must adhere to his opinion as to the near affinity of the diseases. He had in many cases seen glands which had been called strumous turn into cancer; and he consequently held that simple tumours ought to be removed. As to removing true cancer, if you leave the cancer alone, the patient will sometimes live for fourteen or fifteen years; whilst, if operated on, they soon die.

Correspondence.

TREATMENT OF SYPHILIS.

LETTER FROM R. WILLIAM DUNN, ESQ.

SIR,—There is at present some discussion as to the proper treatment of syphilis amongst medical men, few agreeing with my friend and colleague Dr. Drysdale, whilst others hold quite contrary opinions. I held the opinion of the latter; but, after having read my friend's works and observed his practice at the dispensary, I determined to try the non-mercurial treatment of syphilis, particularly in reference to infants. The result of the following cases, which have been under my care, has been, up to the present time, perfectly successful. I think it would confer a great benefit upon society at large if this question was carefully investigated by a committee, and a report of its proceedings forwarded to the next annual meeting of the British Medical Association. The best thanks of the profession, I consider, are due to Dr. Drysdale for the able and persevering way in which he has brought this most important subject under the notice of the profession.

CASE I. G. G. was the child of syphilitic parents, who had been treated by mercury, etc., by another medical man, when I was first sent for to attend the mother in her confinement. She was labouring under sores upon the labia, and a very offensive discharge from the vagina. The child was born quite free from any disease. The fourth day after birth, it had slight conjunctivitis of both eyes, which soon yielded to treatment. Three months after birth, I vaccinated the child; there were no signs of syphilis. Six months after birth, the infant had a severe attack of whooping-cough. Syphilis then first made its appearance in a copper-coloured eruption upon the face, head, buttocks, and legs; there was also an ulcer at the anus. I first treated the whooping-cough; and, as soon as it was a little better, I began to treat the syphilis, feeling quite certain in my own mind that the infant would not recover. I ordered it the following mixture on March 30th, 1864.

℞ Potass. chloratis gr. xxiv; tinct. aurantii ʒi; syrupi zingiberis ʒiij; aquæ destill. ad ʒiss. M. Capiat ʒi ter die.

By the end of April, the whole of the disease had disappeared; and the infant had gained flesh, and looked better than it ever had done since birth. It continued the medicine till May 8th. The infant still continued quite well, and is so up to the present time.

CASE II. A. B., three months old, a dispensary patient. The father of this child had been under my care for both primary and secondary syphilis, and had been treated by mercury and iodine. He consulted me as to marriage; and, as he had no relapse for more than twelve months, I told him I thought he might marry without any risk. His wife soon conceived; and this child was the result. The mother up to the present time has exhibited no sign of syphilitic poison. The child had syphilitic eruption on the head, legs, buttocks; and mucous tubercles on the lips. This child was treated with two grains of chlorate of potass every four hours. It continued the medicine for six weeks, at the end of which time I discharged it cured. I saw the child last on May 19th, 1864; and it was then quite free from any syphilitic disease.

CASE III. L. M., aged four months, was brought to me at the dispensary on account of an eruption which appeared after vaccination. Up to that period the child had been quite well, and the mother said that the eruption had been caused by bad matter being used. I thought at first that this was a case of syphilis transmitted by vaccination; but, upon a most careful examination of both parents, I found that this was not the case. The father admitted having contracted syphilis two or three years before he married. He was treated with pills till his gums were very sore, and afterwards with sarsaparilla. He had had enlarged glands in his groin, but they did not run on to suppuration. He had an eruption on the skin, and ulcerated throat. He was treated first at the Skin Hospital, with the tincture of iodide of mercury; and was discharged cured. The mother exhibited also a slight taint. Upon examining the infant, I found a syphilitic eruption on the head, face, legs. The child snuffled very much, had wasted away, refused the breast, and was very cross and restless. I ordered the child two grains of chlorate of potass every four hours. It continued under treatment for two months, and was then discharged cured. I saw the child last Thursday; it was then quite free from all disease. I am, etc.,

R. WILLIAM DUNN,
Senior Surgeon to the Farringdon Dispensary.

13, Surrey Street, W.C., June 13th, 1864.

ARTARISED ANTIMONY IN SCROFULOUS OPHTHALMIA.

LETTER FROM D. J. GARNHAM, ESQ.

SIR,—In the BRITISH MEDICAL JOURNAL for June is a letter from Mr. Chesshire of Birmingham, "Tartarised Antimony as a remedy in Strumous hthalmia."

The treatment he proposes is, I doubt not, entirely w to most practitioners, and even contrary to the linary received ideas of the principles of practice such diseases. Of its efficacy, however, in such es—more particularly in those where a long con- ued treatment with quinine, steel, and other or- nary tonic remedies, has been persisted in—I have some long time been enabled to take advantage in my practice.

The idea of the use of tartarised antimony in such disease, I first received from my much respected end and teacher, Mr. J. W. Wakem of London; d he (I believe I have heard him state), in his turn, st saw it used in the practice of some practitioner former days in Cornwall.

It has been my habit to administer it in slightly useatic doses of from one-twentieth to one-twelfth a grain, or more, according to age, usually com- ning it with a saline purgative, such as the ordinary spital white mixture, in just sufficient quantity to t slightly upon the bowels. Its effect upon the tient speedily becomes apparent; and the distress- g intolerance to light is one of the earliest symp- ms to receive relief.

From the administration of emetic doses of tartar- ed antimony in this disease, I have not seen good sults follow.

In the one treatment, as in the other, of course, it ould be needless to say, exclusion from light is ually necessary.

Trusting that my few remarks may assist to rengthen the practice advanced by Mr. Chesshire, d also lead to others trying the same.

I am, etc., DEVEREUX J. GARNHAM,
House Surgeon Lincoln Dispensary.

Lincoln, June 8th, 1864.

THE MEDICAL SERVICE IN INDIA. In the House of ommons, on June 17th, Mr. Leslie asked the Secre- ary of State for India whether the necessary arrange- ents were now completed for issuing the Royal arrant to Her Majesty's medical service in India. ir C. Wood said there had been some delay in this atter, in the hope of combining the arrangement of he present service with that of the future service in ndia. It had been, however, determined, in conse- uence of some difficulties, to make the arrangements or the present service, and orders to that effect were ent to India about a month ago, and if the hon. ember would move for that dispatch he would lay it n the table of the house.

FAILURE OF THE MEDICAL ACT IN AUSTRALIA. Although our local Act is very explicit in defining he penalties incurred by those persons who fraudu- ently represent themselves as qualified medical prac- itioners, the offence is still committed with as much mpunity as if no such provision existed. The colony till swarms with the vampires that fatten upon the ife of an overtrusting public, whose health they ruin nd whose pockets they drain. In this city of Mel- ourne they abound in clusters, doing a thriving busi- ess; and not only inflicting serious bodily injury pon their unhappy dupes, but reaping the rewards hat should go to the educated medical man for ser- ices honestly rendered and conscientiously dis- harged. *(Australian Medical Journal.)*

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Friday, June 17th, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Bowles, Robert Leamon, Folkestone
Churchill, John Foot, Croydon
Cooper, George Frederick, Reading
Court, Josiah, Guy's Hospital
Dodsworth, Frederic Charles, Turnham Green
Hammond, Charles, Southampton
St. John, Charles, 6, Foulis Terrace, Onslow Square
Wise, William Clunie, M.D.St.Andrews, Plumstead

At the same meeting, the following gentlemen were reported by the examiners to have passed the primary professional examination:—

Cuddeford, Thomas, St. Bartholomew's Hospital
Taylor, James, Glasgow
Worsley, James Henry, Bury, Lancashire

UNIVERSITY OF CAMBRIDGE. Degree of M.B. conferred at a Congregation held on June 18th.

Farebrother, Thos., M.A., Queen's College, Oxford (*ad eundem*)
Graham, Arthur R., St. Peter's College

Degree of M.D., in Congregatien held June 21st.

Latham, Peter W., Downing College
Robertson, Charles A. L., Caius College

APOTHECARIES' HALL. On June 16th, the following Licentiates were admitted:—

Dawson, Henry, Church Road, Islington
Franklin, Charles, Maida Hill
Hawkins, Edmund Woods, Commercial Road
Jones, Benjamin, Llangefni, Anglesey
Moss, Charles, St. Helena
Puzey, Chauncy, Surrey Square, Old Kent Road
Shaw, Charles Edward Martin, York Street, Portman Square
Snell, Ebenezer, Plymouth

At the same Court, the following passed the first examination:—

Nowell, Richard B., Guy's Hospital
Nunneley, Frederick Barham, University College Hospital
Tayler, George Christopher, St. Bartholomew's Hospital
Weekes, Henry, Guy's Hospital

DEATHS.

DAVIS, John, M.D., Surgeon R.N., at Bristol, aged 73, on June 17.
FORSTER. On June 16th, at Sunbury, aged 4½, Cottingham, third son of *J. Cooper Forster, Esq., of St. Thomas's Street.
MILLER, James, Esq., Professor of Surgery in the University of Edinburgh, aged 52, on June 17.
MINSHULL. On June 19th, at Tattenhall, Cheshire, aged 86, Mrs. Minshull, widow of John Minshull, Esq., Surgeon to the Liverpool Royal Infirmary, and mother of *J. L. Minshull, Esq., Liverpool.
SPURGIN. On June 15th, at 17, Great Cumberland Street, aged 23, Charles Clissold, third surviving son of *John Spurgin, M.D.

APPOINTMENTS.

ROYAL NAVY.

M'CLURE, Andrew, Esq., M.A., Surgeon, to the *Racer*.
MORTON, Charles, Esq., Surgeon, to the *Fawn*.
WARREN, Thomas R., Esq., Surgeon, to the *Cordelia*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

HEMINGWAY, C. A., Esq., to be Assist.-Surg. 26th West Riding R.V.
OGLESBY, R. P., Esq., to be Assistant-Surg. 7th West Riding R.V.
WATKINS, E., Esq., to be Assist.-Surg. 2nd Northamptonshire R.V.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY. An additional ordinary meeting of the Fellows of the Society will be held on Tuesday, July 5th, 1864, at eight p.m., to receive the Report of the Scientific Committee on the Uses and Effects of Chloroform.

Royal College of Physicians. The President and Fellows of the College of Physicians held a *Conversazione* in Pall Mall East, on the 18th inst., which was most numerously attended, the list of visitors including names of the highest eminence in the medical and other sciences, together with a large infusion of the political and fashionable world. The spacious library of the College was fitted up for the occasion, and upon the tables were exhibited specimens of the most recent improvements in optical and other scientific instruments, some of the microscopes being of enormous power. Some microscopic preparations were shewn by Dr. L. Beale. Dr. Thudichum exhibited under the microscope a new cysticercus from the sheep; and Mr. E. Hart a new ophthalmoscope, for showing the deep structures of the living eyeball, without darkening the room. A very ingenious arrangement for observing the vibration of sonorous bodies, was shown by Mr. Ladd. Specimens of the casket, or crystal cube portrait, in which a miniature photograph, imbedded in a cube of crystal presents, under the influence of transmitted light, the appearance of a solid bust in perfect relief, were also shown. A valuable collection of minerals and precious stones, lent by Professor Tennant, photographs, and other objects of scientific interest attracted the notice of the visitors. Among the earliest arrivals were their Royal Highnesses the Prince of Wales and Prince Louis of Hesse, who were received by the President and members of the Council, and by them conducted through the room.

Death of Professor Miller. Mr. James Miller, Professor of Surgery in the University of Edinburgh, died on the 17th inst., at Corstorphine, at the age of 52. The deceased gentleman was the son of the late Rev. James Miller, minister of Monikie, in Forfarshire. He studied medicine in Edinburgh, and was the favourite pupil of Mr. Liston, with whom he resided for fifteen years—for five years as his assistant. Mr. Liston before leaving Edinburgh for London, introduced him to all his patients. In 1842, on the death of Sir Charles Bell, Mr. Miller was unanimously elected by the Town-Council to fill the chair of surgery in Edinburgh University, where he was a very popular and successful teacher. Mr. Miller was also Professor of Pictorial Anatomy to the Royal Academy, and was Surgeon-in-Ordinary to the Queen for Scotland, As a surgeon his services were highly esteemed, and both in the scientific and practical parts of his profession he maintained a high reputation. He was the author of *Principles and Practice of Surgery*, which has passed through four editions in this country, and been several times reprinted in America. He was also the writer of the article "Surgery" in the *Encyclopædia Britannica*; and the author of *Surgical Experience of Chloroform*, and other works. He published a considerable number of tracts on temperance, of which he was a strenuous advocate. In philanthropical and religious agitations he took a very active part, both on the platform and through the press; and as an elder in the Free Church was an ardent supporter of its politico-ecclesiatical views, and of its missionary schemes. He was a man of lively and generous sympathies, and of kindly temper, and he enjoyed the affection and esteem of a wide circle of friends, accompanied by no small degree of popularity in public life. He was a man of fine *physique*, and the sudden breakdown of his constitution gave a shock of surprise to many who had admired his manly vigour and envied his robust health. A few weeks ago he was seized with congestion of the brain, which, notwithstanding the most watchful care of his professional friends, entirely prostrated his strength, both mentally and physically, and rapidly led to a fatal result. Professor Miller married in 1834 a daughter of the late Major Gordon, of Rosiburn, Aberdeenshire, who, with a numerous family survives him.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.— London Surgical Home, 2 P.M. — Royal Orthopædic, 2 P.M. — Royal London Ophthalmic, 11 A.M.

Friday..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Fenwick, "On the Condition of the Stomach and Intestines in Scarlatina"; Dr. Wilson Fox, "On the Origin, Structure, and Development of Multilocular Cysts of the Ovary"; Mr. Kingdon, "On the Causes of Hernia."—Zoological.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

We have been obliged this week to defer the insertion of the letters, etc., of many correspondents.

Cambridge University.—The following is the proceeding about which our correspondent asks information.

The degree of M.D.Cantab. can be obtained only by going through a prescribed course of study and examinations, the particulars of which may be seen in the *Cambridge Calendar*, *The Students' Guide to the University of Cambridge*, and *The Medical Directory*. The chief requirements are:—

1. Residence in the University during three academical years: the first of which is occupied in studies of a general kind, the other two in medical studies.

2. The passing of at least one examination in classics and mathematics, and two examinations in medical subjects; besides certain exercises called acts, including the writing of theses.

The degree of M.D., as also that of M.B. which precedes it, is a legal qualification, entitling its holder to be registered.

The degree of M.B. cannot be obtained in less than five years by a student who begins his medical studies at Cambridge. One who has studied medicine for two years before entering the University may obtain this degree in three years.

The degree of M.D. can be obtained within three years after that of M.B.

The fees for the M.B. degree are eleven guineas; for the M.D. degree, twenty guineas.

The first step for a person to take who is desirous of proceeding to a medical degree at Cambridge, is to enter his name at one of the seventeen Colleges. This is to be done by application to the tutor of the College. If he be not acquainted with either a tutor or a fellow of any one of the Colleges, or with any of the medical men in Cambridge, he can obtain information and enter his name through any Cambridge graduate with whom he happens to be acquainted—such as any of the clergy in his neighbourhood.

There are some reasons for medical students preferring the Colleges of Caius, Downing, St. John's or Sidney, which in various ways give more encouragement to medical students than is at present given by other Colleges.

COMMUNICATIONS have been received from:—Mr. William Copney; Dr. Cotton; Mr. R. S. Fowler; Mr. Hornby; The Honorary Secretary of the Royal Medical and Chirurgical Society; Mr. Griffiths; Dr. Gilchrist; Dr. W. Ogle; Mr. D. K. Jones; The Hon. Secretary of the Odontological Society; Mr. G. Bottomley; Dr. Foster; Mr. V. Wearne; Mr. John Dix; and Mr. J. Vose Solomon.

INDEX.

A.

lomen, Mr. Hutchinson on hydatid tumours of, 197; ecovery after laceration of, 213; treatment of penerating wounds of, 316
lominal muscles, Dr. W. H. Day on neuralgia of, 412
scess, deeply seated pectoral, 51; chlorine-water in, 156; pulmonary, 375
sorption of uterine tumours, 281; by the skin, 426
antophonia, 611
etic acid of *British Pharmacopœia*, 132
ids, in *British Pharmacopœia*, 132; in diphtheria, 661; in phthisis, 684
and, Dr. H. W., medical education, 482, 513
onite, preparations of in *British Pharmacopœia*, 155
tion, unfounded for malpractice, against Mr. Peat, 14; against Dr. Lalor, by widow of a lunatic, 26; egarding chlorodyne, Browne *v.* Freeman, 83; Sergeant *v.* the Medical Council, 139; unfounded, against Mr. Millett, 184; against Dr. Corry, 213; for illegal detention in an asylum, Macintosh *v.* Smith and Lowe, 221; against a herbalist, 303; against a physician, for revealing "secret disease", 320; for libel, Millett *v.* Edmonds, 357; for keeping an unlicensed asylum, 609, 653; by a non-registered practitioner, 679; for recovery of fee, Manley *v.* Hooper, 693
upressure in amputation of leg, 428
lams, Mr. W., transverse fracture of patella, 245; dislocation of patella, 694
ldison, Dr. W., pathology of blood and fever, 202, 282
lvanced Life, Dr. Maclachlan on Diseases and Infirmities of, *rev.*, 124
lvertising, medical, 521
lvice to a Mother, Mr. P. H. Chavasse's, *rev.*, 289
ges of the nobility, etc., 84
r, effects of compressed, 241; purification of by vaporisation of water, 241, 246; of Manchester, 251; in bedroom, 332; in vessels, death from after labour, 213, 342
tken, Dr. W., Science and Practice of Medicine, *rev.*, 7
buminuria with mania, Dr. C. L. Robertson on case of treated by Roman bath, 229
cohol, Dr. Waters on therapeutic action of, 260
ford, Mr. H. J., spontaneous gangrene, 164
lkali-works, inspection of, 169
llison, Mr. W. J., types of fever, and blood-letting, 624
loes, preparations of in *British Pharmacopœia*, 155
lopecia, Mr. Naylor on, 296
lthaus, Dr. J., Paralysis, Neuralgia, etc., *rev.*, 448
maurosis, Mr. Hutchinson on clinical illustrations of, 146; in cerebral hæmorrhage, 658
merica, medical schools in, 83; treatment of army surgeons in, 110; medical candidates for army in, 122; provision for recruits in, 377; increase of medical students in, 487. *See* Army, American.
mmonia, preparations of in *British Pharmacopœia*, 155; benzoate of, 156; phosphate of, *ib.*; in hospital gangrene, 265; in diphtheria, 661
mmoniacal fermentation, 241
mputation at ankle-joint, 51; of leg, Mr. W. Eddowes on secondary hæmorrhage after, 93; by single flap, Mr. Carden on, 416; of thigh, 427; of leg, 428; at shoulder-joint for aneurism, 454, 621
mputations in St. Bartholomew's Hospital, statistics of, 242; in Paris and the provinces, statistics of, 619
mussat's operation, cases of, 426, 593
næsthesia, by subcutaneous injection of morphia, 48, 293; surgical, new treatise on, 169; cutaneous, in cerebral hæmorrhage, 658
Anæsthetics, deaths from, 436
Analysis, Fresenius' Qualitative Chemical, *rev.*, 69
Anatomy, Descriptive and Surgical, Mr. Gray's, *rev.*, 153
Ancient treatment of disease, 371
Anderson, Dr. W., santonine, 443
Anencephalous monsters, 111, 429
Aneurism, application of indices to compressing instruments in, 16; new method of procuring consolidation in, 455; popliteal, unusual occurrences in cure of, 15; flexion in, *ib.*; thoracic, effect of implication of pneumogastric nerves by, 186; of aorta, 214, 594; subclavian, amputation for, 454, 621; of aorta, wire inserted into, 455; of sciatic artery, injection of perchloride of iron in, 614; inguinal, compression in, *ib.*
Ankle-joint, amputation at, 51
Annals of Military and Naval Surgery, *rev.*, 394
Anthelmintics in *British Pharmacopœia*, 207
Antimony, preparations of in *British Pharmacopœia*, 156; tartarised, in strumous ophthalmia, Mr. Chesshire on, 609; Dr. W. Price on, 685; Mr. Garnham on, 697
Antiquity of man, proofs of, 410
Antiseptic, quinine as an, 94; sugar-cane as an, 641
Anus, artificial, Mr. J. R. Humphreys on case of, 230; cases of, 426, 593; imperforate, 594
Aorta, aneurism of, effect of implicating of pneumogastric nerve by, 186; cases of, 214, 594; rupture of into œsophagus, 244; aneurism of treated by insertion of wire, 455
Aphasia, 534
Aphonia, causes of, 610
Apnœa, Dr. Waters on treatment of, 32; Mr. R. L. Bowles on, 149; of children, Mr. Garraway on, 176
Apoplexy, Mr. Jones on, 657
Apothecaries' Hall of Ireland, license of recognised by army medical department, 184; proceedings in Medical Council regarding, 545, 563; fire at, 407
——— Society of London, pass-lists, *see* Medical News in each number; admission of Miss Garrett by, 452; non-compliance of with recommendations of Medical Council, 458, 519
Apprenticeship, medical, Mr. Martin on, 371
Archer, Dr., Annual Report of Calcutta Eye Infirmary, *rev.*, 289
Aretæos, Dr. T., monstrosity by inclusion, 286
Arm, separation of in attempt to reduce old dislocation, 371
Army, British, cramming for medical examinations in, 53; assistant-surgeon of killed in action, 169; hospital at Netley, Queen's visit to, 170; *Athenæum* on medical service of, 195; successful candidates for medical service of, 220; new warrant, 235; examination questions for medical service, 304; hospitals and civil surgeons, Mr. H. Terry on, 355, 571; letters on, 433; new rank of acting assistant-surgeons in, 434, 589; imperfect qualifications of medical candidates for, 452, 509; expenses of, compared with French army, 479; leading articles on medical service of, 496, 533, 615, 616, 667; titles of medical officers in, 545; syphilis in, 547; resolutions of Medical Council on examinations in, 564; letter on medical department of, 573; memorial of Edinburgh College of Physicians, 589; letter on resolution of Medical Council, 598; resignations in, 600; treatment of medical officers of by clubs, 669; medical warrants of 1858 and 1863, 670; meeting of Metropolitan Counties Branch regarding medical service of, 671; letter on, 677; acting assistant surgeons in, 692

Army, American Federal, female nurses in, 50; disease in, 83; treatment of surgeons in, 110; candidates for medical appointments in, 122; court-martial on Surgeon-General Hammond, 169, 379, 521, 600
—— Austrian, in Schleswig, sanitary state of, 293, 378, 453
—— Danish, treatment of sick and wounded in, 303
—— Indian, delay of Royal warrant, 276, 697; sanitary commission on, 294, 653; leading articles on medical service of, 345, 496; pay of medical officers in, 349, 356, 460
—— Prussian, vaccination in, 269; in Schleswig, sanitary state of, 293, 459
Arnica, Dr. Garrod on, 132
Arnott, Mr. J. M., medical education, 482, 511
Arsenic, preparations of in *British Pharmacopœia*, 208; poisoning by absorption of, 276
Artery, popliteal, aneurism of, unusual occurrences in cure of, 15; aneurisms of treated by flexion, *ib.*; pulmonary, fibrinous deposit in, a cause of death after labour, 342; common carotid, ligature of, 372; subclavian, amputation for aneurism of, 454, 621; sciatic, aneurism of injected with perchloride of iron, 614; femoral, compression in, *ib.*
Assassination of a medical practitioner, 372
Assimilation of isomorphous substances, 287
Association, British Medical, report of meeting of Committee of Council, 321; financial report for 1863, *ib.*
———— Bath and Bristol Branch, ordinary meetings, 133, 242, 373, 534
———— Bengal Branch, annual meeting, 518
———— Birmingham and Midland Counties Branch, ordinary meetings, 103, 214; special meeting on case of Mr. Manley, 321
———— East York and North Lincoln Branch, annual meeting, 591
———— Metropolitan Counties Branch, special general meetings, 214, 671; appointment of Committee on Parliamentary Bills, *ib.*; resolutions regarding Army Medical Department, 618, 671
———— Midland Branch, quarterly meeting, 164; resolution on consultation with homœopaths, 164
———— North Wales Branch, general meeting, 373
———— South-Eastern Branch, West Kent district meetings, 428, 518
———— West Somerset Branch, *conversazione* meeting, 164
Association, Manchester Medico-Ethical, annual report of, 477
———— Medical Registration, debt of, 73, 379
———— Metropolitan, of Medical Officers of Health, investigation on diseased meat, 46
———— National, for Promotion of Social Science, special meeting, 520
Asthma, iodide of potassium in, 194
Astigmatism, cylindrical lenses in, 77
Asylum, action against superintendent of a, 26; for idiots, alterations in, 194; action for alleged illegal detention in, 221; unlicensed, prosecution for keeping, 609
Asylums, district lunatic, in Ireland, 356; in Italy, Dr. G. M. Bacon on, 399; Middlesex County, patients in, 407; high walls to, 647, 653
Atmospheric pressure in treatment of disease, 172
Atropine papers, 168, 193
Aubry, M., pulsating varix of ophthalmic vein, 613
Auditory canal, hæmorrhage from, 270

B.

Bacon, Dr. G. M., lunacy in Italy, 399
Bael, description and properties of, 178
Banting, Mr., his cure for corpulence, 99
Barclay, Dr. John, on the building of infirmaries, 380
Barnes, Dr. R., craniotomy forceps, 52
Barrett, Dr., hydrocephalic fœtus, 187; aneurism of abdominal aorta, 594; absence of anterior wall of bladder, 622
Basile, Dr., health of General Garibaldi, 451
Bath, Roman, Dr. Robertson on mania and albuminuria treated by, 229
Baudot, M., translation of Mr. H. Lee on Syphilitic Inoculation, *rev.*, 612
Beale, Dr. L. S., medical education, 477, 484, 596
Beberia, Dr. Garrod on, 156
Bed-sores, quinine as an application to, 95
Belcher, Mr. P., foreign bodies in the ear, 649
Belladonna, preparations of in *British Pharmacopœia*, 178
Bennett, Dr. Hughes, illness of, 163; medical education, 621, 649
Bequests, 9, 302, 329, 433, 459, 575, 600, 627
Berthelot, M., action of oxygen on wine, 241
Berthier, M., ophthalmia of lunatics, 213
Bethnal Green guardians, conduct of to medical officers, 47
Beyran, M., urethral polypus, 95
Bickersteth, Mr. E. H., treatment of ununited fracture, 373; tumour removed from face of child, 427
Bidwell, Dr., the tongue in malaria, 447
Birth, concealed, 164; multiple, 378
Bismuth, solution of, 163, 249
Bladder, exfoliation of mucous membrane of, 47; distention of in fœtus, 53; distention of, a cause of *post partum* hæmorrhage, *ib.*; subpubic puncture of, 95; tenesmus of after sprain of hip, 154; reflex irritability of in the female, 231; villous tumours of, 352; influence of nervous system on, 453; absence of anterior wall of, 427, 622
Blepharoplastic operation, 243
Blood, Dr. W. Addison on pathology of, 202, 282; gases in, after labour, 213, 342; venous, colour of, 287
Blood-letting in old age, Dr. Maclachlan on, 125; in disease, Dr. Markham on, 359, 385, 411, 437, 461, 489; Dr. Mayo on, 603; Mr. Allison on, 624; Dr. Wardell on, 625
Blood-vessels, Dr. Waters on action of nerves on, 29; air in, a cause of death after labour, 213, 342
Bodington, Dr. G., plea of insanity, 300
Bœckel, Dr., polypi of larynx removed by laryngotomy, 479
Bombay, hygiene in, 645
Bone, dead, absorption of, 296; regeneration of, 398
Boott, the late Dr., 102
Botany, teaching of in Edinburgh, 620
Boughton, Gabriel, 211
Bowles, Mr. R. L., treatment of apnœa from drowning, 149
Bowman, Mr. W., iridectomy, 18, 54, 104, 133, 165, 216, 298, 323, 402, 568
Brain, syphilitic disease of, 447; affection of following liver-disease, Dr. Gramshaw on, 663; development of in relation to civilisation, 674
Bramwell, Baron, medical evidence in insanity, 669
Brandy in phthisis, 185
Breasts, condition of in uterine fibrous tumour, 655; tumours of, 695
Broca, M., infibulation, 161; nomenclature of loss of voice, *ib.*
Brodhurst, Mr. B. E., lectures on orthopædic surgery, 5, 59, 113, 171, 253, 307, 409, 491, 577, 629
Bronchi, casts of, 243, 591
Brown, Dr. F. J., median lithotomy, 38; laryngo-tracheotomy in an infant, 445
——— Mr. H., presentation by the Queen to, 139
——— Mr. I. B., removal of uterine fibrous tumours, 35
——— Sir W., legacies of, 329
Browne, Dr. S., iridectomy, 136, 273, 354; Mr. Bowman's reply to, 216, 298, 402
Brown-Séquard, Dr., colour of venous blood, 287

ryant, Mr. J. H., atropised and Calabarised gelatine, 193
—— Mr. T., ovariotomy, 350; calculus in the female, 676
ryson, Dr. A., pleuropneumonia in the Mediterranean fleet, 52
ucquoy, M., effects of compressed air, 241
udge, M., influence of nervous system on bladder, 453
ullen, Dr., and Sir R. Kane, 435, 459, 600
urder, Mr. W. C., night air, 332
urrows, Dr. G., resignation at St. Bartholomew's Hospital, 56; elected president of Medical Council, 72; medical education, 515
urying without a certificate, 549
utter, chromate of lead in, 48

C.

adillot, Dr., marriages of consanguinity, 49
æsarean section, case of, 344
alabar bean, new alkaloid from, 153
alabarised paper, 193
alculus, soft, in a child's bladder, 51; in urethra of child, Mr. Heath on, 309; large, in urethra, Dr. Rooke on, 313; in female bladder, 676
alcutta, sanitary state of, 378
allender, Mr. G., amputations in St. Bartholomew's Hospital, 242; medical education, 371
alomel, fumigation with in obstinate syphilis, Mr. H. Lee on, 389; use of in diphtheria, 661
amera, M. J., santonine in the uric acid diathesis, 123
ameron, Dr. J., case of hydrophobia, 632
amplin, Dr. J. M., Diabetes, *rev.*, 448
ancer of tongue, removed by *cauterisation en flèches*, 49; of liver, 428
andy, Dr. J., man-midwifery, 58
annabis Indica, preparations of in *British Phaamacopœia*, 179
antharides, liniment of, 240
anton medical mission, 330
aradec, Dr., nitrate of silver in dysentery, 398, 447
arbolic acid in hospital gangrene, 264
arbon, Dr. Addison on pathology of retention of, 203
arbonic acid, decomposition of by leaves, 241
arbuncle, local application of quinine in, 94
arden, Mr. H. D., amputation by single flap, 416
arlyon, the late Dr. C., 357
armichael school of medicine, 407
artwright, Mr., irregularity of the teeth, 548
asper, Professor, death of, 302; works of, 320
atalepsy, endemic, 122
ataract, iridectomy after extraction of, 25; laminar, 243; Mr. Walton on case of, 493
atheter, broken, in bladder, Mr. Fry on median lithotomy for, 39
attle, M. Thury's researches on breeding of, 128; disease of, in Switzerland, 195; Disease Prevention Bill, 600
austics, abuses of, 117
auterisation *en flèches*, 49; of malignant pustule, 614
ayenne pepper, charlatanic use of, 562
azot, M., marriages of consanguinity in Persia, 48
ell-walls, formation of, 581
ensus of Ireland, 250
entenarians, M. Flourens on, 372
erebellum, clot in, 245
erebral hæmorrhage, Mr. T. Jones on, 657
ertificates, lunacy, to be signed by registered practitioners, 183, 220; resolutions of Edinburgh College of Physicians regarding signing of, 268
hancre, indurated, in the female, 215
hange of type in disease, Dr. Aitken on, 9; Dr. Markham on, 360, 385, 411
harity, professional, 368
haucer's translation of first aphorism of Hippocrates, 222
havasse, Mr. P. H., Advice to a Mother, *rev.*, 289
hemical Analysis, Fresenius', *rev.*, 69
hemistry, Mr. Galloway's Second Step in, *rev.*, 205
herry-laurel water, 207
hesshire, Mr. E., tartarised antimony in strumous ophthalmia, 609
hest, Mr. Brodhurst on effect of spinal curvature on, 171; treatment of penetrating wounds of, 316; Dr. Waters on cases of disease of, 442, 606
hild, soft calculus in bladder of, 51; poisoned by laudanum, 83; noma in, treated by local application of quinine, 95; poisoned by cutaneous absorption of arsenic, 276; Mr. Heath on calculus in urethra of, 309; Mr. Cousins on intussusception in a, 312; spontaneous gangrene in a, 401; tumour removed from face of a, 427; Dr. F. J. Brown on laryngo-tracheo- in a, 445
hildren, Dr. F. J. Brown on median lithotomy in, 38; injurious effects of naked arms, 145; still-born, Mr. Garraway on resuscitation of, 176; hospital for in Edinburgh, 294; still-born, in department of the Seine, 372; proposed hospital for contagious diseases of, in Manchester, 477; syphilis in, 670
hiretta, properties of, 179
hiropodist, business of a, 83
hlorine water in abscess, 156; pharmacopœial solution of, 240; gas, effect on hospital gangrene, 265
hlorodyne, legal action concerning, 83; Mr. Towle's, 251; Mr. Freeman's, 305, 331
hloroform, anæsthesia from, prolonged by subcutaneous injections of morphia, 48, 293; death from, 58; Dr. Newman on coma from, 63; electricity in accidents from, 196; spirit of, 207; Mr. Towle's preparations of, 251
holera in Bombay, 168; nitric acid fumigations in, 619
hristison, Dr., medical education, 507
hurchill, Dr. F., Diseases of Women, *rev.*, 231
ider kept in leaden vessels, poisoning by, 169
ilia, development of, 40
inchona, falsification of, 85; yellow, liquid extract of, 239; and iron, syrup of, 287
iviale, M., hospital surgeons, 160
ivilisation in relation to cerebral development, 674
larke, Mr. W. M., ovariotomy, 635
lassification of disease, Dr. Laycock on, 177, 327; of animals, Mr Huxley on, 639
limate, suggested inquiry as to result of change of, 488
loez, M., decomposition of carbonic acid by leaves, 241
lub-foot, Mr. Brodhurst on, 491, 577, 629
oal, consumption of, 289
oca, physiological effects of, 83
occulus Indicus, properties of, 179
ock, Dr., spontaneous gangrene in a child, 401
odeia, physiological effects of, 238
ole, Mr. J., mortality in labour cases, 367
ollege, King's, new regulations regarding assistant medical officers, 478
—— King and Queen's, of Physicians in Ireland, right to confer title of doctor, 101, 194; decision of Master of Rolls on, 478, 498; titles of licentiates of in *Army List*, 545
—— Queen's, at Cork, investigation regarding fire at, 379; resignation of the Professor of Surgery, 459; new appointments at, 600
—— Royal Medical Benevolent, annual festival, 371, 521, 562; bequest to, 406; annual general meeting, 600
—— Royal, of Physicians of Edinburgh, pass lists, 193, 486, 599; resolutions on signing lunacy certificates, 268; memorial on army medical service, 589
—— Royal, of Physicians of London, subjects of lectures at, 46, 83; rights of members to claim fees, 111, 212, 277; election of representative in Medical Council, 128; nominations by to St. Bartholomew's Hospital, 129; presentations of portraits to, 160; Dr. Garrod's lectures at, *see* Lectures; pass lists, 230, 356,

459, 697; re-election of Dr. Watson as president, 347; Miss Garrett's application to, 452, 534; title of doctor not granted by, 602; conformity of regulations of with recommendations of Medical Council, 619; *conversazione* at, 698
College, Royal, of Surgeons of Edinburgh, *conversazione* at 163; pass lists, 193, 486, 599
——— Royal, of Surgeons of England, vacancies in through Mr. Green's death, 83; lectures at, 110; election to Council of, 128; pass lists, 138, 193, 302, 330, 520, 575, 599, 626, 652, 678; new examiners in, 139; new regulations regarding University graduates, 269; country members of Council, 293, 692; prizes of, 460; vacancies in Council, 619; election of Councillors, 668, 690; candidates, 669
——— Royal, of Surgeons in Ireland, death of vice-president of, 109; professorship of hygiene in, 619; officers of, 653
——— University, Prince of Wales vice-patron of, 295; clinical teaching at, 601; prizes at, *ib.*
Colleges, medical, in Montreal, 57
Collodion with perchloride of iron, 251
Collyns, the late Mr. C. P., 453
Coma from chloroform inhalation, Dr. Newman on, 63
Comparative Anatomy, Professor Huxley's Lectures on, *rev.*, 639
Compression in aneurism, cases of, 15, 614; measurement of by indices, 16
Confections in *British Pharmacopœia*, 239
Congress, Medico-Chirurgical of Rouen, published proceedings of, 48; medical, of Spain, 236; at Lyons, 645
Conium, physiological and therapeutical effects of, 156
Consanguinity, marriages of, in Persia, 48; effects of, 49
Conspiracy against the French Emperor, 138
Consumption. *See* Phthisis
Convalescent wards in hospitals, 479, 550
Convulsions attending cerebral hæmorrhage, 657; Dr. Radcliffe on pathology and treatment of, 665, 687; Puerperal, Dr. Hodges on, *rev.*, 666
Cooke, Mr. W., tumours of female breast, 695
Cooper, Mr. White, iridectomy, 23
Coote, Mr. H., ovary in sac of inguinal hernia, 164
Copaiba, adulteration of in capsules, 243
Copper, sulphate of, poisoning by dust of, 670
Coreometer, Mr. Laurence's, 245
Coriaria myrtifolia, poisonous principle of, 241
Cornea, puncture of for relief of tension, 404
Coroner, conduct of a, towards Mr. Manley of Bromwich, 318, 321; year's work of a, 680
Corpulence, Mr. Banting's cure for, 99
Corrigan, Dr., medical education, 507, 512; amendment of the Medical Act, 536
Corry, Dr., unfounded charge against, 213
Corvisart, M., action of pancreatic juice, 590
Cotton, Dr. R. P., Phthisis and the Stethoscope, *rev.*, 288; therapeutics of consumption, 683
Coulson, Mr. W., public dinner to, 221, 303
County Court Bill, the Lord Chancellor's, 595, 651, 677
Court-martial on a naval assistant-surgeon, 56
Cousins, Mr. E., intussusception in a child, 312
Cow-houses in St. Pancras, 57
Crania, crooked, from Wroxeter, Dr. H. Johnson on, 284
Craniotomy forceps, 52
Cretinism, M. Kœberle on, 346
Criminal lunatics, responsibility of, 192, 208; Dr. Symonds on, 223; Dr. Davey on, 392
Critchett, Mr. G., iridectomy, 19
Croup, M. Guersant's cases of tracheotomy in, 320
Curry, Mr. W., gratuitous medical services, 377
Cystic transformation of uterine fibrous tumours, Dr. Routh on, 256

D.

Daniell, Mr. R. T., pulmonary abscess, 375
Danish sick and wounded, 303
Date, Mr. W., poisoning by kidney-beans, 471
Daunt, Dr., contagiousness of leprosy, 57
Davey, Dr. J. G., the plea of insanity, 392
Davy, Sir H., memorial of in Penzance, 679, 693
Day, Dr. E., extrauterine fœtation and premature labour, 103
—— Dr. G. E., testimonial to, 549
—— Dr. W. H., neuralgia of abdominal muscles, 412
Dead, burial of among Danes, 373
Death, Mr. Grindon on, 97; Mr. Savory on, 98; abolition of punishment of, 194
Deaths, average annual proportion of, 282, 433
De Bartolomé, Dr., testimonial to, 435
Decoctions in *British Pharmacopœia*, 239
Defervescence in fever, 8
Deformity, fœtal, in twins, 592
Degeneration of human species, 185
Delcroix, M., alleged curability of hydrophobia, 236
Delirium, Dr. Waters on pathology of, 227
Demarquay and Leconte, MM., action of oxygen, 241, 269
De Méric, Mr., indurated chancre in the female, 215
Demonopathic hysteria in Savoy, 645
Denmark, medical practice in, 590
Deschamps, M., absorption of iodide of potassium, 240
Desgranges, M., hernia reduced into artificial cavity, 96
Diabetes, treatment of, 74; Dr. Camplin on, *rev.*, 448
Dickens, Mr. C., his apology for Mr. C. Reade, 45
Diday, M., treatment of hooping-cough by coal-gas, 372, 500
Diet and Regimen, Dr. Dobell's Manual of, *rev.*, 448
Dietary in Wakefield prison, 330
Digitaline, action of on urine, 41; characters and effects of, 179
Diphtheria, Mr. J. W. Walker on, 529, 551, 584, 660; treatment of, 694
Dipsomania, Mr. F. D. Fletcher on, 35
Disease, Dr. Laycock on classification of, 177, 327; investigation of in Northumberland and Durham, 196; and weather, international registration of, 356; blood-letting in, *see* Blood-letting; change of type in, *see* Change of type
Dislocation of humerus, avulsion of arm in attempt to reduce, 371; of patella, outwards, 694
Dispensary, Metropolitan, payment by patients at, 679
Dissecting-wound, death from, 251
Distortions, Mr. Brodhurst on causes of, 409
Dixon, Mr. J., iridectomy, 80, 108, 376, 597, 648; Mr. Bowman's replies to, 323, 568
Dobell, Dr. H., Manual of Diet and Regimen, *rev.*, 448
Donations, 56, 213, 301, 302, 600
Drew, Dr. S., payments for vaccination, 550
Drowning, Mr. Bowles on treatment of apnœa from, 149
Druggists, opposition of to proposed legislation by Medical Council, 13, 111, 236
Drunkards, Mr. Fletcher on, 35; New York asylum for, 67
Drysdale, Dr. C. R., evidence against internal use of mercury, 16, 77; Treatment of Syphilis and other Diseases without Mercury, *rev.*, 151; mercury in iritis, 219; death apparently from inhalation of sulphurous acid gas, 401; mercury in syphilis, 404
Dublin Medical Press on gratuitous medical services, 487; on admission of reporters to Medical Council, 618
Duchesne-Thoureau, M., utilisation of spiders' webs, 269
Dulcamara, infusion of, 239
Dunn, Mr. R., civilisation and cerebral development, 674
—— Mr. R. W., treatment of syphilis, 696
Duodenum, hæmorrhage from chronic ulcer of, 375
Duplay, M., syphilitic disease of brain, 447
Durham, Mr., popliteal aneurism cured by flexion, 15
Dwellings, most elevated human, 161
Dysentery, nitrate of silver in, 398, 447
Dysmenorrhœa, Dr. J. Williams on Russian bath in, 64
Dyspepsia in early phthisis, 555

E.

ars, causes of hæmorrhage from, 270; removal of foreign bodies from, 315, 405, 596, 649
arle, Dr. J. L., distension of bladder a cause of *post partum* hæmorrhage, 53
cthyma, diagnosis from impetigo contagiosa, 607
ctopia cordis, case of, 41
czema impetiginoides, diagnosis from impetigo contagiosa, 607
ddowes, Mr. W., jun., of secondary hæmorrhage, 93
dinburgh, new hospital in, 294
ducation, medical. *See* Medical Education
dwards, Mr. T. F., removal of prolapsed uterus, 147
lectric light for scenic effects, 378
lectricity in chloroform accidents, 196; relation of to muscular and nervous action, 664
ly, the late Bishop of, bequests by, 330
mbleton, Dr., medical education, 514
mbolism, fatty, a cause of pyæmia, 41; after labour, Dr. J. S. Fletcher on, 243, 469; diagnosis of, 271
mphysema, pulmonary, Dr. Waters on pathology of, 144
ngledue, the late Dr., portrait of, 56
piglottitis, Mr. J. Windsor on case of, 120
pilepsy, Dr. Waters on state of nervous system in, 31; Dr. Radcliffe's Lectures on, *rev.*, 664; pathology and treatment of, 687
pileptiform neuralgia, 123
pithelioma of penis and scrotum, Dr. F. Page on, 363
pithelium, ciliated, development of, 40
rgot in hooping cough, 122; Mr. Garraway on action of, 176; liquid extract of, 239
richsen, Dr. J., disease of suprarenal capsules, 41
——— Mr. J., Science and Art of Surgery, *rev.*, 471
smarch, M., honour conferred on, 590
ther, nitrous, spirit of, 207; sulphuric, use of in detecting feigned disease, 581
urope, suicides in, 653
xcision of knee-joint, 295, 622; of Scapula, Mr. Syme on, *rev.*, 313
xercise, physiological effects of, 316
xperts in criminal lunacy cases, 208, 232
xtracts, liquid, in *British Pharmacopœia*, 239
ye Infirmary of Calcutta, Dr. Archer's Annual Report of, *rev.*, 289
yes, Mr. Solomon on operations for relief of tension of, 91; Mr. Hutchinson on diseases of consequent on syphilis, 440

F.

ace, dilatation of small vessels of, 222
aculty of Physicians and Surgeons of Glasgow, power of diploma of, 436
alconer, Dr. R. W., ice to the spine in tetanus, 414
——— Mr., antiquity of man, 410
alling stars, 56
arre, Dr., defence of *British Pharmacopœia*, 452
atty disease of heart, Dr. Waters on, 115
avus, Hebra's treatment of, 123; with herpes circinatus, 374
ees, recovery of by members of College of Physicians, 111, 212, 277; professional, 252
eigned disease, detection of, 581
ellowships at Cambridge and Oxford, 234, 275. *See* University of Cambridge.
emale, indurated chancre in the, 215; removal of calculus in, 676
emale army nurses, 50
ergusson, Mr., and General Garibaldi, 450
ermentation, ammoniacal, 241
ern, male, Dr. Fleming on oil of, 61; liquid extract of, 207; oil of in tapeworm, Dr. Rendle on, 390
etherston, Dr., labour obstructed by unruptured hymen, 344
ever, ranges of temperature in, 8; Dr. Addison on pathology of, 202, 282; deaths of medical men from, 259, 487; types of, 624; typhoid, significance of intestinal hæmorrhage in, 48; contagiousness of, 161; puerperal, in Edinburgh, 454
Fevers, Dr. Laycock's classification of, 178, 347, 381
Fibrinous deposits after labour, Dr. J. S. Fletcher on, 243, 469; sudden death after labour from, 342
Fibroid tumour of uterus, 201
Fibroma of uterus, 174
Fibrous tumours of the uterus, Dr. Routh's lectures on, *see* Lectures and Uterus; removal of, 350
Fish in the Thames, 547
Fistula, vesico-uterine, 272
Fissure of sternum, 41
Fleming, Dr. A., oil of male-fern in tapeworm, 61
——— Dr. J. G., medical education, 514
Fleshworm disease in Germany, 75
Fletcher, Mr. F. D., dipsomania, 35
——— Dr. J. O., fœtal deformity in twins, 592
——— Dr. J. S., embolism after labour, 243, 469
Flourens, M., centenarians, 372; recovery of, 645
Fœtus, distended uterus of impeding labour, 53; urinary distension of impeding labour, *ib.*; hydrocephalic, 187; monstrosity of, 286; in rudimentary horn of uterus, 287; deformity of in twins, 592
Follin, M., iridectomy, 74; trephining the mastoid process, 272
Forceps, craniotomy, 52
Foreign bodies in ear, 315, 405, 596, 649; in trachea of child, Dr. F. J. Brown on laryngo-tracheotomy for, 445
Fossils demonstrating antiquity of man, 349, 679
Fox, Dr. W. T., impetigo contagiosa, 78, 467, 495, 553, 607; parasites of the skin, 309, 363; Classification of Skin-Diseases, *rev.*, 640
Fracture of spine, 50; of patella, 245; of petrous bone, 270; of scapula, 352; ununited operation for, 373
France, summary of medical matters in, 48
Fraser and Andrews defence fund, 109
Freeman's chlorodyne, 305, 331
Fresenius's Qualitative Chemical Analysis, *rev.*, 69
Frickhœffer, Dr., Cæsarean section, 344
Fright, deaths from, 138, 157
Fry, Mr. F., lithotomy, 39

G.

Gairdner, Dr. J., lecture on History of the Medical Profession in Edinburgh, 163
Galileo, third centenary of birth of, 320
Gallic acid, Dr. Waters on large doses of, 261
Galloway, Mr. R., Second Step in Chemistry, *rev.*, 205
Galvanisation in Diseases of the Nervous System, Dr. Althaus on, *rev.*, 448
Galway Board of Guardians, reduction of salaries of medical officers, 57
Gamgee, Mr. J. S., elected corresponding member of Surgical Society of Paris, 407; ovariotomy, 634
Gangrene, spontaneous, in a boy, 164; hospital, Mr. Pick on, 262; spontaneous, in a child, 401
Garibaldi and gratuitous medical services, 408, 436; his departure from England, 450, 478, 487, 550, 561
Garnham, Mr. D. J., tartarised antimony in scrofulous ophthalmia, 697
Garraway, Mr. E., resuscitation of stillborn children, 176
Garrett, Miss E., her application to the College of Physicians, 452, 534
Garrod, Dr., lectures on the *British Pharmacopœia*, 130, 154, 178, 206, 237
Gärstang, Dr., gratuitous medical services, 348
Gases in the blood-vessels of puerperal women, 213, 342
Gaskoin, Mr. G., mercury in syphilis, 301, 574
Gee, Dr., pneumonic lung, 51; scirrhous cancer of liver, 428
Gelatine, atrophised and calabarised, 193
German *versus* English ophthalmology, 424
Germany, medical education in, 265, 290, 317

Germination, action of infusoria in, 240
Gervis, Dr., difficult labour from distended fœtal uterus. 53
Gibb, Dr. G. D., practical use of laryngoscope, 79; honorary degree conferred on, 520; Diseases of the Throat and Windpipe, *rev.*, 610
Gibbon, Dr. S., gratuitous medical services, 191, 650; Insane Prisoners Act Amendment Bill, 275
Gieseler, Dr. ,quinine as a local antiseptic, 94
Gintrac, M., contagiousness of typhoid fever, 161
Glaucoma, iridectomy in, *see* Iridectomy; Mr. Hulke on case of, 391
Glycerine in phthisis, 180, 684
Goode, Dr. H., registration necessary for certificates, 220
Goodeve, Dr. H. H., appointed a magistrate, 169
Gramshaw, Dr. J. H., the Lord Chancellor's County Court Bill, 595; brain-affection following liver-disease, 663
Gray's Anatomy, *rev.*, 153
Green, Mr. J. H., funeral of, 26
Griepenkerl, M., ergot in hooping-cough, 122
Griffin, Mr. R., poor-law medical reform, 250, 304, 405, 460, 602
Grimault, M., syrup of iron and cinchona, 287
Grimsdale, Dr. T. F., ovariotomy, 187
Grindon, Mr. L. H., Life, *rev.*, 96
Guiaicum in diphtheria, 660
Guérin, M., avulsion of arm in attempt to reduce old dislocation, 371
Guersant, M., statistics of tracheotomy in croup, 320
Guide-hook, the, 103
Gunshot-wounds of chest and abdomen, treatment of, 316

H.

Habershon, Dr., implication of pneumogastric nerve by aneurisms, 186
Hæmatocele, periuterine, Dr. Churchill on treatment of, 231
Hæmaturia, of the Cape of Good Hope, 186; Dr. F. Page on case of, 467
Hæmorrhage from bowels in typhoid fever, 48; after labour, distended bladder a cause of, 53; secondary, Mr. W. Eddowes on, 93; from ears, causes of, 270; after labour, Dr. J. S. Fletcher on embolism following, 469; fatal umbilical, in an infant, 557; cerebral, Mr. T. Jones on, 657
Hamilton, Mr. J., Restoration of Lost Nose by Operation, *rev.*, 613
——— Mr. W., his services to the East India Company, 211
Hammond, Dr. W., court-martial on, 169, 379, 521, 600
Hardening of uterine fibrous tumours, 281
Hardy, Dr., treatment of itch, 373
Hargrave, Mr. W., medical education, 506
Harley, Dr. J., hæmaturia of the Cape of Good Hope, 186
Hart, Mr. E., popliteal aneurism cured by flexion, 15; indices to pressure-instruments, 16
Haschisch, regulations regarding sale of in Constantinople, 372
Haselwood, Mr. A. F., Notes on the *British Pharmacopœia*, *rev.*, 448
Hawkins, Dr. Francis, testimonial to, 567
——— Dr. Frederick, testimonial to, 302
Headlam, Dr , death of, 251
Heart, Dr. Waters on disease of, 2, 115; fœtal displacement of, 41; nervous influence on, 57
Heath, Mr. C., calculus in urethra of child, 309; cleft palate, 493
Hebra, Professor, his treatment of favus, 123
Hemidesmus, properties of, 237
Hemiopia following syphilis, Mr. Hutchinson on, 441
Hemiplegia on right side with loss of speech, 572
Henri Quatre, medical staff of, 619
Herbalist, trial of a, for manslaughter, 303; committed for manslaughter, 548
Hernia, inguinal, reduction into artificial cavity, 96; ovary in sac of, 164; femoral, in subperitoneal pouch, 243
Herpes circinatus and favus combined, 374
Hervieux, M., treatment of abscess by chlorine water, 154; gases in blood-vessels of puerperal women, 213; sudden death after labour, 342
Heschl, Professor, ossification of nerve-cells, 286
Hewitt, Dr. G., intractable menorrhagia, 77; fatal umbilical hæmorrhage in an infant, 557
Hickman, Dr., sudden death, 401
Hicks, Dr. J. B., combined external and internal version, 53; abnormal conditions of fœtus impeding labour, *ib.*
Higginson, Mr., Pirogoff's amputation, 51; early embryo, *ib.*; cases of trephining, 622
Hill, Mr. J. D., Freeman's chlorodyne, 305
Hingeston, Mr. J. A., Topics of the Day, *rev.*, 448
Hippuric acid in human urine, 18
Hoar, Mr. W., laceration of the perinæum, 686
Hodges, Dr. R., Puerperal Convulsions, *rev.*, 666
Hobart, Dr. H., death of, 110
Hogg, Mr. J., iridectomy, 108
Holmes, Mr. T. Gray's Descriptive and Surgical Anatomy, *rev.*, 153
Holt, Mr. B., Immediate Treatment of Stricture of Urethra, *rev.*, 68
Home, Mr., the spirit medium, at Rome, 83
Homœopath, consultation with a, 13
Homœopathic literature, 583
Homœopathy, great discovery in, 60
Honey, action of light on, 648
Hooker, Dr., replacement of species, 454
Hooping-cough, treatment of, 53; ergot in, 122; vapour of gas-works in, 372, 500
Hospices, definition of the term, 184
Hospital, Bethlehem, removal of, 425, 435
——— Bicêtre, enlargement of, 357
——— Birkenhead, construction of, 69
——— Chalmers's, in Edinburgh, 294
——— Chelsea, causes of death in, 124
——— Cochin, in Paris, puerperal fever in, 356
——— Cotswold Village, report of, 479
——— Dental, recognised by College of Surgeons, 26; anniversary festival of, 522
——— gangrene, Mr. Pick on epidemic of, 262
——— Guy's, new president of, 26; biennial festival of, 277
——— for Incurables, enlargement of, 679
——— Leeds, for Women and Children, assistant-surgeon to, 109
——— London, publication of Reports of, 138; enlargement of, 221, 679
——— London Fever, contributions to, 169
——— Lying-in, in Vienna, mortality in, 476
——— in Manchester, proposed, for contagious diseases of children, 477
——— Maternity in Edinburgh, puerperal fever in, 454
——— in New York, a new, 194
——— Norfolk and Norwich, recognition of certificates by University of London, 143
——— Royal London Ophthalmic, ophthalmoscopic demonstrations at, 453
——— Royal Victoria at Netley, Queen's visit to, 170
——— St. Bartholomew's, Dr. Burrows elected consulting physician to, 109; new appointments at, 138; nominations to by College of Physicians, 129; professional reputation of students of, 159; statistics of amputations at, 242; prizes at, 627
——— St. George's, Mr. Pick on epidemic of phagedena in, 262: convalescent hospital of, 619
——— St. Mary's, remarks of Archbishop of York at distribution of prizes, 645; prizes at, 652
——— St. Thomas's, site of new, 267, 277

ital, at Shoreditch, new, 302
—— Staffordshire, enlargement of, 356
—— Westminster, prizes at, 559
pitals, medical men of Perth on limitation of term of fice in, 74; army, and civil surgeons, Mr. H. Terry , 355, 571; Parisian, improvements in, 356, 357; nvalescent wards in, 479, 550; Philadelphia military, 9; London, mortality in, 691
-air bath in albuminous nephritis, 123
ard, Dr., rupture of aorta into œsophagus, 244
ke, Mr. J. W., femoral hernia in subperitoneal pouch, 3; iridectomy for glaucoma, 391
naan race, alleged degeneration of, 185
nphreys, Mr. J. R., artificial anus, 230
nphry, Dr. G. M., fellowships at Cambridge, 275
nt, Mr. B., pathology of strabismus, 592
band, Mr. W. D., resignation as alderman of York, 73
chinson, Mr. J., clinical illustrations of amaurosis, 46; surgical treatment of hydatid tumours of abdo- en, 197; diseases consequent on constitutional syphi- s, 440
kley, Mr. T. H., Lectures on Comparative Anatomy, *rev.*, 639
latid tumours of abdomen, Mr. Hutchinson on treat- ent of, 197
lrocephalus in a fœtus, 187
lrochloric acid in consumption, 684
lrocyanic acid of *British Pharmacopœia*, 207
lrophobia in a mule, 185; alleged curability of, 236; ase of, 353; Dr. Cameron on case of, 633
giene, appointment of commission on, in Paris, 349; rofessor of in College of Surgeons in Ireland, 619; n Bombay, 645
men, unruptured, obstructing labour, 344
pochondriasis, Dr. Sankey on, 175
steroma of uterus, 174

I.

in sea-sickness, 83; applied to spine in tetanus, Dr. Falconer on, 414
ntity, mistaken, 83
ots, pauper, proposal for treatment of, 406
gal practice, prosecutions for, 398, 460, 522, 562
gitimate births in workhouses, 194
lach, Dr., medical attendance on pauper cases, 428, 529
petigo contagiosa, Dr. W. T. Fox on, 78, 467, 495, 553, 607
lia, benefits conferred by medical men in, 210; army sanitary commission in, 294, 653; sanitary science in, 580. *See* Army, Indian.
lian hemp, preparation of in *British Pharmacopœia*, 179
ligestion in early phthisis, 555
fant, fatal umbilical hæmorrhage in an, 557; tænia in an, 592; imperforate anus in, 594. *See* Child and Children.
fibulation, operation for, 161
firmary, Dundee Royal, deaths from fever in, 259; Calcutta Eye, Dr. Archer's Annual Report of, *rev.*, 289; Leicester, faulty construction of, 380; Eye and Ear, new, at Bradford, 434; new, at Leeds, 435
fusions in *British Pharmacopœia*, 239
fusoria, action of in germination, 240
jection and stomach-pump, 428
oculation, imprisonment for, 138
sane paupers, statistics of, 83; prisoners' act amend- ment bill, 275
sanity, Dr. Sankey on illustrations of, 33, 175, 340, 583; the plea of, 126, 182, 232; Dr. Maudsley on, 192; Dr. Symonds on, 223; Dr. Bodington on, 300; Dr. Davey on, 392; in Italy, Dr. Bacon on, 399
stitution, Royal, lectures at, 110
Intestines, Dr. H. Sandwith on fatal obstruction of, 5; wound of, 214; Amussat's operation for obstruction of, 593
Intelligence, how affected in cerebral hæmorrhage, 658
Intussusception, Mr. Cousins on case of, 312
Iodine, action of mercury modified by, 206; liniment of, 240; in diphtheria, 661
Ireland, census of medical practitioners in, 250; district asylums in, 356
Iridectomy, leading articles on, 12, 397, 617; Mr. Bow- man on, 18, 54, 104, 133, 165, 216, 298, 323, 402, 568; Mr. J. E. Smith on, 19; Mr. Critchett on, *ib.*; Mr. Haynes Walton on, 20; Mr. White Cooper on, 23; Mr. Teale, jun., on, 24; case of, 74; Mr. Dixon on, 80, 108, 376, 597, 648; Mr. F. Jordan on, 81; Mr. Woolcott on, 82; Mr. Hogg on, 108; Dr. S. Browne on, 136, 273, 354; Dr. J. R. Wolfe on, 167, 297; Mr. Hulke on case of, 391; letters on, 81, 623
Irish candidate, anecdote of an, 110; poor-law medical officers, 194, 323, 547; surgeon, exclusion of from hospital appointment, 195; poor-law commissioners, requirements of, 543
Iritis, mercury in, 219; syphilitic, Mr. K. E. Knight on, 467
Iron, preparations of in *British Pharmacopœia*, 180, 208; perchloride of with collodion, 251; and cinchona, syrup of, 287; and quinine, in purpura, 447; tincture of perchloride of in diphtheria, 661; preparations of, in consumption, 684
Irvine, Dr., imperforate anus, 594
Isomorphous substances, absorption of, 287
Italy, Dr. G. M. Bacon on lunacy in, 399
Itch, treatment of, 372, 670

J.

Jaccoud, Dr., medical education in Germany, 265, 290, 317
Jackson, Dr. J. H., hemiplegia on right side with loss of speech, 572
—— Mr. T., payment for re-vaccination, 486, 488, 571
Jalap, resin of, 206
Jardin des Plantes, vegetable parasite in tanks of, 548
Jatropha nuts, poisoning by, 678
Jobst and Hesse, MM., new alkaloid from Calabar bean, 153
Johns, Dr. R., death of, 575
Johnson, Dr. H., crooked crania from Wroxeter, 284
Joly and Musset, MM., spontaneous generation, 240
Jones, Mr. T., cerebral hæmorrhage, 657
Jordan, Mr. F., iridectomy, 81; ovariotomy, 631
—— Mr. R. J., removal from *Medical Register*, 518
Journal of Mental Science, 426; new medical in America, 605
Juler, Dr. H. C., influence of nervous action on skin- diseases, 374

K.

Kalb, Dr., treatment of itch, 670
Kamela, properties of, 207
Kidd, Dr. C., deaths from anæsthetics, 436
Kidneys, distension of in fœtus, 53; hot air baths in disease of, 123; suppurative disease of, 352
Kidney-beans, Mr. Date on poisoning by, 471
Knee, disease of, 244; excision of, 295, 622
Knight, Mr. K. E., phagedænic ulceration, 363; syphi- litic iritis, 467
Kœberle, M., cretinism, 346
Kousso, properties of, 207
Kuss, M., hot air bath in albuminous nephritis, 123
Kyan, Mr., extraction of teeth and roots, 522

L.

Labour, Dr. Munroe on rare presentation in, 7; impeded by distension of fœtal uterus, 53; abnormal distensions of fœtus impeding, *ib.*; premature, in extrauterine fœtation, 103; mortality in cases of, 218; payment of Poor-law officers for attending cases of, 233; sudden death after, 342: missed, 343; obstructed by unruptured hymen, 344; Mr. J. Cole on mortality in, 367
Lady-doctors, 452, 472, 622
Lalor, Dr., action against, 26
Lamp-oil, dangerous, 240
Lancereau, M., syphilitic lesions of internal viscera, 446
Lane, Mr. J. R., vesico-uterine fistula, 272
Langenbeck, M., trichinal infection, 447
Lankester, Dr., year's work of a coroner, 680
Laplace's estimate of natural sciences, 185
La Pommerais, M., trial for murder, 303, 357, 548, 568, 618
Laryngoscope, illustrations of use of, 79, 398, 430; description of Dr. Babington's, 675
Laryngotomy, to remove vegetations behind glottis, 479
Laryngo-tracheotomy in an infant, Dr. F. J. Brown on, 445
Larynx, removal of tumours of, 479, 610; conditions of affecting voice, 611; subglottic œdema of, 612
Latham, Dr. P. M., medical education, 141
Laudanum, poisoning of a child by, 83
Laugier, M., vesical tenesmus after sprain of hip, 154
Laurence, Mr. J. Z., astigmatism, 77; ophthalmic instruments, 245; simple ophthalmoscope, 596
Lawson, Dr. H., Manual of Popular Physiology, *rev.*, 232
Laycock, Dr. T., Medical Observation and Research, *rev.*, 177; medical education, 319, 327; his classification of fevers, 347, 381
Lead, chromate of, in butter, 48
Leaves, decomposition of carbonic acid by, 241
Lectures, on mutual relations of physiology, pathology, and medicine. Dr. Waters's, 1, 29, 89, 115, 144, 227, 259, 279; on orthopædic surgery, Mr. Brodhurst's, 3, 59, 113, 171, 253, 307, 409, 491, 577, 629; obliteration of varicose veins, Mr. H. Lee's, 87, 118; at Royal Institution, subjects of, 110; on the British *Pharmacopœia*, Dr. Garrod's, 130, 154, 178, 206, 236; Lettsomian, on fibrous tumours of the uterus, Dr. Routh's, 173, 201, 255, 280, 333, 464, 579, 604, 655, 681; hydatid tumours of abdomen, Mr. J. Hutchinson's, 197; Gulstonian, on blood-letting in disease, Dr. Markham's, 359, 385, 411, 437, 461, 489; on diseases consequent on congenital syphilis, Mr. Hutchinson's, 440; history of midwifery, Dr. Murphy's, 523; on Epilepsy, etc., Dr. Radcliffe's, *rev.*, 664, 687; courses of in medical schools, *see* Medical Education.
Lee, Mr. Henry, obliteration of varicose veins, 87, 118; calomel fumigation in obstinate syphilis, 389; on Syphilitic Inoculation, translations of, *rev.*, 612
Leet, Dr., medical education, 515
Le Fort, M., appointed to visit European hospitals, 372
Legoyt, M., suicides in Europe, 653
Legrand du Saulle, M., on madness, 398
Leishman, Dr. W., Mechanism of Parturition, *rev.*, 314
Lemaire, M., action of infusoria in germination, 240
Leprosy, contagiousness of, 57
Leslie, Dr. P., the druggists' complaint, 111; medical education, 327
Leucocythæmia, Dr. S. Martin on recovery from, 285
Lichen, Mr. Naylor on, 582
Liddell, Sir John, retirement of, 109, 169; honour conferred on, 194
Liddon, Mr. W., ovariotomy, 164
Life, Mr. Grindon on, *rev*, 96; and Death, Mr. Savory on, *rev.*, 97; duration of in France, 398
Light, electric, employed for scenic effects, 378; effect of on honey, 648
Lightning, death from, 627
Lime, saccharated solution of, 240
Lindley, Mr. J., foreign bodies in ear, 405
Lingen, Dr., application of fund raised for, 269, 302, 33
Liniments in *British Pharmacopœia*, 239
Liquor sanguinis, Dr. W. Addison on, 203
Lithia, preparation of in *British Pharmacopœia*, 237
Lithotomy, median, Dr. F. J. Brown on, 38; Mr. Fr on, 39
Liveing, Dr., testimonial to, 356
Liver, abscess of, 215; cancer of, 428; disease of fol lowed by brain-affection, Dr. Gramshaw on, 663
Liverpool, sanitary condition of, 303, 331
Livingstone, Dr., his expedition, 169; report of death o contradicted, 406
Llewellyn, Mr. J. H., rupture of uterus, 344
Locock, Sir C., appointed chairman of dinner of Medica Benevolent College, 371
London, deaths in, 138, 139, 194, 221, 276, 303, 407 434, 575
Longevity, examples of, 145, 398, 549
Lord, Dr., new cure for small-pox, 479
Lorimer, Dr., cystic tumour of thyroid gland, 244
Lowndes, Mr., fractured scapula, 352; disease of ankle 428
Lumbrici, Dr. Anderson on santonine in, 443
Lunacy certificates, refusal to sign, 82; registration n cessary for signing, 183; Edinburgh College of Phy sicians on, 268
Lunatics, criminal, and experts, 208, 232; ophthalmi of, 213
Lund, Mr. E., adulteration of copaiba in capsules, 243; syphilis in monkeys, 244
Lungs, abscess of, 375
Luschka, M., fœtus in rudimentary horn of uterus, 287
Lye, Dr. Bleeck, death of, 138; memoir of, 162
Lynch, Dr., fatal accident to, 678
Lyons, medical congress at, 645; the syphilitic schoo of, 646

M.

McClintock, Dr., missed labour, 343
McGrigor, Sir James, statue of, 302
Mackenzie, Dr. M., Dr. Babington's laryngoscope, 675
Mackesy, Dr. T. L., testimonial to, 644
Maclachlan, Dr. D., Diseases of Advanced Life, *rev.*, 12
Madge, Dr. H., lesion of placenta, 103
Madras, small-pox in, 56
Magnesia, citrate of, 287
Magnesium, photography by light from, 547
Mailloux, Dr., alleged cure for cholera, 619
Maisonneuve, M., removal of cancer of tongue by *cau terisation en flèches*, 49
Malaria, effect of on tongue, 447
Malignant pustule, cauterisation of, 614
Malpractice, alleged, 14
Mammalia, Mr. Huxley on classification of, 640
Mammary region, abscess in, in male, 51
Man, evidences of antiquity of, 48, 110
Manchester, air of, 232, 251; sanitary report on, 292 proposed hospital for contagious diseases of children in, 477
Manganese, theraupetic use of, 180
Mania, and albuminuria, Dr. C. L. Robertson on Roman bath in, 229; Dr. Sankey on cases of, 340, 583
Manifold, Mr. W. H., severe wound of skull, 187
Manley, Mr., conduct of a coroner towards, 318, 321 action for recovery of fee by, 693
Man-midwifery, 58, 219
Manslaughter, alleged, by a herbalist, 548
Marcotte, M. J., chemical composition of matico, 288
Margate, sanitary state of, 617
Markham, Dr., Gulstonian lectures on blood-letting in disease, 359, 385, 411, 437, 461, 489
Marley, Mr. R., treatment of hooping-cough, 53

ues, Dr., translation of Mr. H. Lee on Syphilitic oculation, *rev.*, 612
iages of consanguinity, 48, 49
ih, Mr. F., complimentary resolution to, 653
hall, Dr. H., ovariotomy, 637
in, the late Mr. P., memorial to, 72, 100, 139
— Mr. T., medical apprenticeship, 371
yn, Dr. S., medical education, 247; recovery from icocythæmia, 285
— Dr. W., fatal hæmorrhage from chronic ulcer of iodenum, 375
toid process, trephining the, 272
ico, scarcity of, 32; properties of, 237; chemical mposition of, 288
idsley, Dr. H., criminals' responsibility, 192
rezin, Drs., cauterisation of malignant pustule, 614
ne, the late Dr. R., 521
o, Dr. T., extremes in practice, 603
dow's, Dr. A., Prescriber's Companion, *rev.*, 394
t, diseased, inquiry into effects of, 46; sale of, 169
ical Act, proposed pharmacy clause of, opposed by uggists, 13; suggested alterations in, 14, 236; proedings in Medical Council regarding, 517, 535; in ustralia, failure of, 697
— advertising, *Dublin Medical Press* on, 371
— apprenticeship, Mr. Martin on, 371
— congress in Spain, 236; at Lyons, 645
— Council, special meeting of, 56; new president f, 72; treasurer of, 109; Mr. Serjeant's action gainst, 139; leading articles on, 395, 422, 449, 531, 87; letter on registration of students by, 457; nononformity of Society of Apothecaries with recomendations of, 458, 519; admission of reporters to, 78, 500, 618; report of session of, 480, 501, 535, 63; resolutions on admission of reporters, 480; tanding orders, 480, 543, 567; the *British Pharmaopœia*, 481, 504, 512; education of medical students, 81, 501, 513, 541, 545, 565, 567; discussion on preminary education and examination, 483, 501; applination from Catholic University of Ireland, 503, 504, 63; discussion on professional education, 504, 513, 45, 565; registration of students, 503, 547; the Medical Act, 517, 535; report of Finance Committee, 17, 564; the Council minutes, 517; case of R. J. ordan, 518; case of R. Organ, 541; report of Select Committee on Education, 541; erased names, 543; ength of speeches, 543; requirements of Irish Poorlaw Commissioners, *ib.*; Faculty of Physicians and Surgeons of Glasgow, 545; titles of army medical fficers, *ib.*; Apothecaries' Hall of Ireland, 545, 563; xecutive committee, 547, 567; president's casting ote, 563; army and navy medical examinations, 64; registration of British practitioners in foreign ountries, *ib.*; recovery from apparent death by drowning, *ib.*; uncertified deaths, *ib.*; returns from licensing odies, 566; testimonial to Dr. Hawkins, 567; votes f thanks, etc., *ib.*
— education, leading articles on, 42, 70, 157, 319, 70, 395, 422, 449, 473; in Montreal, 57; Mr. Syme's cheme of, 70; letters on, 137, 247, 248, 305, 654; Dr. Latham on, 141; Dr. Martyn on, 247; in Germany, 65, 290, 317; Mr. Parsons on, 326; Dr. Leslie on, 27; Dr. Laycock on, *ib.*; Dr. Andrew Wood's and Mr. Callender's plans of, 370; discussion on in Medical Council, 481, 501, 505, 513, 541, 565, 567; Dr. L. Beale on, 484, 596; report of Committee of Medical Council on, 541; Dr. Stephens on, 602; Dr. Hughes Bennett on, 621, 649; the Archbishop of York on, 645
— Institution, Liverpool, reports of, 50, 187, 214, 44, 352, 428, 529, 594, 622; resolutions on gratuitous medical services, 398
— journalism for the million, 195
— lectures, *see* Medical Education
— matters in France, summary of, 48
— nomenclature, public, 196
Medical Observation and Research, Dr. Laycock on, *rev.*, 177
— oratory in New York, 414
— periodical, new, an American, 605
— philanthropists, 210
— portrait, a, 92
— portraits at the Royal Academy, 673
— practitioners, the Judge Ordinary on pay of, 293; in France, and life assurances, 618; in England, decrease of, 652
— prize system, 234
— profession in Edinburgh, history of, 163
— register, a French, 407
— schools in America, 83
— section of Manchester Royal Institution, reports of, 243, 430, 591
— services, gratuitous, leading articles on, 160, 181, 235, 317, 368; Dr. Mushet on, 190; Dr. Gibbon on, 191, 650; letters on, 191, 305, 329, 376, 432, 650; Dr. Garstang on, 348; resolutions of Liverpool Medical Institution on, 398; Dr. Ogle on, 431; *Dublin Medical Press*, on, 459, 487; *Gazette Médicale de Lyon* on, 693
— *Times and Gazette* on professional charity, 368; abuse of British Medical Journal by, 558.
Medicine, Dr. Waters on relations of to physiology and pathology, 1, 29, 89, 115, 227, 259, 279; Dr. Aitken's Science and Practice of, *rev.*, 7; progress of, 10; estimate of in Spain, 236; Dr. Waters on large doses of, 261; lectures on history of, in Paris, 372, 426
Melancholia, Dr. Sankey on, 33
Melland, Mr., pneumothorax, 592
Memorial of Mr. Peter Martin, 72, 100, 139; to late Mr. Smyly, 194; to Sir Humphry Davy, 679
Menorrhagia from lead-poisoning, 77; a symptom of uterine fibrous tumour, 604
Menstruation, state of in uterine tumours, 656, 682
Mercury, Dr. Drysdale on use of, 16, 77; Dr. Drysdale on Treatment of Syphilis and other Diseases without, *rev.*, 151; in syphilis, letters on, 168, 301, 404, 574; preparations of in *British Pharmacopœia*, 206; in iritis, 219, 467; in phagedænic ulceration, Mr. K. E. Knight on, 363
Methylated nitre, 85
Metrical system, bill for introduction of, 302
Metzel, Dr., treatment of scabies, 123
Midwifery, Dr. Murphy on history of, 523
Midwifery in Philadelphia, 330
Military Surgery, Dr. G. Williamson's, *rev.*, 68
Miller, Mr. James, System of Surgery, *rev.*, 471; death of, 698
Millett, Dr., unfounded charge against, 184; action for libel by, 357
Mineral waters, spectrum analysis of, 240
Monitor, air-supply in a, 229
Monkeys, syphilis in, 244
Monstrosity by inclusion, 286
Montreal medical education in, 57
Monneret, M., treatment of diabetes, 74
Moore, Mr. C. H., unusual occurrences in treatment of aneurism, 15; new method of consolidating fibrine in aneurisms, 455
— Dr. E., and the Bethnal Green Board of Guardians, 379
Morgue, new, at Paris, 548
Morin, M., purification of air by vaporisation of water, 241
Morphia, subcutaneous injection of to prolong anæsthesia, 48, 293; hydrochlorate of, 238; solution of, 240
Müller, Dr. H., death of, 619
Munroe, Dr. H., rare presentation, 10
Murchison, Dr. C., aortic aneurism treated by insertion of wire, 455
Murphy, Dr. E. W., lecture on history of midwifery, 523
Muscle, tensor, of choroid, section of, 348

Muscular atrophy, case of, 161; twitchings in cerebral hæmorrhage, 657; action, physiology of, 674
Mushet, Dr. W. B., gratuitous medical services, 190
Myotomy, intraocular, Mr. Solomon on, 91

N.

Naked arms of children, effects of, 145
Narcotine, properties of, 238
Nash, Mr., abscess of liver, 215; villous tumours of bladder, 352; tubercle of kidney, 594
Natural science, teaching of to theological students, 185
Naval assistant-surgeon, court-martial on a, 56; assistant-surgeons in New Zealand war, 212
Navy, the director-general of, 109, 169; vote for medical supplies in, 406; state of medical service of, 497
Naylor, Mr. G., alopecia, 296; lichen, 582
Necrosis, local application of quinine in, 95
Negro, the, in disease, 677
Nélaton, M., as a clinical teacher, 48; injection of sciatic aneurism with perchloride of iron, 614; œsophagism, *ib.*
Nephritis, albuminous, hot-air bath in, 123; suppurative, 352; traumatic, 430
Nerve-cells, ossification of, 286
Nervous system, Dr. Waters on influence of on blood-vessels, 29; influence on skin-disease, 374; diseases of following syphilis, Mr. Hutchinson on, 441; Dr. Althaus on Galvanisation in Diseases of, *rev.*, 448; influence of on bladder, 453; action, physiology of, 665
Neuralgia, epileptiform, 123; of abdominal muscles, Dr. W. H. Day on, 412
Nevins, Dr. J. B., Prescriber's Analysis of the *British Pharmacopœia*, *rev.*, 394
Newham, Mr. S., guide-hook, 103
Newman, Dr. W., galvanism in coma from chloroform, 63
New York, health affairs of, 251
Nobility, ages of, 84
Noma, local application of quinine in, 95
Nomenclature of *British Pharmacopœia*, Dr. Garrod on, 154; medical, 178, 377; popular perversions of, 196
Normandy, the late Dr., 600
Norris, Mr. H., concealed birth, 164; the Lord Chancellor's County Courts Bill, 651
Nose, Lost, Mr. Hamilton on Restoration of by Operation, *rev.*, 613
Nottingham, Dr., fractured spine, 50; perforated stomach, *ib.*; disease of knee, 244; effect of teak wood, 429; cancer of heart, *ib.*; anencephalous child, *ib.*; fatty tumour, 530; ring-pessary, *ib.*; excision of knee, 622
Novelists, sensation, 45, 84
Nunneley, Mr., ovariotomy, 335
Nurses, female army, in America, 50; in Constantinople, 65; Dr. Symonds on training of, 212
Nussbauer, M., anæsthesia from subcutaneous injection of morphia, 48, 293
Nyssens, Dr., iron and quinine in purpura hæmorrhagica, 447

O.

Obstetric Aphorisms, Dr. J. G. Swayne's, *rev.*, 69
Occhim, Dr., laceration of abdomen, 213
Œdema of uterine fibrous tumours, 255; subglottic, Dr. Gibb on, 611
Oehl, M., development of ciliated epithelium, 40
Œsophagism, 614
Œsophagus, rupture of aorta into, 244
Ogle, Dr. J. W., effervescing bismuth water, 249
—— Dr. W., medical prizes at Oxford and Cambridge, 354, 406; professional charity, 431
Old age, diagnosis of disease in, 124; blood-letting in, 125; phthisis in, *ib.*
Oldham, Dr. H., address to Obstetrical Society, 103
Olivieri, Dr., benevolent act of, 426
Ollier, M., reproduction of bone, 398, 590
Ophthalmia of lunatics, 213; strumous, Mr. Chesshire tartarised antimony in, 609; Dr. W. Price on, 685; M Garnham on, 697
Ophthalmic instruments, new, 245; Review, the, 424
Ophthalmoscope, demonstrations of, 453; a simple, 5
Opium, preparations of in *British Pharmacopœia*, 23 in hospital gangrene, 265; adulteration of in Ameri 521
Orbit, syphilitic periostitis of, Mr. Hutchinson on, 44
Organ, Mr. R., decision of Medical Council in case 541
Osborne, the late Dr. J., 162
Otorrhagia, causes of, 270
Ovarian tumours, diagnosis from uterine, 519, 573, 68
Ovariotomy, Mr. Liddon on, 164; fatal case at Lyo 185; Dr. Grimsdale on, 187; Mr. Nunneley on, 33 Mr. Bryant on, 350; in Edinburgh, 454; Dr. Ty Smith on, 557; Mr. F. Jordan on, 631; Mr. J. Gamgee on, 635; Mr. W. M. Clarke on, 635; Dr. Marshall on, 637; Mr. S. Wells on, 676
Ovary in inguinal hernia, 164
Overworked men, diseases of, 195
Ox-bile, purified, 181
Oxley, Mr. W., testimonial to, 26
Oxygen, action of on animals, 241; on wine, *ib.*; wounds, 241, 269

P.

Page, Dr. F., epithelial cancer of penis, 263; hæmatu 467
Paget, Dr. G. E., medical education, 513
Pain, Dr. Waters on significance of, 30; pathology of,
Painter, Dr. R. B., testimonial to, 289
Pajot, M., appointment to chair of midwifery in Pa 426
Palate, cleft, Mr. Heath on, 493
Pancreatic juice, properties of, 590
Paralysis in relation to distortions, Mr. Brodhurst 409
Paraplegia from reflex causes, Dr. Waters on, 31
Parasitic, a vegetable, in the Garden of Plants, 548
Parasites of the skin, Dr. W. T. Fox on, 309, 363; man, number of, 426
Pareira, liquid extract of, 239
Paris, improvements in hospitals of, 356, 357
Parkes, Dr., medical candidates for the army, 509
Parsons, Mr. J., medical education, 326
——— Dr. J. G., the Faculty of Physicians and S geons, 436
Partridge, Mr. R., address at annual meeting of Ro Medical and Chirurgical Society, 322; on case General Garibaldi, 450
——— Mr. W. S., appeal on behalf of family of, 2 332
Parturition, Dr. Leishman on Mechanism of, *rev.*, 31
Patella, transverse fracture of, 245; dislocation of, 69
Pathology, Dr. Waters on relations of to practice of m dicine, 1, 29, 89, 115, 144, 227, 259, 279
Pauper cases, medical attendance on, 428
Peat, Mr., unfounded action for malpractice against,
Pecholier and St. Pierre, MM., effect of verdig manufacture, 185
Pelvis, obliquity of a cause of spinal curvature, 3
Pemphigus, diagnosis of from impetigo contagiosa, 6
Penis, Dr. Page on epithelial cancer of, 363
Percussion-caps, dangerous, 600
Pericarditis, Dr. Waters on, 442
Perinæum, Mr. Hoar on laceration of, 686
Periostitis, syphilitic, of the orbit, 440
Persia, marriages of consanguinity in, 48
Pessary, ring, 530
Petrous bone, hæmorrhage from fracture of, 270
Phagedæna, sloughing, Mr. Pick on an epidemic 262; treatment of, 264

Agedænic ulceration, Mr. Knight on, 363
Armacopœia, *British*, completion of, 73; leading articles on, 98, 184, 268, 396; origin of, 100; Dr. Garrod's lectures on, 130, 154, 178, 206, 237; weights and measures of, 131; language of, *ib.*; arrangement of materia medica, *ib.*; notice of publication of, 133; changes of nomenclature in, 154; two editions of, 213, 434; *Chemical News* on, 321; Dr. Nevins's Analysis of *rev.*, 394; Mr. A. F. Haselden's Notes on, *rev.*, 448; proceedings in Medical Council regarding, 481, 499, 504, 512, 566; cost of, 565
Armacy, proposed regulations of, 564, 574
Elps, the late Captain, 251
Hilanthropists, medical, 210
Hilosophers, longevity of, 549
Hosphates in decoctions and infusions, 463
Hosphoric acid in consumption, 685
Hosphorus, poisoning by, 487; in phthisis, 683; in convulsive disease, 688
Hotography by artificial light, 547
Hthisis, brandy in, 185; and the Stethoscope, Dr. Cotton on, *rev.*, 288; early, indigestion in, 555; Dr. Cotton on therapeutics of, 683
Hysicians, precedence of, 85; right of to claim fees, 212; titles of, 408
Hysiology, Dr. Waters on relation of to practice of medicine, 1, 29, 89, 115, 144, 227, 259, 279; Popular, Dr. Lawson's Manual of, *rev.*, 232
Ick, Mr. T. P., epidemic of hospital gangrene, 262
Igs, trichinæ in, 75; diseased, in Liverpool, 169
Isciculture, 547
Placenta, lesion of, 103
Plasters in *British Pharmacopœia*, 239
Plastic operations, quinine as an application after, 95
Playfair, Dr. L., chemistry of coal-tar colours, 163
Pneumogastric nerve, effect of pressure of aneurisms on, 186; effect of section of on poisoning, 236
Pneumonia, deposit in case of, 51; epidemic, in Mediterranean fleet, 52; Dr. Waters on, 606
Pneumothorax, case of, 593
Podophyllum, resin of, 206
Pogonotrophy, 111
Poisoning by nitrate of potash, 56; by trichinised pork, 75, 170; by laudanum, 83; by strychnia, effect of section of par vagum on, 186; by absorption, 276; by strychnia, 453; by kidney-beans, Mr. Date on, 471; by phosphorus, 487; by dust of sulphate of copper, 670; by jatropha nuts, 678
Polypus of urethra in man, 95
Poor-law guardians, liberal act by Boards of, 26, 235; the Bethnal Green Board and Dr. Moore, 47, 379; in Galway, reduction of salaries of medical officers by, 57; refusal of payment in midwifery cases by, 223; refusal by of payment for re-vaccination, 386, 388
Poor-law medical officers, superannuation of, 323
Poor-law medical reform, 250, 304, 397, 405, 460, 602, 693
Pope, Mr. T., mercury as a remedy, 219
Pork, poisoning by trichina in, 75, 170
Porrigo, Dr. W. T. Fox on, 467, 495, 553, 607
Porter, Samuel, trial of, 356
Portrait, a medical, 92
Postage-stamps, caution to collectors of, 185
Potash, nitrate of, poisoning by, 56; solution of, 240; citrate of, 237; permanganate of, *ib.*; chlorate of in hospital gangrene, 265; in diphtheria, 660; solution of, in consumption, 684
Potassium, iodide of in asthma, 194; bromide of, 208; absorption of iodide of, 240; iodide of, in consumption, 684; bromide of in epilepsy, 688
Precedence of physicians, 85
Pregnancy, extra-uterine, 103; after closure of os uteri, 272; diagnosis from uterine fibrous tumours, 655
Prescriber's Companion, Dr. Meadows's *rev.*, 394; Analysis of the *British Pharmacopœia*, Dr. Nevins's, *rev.*, *ib.*
Price, Dr. W., tartarised antimony in scrofulous ophthalmia, 685
Prison, Wakefield, dietary in, 339
Privy Council expenses, 679
Prize, Cuvier, 56; Swiney, 169; Phillips, 185
Prizes of Academy of Medicine, 49; of Academy of Sciences, 74; medical leading article on, 234; proposed by Belgian Academy of Medicine, 349; in universities, *see* University of Cambridge; of Royal College of Surgeons, 460; at Westminster Hospital, 559; at University College, 601; at St. Bartholomew's Hospital, 627; at St. Mary's Hospital, 652
Prostitution, government patronage of, 184, 291; in New York, 434
Psoriasis, non-syphilitic, Mr. Spender on, 65
Publicans, mortality of, 83
Puerperal females, gas in blood of, 213
Puff, a big, 250
Pupillometer, Mr. Laurence's, 245
Purgative, a pleasant, 694
Purpura, iron and quinine in, 447
Pyæmia, fatty embolism a cause of, 41
Pylorus, scirrhus of, 592

Q.

Queen, visit of, to Netley Hospital, 170
Quinine as a local antiseptic, 94; in diphtheria, 661; in consumption, 685

R.

Radcliffe, Dr. C. B., Lectures on Epilepsy, etc., *rev.*, 664, 687
Radford, Dr., proposal for new hospital at Manchester, 477
Rain, falls of, 194
Randall, Mr. A. M., the Society of Apothecaries and the Medical Council, 458, 519
Ranvier, M., fissure of the sternum, 41
Rawdon, Mr., deep-seated pectoral abscess, 51; soft calculus in child's bladder, *ib.*
Rayer, M., resignation as dean of Faculty of Medicine, 101
Reade, Mr. C., his insults to the medical profession, 45; the *Times* on his estimate of "mad doctors," 84
Recruits, imperfect provisions for, 377
Reflex action, influence on blood-vessels, 29
Registration necessary for certificates, 220; compulsory, of deaths in Scotland, 236; international, of weather and disease, 356
Remedies, new, 74
Renard, M., sulphur in rheumatism, 123
Rendle, Dr. J. D., oil of male-fern in tape-worm, 390
Reporters, admission of to meetings of Medical Council, 476, 478, 500, 618
Resection, after-treatment of, 379
Resins in *British Pharmacopiœa*, 206
Resuscitation of still-born children, Mr. Garraway on, 176
Revaccination in the Prussian army, 269; payment for, 486, 488, 550, 571
Rey, M., degeneration of the human race, 185
Rheumatism, M. Renard on sulphur in, 123; Mr. Roberton on treatment of, 244, 659
Ribau, M., poisonous principle of coriaria myrtifolia, 241
Ribes, M., death of, 269
Rigden, Mr. G., mortality in labour-cases, 218
Rigidity in cerebral hæmorrhage, 658
Rigor mortis, cause of, 665
Rizzoli, M., compression in inguinal aneurism, 614
Roberton, Mr. J., treatment of rheumatic fever, 244, 659
Roberts, Dr. J., tænia in an infant, 592
——— Dr. W., traumatic nephritis, 430; retrogressive tubercle, 592
——— Mr. W. R., anenkephalous monsters, 111
Robertson, Dr. C. L., mania and albuminuria treated by the Roman bath, 229

Rogers, Mr. R. J., testimonial to, 626
Rollet, M., retirement of, 646
Rooke, Dr. T. M, large calculus impacted in urethra, 313
Rose, M. H., death of, 221
Roussin, M., assimilation of isomorphous substances, 287
Routh, Dr., Lettsomian lectures on uterine fibrous tumours, *see* Uterus; diagnosis of uterine and ovarian tumours, 573
Rowe, Mr., murderous attack on, 407, 434, 548
Rumsey, Mr. H. W., legislation on pharmacy, 539
Rupia, diagnosis from impetigo contagiosa, 607

S.

Samelson, Dr., blepharoplastic operation, 243; laminar cataract, *ib.*
Sampson, Dr., in *Hard Cash*, 92
San Francisco, health of, 3
Sandwith, Dr. H., fatal obstruction of bowels, 5
Sanitary statistics of Margate and Bedford, 617; commission in India, 294, 653; science in India, 680
Sankey, Dr. W. H. O., illustrations of forms of insanity, 33, 175, 340, 583
Santonine in uric acid diathesis, 123; as an anthelmintic, 207; Dr. W. Anderson on, 443
Sarracenia purpurea in small-pox, 159, 303, 379
Savory, Mr. W. S., Life and Death, *rev.*, 97; absorption of dead bone, 296
Scabies, treatment of, 134; diagnosis from impetigo contagiosa, 607
Scammony, resin of, 206
Scapula, Mr. Syme on Excision of, *rev.*, 313; fracture of, 352
Schlagintweit, MM., elevated human dwellings, 161
Scholarships in natural science at Cambridge, 169; successful candidates for, 669. *See* University.
Schönlein, M., death of, 161
Scirrhus of pylorus, 592
Scoliosis, Mr. Brodhurst on causes of, 3; symptoms of, 59; pathology of, 60, 113, 171; treatment of, 172, 253
Scotland, Registrar-General's report on, 57, 357, 575, 679; weather-returns of, 294
Sea-sickness, ice in, 83
Semen contra, 207
Sensation-novelists, 45, 84
Sensation, physiology of, 666
Senses, affections of in cerebral hæmorrhage, 658
Sensibility, affections of in cerebral hæmorrhage, 658
Sergeant, Mr., action against the Medical Council, 139
Serre, M., section of tensor muscle of choroid, 348
Sewage commission, 575
Sexes, production of in animals, 128
Seymour, Lord H., decision on his bequest to the *hospices*, 184
Sharpey, Dr., medical education, 510; amendment of Medical Act, 539
Sheep, vaccination of, 276
Sigmund, Dr., syphilis in children, 670
Silver, oxide of, its properties, 178; nitrate of in dysentery, 398, 447
Skin, treatment of diseases of, 58; Dr. W. T. Fox on parasites of, 309, 363; absorption by, 426; influence of nervous reflex action on diseases of, 374; Dr. Fox on Classification of Diseases of, *rev*, 640
Skinner, Dr. T., injection and stomach pump, 428; transmission of secondary syphilis, 595
Skull, trephining for perforation of, 51; wound of, 187
Small-pox in Madras, 56; in Scotland, 57; sarracenia as a remedy for, 159, 303, 379; at Portsmouth, 356; new cure for, 479
Smart, Mr., bronchial casts, 591
Smith, Mr. J. E., iridectomy, 19
——— Dr. Tyler, ovariotomy, 557
Smyly, Mr., death of, 109; proposed memorial of, 194
Social Science Review, 47, 426
Society of Arts, Dr. C. Calvert's lectures at, 378
——— Chemical, officers of, 379
——— Clerical, Medical, and General Assurance, pointments in, 110
——— of Climatology at Algiers, 320
——— Edinburgh Medico-Chirurgical, president of,
——— Epidemiological, report of, 52; officers of, deputation on vaccination, 555; amendments in v cination laws, 618
——— Ethnological, report of, 674
——— Glasgow Medical, officers of, 26
——— Glasgow Southern Medical, officers of, 26
——— Harveian, reports of, 16, 77, 215, 245, 374, 401,
——— Medical, of London, annual meeting, 330; rep of, 555
——— Medical and Physical, of Bombay, *Transacti* of, *rev.*, 289
——— Medico-Psychological (?), *Gazette des Hôpita* on, 348
——— Obstetrical, of Edinburgh, officers of, 56
——— Obstetrical, of London, reports of, 52, 103, 3 557; condition of, 109
——— Odontological, proceedings of, 139, 331, 522, 54 *Transactions* of, *rev.*, 152
——— Pathological, of London, condition of, 46; rep of Council of, 56; application regarding rent, 73, 2
——— Pharmaceutical, proposed Bill for regulati Pharmacy, 407; *conversazione*, 600
——— of Physicians of Vienna, corresponding memb of, 453, 487
——— of Practical Medicine in Paris, officers of, 49
——— for Relief of Widows and Orphans of Medic Men, half-yearly meeting, 195; charter of incorpor tion granted to, 426; anniversary dinner of, 617
——— Royal, proposed medical members of, 379
——— Royal of Edinburgh, ordinary meetings, 163
——— Royal Medical, of Edinburgh, annual dinner 454
——— Royal Medical and Chirurgical, reports of, 1 164, 186, 242, 296, 322, 373, 455, 593, 675; annu meeting, 276, 322
——— Surgical, of Paris, foreign associates of, 109, 4
——— Western Medical and Surgical, reports of, 7 272, 375
Soda, arseniate of, 208; solution of, 240
Sodium, chloride of in consumption, 684
Softening of uterine fibrous tumours, 255
Solar radiation, 439
Solly, Mr. S., Amussat's operation, 426, 593
Solomon, Mr., intraocular myotomy, 91
Solutions in *British Pharmacopœia*, 240
Spaeth, Dr., mortality in Vienna Lying-in Hospital, 47
Spain, medical congress of, 236; estimate of medicin in, *ib.*
Spasm, pathology of, 688
Specialists, a plea for, 606
Species, replacement of, 454
Speck, M., physiological effects of exercise, 316
Spectrum analysis of mineral waters, 240
Speech, loss of, with hemiplegia of right side, 572
Spell-medicine, 522
Spence, Mr., tracheotomy in diphtheria and croup, 295
Spender, Mr. J. K., non-syphilitic psoriasis, 65
Spiders, utilisation of, 269
Spinal cord, action of conium on, 157
Spine, Mr. Brodhurst on lateral curvature of, *see* Sco liosis; fracture of, 50
Spirit of chloroform, 207; of nitrous ether, *ib.*; rectifie pyroxylic, *ib.*
Spirits, consumption of, 303
Spontaneous generation, 240, 466
Sprain of hip followed by vesical tenesmus, 154
Sproule, Mr. J., treatment of skin-diseases, 58
Squill, compound syrup of, 84
Stadion, Dr., action of digitaline on the urine, 41

hens, Dr. J., medical education, 596
ium, fissure of, 41
es, Dr., medical education, 506
ach, perforation of, 50
rar, Dr., medical education, 481, 511 amendment of e Medical Act, 538
bismometer, Mr. Laurence's, 245
bismus, pathology of, 592
ngulation, hæmorrhage from ears in, 270
atfeild, Mr. J. F., gelatine atropine papers, 168
chnia, influence of section of pneumogastric nerves poisoning by, 236; case of poisoning by, 453
ents, medical, education of. *See* Medical Education.
glottic œdema, 612
len death in New York, 60
ar, Dr. Waters on formation of in the body, 2
ar-cane, alleged antiseptic properties of, 641
ide by swallowing stones, 48; by boys, 163; in urope, 653
hites in hospital gangrene, 265
hur in rheumatism, 123; production of, 378
hurous acid, death apparently from inhalation of, 401
puration of uterine fibrous tumours, 280
rarenal capsules, disease of, 41
gery, orthopædic, Mr. Brodhurst's lectures on, *see* ectures; Military, Dr. Williamson on, *rev.*, 68; Annals of Naval and Military, *rev.*, 394; Mr. Erichsen's cience and Art of, *rev.*, 471; Mr. Miller's System of, *v.*, *ib.*
pensory bandage, graduated, 229
yne, Dr. J. G., Obstetric Aphorisms, *rev.*, 69
e, Mr., medical education, 70, 481, 505, 516; excion of knee-joint, 295; Excision of the Scapula, *rev.*, 13
onds, Dr. J. A., training of nurses, 212; criminal responsibility and insanity, 223
cope, death from after labour, 342
hilis, mercury in, 16, 77, 168, 301, 404, 574; Treatent of without Mercury, Dr. Drysdale on, *rev.*, 151; monkeys, 244; increase of, 372; Mr. Lee on calomel fumigation in, 389; constitutional, Mr. Hutchinson rare forms of disease attending, 440; of internal iscera, 446; of brain, 447; secondary, transmission f, 595; inoculation with by catheterism of Eustachian ibe, 645; doctrines regarding taught at Lyons, 656; children, 670; treatment of, 696

T.

ipes, Mr. Brodhurst on, 491, 577, 629; equinus, 491: arus, 577, 629
eworm, Dr. Fleming on oil of male-fern in, 61; Dr. endle on, 390; in an infant, 592
, consumption of, 356
k-wood, effects of, 429
le, Mr. T. P. jun., iridectomy, 24; puncture of the ornea for the relief of tension, 404
th, irregularity of, 548
ry, Mr. H. jun., army hospitals and civil surgeons, 355, 71
timonial to Dr. West, 2; to Mr. W. Oxley, 26; to Dr. ainter, 289; to Dr. Lingen, 302; to Dr. Frederick Hawkins, *ib.*; to Dr. Sieveking, 356; to Dr. De Bartome, 435; to Mr. R. J. Rogers, 626; to Dr. T. L. Mackesy, 644; to Mr. F. Marsh, 658
anic spasms in cerebral hæmorrhage, 658
anus treated by ice to the spine, Dr. Falconer on, 414
ackeray, Mr., death and *post mortem* examination of, 4, 58
ames, fish in, 547
erapeutics, Dr. Waters on, 259
ompson, Dr. E. S., indigestion in early phthisis, 555
——— Mr. H., Garibaldi and gratuitous medical ervices, 436
——— Mr. John, foreign bodies in the ear, 596
Thomson, Dr. A., medical education, 508
Thorburn, Dr., fibrinous bronchial casts, 243
Throat, affections of, 79; and Windpipe, Dr. Gibb on Diseases of, *rev.*, 610
Thrombosis of pulmonary artery, death from after labour, 342
Thudichum, Dr., trichiniasis, 170
Thury, M., cattle-breeding, 128
Thyroid gland, cystic tumour of, 244
Tongue, removal of by *cauterisation en flèches*, 49; in malaria, 447
Tooth-drawing a pleasure, 521; as a preliminary to artificial substitutes, 522
Topics of the Day, Mr. Hingeston on, *rev.*, 448
Torticollis, Mr. Brodhurst on, 307
Towle, Mr. A. P., preparations of chloroform, 251
Townley, G., case of, 12, 26, 45, 71, 100, 159, 182; Dr. Davey on, 392
Tracheotomy in diphtheria and croup, 295; in croup, 320
Tremor in cerebral hæmorrhage, 657; pathology of, 688
Trephining, cases of, 51, 622; the mastoid process, 272
Trial of a herbalist for manslaughter, 303
Trichiniasis, poisoning by in Germany, 75, 170, 447; in America, 308
Tripier, M., brandy in phthisis, 185
Triquet, M., hæmorrhage from the ears, 270
Trousseau, M., epileptiform neuralgia, 123; progressive muscular degeneration, 161
Truss, a new, 251
Tubercle, extensive, 353; retrogressive, 592; in kidneys, 594
Tumour of bladder, villous, 352; on face of child, removal of, 427; ovarian, *see* Ovarian; of larynx, 610; fibrous, of uterus, Dr. Routh's lectures on, *see* Lectures; structure of, 173; varieties, 174, 201; changes in, 255; softening of, *ib.*; œdema of, *ib.*; cystic transformation of, 256; suppuration in, 280; fatty degeneration of, 281; hardening of, *ib.*; interstitial absorption of, *ib.*; causes and frequency of, 333; removal by surgical means, 350; diagnosis of, 464; examination of patient, *ib.*; diagnosis from ovarian tumour, 519, 573, 681; physical characters, 579; auscultatory signs of, *ib.*; menorrhagia in, 604; diagnosis from pregnancy, 655; state of menstruation in, 682
Turnbull, surgeon, 129, 221
Turning, combined internal and external, 53
Twins, fœtal deformity in, 592
Tympanum, hæmorrhage from rupture of membrane of, 270

U.

Ulceration, phagedænic, mercury in, 363; of duodenum, chronic, fatal from hæmorrhage, 375
Umbilical hæmorrhage, fatal, 557
Underground travelling in America, 302
University of Cambridge, natural science scholarships, 169; wranglers in, 251; examination for scholarships in, 252; fellowships, etc., at, 234, 275, 354, 406, 641, 648; pass lists, 434, 626, 678, 697; notice regarding examinations, 548, 575, lectures on surgery, 627; elections to scholarships in, 669; how to obtain medical degrees in, 698
——— Catholic, of Ireland, application to Medical Council by, 503, 504, 563
——— of Edinburgh, examinations in, 160; summer lectures in, 620
——— of London, certificates of Norwich Hospital recognised by, 143; new members of senate, 221; pass list, 378
——— of Oxford, travelling fellowship in, 487; grants to professors in, *ib.*
——— of St. Andrew's, dinner of graduates of, 487, 549; pass list, 547
——— proposed, in Wales, 406
Urea, pathology of, 203

Urethra, Mr. Holt on Immediate Treatment of Stricture of, *rev.*, 68; polypus of in man, 95; stricture of in the female, 231; Mr. C. Heath on calculus impacted in, 309; Dr. Rooke on calculus in, 313
Uric acid diathesis, santonine in, 123
Urine, action of digitaline on, 41; distension of fœtus with, 53; hippuric acid in, 85
Uterus, fœtal, difficult labour from distension of, 53; prolapsed, Mr. T. F. Edwards on removal of, 147; Dr. Routh's lectures on fibrous tumours of, *see* Lectures and Tumours; fœtus in rudimentary horn of, 287; rupture of, 344

V.

Vaccination, returns of, 194; in Prussian army, 269; of sheep, 276; registration of, 330; Dr. Fox on relation of to impetigo contagiosa, 553; deputation of Epidemiological Society regarding, 555; recommendation of committee of Epidemiological Society, 618; letter on registration of, 651
Vaccine, discussion of in Academy of Medicine, 161, 320
Van Tieghem, M., ammoniacal fermentation, 241
Vapour bath, Russian, Dr. Robertson on mania and albuminuria treated by, 64
Varicose veins, Mr Lee on obliteration of, 87, 118
Varix, pulsating, of ophthalmic vein, 613
Veins, varicose, Mr. Lee on obliteration of, 87, 118; red blood in, 287
Veratrum viride, effects of, 218
Verdigris, effects of manufacture of, 185
Vertebrata, diagnostic characters of, 639; Mr. Huxley's classification of, *ib.*
Vesico-uterine fistula, pregnancy after operation for, 272
Veterinary surgeons, proceedings in Parliament regarding, 194
Vichy water, consumption of, 236
Vienna, effect of sudden cold on health of, 213; white sand in city park of, 590
Vinegar, French, 84
Virchow, M., as a politician, 169
Vision, affections of consequent on syphilis, Mr. Hutchinson on, 441
Vital force, Mr. Savory on, 97
Vivisection, when justifiable, 71; and torture-traps, 643
Vogt, Dr., endemic catalepsy, 122
Voice, nomenclature of loss of, 534; pathological modifications of, 611
Voillemier, M., subpubic puncture of bladder, 95
Voltolini, Dr., foreign bodies in the ear, 315
Volunteer review, accidents at, 406
Volunteers, medical captain of, 547
Vopicelli, Signor, spectrum analysis of mineral waters, 240
Vrolik, the late Professor, 222

W.

Wagner, M. E., fatty embolia a cause of pyæmia, 4
Wahltuch, Dr., laryngoscopy, 430
Wales, Princess of, accouchement of, 73, 282; prese 276; vaccination of child of, 378
Walford, Mr. T. L., the County Courts Bill, 677
Walker, Mr. J. W., diphtheria, 528, 551, 584, 660
——— Mr. W. G., non-payment for pauper cas labour, 233
Walton, Mr., H., iridectomy, 20; Mr. Bowman's rep 104, 133, 165; cataract, 493
Wardell, Dr. J. R., blood-letting, 625
Warrants, army medical, 670
Waters, Dr. A. T. H., lectures on physiology, patho and practice of medicine, 1, 29, 89, 115, 144, 227 279; thoracic aneurism, 214; clot in cerebellum, pericarditis, 442; pneumonia, 606
Waters, in *British Pharmacopœia*, 239; mineral, trum analysis of, 240
Watson, Dr. James, new remedies, 74
Weather, prophecies concerning, 70; in Scotland, and disease, international registration of, 356
Weights and measures of *British Pharmacopœia*, 1
Wells, Mr. T. S., diagnosis of ovarian and uterin mours, 519; practical details in ovariotomy, 676
West, Dr. C., testimonial to, 9
Whale-steaks, 56
Whittle, Dr. E., hydrophobia, 353
Wickham, the late Mr. W. J., 139, 162
Wilde, Dr. W. R., knighthood of, 160
Willemin, Dr., cutaneous absorption, 426
Williams, Dr. J., Russian bath in menorrhagia, 64
Williamson, Dr. G., Military Surgery, *rev.*, 68
Windham, Mr. W. F., case of, 499
Windsor, Mr. J., epiglottitis, 120
Wine, artificially coloured, test of, 143; action of ox on, 241
Wire, introduction of into aortic aneurism, 455
Wolfe, Dr. J. R., iridectomy, 167, 297
Women, Dr. Churchill on Diseases of, *rev.*, 231
Wood, Dr. Alexander, medical education, 482, amendment of Medical Act, 538
—— Dr. Andrew, medical education, 370, 481, amendment of Medical Act, 537
Woolcott, Mr. J., iridectomy, 82
Wounds, penetrating, of chest and abdomen, 316
Wroxeter, Dr. H. Johnson on crooked crania from,
Wry-neck, Mr. Brodhurst on, 307

Y.

York, Archbishop of, on lectures, 645

Z.

Zambesi, expedition to the, 276
Zinc, valerianate of, 237

T. RICHARDS, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS.

THE

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BEING THE

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WILLIAM O. MARKHAM, M.D.,

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Abstract of Lectures

ON THE

PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

The editor, knowing that I had been present at the whole of the course of lectures which Mr. Fergusson recently delivered at the Royal College of Surgeons, was kind enough to request me to give the readers of the British Medical Journal a short abstract of the chief points of this very remarkable course of lectures. The detailed verbal reports of the lectures, from Mr. Fergusson's MS., may be found elsewhere; and it is to this report that I have had recourse in quoting such passages as seemed necessary. The object of what follows is rather to bring prominently forward the chief points of novelty or interest in these lectures, and to state, as succinctly as I am able, the general impression which they produced upon one who was not the least attentive or the least interested of Mr. Fergusson's auditors. Although I have not had the advantage of being a pupil of Mr. Fergusson's school, I may say that no one has been more interested in "conservative surgery" than I have—and that, as far as my opportunities have extended, I have lost no fair occasion for testing the practical value of the operations which Mr. Fergusson has done so much to introduce into practice. I trust I shall not be considered presumptuous in criticising what fell from one so eminent and so much my senior. A man in Mr. Fergusson's position finds plenty of critics who, without much troubling themselves to think over what he says (and, perhaps, without any practical experience on the subjects of his discourse), will exhaust their ingenuity in running through the usual vocabulary of compliment. My intention is to point out the amount of instruction which these lectures contained for one who went there strictly in search of instruction, and who very gratefully acknowledges the large amount of it which he found.

Mr. Fergusson commenced his first lecture by pointing out the two courses which were open to him; viz., either to take one special subject, and work it up in all its bearings, supplementing what had been said or done by others with the results of what he had himself thought and done; or, on the other hand, "to select several subjects in which he had himself taken special interest, or had particular opportunities of studying, and lay them before his hearers in such a way as to give the appearance of novelty and attraction to an audience assembled in the heart of London, and in the metropolitan abode of English surgery." Of these two plans, Mr. Fergusson selected the latter. No syllabus of the lectures was circulated, nor was any plan of the subjects announced. They were as follows: Lecture I, A General View of the Progress of Surgery in the last Forty Years, or thereabouts; Lecture II, On Conservative Surgery; Lecture III, On Hare-lip and Fissured Palate; Lecture IV, On Lithotomy and Lithotrity; Lecture V, VI, On Excision of the Knee. It is impossible not to regret Mr. Fergusson's choice. The course of lectures which is allotted by the College to their Professor of Anatomy and Surgery is so short that it is impossible in a single year to do full justice even to a single subject. The topic of Mr. Fergusson's first lecture would have been far from being exhausted had it been carried on to the end of his sixth; but no powers of compression, and no command of language, would suffice to treat adequately in six hours of speaking the immense range of subjects which Mr. Fergusson took up. Consequently, he was obliged to restrict himself to offering detached remarks on each of them—a practice which has its advantages, since it affords a ready refuge against any charge of incompleteness; but which can hardly fail to leave the reader more regretful for what is omitted, than grateful for what has been given.

Mr. Fergusson's first lecture was, perhaps, the most complete illustration of this fact. It was, in a great measure, personal, and commenced with an enumeration of the great men, abroad and at home, who held the first rank in the surgical world in 1825, when Mr. Fergusson entered the profession, followed by a brief account of the most prominent of Mr. Fergusson's contemporaries and teachers in Scotland, on which the lecturer lavished all that zeal and enthusiasm, which our northern kinsmen so often display in speaking of each other. On Mr. Liston especially, he dilated with a warmth and eloquence which the subject well deserved; and he mentioned Mr. Syme in a way which certainly left nothing for his warmest friends to desire. But if a biographical history of surgery had been aimed at, the lecturer would have maintained a more just proportion. He would hardly have given half a page to Liston, Syme, and Lizars, while reducing Brodie and Guthrie to mere names, and passing over Lawrence with a hint. However, to a surgeon of Scottish origin, this compliment to his school might well be indulged.

Mr. Fergusson then passed on from men to things, and began to tell his hearers in what respects the surgery of the present day had varied from that of 1825. He commenced by noticing the great impulse to a more accurate study of surgical anatomy, which had been given by the labours of Hunter and his followers; and then proceeded with a passage, so characteristic, and at the same time so suggestive, that it is worth quoting:

"There were manuals of anatomy in those days, written by men who have since held the highest professional positions, which really left little for the practical surgeon to desire; in fact, the subject was in a manner exhausted. Whatever was essayed as novel, seemed in reality but a repetition of something already done and known; and, with an occasional exception, there was little left for the modern anatomist but transcendentalism and minute observation. Investigations on ill-defined and obscurely developed quantities have, I fear, taken largely the place of wholesome surgical anatomy; and whilst I shall not go so far as to say that they are not of great value to the education of the practical surgeon, I may state that I have often felt inclined to protest against a system which seems to draw little or no distinction between this kind of so-called philosophy and that common-place, but common-sense, anatomy which is of essential service to the practical surgeon. With some it almost appears as if the bulk of the two thousandth part of an inch were of equal importance to the surgeon as the outlines of the sterno-mastoid or deltoid muscles; and with many it seems to be that there is really little or no difference of essential value between 'blastema' and bone, 'molecule' and muscle, 'cytoblast' and cellular membrane!—nay, actually that once familiar term is now in some degree tabooed, and a man's acquirements are suspected if he does not use instead the modern one of 'areolar tissue.'

"In surgical pathology, it was known that a person might live with an obliterated aorta, and might survive the loss of an upper or lower extremity. Inflammation with denudation of bone was commonly believed to necessitate amputation; and diseased joints with ulceration of cartilages, particularly if denoted by crepitation, were generally deemed incurable, excepting by removal of the limb. Tumours of enormous size were frequently met with, and the disease then familiarly known as fungus hæmatodes was more common than in the present day; in both instances doubtless from timidity on the part of those who feared to meddle with what the modern surgeon arrests in early progress."

These remarks are worth reading and thinking over. They are expressed with something of that haste and want of precision which the scheme of these lectures necessitates, for Mr. Fergusson of course does not mean to decry microscopical study any more than he means to assert that modern surgery has found a method of arresting fungus hæmatodes; he only intends to give a useful caution in the first passage to his hearers not to neglect what is practical and certain in surgical anatomy for what is at present so uncertain as microscopical pathology; and in the second, to indicate with what happy boldness the great surgical anatomists of modern times, such as Liston, Syme, Dieffenbach, Langenbeck, amongst many others, have dealt with tumours which their predecessors—because they had less of that minute knowledge of the human frame which Mr. Fergusson is here inculcating, and that confidence in the resources of nature, which is founded mainly on the successful issue of modern operations on the arteries—hesitated to touch.

After somewhat more of this preliminary matter, Mr. Fergusson proceeded to illustrate the changes in modern surgical practice by the comparative simplicity of the modern treatment of wounds, by the modern improvements in treating stone in the bladder, distortions of the limbs, strabismus, cicatrices and unnatural openings, by plastic operation, by modern inventions for physical examination, by the progress of ophthalmic surgery, by the practice of excisions, the introduction of anæsthetic agents, the use of metal sutures, and finally, by the free interchan of ideas by means of the medical press and ot organs of mutual information. The mere list these subjects shows how sketchy the lectur manner must necessarily have been, and what la parts of his ostensible subject he was obliged to on "Conspicuous by its absence" was the great char which has come over surgery in respect to the the of inflammation and the practice of antiphlogisti but much of what was said was very interesting a suggestive. In noticing the treatment of woun Mr. Fergusson made the following observatio which we commend to the attention of practical s geons.

"In speaking of wounds, I should not be doi justice to my own views and experience, nor to t efforts of others, were I to omit reference to the m common use of stitches than was sanctioned so thirty or forty years ago. When early and perf union is desired in a line of considerable length, th far surpass other methods, and when judiciously a plied (possibly in many instances with a due share additional support) they are of the utmost valu Throughout my experience I cannot say that I ha seen the slightest evil arise from them, whilst t best possible good has often been derived. In fa some of the greatest triumphs of modern surgery a associated with this simple mechanical process; h how else could so much have been done with th vesico-vaginal fistulæ which so baffled our forefathe and are now so amenable to skilful operative manag ment? How else could the operation for cleft pala have been successfully accomplished? How else cou we have dared to lay open the walls of the abdom to the extent of six, twelve, or fifteen inches? Mu has been said in recent times of the superiority of t wire over thread as the material for the stitch; but f my own part I deem the subject of comparative little importance, whilst I do not hesitate to proclai my preference of common silk thread for gener use."

With respect to the treatment of stone, since formed the subject of one entire lecture in the aft part of the course, we need not notice the few gen ral observations which the lecturer made on it her In speaking of deformities, and their cure b tenotomy, drawings of a very successful case, treat by Dr. Wiblin of Southampton, were introduced; an with reference to excisions, the drawings of Dr. W liamson's well known case of excision of the elbo in which he removed, also, the whole of the ulna (a Mr. Fergusson put it), were exhibited. Surely, quoting this case in future, it would be more corre to describe the part removed as "a sequestrum e tending the whole length of the shaft of the ulna Such sequestra have been removed a hundred tim before without impairing the usefulness of the lim Dr. Williamson's case shows merely that the remov of such a sequestrum does not preclude the simult neous removal of the diseased end of the humeru but it really shows no more. The bearing, howeve of this difference in statement on the question of e cision can be more conveniently discussed in speakir of the lectures on excision of the knee.

Such were the chief topics of Mr. Fergusson's fir lecture—a performance so interesting and so sugge tive, that its hearer did not perceive till after son reflection that the lecturer had taken up a then which he had not time to finish, and had, therefor been dwelling on detached parts of it, instead tracing a plan of the whole.

Statistics of the Blind. There are, it is calc lated, 30,000 blind people, male and female, in Gre Britain and Ireland.

Transactions of Branches.

SOUTH EASTERN BRANCH.

PRESIDENT'S ADDRESS.

By Edward L. Ormerod, M.D., Brighton.

[*Delivered June 16th*, 1864.]

My first duty, gentlemen, is to welcome you to Brighton, and to express a hope that you may all carry away a pleasant recollection of this meeting. I will not dilate upon the things that you may see here, for I presume that by this hour of the day you have seen all that you intended to see, and that the business of our meeting will occupy your remaining leisure. I will only say, that the attendants at the different places indicated in the notice sent round to the members have had directions to be at your service; and I trust that your visits have been agreeable and profitable; and with these remarks I will turn immediately to the business before us.

It is the custom at these gatherings, I see, for the president to select some particular topic of advice, and to treat of some of the great questions of medical ethics or medical reform. And perhaps, when the snow of years has fallen a little more thickly on my head than it has at present, I may on some future occasion adopt a similar course. Such advice, however, I could hardly give you now. I cannot now claim to guide you on these great moral questions; but if all of us, till we can be teachers, will be followers of the simple rule of doing as we would be done by, the task of medical reformers will be greatly facilitated.

There are certain points which have a particular claim on our attention just now, on which I would invite discussion; matters of recent occurrence, or questions demanding a present solution; and to some of these your attention will be called more particularly in the Report.

The first point to which I shall allude is, I am afraid, not a very agreeable one. You will all probably coincide with me in expressing regret at the condition in which our national *Pharmacopœia* has been presented to us, after so long delay. It is much to be regretted that the proofs of this work were not very largely distributed throughout the country, asking for corrections and suggestions before the final *imprimatur* was set upon it. Some such course is indeed being pursued now, though in a less agreeable way. When the book emerges in a new form, improved by the corrections which a somewhat irritated profession has very freely uttered, I trust it will be more worthy to be called the *British Pharmacopœia*. I must, however, express my satisfaction that at least the metrical system has not been added to its other novelties.

One word on the decimal system, with which legislators have threatened us. Nothing, indeed, can be more simple than a thorough going decimal system; but, before we sacrifice all the comfort of the present generation, and render nearly all our books next to useless, we should satisfy ourselves of the accuracy of the basis of the proposed change, and that the decimal system is the best which can be adopted for all time. If I am addressing any one very enthusiastic for this change, might I recommend him to work his books and his family on a decimal system of hours, making ten or twenty hours for the day for the next week or two, before he seriously attempts to inflict such a bother on his fellow countrymen—and women.

The next subject is one, I trust, of unmixed satisfaction; I allude to the conduct of our Journal. I could not pass it over unnoticed on the present occasion. We may differ with our honest, zealous, and talented editor on many points; but we must all feel that he does his very best, and that he has raised the Journal to a very high position. On one point in which he seems to differ from many of us—on the question, namely, of gratuitous practice—I think that the difference is not so great as it seems to be. We are all of us agreed, doubtless, that the medical officers of charities ought to be paid for their services; and it is equally apparent on the other hand, that without gratuitous services much real charity would fail. To a certain extent we are powerless in the matter; custom has been allowed to grow up, till what should be taken as a favour from us is now claimed almost as a right. Still the remedy is to some extent in our own hands; the custom need not grow—it should be real charity only to which we minister. Indeed, we are not blameless in the matter; the public rates our services as we rate them ourselves; and when we scramble for gratuitous appointments, when we found special dispensaries, the wise world does not consider this as charity, and prudently offers nothing for what we profess ourselves so exceedingly anxious to give away. Surely we are agreed with our editor in the general truth of his remarks; but, while admitting this much, I would not have it understood that I advocate, nor do I believe him to advocate for a moment, a grasping demand for payment for every service that we render to our fellow-creatures. Notwithstanding all that has been said to the contrary, my firm conviction, nay my personal knowledge is, that, in so doing, we should fall very far short of the liberality of the two professions with which we compare ourselves—the church or the law.

At the present time, medical education is attracting much attention. My own views on this point are so very decided, that I could not express them without detracting much from the impartiality which, as your chairman, I ought to exhibit. One point, however, I may just touch on, as concerning us in the country more particularly—the question of apprenticeships. I suppose that we send upon an average from the Sussex County Hospital every year to the London schools three pupils. I do not profess to have any particular power of teaching; I will not claim for our pupils any singular ability; I regard their success in London and afterwards as the result simply of that modified system of apprenticeship which I should like to see generally adopted. A thorough grounding in their profession, a practical familiarity with the details of minor surgery, and a tolerable knowledge of the rudiments of clinical medicine; these are advantages to a student in the first beginning of his London life which can never be over-estimated. He learns these better with a few than among a crowd. I may say, that I feel quite a pride in the results which this system has produced in the pupils we have sent up to London in years past; and I should not be doing justice to the painstaking, intelligent, young men who at this present moment may be seen at work wherever knowledge is to be gained in the Sussex County Hospital, unless I said that I hope as well for them as for those who have preceded them.

Is it too Utopian to imagine that some day or other the whole country may be divided into districts, each under the superintendence of a medical inspector, who shall be both officer of health and medical assessor to the coroners throughout this district? Should such appointments be made, I feel that the machinery will be derived in great measure from the respective branches of our Association.

There are other topics which will doubtless have suggested themselves to you, and on which I shall be pleased to hear your remarks. There is only one

subject more to which I would myself allude, the loss which we have sustained by the death of our late lamented secretary, Mr. Peter Martin. My knowledge of Mr. Martin, compared to many of yours, is so slight, that I should seem to you to do bare justice to his claims on our affectionate and grateful remembrance, should I try to sketch the history of his connection with our Association. I will only say that this affection and gratitude have urged some of our members to perpetuate his memory by some substantial testimonial which shall be essentially our own. I speak now the wishes of his relatives when I say that it is their desire that such memorial should be of the most unostentatious kind. Had he lived, they tell me, he would not have accepted any testimonial by which a man who could ill-afford to contribute should be made poorer, and they have begged me most emphatically to express their wish that no costly tribute, involving such sacrifices, be erected to his memory. There are among us many who would be pained to be deprived of the privilege of doing something at least to Peter Martin's memory. I trust that, to erect a plain mural tablet, with the simplest of all inscriptions, in the church where he worshipped, would satisfy the affectionate wishes of these; as I am assured on the best authority, indeed of his father, which should be paramount on such a point, that it would best accord with the feelings of those dearest to him.

BENGAL BRANCH.

STATE SANITATION: A FAREWELL ADDRESS AT THE FIRST ANNUAL MEETING OF THE BRANCH.

By Norman Chevers, M.D., President for 1863.

[*Delivered February 2, 1864.*]

Gentlemen,—We are assembled for the purpose of formally closing the first year's proceedings of the Bengal Branch of the British Medical Association.

The history of this institution still lies within a small compass. It was planned, with much judgment, by Dr. Chuckerbutty; its leading object being to draw together the European and Native members of the medical profession, resident in Bengal, upon terms of perfect equality, for the cultivation of medical science and for the maintenance of reciprocal good feeling and professional honour.

The Association commenced its working operations in July last. These have been, I think judiciously, wholly confined to the monthly reading and discussion of scientific papers. Most of these have been printed and are about to appear in the *Indian Annals of Medical Science*. It was the opinion of some members that the Association ought to maintain an independent existence; the majority have, however, decided against this view; and, by their votes, the Association has now become a branch of the British Medical Association—those members who refrain from joining the parent institution continuing to enjoy, as Fellows, all the *local* privileges and advantages of the Association.

The working of the Association has been such as to afford me the gratification of declaring my belief that it is now permanently established with every prospect of assured success.

The Association has sustained a serious loss in the premature death of one of its ablest and most active members,—Dr. John Brown, first Assistant-Surgeon to the General Hospital,—a man who, although scarcely past his first youth, had, by constant labour in the field of science, become a medical author of reputation, and a physician whose decided, but ever modestly enunciated, opinions upon the gravest cases his contemporaries, and even his seniors, often sought and always attended to with respect. As a man of the most unassuming, honest, and truthful character, generously ambitious, ardent in the professional race, but ever just and scrupulously regardful of the claims of others, he has passed from among his brethren universally beloved, honoured, and lamented.

At the last meeting of the Association new office-bearers, including a council of ten persons, were appointed; and, while again expressing to my brethren of the Association the gratitude with which I shall always remember their unexpected, and I fear undeserved kindness in selecting me as the first president of this honourable and dignified institution, I cannot but warmly acknowledge the favour which they have shewn me in accepting my nomination of my successor in the person of Dr. Edward Goodeve, professor of medicine in this college. I have not yet reached that position in my profession which would entitle me to pass a public eulogium upon my honoured colleague. I can only venture to express the gratification which I feel in enjoying the privilege of being associated with such a man, both in my daily official labours and in the ranks of this Association.

It affords me great pleasure to notice that two of their medals have been awarded by the Prize Committee of the International Exhibition to our esteemed treasurer, Baboo Kanny Loll Dey, for his contributions of collections of Indian drugs and other useful products of this country. This success, obtained by one of our members, cannot but give satisfaction to our Association.

It might be expected that I should dilate at considerable length upon the constitution, objects, and prospects of this Association; I, however, discussed these points rather fully in my opening address seven months ago, and I have now arrived at a period of life and a frame of mind in which it appears to me that every hour, not devoted to the task of steadily advancing some useful object, is spent to disadvantage; I shall, therefore, occupy the few minutes which I might fairly claim for the not unregretful duty of relinquishing this chair and of bidding you farewell, as president, in bringing before the distinguished company of guests who grace this meeting with their presence and yourselves a few of the leading points of a question which vitally affects the interests of us all; this is *State Sanitation*.

The first and most natural object of a parent's care is to preserve the lives of his children. The foremost duty in the political economy of princes is to provide that the lives of their people may be long in the land.

The moral code which, in every great system of religion, defines the duties which God-fearing and just men owe to their neighbours and to themselves is, essentially, a scheme of public health. One century of universal morality would empty our prisons, lunatic asylums, and workhouses, and close more than half of our hospitals; a second would well nigh remove our self-imposed curse of "natural" death in youth.

That all-wise Providence who, amid the thunders of Sinai, gave the Jews a system of religion and a code of sanitary moral laws, also then vouchsafed to his chosen people the revelation of a system of public health which has, ever since, remained open for the instruction of all in the Books of Leviticus and Deuteronomy. Consequently, state medicine or sanitation is a system specially revealed to and enjoined upon man by his Creator—a Mosaic institution, whence the Hindoo and the Mahomedan derive all in their religious precepts and ordinances that is valid for the preservation of health and life in communities.

In sending the children of Israel into the Promised Land, the God of Battles strengthened his chosen

my by no miraculous power. He made them healthy y the operation of a sanitary system, observed as a ode of religious ordinances; hence they, having no ck or feeble men amongst them, necessarily con- ıered in a strife where—Omnipotence ruling all— very struggle was decided by the strong arms and ıe javelin points.*

I have been at considerable pains, elsewhere, to ıew how clearly the design of a sanitary system ines forth in the moral codes of the Hindoos and ıe Mussulmans. A similar design is distinctly isible in the religious ordinances of the ancient gyptians. Three maladies especially afflicted this eople. These were a disease somewhat allied to yphilis, for the prevention of which the rite of cir- ımcision was, it is believed, established. It is in- ·esting to remark that it has, recently, been noticed hat the Jews of England are very little liable to this lass of disorders. In the earliest times, as now, phthalmia was most destructively rife in Egypt. he priests, considering that onions were hurtfully timulating to the eyes, consecrated this vegetable, nd thereby prohibited its use as food. Leprosy and corbutic affections were among the worst scourges of his people. On this account, the priesthood ab- tained from all kinds of fish. The people were llowed to eat those kinds which were considered ıost wholesome, especially the scaly tribes and shell sh. The flesh of the hog, which is everywhere one of Nature's most active scavengers, was held unclean. Vine was totally prohibited, except twice a year, vhen the common people were indulged in the use of t. The first magistrates, especially the Pharaohs, ·ere not allowed to drink wine. During the hottest eason of the year, when disease was most rife, and emperance in all things most needful, the Egyp- ians observed a Lent of forty days—a truly dietetic nstitution. They had several smaller Lents of six ays.† The Egyptian system of embalming their lead was, in the highest degree, judicious with refer- nce to the well known peculiarities of their soil and limate.

In ancient Greece, the first object of the lawgiver vas to enable a people, destitute of the advaniages of wealth and numbers, to hold their own against the world in a system of hand-to-hand warfare, the essen- ial requisites for which were valour and bodily strength and endurance—the quick eye, the fleet foot, the vice-like grasp in the grapple for life or death.

The state medicine of Lycurgus consisted, mainly, in a system of abstinence carried to the utmost lengths of physical self-denial, and a course of military exercises and athletic public games, in which every sport, like the play of tiger-cats and lions' whelps, was a training for mortal battle. Under the Greek system, the development of the brain kept pace with the development of the thews and sinews, until, among the Athenians, it became the rule that he who, in youth, gained many of the Pythian and Olympian wreaths, often, in his green old age, stood foremost among the sages of the Areopagus. Homer had a deep meaning when he described Nestor the sage as a man who had outlived three generations. So Baily tells us that "warriors full of courage, and politicians full of craftiness, may be frequently met with; but of those who have a great and noble character, the result of their sentiment and strength, no one would have become famous on the earth, *if his moral education had not been fortified by an excellent physical one.*" (*Dictionnaire des Sciences Médicales.* Quoted by Dr. Henry Smith in *The People's Guide to Health.*)

The state medicine of the Athenians, however, rose far above that of the Spartans. Xenophon has left us, in the *Cyropædia*, a sentence which may well form the text to our whole system of civil and military hygiene. It is this:—"I believe, Father," said he, "that I have men with me who are very able in the art of physic." "Child," replied the Father, "the men you speak of are like the menders of torn garments; so, when people are sick, physicians cure them; but your care of health is to be of a nobler kind; *it is for you to prevent the army from becoming sickly.*"

The great soldier had mastered this priceless secret. For two hundred and fifteen days he led his ten thousand Greeks over an inhospitable tract of three thousand six hundred miles; in that memorable retreat no man in all the host perished by disease.

Homer had two favourite epithets in expressing the idea of a large and opulent city; one of these was "well-built," the other signifies "having wide streets."

To the Athenian system of state medicine the Romans of the Empire made great and valid additions, especially in the inauguration of the Ædiles, dignitaries wearing the toga prætexta, and having the right of images, among whose leading duties were the care of the city, its public buildings, temples, theatres, baths, aqueducts, common sewers, rivers, and public roads; also of private buildings lest they should become ruinous and deform the city, or occasion danger to passengers. The surveyorship of a great public way or river was an office of high dignity. Cæsar is mentioned by Plutarch as surveyor of the Appian Way; and we find Cornutus Tertullus, a man of very exalted character who had held the consular dignity, most warmly congratulated on his acceptance of the surveyorship of the Æmilian Way by Pliny the Consul who, himself, held the office of surveyor of the River Tiber and its banks. The Ædiles likewise supervised provisions, markets, and taverns; they inspected those things which were exposed for sale in the Forum, and, if they were not good, caused them to be thrown into the Tiber; they broke unjust weights and measures; they fined or banished women of bad character condemned by the senate or people; they exhibited in public solemn games. Cæsar's Cereal Ædiles inspected the public stores of corn and other provisions. (Adams's *Roman Antiquities.*) The plans of Roman castrametation are models upon which all modern generals have formed their systems of encampment. Rome, now one of the

* Ancient records and modern investigation combine in proving hat, in the time of its prosperity, the city of Jerusalem possessed dmirable systems of water-supply and sewage. This city, standing pon a limestone rock, surrounded on three sides by precipitous avines, has, in modern times, been extremely ill provided with vater. Formerly, however—when it contained a resident population f probably not less than two hundred thousand souls, to whom the ature of the climate and the ceremonials of their religion combined o render a profuse supply of pure water one of the first essentials f existence—the Rock of Zion had, by a most extensive and judi- ious system of works, been converted into "a fresh spring in a dry nd thirsty land where no water is." So extensive were the city eservoirs, and in all probability also the underground sources of vater supply that, according to a recent authority—although during ll the sieges which it underwent the inhabitants were frequently riven to the last extremity by hunger—we read of but one occasion n which they experienced any inconvenience through a deficiency f water. This was in the siege by Antiochus. It has recently been alculated that—as Titus, in besieging the city, doubtless cut off all isible supplies of water from without the walls—the besieged must ave been supplied with receptacles capable of storing, in the aggre- ate, upwards of a hundred and forty-five millions of gallons of vater. Dr. Pierotti has recently discovered that the Temple of erusalem was supplied with a great system of aqueducts, reser- oirs, and sewers, all excavated in the solid rock, whereby the blood nd offal which would have otherwise accumulated within the sacred recinct at times of sacrifice, were diluted with pure water, and reely carried away into the valley of the Kedron, where this sewage- natter, being collected in appropriate receptacles, was disposed of s liquid manure to the market-gardeners. The fullest information n these points will be found in Dr. J. Irvine Whitty's recently pub- ished and most interesting volume, *Proposed Water-Supply and Sewerage for Jerusalem, with Descriptions of its Present State and Former Resources.*

† On the above points, *vide* the works of M. Pauw.

most filthy and unhealthy of all Italian cities, had, in the days of her imperial magnificence, a system of sewage second only to that of modern London, and enjoyed the most copious supply of pure water with which the art and labour of man have ever purified and embellished a city.

We gather from one of the Emperor Trajan's letters that condemned criminals were usually employed in attending to the public baths, cleansing the common sewers, and repairing the streets and highways.

There are passages in the correspondence between Pliny and his master Trajan which forcibly shew that, in the first century of the Christian era, the little cities of Bithynia, Pontica, and Pontus were—under the administration of a wise and benevolent proconsul and of an enlightened sovereign—initiating those first advances towards the establishment of proper sanitary arrangements, which are beginning to be promised for Calcutta in the year of grace eighteen hundred and sixty-four. Thus:—

"*To the Emperor Trajan.* The city of Sinope is ill supplied, Sir, with water, which, however, may be brought hither from about sixteen miles distance in great plenty and perfection. The ground, indeed, near the source of the spring, is, for somewhat more than a mile, of a very suspicious and loose nature; but I have directed an examination to be made (which will be effected at a small expense) whether it is sufficiently firm to support any superstructure. I have taken care to provide a suitable fund for this purpose, if you should approve, Sir, of a work so conducive to the health and pleasure of this colony, greatly distressed by a scarcity of water."

"*Trajan to Pliny.* I would have you proceed, my dear Pliny, in carefully examining whether the ground you suspect is firm enough to support an aqueduct; for I have no manner of doubt that it is proper the city of Sinope should be supplied with water, provided their finances will bear the expense of a work so conducive to their health and pleasure."

"*To the Emperor Trajan.* The elegant and beautiful city of Amastris, Sir, has, among other capital buildings, a most noble and extensive piazza. On one entire side of this structure runs what is called, indeed, a river, but, in effect, is no other than a vile common sewer, extremely offensive to the eye, and, at the same time, very unwholesome by its noxious vapours." [Calcutta of the present day has more than a hundred miles of this kind of sewer, except that, with us, these cloacæ never *run*; "their strength is to stand still"!] "It will be advantageous, therefore, in point of health as well as ornament, to have it covered; which shall be done, with your permission, as I will take care, on my part, that money be not wanting for executing so noble and necessary a work."

"*Trajan to Pliny.* It is highly reasonable, my dear Pliny, if the water which runs through the city of Amastris is prejudicial to the health of the inhabitants, that it should be covered. I am well assured you will, with your usual attention, take care that the money necessary for this work shall not be wanting."

Assuredly the mighty Roman people were not ignorant of the advantages of an enlightened, liberal, and far-seeing system of state medicine.

Towards the end of last century a great scholar and philosopher* held that "the more we look back to antiquity, the more we study the ancients, the more we look to nature, the more healthy and robust is the organisation." Let us trust that, far on in the nineteenth century, we are recovering and enlarging those undying systems of state sanitation which made the Greeks and Romans physically, intellectua and nationally the masters of the world.

About twelve hundred years after the Ædile s tem of the Romans reached its highest perfectio that is, in the year 1189, late in the reign of K Henry the Third—the worthy citizens of Lond then, as now, Europe's greatest city, appear to h begun to perceive the necessity of instituting a s tem of municipal sanitation. It is a curious rem that, both structurally and in a hygienic point of vi London, seven hundred years ago, in many lead points resembled Calcutta to-day. I have elsewh fully shewn that, then, the prevailing diseases London were those deadly agues and dysente (now, thanks to sanitation, almost extinct through England) which at present menace the lives of ev person within this room. Bear with me while I qu from an ancient work not very generally known few passages which shew how much London of Plantagenets resembled our own Calcutta. T greater part of the royal city was unpaved, but a householder might lay down a pavement before tenement, "provided it were not to the nuisance the city or of his neighbour." The coroners' rolls sh that mortal accidents were wont to befall youths tempting to steal apples in the orchards of Ivy La and Paternoster Row, just as every mango seas now sends into our medical college and Chandr hospitals poor little quick-eyed Bengali lads, who h come woefully to grief in their climbings after t forbidden golden fruit. The due construction of g ters and the convenient dispersion of waste wa were objects of consideration. The *cameræ priv* of the citizens were not left unregulated; they we prohibited within the distance of two and a half three and a half feet from a neighbouring tenemer and the propriety of their construction was liable the survey of a jury chosen by the authorities. T situation of London, with an easy descent towa the Thames, was favourable to a surface-draina aided in a great degree by those natural strea which then flowed open to the river, the Wall-bro and the Fleet, the cleansing and maintenance in proper state of which were, from an early period, o jects of solicitude to the magistracy. It may be c lected also, from the perusal of ancient evidences, sa our authority, that narrow channels ran down t centre of many of those streets which led directly the river side. Bad as the effect of these uncover sewers must have been, they were, possibly, bett than no drainage whatever. The greatest source annoyance, however, was the existence of the pub shambles almost in the very heart of the city, clu tered round the Church of St. Nicholas, the patron butchers and fishermen. From a remote time, ord nance after ordinance was levelled against the fla rant nuisance. There being no under drainage, th refuse of the slaughter-houses was thrown by t butchers wherever they could find a place; into t streets, or the Fleet, or into the river Thames, whe often left on the banks, the putrefying heaps, we a told, offended the olfactory senses of the Edwards an Henrys as they rowed between Westminster and th Tower, producing impressive monitions to the May to repress the intolerable excesses of the flesh mongers, but in vain. By a regulation passed in th reign of Richard the Second, the blood and offal the shambles were to be boated into the mid strea of the Thames at ebb-tide; but this and subsequen enactments were evaded or carelessly enforced.†

* Samuel Johnson, quoted by Dr. Henry Smith.

* Chronicle of the Mayors and Sheriffs of London from 11 to 1274.

† I cited some of these laws in my work on Public Health, pu lished in 1852. The following is an extended list.

Anno 1320, *temp.* Edward II. A complaint laid before Parliame

We cannot be surprised that, in those days, the owing prosperity of London was frequently interpted and marred by frightful outbreaks of disease; at its people were scarcely ever free from the true ague; that, in 1252, this disease broke out in the ty at Michaelmas and overspread England during e winter; that, in 1299, there was prodigious morlity among Jews (who occupied, as they still do, a ose and unsavoury quarter in the very heart of the ty); and that, in 1347, an epidemic, finding London oroughly prepared as a hot-bed for its ravages, inned out and slew its overcrowded citizens so gorously that 50,000 bodies were buried in a week.

Prescott shews that an admirable system of city nservancy was maintained in ancient Mexico. A ousand persons were employed, daily, in watering nd sweeping the streets; so that, in the language of a old Spaniard, a man might walk through them ith as little danger of soiling his feet as his hands.

According to Garcilasso de la Vega, the Yncas of eru had roads through the mountains, 500 leagues a length, along which houses for the free accommoation of strangers were erected at convenient disnces.

Did time permit, much might be adduced regardng the progress of sanitation in the various countries nd cities of ancient and mediæval times, the whole f the facts combining to shew that there has never xisted an enlightened people among whom either the overnment, the priesthood, or the physicians did ot, to a greater or less extent, inculcate and endeaour to maintain the rudiments of a system of sania ry morality or state medicine.* Consequently, that anitation which has been adopted in very recent imes is little more than the sanitary wisdom of the ncients arranged, systematised, and developed into he form of a working science.

In tracing out this profitably suggestive history it s, however, most interesting to observe how indepenent the development of public health has, in a large neasure, been of any direct attempts advisedly unertaken by mankind with a view to promote it, and o remark how largely the causes which tend to engthen the lives of communities have been evolved nder the operation of those occult providential laws, which men of sense are now ceasing to designate as hance.

The assertion that Luther's Reformation, the introluction of the use of cotton candle-wicks and roofiles, and the spread of the carpet manufacture, were argely instrumental in ridding England of those agues and dysenteries which were its deadliest scourges at the beginning of the sixteenth century, night, standing without explanation, be well regarded as a mad absurdity. It, however, represents the truth. When every man religiously kept Lent, observed fast days, and refrained from flesh-meat on Fridays, every mere and fish-pond became a valuable property, every stew and eel-pit was a little silver mine.* In these times, too, the floors of all respectable dwellings, as well as those of theatres and other public buildings, were daily strewed with fresh rushes growing in fenny marshy spots. In the absence of cotton, the peeled rush was the only material of which candle-wicks could be made; and there were, not many years ago, districts in England, where rushes, saturated with grease, were the only tapers obtainable by the poorer inhabitants. Reeds for thatching were also a very valuable commodity. Fuller, writing in 1650, tells us that "an acre of reeds on the bankside is as beneficial as one of wheat." But when it became the desire of most Englishmen to dine daily upon beef and mutton and good wheaten bread and pudding, and when excellent substitutes for rushes and reeds came into general use, every available acre of marsh land became converted into an arable field or pasturage for cattle, infinitely to the removal of malarious diseases and equally to the improvement of agriculture and of public health.

Many, if asked—To what circumstance is the practice, now almost universal out of India, of burying the dead attributable?—would, probably, reply, To the advance of civilisation and of public decency. This reform has, however, been considered, with great probability, as the mere result of a physical necessity. M. Pauw, after shewing that the custom of burning the dead obtained generally in Europe about two thousand years ago, argues that it, at length, became necessary to bury them, because arts, population, and the clearing of grounds had thinned the forests to such a degree that towns and entire provinces were menaced with an approaching want of fuel. He adds that, in the second century of our era, the Romans foresaw the necessity of abandoning their ancient practice, of changing their funeral piles into graves, and of committing the remains of their dearest relations, with infinite regret, to worms and putrefaction. The Christian religion, though originating in a country where the dead were awkwardly embalmed, had not the smallest share in producing the change in question.

It cannot be doubted that, in strictly enjoining the incremation of their dead, the ancient Hindoo lawgivers fully believed that the wood supply of Hindustan was inexhaustible. The result is that, in the present day, the extreme heat both in Lower Bengal and Up-Country, is, in a large measure, due to the scarcity of tree-vegetation. In Calcutta, there is no wood for fuel except that brought at considerable trouble and expense from the distant Sunderbuns. The poor cannot burn their dead, and the waters of the Hooghly are, consequently, infected and poisoned.

It is beautiful to observe by what natural provisions the All-wise progressively works out the improvement of man's physical condition. A simple people occupy a damp and malarious territory; they cut down trees to build their huts, they consume the underwood and jungle in cooking their food and in incremating their dead. The more rapidly malaria sweeps them down, the more effectually are they compelled to cut broad openings in the bush-obstructed glades, giving admission to wholesome air and invigorating sunshine. They long subsist upon the ripe acorns and beech mast which fall plentifully around them. Their first

by the inhabitants of Smithfield against the butchers in that neighbourhood, for digging wells or pits, "without the king's license", to receive the offal of their slaughtered beasts, which malpractice the mayor and corporation of London were directed to restrain.

1361, *temp.* Edward III. Plague attacked London. Its ravages were mainly attributed to the corruption arising from the slaughter of cattle, sheep, etc., within the city. Consequently, the king issued a proclamation forbidding the slaughter of cattle nearer to the city than Stratford and Knightsbridge. This mandate appears to have been practically set aside by the butchers and taverners.

1380, 3rd of Richard II. A motion was made that no butcher should kill any flesh within London; but at Knightsbridge, or some such distant place from the walls of the city.

1488-89, an Act (4 and 5 of Henry VII, c. 3) was passed, enjoining that "no butcher shall kill any flesh within his scalding house, or within the walls of London, in pain to forfeit for every ox so killed, 12*d.*, and for every other beast, 8*d.*, to be divided between the king and the prosecutor."

Temp. Queen Elizabeth. In Lansdowne MSS., No. 18-60, p. 37, are proposals to the Lord Treasurer for amending and enforcing the Act of Henry VII, against butchers killing beasts in the city.

* Dr. Chevers here gives a collection, evidently made with great labour, of sanitary laws, injunctions, and practices, of various nations in ancient and modern times. Want of space compels us to postpone it.

* Whitaker notices that, from an inquisition taken in the time of the last Earl Warren, it appears that the meadow ground, which lay in open field, was worth five shillings per acre; the pasture ground was enclosed, and worth only one-tenth of that sum; and the fishery, a small pond of four acres, was worth almost one-third more per acre than the best meadow ground.

tillage is upon spots where the forest ends and the marsh begins. As those to be supported become more and more numerous, the wood-openings widen and the marshes disappear; and the race, although still unhealthy, grow daily more vigorous in the improving land.

Ten centuries pass away. The country is one wide spread of corn and pasture fields. Every city of the living has, beside it, a city for its dead. The great oak forests have disappeared in the roofings of baronial halls, in the wainscoating of citizens' parlours, in the timbers of men of war which the rocks of a hundred iron-bound shores have now crushed into flinders, where the ship-worm and the dry-rot have not crumbled them into dust. Wood has to be largely imported; elm trees are becoming so scarce that undertakers begin to shake their heads and to suspect that their sons will have to burn the dead in furnaces or to bury them in iron coffins. The admiral and the merchant adventurer now sail forth in iron-plated ships. For two hundred years the staple fuel has been dug out of the bowels of the earth. The leading means of navigation, of manufacture, of carriage, and of transit, are now afforded by steam. Forests, we repeat, have become rare in the land—in fact, there is only one, and it is regarded as so great a curiosity that, recently, a literary man and half a dozen artists have combined to make a book upon it. (*The New Forest, its History and Scenery*, by John R. Wise, 1853.) For five hundred years and upwards, there has been no cover for the wolves and bears, the elk, the white uri, and the wild cat and wild hog, which have all died out, much to the relief of agriculturalists and poultry feeders. The deer are fast disappearing; there is only enough marsh-land to afford pasturage for the cattle demanded by the city markets. With these changes, ague—formerly the commonest disease of the country, from which scarcely any escaped—is becoming extremely rare; and dysentery, once the almost universal scourge under which many of the noblest in the land succumbed, is of so unusual occurrence that the best physicians know next to nothing about it. Such are some of the leading changes by which, in the progress of advancing civilisation, Divine Providence has made the United Kingdom the healthiest realm in the world.

The health of communities is maintained by the simultaneous observance of two systems: personal and public hygiene. The former lies within the reach of the majority of individuals; the latter can only be commanded by the State or by powerfully influential municipal and other bodies. By the maintenance of a strict system of personal hygiene, by the observance of morality in its strictest and widest sense, of temperance, of cleanliness—men of originally healthy constitution, living in a wholesome air and provided with adequate food, fuel, and raiment, for the most part enjoy almost unbroken health and attain extreme old age. The preservation of the health of soldiers and sailors and also of the pauper class must always devolve upon governments, who, as we have already seen, have also, in the earlier stages of civilisation, generally become the conservators of the public health of cities. In modern times, where it has appeared to government safe and proper to do so, *self-government* has been conceded to civic and other communities, in the belief that, wherever the spread of enlightenment is sufficiently advanced and general, ratepayers ought to be allowed free action in providing for the maintenance of public health in their own cities. Nothing can be juster, in the abstract, than this view of the matter; but, practically, civic self-government has not always tended to the public good. Men are too generally inclined to argue thus:—"We are told that this our city is filthy and insanitary—but it always was filthy in our own and in our fore fathers' time. We are accustomed to stenches; the agree with us; we are healthy, and have grow wealthy in the midst of these so-called insanitary in fluences. Should we become sick, we will send fo the doctor. We do not believe that disease is preven able, because we have never seen disease prevented we will leave well alone; we have enough call upo our money without being taxed for the maintenanc of municipal commissioners and of unpractical sani tary enthusiasts." These short-sighted men canno perceive the plain fact that a city is merely a larg family; and that a family in which the working men the bread-winners, are always sick, in which the wo men languish and bring forth puny offspring, and in which widows and orphans accumulate, cannot bu shortly come to ruin. This rule applies as literall and practically to a family of two millions, as it doe to a family of ten souls. The whole sanitary systen is too natural and too easy to command ready belief It is like the scorned injunction of the Prophet—"Wash in Jordan and be clean."

It is declared in the oldest and wisest Book extant that "all that a man hath will he give for his life." It was not so in Birmingham ten years ago; it is no so in Calcutta to-day. But we cannot doubt that eventually, the instinctive wisdom of human natur will regain its ascendancy.

Before such an audience as this, I need scarcely say much in support of those who are earnest in striving for the advancement of sanitary improvement. Still although the subject is one of some delicacy, I shal not hesitate to make this the occasion of alluding in a spirit of moderation, to the manner in which many in Calcutta have met my professional brethren and myself in our recent earnest but, for the present, miserably abortive attempts to establish a rational system of sanitation in this pestiferous city. It appears that many regard our efforts merely as base and selfish attempts to place some one or other of our friends in lucrative situations, as arrogant attacks upon the judgment of those who are wiser than we are, and as unprincipled experiments upon the public purse. We, however, hope to live these ungenerous suspicions down, satisfied that we merely did our duty in urging upon citizens, annually thinned out by something nearly approaching to semidecimation, the importance of sanitation, the necessity for the appointment of a duly qualified health officer, and the obligation of treating him with confidence and adequately remunerating him for his scientific labour. I, however, believe that, exemplary as our failure has been, we have succeeded in laying the foundation of a good work, by grafting in the public mind the idea, which will hereafter grow into the belief, that sanitation is as needful for the safety of this impested city, as water is for the preservation of a burning house; and that, unless its inhabitants are willing to forfeit their lives, they must be content to lay down a few of their rupees in the work of sanitary improvement.

In looking over an old number of the *Eclectic Review* for October 1853, I find some very striking comments upon the position of the public health movement in the popular mind of England ten years ago, which are not without application to the manner in which this vital question is, at present, regarded by many in Calcutta. The reviewer says: "Public health reform is led by men whose motives not even malignity can *long* blacken or ignorance mistake; its true merits cannot well be shrouded up in any political haze from the common sense of the working man; his interests are, directly and without any drawback, contemplated by it, and it interferes with no other more cherished reform; yet, even in this measure, we are painfully reminded of the infatuated opposi-

tion to their own interests displayed by the working classes during the corn-law agitation.

"In some towns in which preliminary inquiries have been held by the inspectors of the Board of Health, the labouring population, the poorer ratepayers, have actually been led by interested persons to oppose the introduction of the Health Act. Where the town was the most putrescent, the clamour has been the greatest. The owners of bad tenemented property, the proprietors of lanes and courts wherein a high rate of mortality always exists, and whence death and contagion are propagated to the wealthier inhabitants, have been the chief agitators, and have led the small ratepayers, by exaggerating the expense of the necessary works, to join them in their opposition. They have thus succeeded, in some instances, in preventing the application of the measure; and, notwithstanding the tremendous exposures at the examinations of inspectors of existing filth, vice, crime, disease, and death, they still remain—as at Whitehaven, Hertford, Birmingham, Cambridge, etc.—in the same sordid and deadly condition as before. Thousands of those who, during the last few years, resisted the application of the Health Act, must have perished of the diseases against which it is a safeguard. Refusing to accept this defensive armour against death, they have been shot down. There is no other cure for the ignorance from which this mistaken opposition arises than *knowledge;* and here the thinking classes have been greatly remiss in their duty to their brethren of toil. We should have taken more vigorous means to spread accurate views on the subject among the masses of the people."

We have abundant proof of the fact that well-directed sanitary measures are capable of largely reducing mortality in cities. In the sixteenth century, the annual death-rate in London was fifty in the thousand; it is now twenty-five in the thousand. As nearly as can be ascertained at present, in the absence of a census and systematic registration of deaths, the death-rate among Mussulmans in Calcutta is forty-two, and among Hindoos thirty-nine in the thousand. There can be no fair reason why these fearful rates should not be speedily reduced at least to the still very excessive standard of Madras, which, last year, was under 33 (32·74). Why should not these terrible rates be still further reduced to seventeen in the thousand, above which rates, the present Registrar-General declares, all deaths are unnatural? Why should they not, as improvement advances, be brought down even to that singularly low rate of less than ten in the thousand (9·76) of which the last decennial census but one proved the existence in that respectable body, the Society of Friends, residing in all parts of England and Wales? Indian native soldiers are nearly as healthy as any troops in the world—why should not the same standard of salubrity be achieved for the denizens of Indian cities?

The European systems of naval and military hygiene have been tardily developed, and may still be regarded as almost in their infancy.

Most of my auditors will feel interested in the fact that the East India Company were among the first who perceived the necessity of sanitating for their mariners and soldiers. I have collected many evidences of this fact. The following have recently appeared in *Sanisbury's Calendar of State Papers, Colonial Series, East Indies, China and Japan, up to* 1616. Under the Court Minutes of the East India Company, December 10th, 1614, Captain Castleton to be entertained. * * * Trial to be made of sundry of his proposals including the making of fresh bread at sea, with the grinding of corn, "an exercise fit to preserve men in health" instead of meal; of distilling fresh water from salt water by having stills fitted to furnaces—a plan which was rediscovered by Dr. Lind, 147 years later, 1761—carrying a hogshead of fresh provisions [?] to be used only in case of necessity. Under the same date is noted:—"Offer of Dr. Burgis to present the Company with an antidote against poison, scurvy, and other diseases to which people are subject in these long voyages. Sir Thomas Roe and Captain Keeling to confer with him and report their opinions."

Preservation of spices and fruits for sick men on the voyage, December 14th, 1614. Richard Hide, a skilful druggist, to be entertained. September 23rd, 30th, surgeons' chests with good drugs to be provided. Dr. Burgis, professing great skill in the cure of scurvy, to be admitted. *Dr. Burgis was afterwards admitted a Free Brother.*

On January 25th, 1615, it is noted: "Instructions in writing and boxes of such things as are to be used for prevention of flux, scurvy, and fever, prepared by Dr. Burgis, delivered to each ship. The cost, about £23, to be paid."

In the English Royal Navy there was no regular system for the prevention of that most preventable of all diseases, sea scurvy, until exactly one hundred and eighty years after this, when—at the constantly maintained instigation of Lind and Blane, and countless other medical officers—lime-juice was made an article of regular supply throughout the fleet.

In 1779, the mortality rate among all employed in the British Navy was 125 in the thousand. About twenty years ago, the navy death-rates ranged only from less than eight per thousand (7·7) annually, on the healthy South American station, to fifty-seven per thousand in the African Squadron.

In the Bengal Presidency, between the years 1812 and 1854, the mortality rate of soldiers, *in hospital,* amounted to 69·40 per thousand. This calculation, of course, included a large proportion of the casualties of many severe and trying war years. In the eight years ending 1853-54, during nearly the whole of which war was in active progress, the death-rate of our European soldiers in Bengal, *both in and out of hospital,* was reduced to 63·38 per thousand; shewing, it may be fairly argued, that considerable improvement had taken place in our mode of sanitating for troops in this country both in peace and war.

The spread of military hygiene in India still continuing to advance, we find that, during the three peace years ending 1861, the death-rate, *in and out of hospital,* in our Bengal European force amounted to only 42·70 in the thousand. In 1862 it was at the comparatively very low rate of 28·10.

Even from these few scattered facts, any of my hearers who have not yet directed much attention to the subject may infer that the sanitarians' claim, under Providence, to the power of preventing and controlling disease and death, is no false boast. In truth, as the triumphs of sanitation spread, the Shaksperian axiom,

> "We *cannot* hold mortality's strong hands."*

is becoming convertible into the question.

> "*Cannot* we hold mortality's strong hands"?

Although the task is one of vast difficulty and is fraught with many disappointments, the advancement of state sanitation in India promises to become a noble success. True, the climate of this country is most unfavourable, but my professional brethren should not allow this bugbear to deter them. Providence has permitted man to modify, in a large measure, the influence of those unfavourable climates in which his lot has been cast. The cry of intellectual and wealthy people in India—"This dreadful climate, this deadly atmosphere," is like the cry of a timid

* *King John*, act iv, scene 2.

primitive tribe living defenceless amongst tanks and jungles—"these merciless tigers, these murderous alligators." As the proper advice to the one party would be—"Buy rifles and learn to use them," so the wisest council to the other is—"Master the simple laws of sanitation, and then spend a little of your money in having them carried into effect."

I need not close these cursory and scattered remarks upon a vast and noble question, with any exhortation to the learned and honourable body of my professional brethren who surround me. We all mutually understand and faithfully strive to labour in our mission here. This labour involves trial, discouragement, sacrifice—probably early death; but the duty is plain and the reward assured.

I have now, gentlemen, office-bearers and members of the Bengal Branch of the British Medical Association, only to thank you most heartily for the support which you have afforded me while occupied as your president, to bid you cordially farewell, and to resign this chair to my esteemed and learned successor.

Progress of Medical Science.

SURGERY.

Ozæna. M. Trousseau observes that we must not confound ozæna depending upon the condition of the nasal fossæ with the fetor of the breath caused by some affection of the mouth or throat. Of all the causes of ozæna, the most frequent is syphilis. Syphilitic ozæna is also important in this respect, that more than any other form it leads to ulcerations and necrosis. We can do little in the case of ozæna which depends upon necrosis of the bones. The odour will continue as long as any portion of the dead bone remains. An ulceration, a necrosis of the walls of the antrum, or a chronic inflammation of the mucous membrane which lines it, will also produce an ozæna, for the cure of which we can do little; and in the greatest number of such cases surgery alone can intervene by penetrating the antrum from the upper row of teeth. In all cases where we can attack the cause of the inflammation of the pituitary membrane, and where there are as yet no osseous lesions, the cure is easy; thus, in syphilitic coryza without ulceration, mercurials, or iodide of potassium, will soon remove this condition. But where we have to do with a herpetic ozæna we have no longer any specific remedies, and the condition is often incurable. By means of arsenical or sulphurous preparations, or iodine, we may do some little good, but it is to topical remedies we must chiefly trust. It is still more difficult to contend against the strumous diathesis, and though we may produce some modification of the constitution, by placing the patient in favourable hygienic conditions, and administering some of the ordinary remedies, we must reckon almost exclusively upon those agents which address themselves directly to the affected mucous membrane. Powders inhaled in the same way as snuff, the direct application of caustic to ulcerated points, injections of different kinds, are the means which have proved most effectual. Not that a cure is easy, far from it, or that it can be obtained in a short time; but, however imperfect the method, we arrive occasionally at relatively good results, which we are glad to have obtained. The following are the powders which M. Trousseau generally employs:—1. Subnitrate of bismuth; Venetian talc, of each half an ounce. 2. Chlorate of potash, 30 grains; powdered sugar, half an ounce. 3. White precipitate, 5 grains, powdered sugar, half an ounce. 4. Red precipitate, 5 grains; powdered sugar, half an ounce. An essential precaution is to clear out, in the first instance, the nasal fossæ, by sniffing up tepid or cold water, so as to remove any crusts or mucous secretions. M. Trousseau uses the mercurial powders in the first instance. The patient should inspire vigorously a pinch by each nostril, and this should be repeated twice or thrice a day according to the amount of irritation produced. In children we must have recourse to injections. These are: 1. Phagedænic water (yellow wash, more or less diluted). 2. Chlorate of potash, 60 grains; distilled water, 7 ounces. 3. Nitrate of silver, 1 grain; distilled water 3½ ounces. 4. Sulphate of copper, or sulphate of zinc, 1 grain; distilled water 3½ ounces. Although topical remedies are the most important, we must not neglect general treatment. Cod-liver oil continued for a long time is often useful. Tincture of iodine, given at meal times, in doses of from 5 to 15 drops, seems often to have a good effect. Arsenical preparations persevered in for a length of time seem often to assist the topical medication. In the treatment of syphilitic ozæna, mercury and iodide of potassium hold the first rank. This most disagreeable complaint is one of the most difficult to cure, but it is also one of those which may be best palliated.

Treatment of Diseases of the Rectum. Mr. Thomas Annandale gives the following cases, most of which have occured in Mr. Syme's practice, to illustrate the treatment of some of the affections of the rectum.

Internal Hæmorrhoids. Case i. Miss J., aged 60, came from England, to be under Mr. Syme's care on June 1863. The patient had been troubled with internal hæmorrhoids for thirty years. During all this time she had been frequently blistered and bled for what was supposed to be heart-disease. For the last twenty-six years the patient had been a confirmed invalid. Miss J. had also during all this time constantly worn an apparatus to keep up the protruded parts, which came down on the slightest exertion. On examination, there was a bright red mass protruding from the anal orifice, consisting of four distinct masses, which altogether formed a tumour of the size of a child's head. The patient was able to return the tumour within the sphincter, by gradually compressing it and pushing it upward. The patient's bowels having been freely opened by castor oil, ligatures of strong silk were applied in the usual manner round the four tumours. After the application of the ligatures, three of the tumours were completely strangulated; but the fourth not being thoroughly destroyed, a second ligature was applied round its base. The parts could not be reduced after the operation, and were, therefore, left protruding. The patient suffered a good deal of pain for the first few hours after the operation, but at the end of this time the pain subsided. A poultice was then applied to the parts, which were quite black and appeared quite dead. By the sixteenth day after the operation all the ligatures had come away. Her health was very much improved; and the sores left by the separation of the ligatures were healing. The patient said she had not enjoyed such good health and comfort for many years. She eventually returned home quite well, and remains so.

Case ii. Mr. M., aged 82, came to Edinburgh, to be under Mr. Syme's care, on July 15th, 1863. The patient had suffered from internal hæmorrhoids for twenty years, which lately had become very troublesome. There was a bright red tumour of the size of half a large orange, protruding from the anus. It consisted of two masses of equal size, and could be returned within the sphincter, but very readily came down again. Ligatures were applied; and the tumour-

·e returned within the sphincter. Three days erwards the ligatures were beginning to separate, strangulated masses lying partly within and tly without the sphincter. On the seventh day, ligatures had all come away, and the wounds re cicatrising. In little more than two months he s quite well.

Case III. Mr. C., aged 50, came from Ireland to be der Mr. Syme's care. The patient had suffered m internal hæmorrhoids for eight or nine years. ey always came down when he was at stool, and asionally bled very freely. Three years pre-usly, nitric acid was applied five or six times to internal piles. These applications gave him much in, and quite failed to relieve the complaint. Four nths before Mr. Syme saw him, several severe at-ks of bleeding took place from the piles, which t him very weak. There were three internal piles, o of them of the size of a filbert-nut each, the third little smaller. One of the tumours had a white rk on it, caused by the previous applications of the tric acid. There were also some loose folds of skin ternal to the sphincter. The piles were ligatured the usual manner, and the loose folds of skin ipped off. The patient had retention of urine for e first twenty-four hours after the operation. At e end of a week the ligatures came away, and in other week he was able to go about, cured of his les.

Case IV. J. P., aged 40, was admitted into the clini-l surgical wards of the Royal Infirmary on January th, 1864. The patient had internal and external emorrhoids for sixteen years. During all this time he st more or less blood whenever he went to stool, and tterly he suffered from headaches and palpitations the heart. In the years 1856 and 1860, he had tric acid applied to the internal piles when in South merica. These applications gave him temporary lief, but did not cure the disease. On admission, ie patient was found to have both internal and ex-rnal piles. The former were ligatured in the usual ay, and the latter were cut off. When the ligatures me away the patient was dismissed, cured of his mplaint.

Case V. A. T., aged 55, was admitted into the inical surgical wards of the Royal Infirmary, Sep-mber 8th, 1863. The patient had been troubled for considerable time with internal hæmorrhoids. On xamination there were found two large internal hæ-morrhoids, each of the size of a pigeon's egg, protruding om the rectum. One of the tumours was in a state f gangrene. Poultices were applied to the swelling r some days. On October 12th, the pile which was ffected with gangrene was gradually becoming de-troyed; the remaining one was to-day cut off. On he 19th, the patient was convalescent, and was dis-nissed, cured of his complaint.

Prolapsus Ani. Mrs.——, aged 55, came to Edin-urgh, to be under Mr. Syme's care. The patient ad been troubled with a protrusion of the bowel for hree or four years. During the last twelve months he gut had been almost constantly protruded, and ad given rise to great inconvenience and much uffering. The protruded portion could be readily eturned, but on the slightest exertion it came down gain; so that whenever the patient moved from the orizontal position the gut remained down. On ex-mination there was a protrusion of the bowel four nches in length; it resembled in appearance the pro-apsus which is not uncommon in children; and was asily returned within the sphincter. When returned, here could be seen round the margin of the anus several folds of loose skin. No other affection could e detected. Mr. Syme cut off the loose folds of kin, and returned the protrusion. The patient was strictly ordered to keep the horizontal posture. There was no further protrusion; and, on the sixteenth day after the operation, the patient returned home quite cured. Prolapsus ani in the adult, Mr. Annandale shews, is not a common disease. The last case is a well-marked example of this affection. The treatment adopted, apparently so simple, was quite successful. The patient never had the slightest protrusion after the operation. It is difficult to explain why the removal of a little loose skin from the margin of the anus should so thoroughly and immediately cure this formidable condition of the rectum. It would appear that any alteration of the parts in the neighbourhood of the sphincter ani muscle prevents the proper action, or leads to excessive irritability of the muscle, and thus gives rise to many of those unpleasant and painful symptoms which attend certain of the diseases of the rectum; for we find in such cases that by removing the cause of irritation and restoring the muscle to its healthy action, we most speedily and surely cure the affection of the rectum. (*Edinburgh Medical Journal.*)

Tendo Achillis United by Silver Wire. Dr. G. L. Simmons of Sacramento relates a case in which the tendo Achillis of a man was completely severed accidentally about an inch from its attachment. He found the upper edge of the cut tendon retracted an inch and a quarter into its sheath. He flexed the limb, drew down the retracted tendon by strong forceps, and united the cut ends with a large sized silver ligature; the leg was kept flexed for a few days with adhesive straps, after which the usual slipper and dog-collar were used. In a few weeks the patient was able to walk in a high-heeled shoe with but little pain. Scarcely any stiffness resulted from the injury, and at the date of the report he could walk freely with the slightest perceptible halt. The "propriety of using silver wire in uniting tendons," Dr. Simmons says, "can hardly be questioned. In the above case the result was all that could be desired; and, although position alone might possibly have accomplished the same end in the same time, yet it is probable that the perfect approximation of the parts by the ligature assisted in defining the bond of union until it became strong. In this case, after the uniting mass was perfected, I removed the silver wire, as the play of the tendon caused the foreign body to slightly irritate the neighbouring tissues." (*Pacific Med. and Sur. Journal*, and *Dublin Med. Press.*)

Turpentine in Hospital Gangrene. Dr. Hachenberg, of the Federal army, writes of the use of turpentine in gangrene, that his experience with the remedy has fulfilled his most sanguine expectations. In conjunction with the sustaining constitutional remedies now in vogue, is applied the turpentine thoroughly every three hours into the wound; and where there are fistulous openings involving the wound, they are at the same time well injected with it, the wound being first cleansed with warm water and any ordinary disinfectant; where the fasciæ are involved, and are in the way of a thorough application of the remedy, they are dissected out. In the application of this remedy, though the wound may be perfectly saturated with it, little or no pain in most cases is caused. The only precaution necessary is, to keep the turpentine confined within the limits of the wound, not permitting it to come in contact with the adjacent skin; otherwise, and particularly when the parts are excluded from the air, it causes pain, and may in time produce cutaneous inflammation, if not vesication. When the turpentine has been regularly used for a few days, the character of the wound becomes changed. The slough falls out, and the dis-

charges become laudable, leaving a clean basis, with an active tendency to granulation. At the same time, the constitutional symptoms become more favourable. Fever has a tendency to subside, the appetite returns, pain disappears, the patient sleeps, and the countenance again appears cheerful.

The therapeutical properties of spirits of turpentine, which make it, perhaps, the most valuable agent in the treatment of hospital gangrene, are the following:—1. Its permeability. 2. It is a ready solvent of the broken-down adipose tissue of the wound. 3. It has local alterative, stimulating, and sedative effects. 4. Its antizymotic properties. 5. It is antiseptic and styptic. 6. It is non-escharotic in its effects. It causes no immediate or chemical eschar, as do bromine, nitric acid, and some other remedies, which are often the means, unhappily, of the retention of vitiated secretion of the wound.

British Medical Journal.

SATURDAY, JULY 2ND, 1864.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

"Not what we are, but what we ought to be."
(*Old Saw.*)

"SELF-ELECTED and irresponsible bodies have always been found the most unsafe depositories of power. If, moreover, the members hold their offices for life, all the elements of misgovernment are combined; and we may safely anticipate that the public good will be sacrificed to private interests." Such were the words applied to the Council of the Royal College of Surgeons of England, by Mr. William Lawrence, some thirty years ago.*

How far Mr. Lawrence's accusation was just at that time, we will not stop to ask; but we will venture to state, that the general terms of his proposition may still be applied to the College which was then subjected to his reforming castigations.

We have already shown that the College has to this day virtually been ruled by a self-elected and irresponsible body; that it has been virtually ruled by the Court of Examiners; and that the Court of Examiners is virtually a body self-elective and holding office for life. Thus, the members of the Court are nominally elected for five years only; but, by the fact of an invariable re-election at the end of that term, they virtually hold office for life. The members of the Court, again, are nominally elected by the Council; but, being all of them members of Council, and forming a veritable *imperium in imperio*, they rule the Council; and, consequently, virtually re-elect themselves. If, therefore, Mr. Lawrence's description of self-elected bodies holding office for life be a correct one, and universally applicable, it may be "safely anticipated" (to use his own words) "that the public good is sacrificed to priva interest" in the instance with which we are now co cerned.

Mr. Lawrence's words, it is true, were applied the Council when it was by charter self-electiv and, of course, are now no longer applicable to th body. But, in so far as the Court of Examine answers the description of a body which is sel elected, and holds office for life, we may logical argue that it must, in Mr. Lawrence's sense (unl he has altered his views on the subject), be in so far body which "sacrifices public good for private i terests."

And, truth to say, we see not how to read the pa history of the Court of Examiners without findi too many grounds for applying to it the condemn tion contained in Mr. Lawrence's solemn axiom. T very Charters of the College, under which the Cou lives and acts, bear on their pages an unceasing r probation of the Court. The new Charters were o tained and framed for the purpose of freeing the Co lege from the charges which Mr. Lawrence, in tho days, laid at its door; and the new Charters ha within them the prescribed elements of a reform College. But the College has read them by the de letter, not by their spirit. Thus, the Examine shall be elected every five years, says the Charter- thereby expressly indicating that the elections shou not be for life. The spirit of the words of Sir Be jamin Brodie was undoubtedly present with tho who framed the Charter; and those words may w be here recalled:

"With respect to the College of Surgeons," sa Sir B. Brodie in 1834, "I can say first what the Cou of Examiners ought not to be. The mode of electi them ought not to be that which it is at prese (1834). The Examiners are now appointed accordi to seniority, or nearly so. The Examiners ought t be those of whom there is reason to believe that th are the best qualified for the office, whether they a the younger members of the body or the older ones

Yes! on May 5th, 1834, these words were spok by Sir Benjamin Brodie, before a Committee of t House of Commons; and in the sense of these word and to give effect to them, were the new Charters the College framed. And yet have we to chronic the fact—may we not call it the discreditable fact —that now, thirty years after these words we spoken, the very system which was condemned b Sir B. Brodie and Mr. Lawrence, and which was have found its reform in the new Charters, is sti actually and virtually in as vigorous operation as ever was, even in those other bygone and corru days once so mercilessly reprobated by Mr. Lawrenc

Not in one single instance has the Council—tha is, the Court of Examiners—elected an Examin who was not one of themselves, one of the Council although the Charter expressly says that the electio of Examiners shall be quinquennial, and that Exa miners may be elected from the body of Fellows a

* Select Committee on Education.

e.* Every man who has been elected to the Court held office (so far) for life! Business, in fact, in this particular, been carried on under the re-ning Charters precisely as it was carried on under supposed corrupt charters of 1800 and 1822.

But, surely, under the broad day of the last half the nineteenth century, this state of things can-be allowed to rest in peace. No! indeed. The lege must "adjust its mantle" for a change. To blicly and clearly proclaim these things, is to con-n them as untenable—is positively to bring about ir reform. For some years past, we have, with s intent, earnestly endeavoured to enlighten the fession on all the short-comings of the College; l glad are we to find that the profession has at begun to open its eyes to the facts and to the th. Glad, also, are we to find, that our contem-raries of the press are now ready to second the rts which we initiated in this direction.

But how is a reform to be effected? We confess t we have hitherto placed our hopes on the elec-n of new men. When the Fellows had resolved t Councillors, at all events, should no longer hold ce for life—that there should be a transfusion of ew blood"—an election of Councillors on reform-; principles—an election of Councillors tacitly or pliedly pledged to carry out the spirit of the arter—we confess that we were vain enough to pe that in these new men would be found the ret of a grand requisite reform. Under the mo-n of these new reforming spirits, we thought that new Charter would be required; that the pre-t Charters would at length be interpreted accord-; to the spirit and intention of their framers; and t advantage would no longer be taken of those rmissive words in them which have enabled men in ce to evade their spirit and intent, and so to per-uate and carry out under them the very evils ich they were framed to remedy.

But we think so no longer. Human nature, even the most reforming sort, is still ever human ture; and when the temptations are greater than linary mortal flesh can bear, we must not be sur-ised even if the new and reforming element trans-sed into the Council should have proved unequal the occasion. In the Royal College of Surgeons, at present constituted, "*les choses* (as we last ek said) *sont plus fortes que les hommes*". We ve already told the tale of how the newly infused od—the reforming Councillor—gradually falls ay from his high and original intent, seduced by e syren voices which sing within that Council amber. *Per me si va, per me si va*, he hears the urt of Examiners ever singing in his ears. To e Court of Examiners—the natural goal of a Councillor's hopes, the desired object which he sees before him when he seeks to become a Councillor—he soon learns that there is no admission for the spirit of reform—the very Court existing on the negation of reform. Soon does the New Blood learn that his best title for admission to the honours and emolumental sweets of an Examiner's office is the negation of those very principles on which he rode so triumphantly into the Council. "Silence is golden" in that chamber.

We have, therefore, neither faith nor hopes that any reform will come through the agency of this infusion of new men. What, indeed, have they yet to show as the results of their efforts in this wise? What have the loudest reformers *out* of office to show as the results of their reforming efforts in office? The old tale of the best radical out of place making the best conservative *in*, finds ample illlustration here. Yet will we blame them not, tempted beyond what frail mortal man can bear. We will blame alone the measures, the unjust situation under which reforming souls are so grievously tempted, and are so naturally led to fall away.

Our hopes in reform can, therefore, now only repose in a new Charter—in a Charter whose terms shall no longer be permissive, but which shall enjoin and enforce the changes which it intends.

And what do we ask for? We ask only for that which we know will at once recommend itself to the sense and justice of every member of the profession outside the Council and the Court of Examiners of the Royal College of Surgeons, and to the sense and justice, also, we have reason to know, of some within that very Council. We ask for that which we are satisfied the Council of the College cannot resist—founded, as it is, on the most plain principles of justice and reason.

We ask that the affairs of the College shall be carried on on the following plain and equitable principles:

1. The Council of the College shall be really and in truth the managing body of the College.

2. No Examiner shall be a member of Council, except the President of the Court and *ex officio*.

3. No Examiner shall hold office for more than five years.

4. Country Fellows shall have the power of voting by proxy at the election of Councillors.

Is it not *primâ facie* absurd, and worse than absurd, that the Council which is nominally, and ought actually to be, the governing body of the College, should be virtually ruled by the Court of Examiners, which it elects, and which ought to be wholly under its supervision and control?

Is it right that an Examiner should be so placed—*i. e.*, in the Council—as to be able to assist in electing himself to the lucrative office of Examiner?

Is it not manifest that some limit ought to be put

* To prevent any misunderstanding, we may say that, of course, exclude from consideration here the case of Mr. Cæsar Hawkins, o is an examiner, though not of the Council. The history of his ticular case is, in truth, the very condemnation of the Council.

to the term of an Examiner's office; that an Examiner should hold office only for a limited and fixed period; and that the limits of that period should be distinctly defined by the Charter?

And is it not most just, and to the interests of the College, and of science, and of the public, that the emoluments of such offices should be distributed so as to enlist the services of all the highest disposable surgical and anatomical skill of the Fellows, instead of allowing them to become patriarchial appanages?

And is it not plainly an act of simple justice, as well as an act of the plainest wisdom, to give country Fellows a vote by proxy? Is there any other means to prevent the bribery, canvassing, and improper conduct, which have characterised some at least of these reformed elections?

So urgent, indeed, seems the need of a new Charter, and so unanswerable and cogent the reasons adduced in favour of it, that to us it seems impossible the College can resist the demand.

One only possible excuse we can imagine, and that is, the legal expenses attending the process for obtaining the Charter. But we will not think that a great corporation, with an income of £10,000 a year, will venture to tell the profession, that it is held back from doing a great act of national justice, because the doing of the act would cost it a hundred pounds!

THE LANCET v. MR. TURNER.

The *Lancet* has once again most unfairly and ungenerously attempted to damage Mr. Turner's candidateship for the office of Councillor of the College of Surgeons, by suggesting, and in fact broadly stating, that Mr. Turner could not perform his duties, if he were elected. The *Lancet* says that "a large number of Fellows are doubtful whether to vote for Mr. Turner will not be to sacrifice the interests of the general body to a personal desire to do honour to that excellent surgeon. . . . . We do not believe that he could do his duty to the Fellows, etc." Now, we beg to assure that "large number of Fellows who are doubtful" that they may at once lay aside their grounds of doubt on the score alleged. Mr. Turner *pledges himself*, if elected, "to discharge all the duties of Councillor most faithfully." The very fact alleged against Mr. Turner speaks volumes in his favour. He withdrew his name from the contest on a former occasion, because he felt that he could not then devote sufficient time to the work. He now, however, goes, as a determined candidate, to the poll, prepared to give his time; and he pledges his word that he will do the duties of his office (if elected) faithfully and fully. One word more on this score. We believe we are stating a well known fact, when we say that there is not a member of Council who is more regular in attendance than the country Fellow, Mr. Paget. We have even heard it said, that some London members of Council might well tak pattern from his punctuality. Moreover, it is tain, that no one of the new members—those, mean, who have been elected on reforming princi —has so boldly and so consistently supported th principles in the Council-room as Mr. Paget. W therefore, again insist that it is most reasonable just that the country Fellows should be duly rep sented in the Council; and we can now add, that conduct of Mr. Paget, as a Councillor, as a rep sentative of the interests of the country Fellows, been such as, in an especial manner, to recomm the introduction of another country Fellow. Turner, it should be noted, will, if he enter Council, enter it as a free and independent Coun lor. He will have no thought of an Examiners before him, and will, therefore, never be tempted sacrifice the interests of the College at the beck an all powerful Court of Examiners. We will v ture to prophesy, arguing from his age and posit —nay, we will venture to assert—if Mr. Turner elected, there will not be in the Council-cham two more thoroughly independent men than M Paget and Mr. Turner, and that the true interests the College will be defended and promoted by warmer advocates. And why do we say this, a why do we so strongly espouse the election of th men? First, because the country Fellows hav right to be duly represented; and secondly, beca Mr. Turner being, like Mr. Paget, untrammeled a unfettered, either by hopes or fears *in futuro*, w if elected, be one of the very few in office who c venture to act with perfect single-mindedness, w can afford to act solely in the interests of the C lege, utterly forgetful of any future possible benefic contingencies, without bias, unselfishly. Whet the *Lancet*, in thus unfairly and untruly attempti to damage Mr. Turner's election, is acting solely the interests of the Royal College of Surgeons—i of the whole body of Fellows and Members—or the interests of some individual Fellow of the C lege, our readers must themselves decide.

The suggestion of the *Lancet*, that Mr. Turn would not be able to attend Committees, is simp frivolous and vexatious. It is a fact, of which t *Lancet*, we suppose, is ignorant, that the only Co mittee which the three junior members of Coun are ever summoned to attend, is the Audit Co mittee (a paid Committee), which generally meets the end of each quarter, and a day or two before t meeting of Council. Mr. Paget was on this Co mittee until last July, when the three younger me bers were elected; and we would suggest to t *Lancet* to inquire of the Secretary of the Colle whether any member of the Committee of Audit ever attended more regularly than he?

We must freely state, that the conduct of t *Lancet* in this affair, in our opinion, suggests unm

akably that it has been influenced in its attempt o damage Mr. Turner rather by a spirit of local liquism, by a wish to serve the ends of personal riendship, than by any large and broad principles—uch as it so often boasts of in the abstract—of justice to the College at large. Even if Mr. Turner be, s the *Lancet* untruly suggests, an unfit representative of the College interests, why has not the *Lancet* uggested some country Fellow who, in its opinion, s a more fitting one? The reason of its not doing o, is obvious. We can, we confess, come to no other onclusion, than that the *Lancet* considers that ountry Fellows ought not to be admitted to the Council.

We sincerely trust that the country Fellows, and hose of the London Fellows who desire reform in he College, will, by their vote at the forthcoming lection, unmistakably show the *Lancet* that they old a very different opinion.

Since the foregoing remarks on Mr. Turner's candidature were in type, we have received a copy of a etter addressed by that gentleman to this day's *Lancet*. It is as follows.

"Sir,—I do not find fault with you for your full nd free analysis of the fitness of the different candidates to fill the office of Councillors to the Royal College of Surgeons; and I quite agree with you in opinion, that a membership of the Council is not only a post of honour, but of duty; and it was with this conviction that I consented to become a candidate for one of the vacant Councillorships. Permit me, however, to state that, in your leading article of last week, you omitted a very important part of what I said from the chair, when I had the honour of presiding at the last annual dinner of the Fellows. On that occasion I pledged myself not only to attend the quarterly meetings of the Council—periods reserved, I presume, for the consideration and disposal of *great* questions—but that I would not fail to attend (unless prevented by urgent professional engagements) all the meetings convened for the discussion of matters of moment connected with the policy of the Council and the interests of the College.

"I am, sir, your obedient servant,

"Thomas Turner, F.R.C.S.

"Manchester, June 27th, 1864."

The *Lancet*, in reply, asserts that it has laboured so long and strenuously to obtain for country Fellows a full share of privileges and personal representation in the Council, that it can but wish well to the candidature of any country Fellow; and Mr. Turner personally possesses its confidence and esteem. It lays great stress on the fact that Mr. Turner will have to attend about twelve Council meetings in the year; and thinks this task "peculiarly arduous at his age, and residing at so great a distance as he does." But since Mr. Turner is desirous of the position, and does not shrink from the onerous task, the *Lancet* "freely supports his candidature". But we must again ask: If the *Lancet* were really desirous of having the country Fellows represented in the Council, why did it not suggest a proper candidate, in place of merely pointing out the unfitness—in its eyes—of Mr. Turner?

The mode of election of Councillors is just on a par with all the other proceedings of the College of Surgeons. It is a wretched system. It not only permits of, but it invites, every kind of electioneering tactics, high and low. Nothing need be said more of it than this, to condemn it; viz., that it allows of men being elected by a *minority* of voters present—*i. e.*, when a majority of voters present have voted against them. In fact, many of the Councillors who have been elected of late years have actually been elected contrary to the opinion (as expressed in their votes) of the majority of Fellows voting. If for no other reason, an alteration of the Charter is demanded to alter this mode of election. It is evident to the common sense of all that no man has a right to enter the Council by a *minority*.

The College of Physicians held a long Comitia on the 25th ult., having much business to transact. They elected their officers for the ensuing year. Large presents of books were announced from the President and Dr. Latham, as well as from others. The library was declared in excellent working order.—Caxton's *Lefévre's Siege of Troy*, the first book printed in this country, has been embalmed under a glass case. The College will not part with this literary jewel, which was lately accidentally discovered hidden away in some darkened nook of the library. It is an expensive ornament, being worth, we are told, some £700 or £1,000! We must confess that we should like to see the precious relic shining in a wider and more appropriate sphere—in the British Museum, for example—and the British Consols credited with £1,000, in the name of the College, in its place. Calculated from the low standard of commerciality, this volume in the glass case seems to cost the College £30 *per annum*.—The photographic mania has visited the College, like all other persons and bodies. The College now asks all its Fellows to favour it with their photographs; which, as the President remarked, may prove interesting to the present as well as to future generations. Why should not the Members also be invited to send in their photographs? The physiognomy of a Member might afford the Council, when in doubt, an indication to help them in their difficult task of selecting Fellows!—A memorial, signed by twenty-nine Licentiates of the Apothecaries' Society, residing at Brighton, was presented to the College. The prayer of the memorial was, that the College should grant its licence, without examination, to all gentlemen who are members of the Society of Apothecaries on July 1st, 1864, and may apply for it. Such a step, it was suggested, would make the London College what it ought to be—a

national medical institution. In exchange for the College diploma, they would surrender their Apothecaries' licence. The memorial was referred to the Council. We fear, however, that there is little chance of the College acceding to this proposal. We apprehend that, if no other obstacle stood in the way, the simple fact that the Apothecaries' Society requires only three years of study at a medical school, whilst the College requires four years of study at a medical school or a recognised hospital, etc., would stand in the way of any such arrangement. It seems clear that, to make any such arrangement feasible, there must be a nearer approach in the quantity of study required by the two Examining Boards than exists at present.

We are most glad to see that a subscription has been opened for the purpose of presenting a testimonial to Mr. Griffin, for the earnest, persevering, long-continued, and most arduous efforts, which he has made in behalf of the Poor-Law Medical Officers. That he has not obtained all he might, is assuredly no fault of his. That he has done very much in bringing the true facts of the case before the House of Commons, is certain; and that he has therefore paved the way for justice being done at some future day, is also certain. It would be a lasting reflection upon the profession, and especially upon our Poor-Law Medical Officers, if they allowed such determined energy, so exerted, to pass away without a fitting acknowledgment.

We have heard it stated that Sir G. Grey has appointed a Committee, consisting of Sir James Clark, Dr. Parkes, and Dr. Sutherland, to confer together on the Army Medical Service difficulty. We apprehend there can be little doubt as to the kind of advice so excellent a trio will give to Sir George. If the fact be correct, it looks well for the future, and shows that the Government is beginning to appreciate the difficulty which meets it.

At the present moment, the following extract from Lord Dalhousie's minute of the Report of the Commission on the Sanitary State of the Army (1858) will be read with interest.

"35. But the most galling, the most unmeaning and purposeless regulation, by which a sense of inferiority is imposed upon medical officers, is by the refusal to them of substantive rank.

"The surgeon and assistant-surgeon rank invariably with the captain and lieutenant; but the rank is only nominal whenever medical officers and others are brought together on public duty; the former has no rank at all, and the oldest surgeon on the list must, in such case, range himself below the youngest ensign last posted to a corps.

"36. It is impossible to conceive how such a system as this can have been maintained so long, on the strength of no better argument than that 'it has been,' therefore 'it ought to be.'

"It is impossible to imagine what serious justification can be offered for a system which, in respect of external position, postpones service to inexperience, cunning to ignorance, age to youth; a system which gives a subaltern who is hardly free from his drill precedence over his elder, who perhaps has served through every campaign for thirty years; a system which treats a member of a learned profession, a man of ability, skill, and experience, as inferior in position to a cornet of cavalry, just entering on the study of the pay and audit regulations; a system, in fine, which thrusts down grey-headed veterans below beardless boys."

A correspondent, who is well posted up in army medical matters, calls attention to remarks in the last volume of the Journal, p. 600. He assures us that the following statement from the *Morning Post* exhibits a truer statement of the actual deficiency in the medical service of the army than the figures in the quotation which was given from a recent parliamentary return.

"The want of medical officers for the army has never been more urgently felt than it is at present. It is announced that in a short time the Warrant will be issued for the Indian medical staff. No assistant-surgeon has been gazetted for the Indian service since the spring of the year 1861, while vacancies have been continually occurring, as of old, from resignations, retirements, and deaths. These vacancies have been temporarily filled up by medical officers from the general army. One of the provisions of the new Indian Staff Warrant is, that vacancies in the Indian staff are to be filled up by volunteers, under certain limitations of age and service, from the assistant-surgeons of the general army; and as these vacancies are now very numerous, and as the provisions of the Indian Warrant will be far more inviting than those of the Warrant of the general army in its present mutilated state, there will evidently be a large exodus of assistants from the medical staff of the general army to the Indian staff. A recent parliamentary return showed the number of vacancies exsting in the Army Medical Department; but this return took no note of the vacancies in the Indian Army Medical Department, nor of the exodus looming in the future to meet this deficiency, any more than it did of the number of surgeons and assistant-surgeons of the general army who are actually at the present time employed in India in consequence of the vacancies in the medical staff of that country. The parliamentary return, by its incompleteness, was only calculated to blind the uninitiated to the real dangers of the situation."

Our readers will see in the Journal an advertisement to the effect that the graduates of the University of Edinburgh have determined to form an Association in London. Some thirty to forty of the leading graduates residing in London and its vicinity have met together, and unanimously agreed that such an Association shall be formed. Its objects are, we conclude, to maintain good fellowship between the graduates, to mark affection for their *Alma Mater*, and to have at all times ready that power which is implied in unity to defend their own interests and the interests of their University. All graduates who may wish to join the Association are requested to forward their names at once to Dr. Murchison. No doubt we shall soon hear of this important movement being inaugurated by a festival.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

Gentlemen intending to read papers, cases, or any other communications, are requested to furnish, at their earliest convenience, the titles thereof to the General Secretary.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, May 10th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
NORTH WALES. [Annual.]	Black Lion Hotel, Mold.	Tuesday, July 5, 1 30 P.M.
WEST SOMERSET. [Annual.]	Clarke's Castle Hotel, Taunton.	Wednesday, July 6, 2.30 P.M.
BATH AND BRISTOL. [Annual.]	Mineral Water Hospital, Bath.	Thurs., July 7, 4.30 P.M.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 12, 3.30 P.M.
READING. [Annual.]	George Hotel, Reading.	Wednesday, July 20th, 4 P.M.

NORTH WALES BRANCH.

THE Fifteenth Annual Meeting of the North Wales Branch will be held at the Black Lion Hotel, Mold, on Tuesday, July 5th, at 1.30 P.M., under the presidency of W. WILLIAMS, M.D.

Gentlemen having papers or cases to communicate, will please to forward the titles of the same to Mr. Kent Jones, Beaumaris.

Luncheon at 12.30, at the house of Dr. Hughes.

Dinner at the Black Lion Hotel, at 4 P.M.

D. KENT JONES, *Hon. Secretary.*

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

THE annual meeting of the South-Eastern Branch was held at Brighton, on Thursday, June 16th. Luncheon was first of all partaken of at the Town Hall, through the hospitality of Dr. Ormerod; after which, the members adjourned to the Council Chamber for business. The chair was taken by the retiring President, JOHN ARMSTRONG, M.D.; and there were also present, besides the President-elect, E. L. ORMEROD, M.D., the following gentlemen: Drs. Armstrong (Gravesend); Carpenter (Croydon); Collett (Worthing); Cunningham (Hailsham); Hall (Brighton); Holman (Reigate); R. Martin (London); W. W. Moore (Brighton); Stephens (Brighton); Taaffe (Brighton); Tyacke (Chichester); and Messrs. Alderey (Brighton); Blaker (Sussex County Hospital); Bottomley (Croydon); Cordy Burrows (Brighton); Furber (Maidstone); R. Gravely (Newick); Hodgson (Brighton); Hollis (Brighton); Holman (East Hoothly); Humphry (Brighton); A. B. Jones (London); W. Martin (Hammersmith); R. Pearce (Brighton); Philpott (Brighton); R. J. Rogers (Brighton); Sankey (Dover); S. K. Scott (Brighton); Sisson (Reigate); Heckstall Smith (Hove); J. P. Smith (Brighton); Steele (Reigate); Tatham (Brighton); Trustram (Tunbridge Wells); Whately (Brighton); T. Watkin Williams (Birmingham); Winter (Brighton); Wooldridge (Brighton); and Wordsworth (London).

The PRESIDENT said that, as there was a good deal of business to be done, he hoped it would be done well, and as worthily became the great town in which they were assembled. His year of office was closing, and he felt, in reviewing that year, that there were associations connected with it, some of a pleasing, some of a painful character—a painful feeling arising from the remembrance that during his year of office they had lost the services of their esteemed secretary, a man memorably associated with the South-Eastern Branch of the British Medical Association. The first intimation we received of his death was from a member resident in Brighton, who suggested the propriety of paying such a mark of respect as became the Association. He (the President) issued a circular, and it was a matter of some consolation to know that nearly forty members of the Association left their homes and practices to attend the funeral. He knew and felt, and it was suggested to him also at the time, that something more than that ought to be done—though, as a mark of respect, perhaps it had not been surpassed at any time during the existence of the Association, not even excepting Sir Benjamin Brodie's funeral. He felt that it would be an act unbecoming of him to assume to himself and determine what the character of the memorial to Mr. Peter Martin should be. Various things had been suggested to him in his endeavours to find out the feeling of his brethren throughout the district; but the result was, that he thought the character of the memorial should emanate from their present meeting. There was one circumstance that gave him considerable pleasure. During his presidency, he had been brought into connection with a large number of his professional brethren throughout his district, and he found that, through this Association, a feeling of friendliness and brotherliness had sprung up amongst them, and a desire to support one another; that discourtesy and party feeling were being obliterated; and that the Association was producing some great fruits which should make them rejoice, and hope for still further better things than they had been accustomed to see. The chair was now about to be filled by a gentleman whose social position, moral character, and professional reputation, would shed a lustre on the office. He thanked the members for the kindness they had shown him during his tenure of office, and introduced the new President, Dr. Ormerod. [*Applause.*]

Dr. ORMEROD then took the chair amidst renewed applause, and delivered an address, which will be found at page 3.

Report of Council. The Honorary Secretary, Dr. C. HOLMAN, read the following report.

"The Council of the South-Eastern Branch are pleased to report that the Branch still maintains its numbers.

"The few withdrawals have been compensated by the accession of new members, and the total number now on the roll is rather more than two hundred; a result especially due to the exertions of the members resident in Kent, where the district meetings have been carried on with great zeal, and with ever increasing professional and social success.

"The general condition of the Association affords great cause for congratulation. The finances are rapidly improving, and when it is understood that some of the greatest difficulties the Association has had to contend with have been want of funds, caused by the remissness of members in sending their subscriptions, it will not be necessary to adduce any

argument on the part of the Council to ensure the discontinuance of such arrears amongst the members of the South Eastern Branch.

"The JOURNAL, under its present management, bids fair to become a true and able exponent of the opinions of the large majority of the profession, and in its onslaughts on all species of charlatanry, and in its observations on the conduct of medical witnesses in cases of professional prosecution, has rendered good service to medicine; whilst the papers appearing in its pages have been of augmented value and interest.

"It is, however, still matter for regret that gentlemen belonging to provincial hospitals do not send more frequent contributions to its weekly issue. A very large amount of most useful information is lost, or lies hid in the note-books of practitioners, who, from their status and ability, are well able to give their quota to the ever accumulating mass of well observed facts, from which deductions may be drawn of untold value, to exercise important influence on the future theories and practice of medicine and surgery.

"Whilst congratulating the members on the prosperous condition of the Association, the Council must draw attention to the large number of the professional body who are not included within its sphere.

"Few medical practitioners can be satisfied with the present condition of the profession, in its social or political aspect. The great question of education has been under the discussion of the Medical Council, but with the result only of issuing a code of suggestions, whose chief features had years since been adopted in the reports of the various Branches of the Association.

"The Army Medical Warrant, which was received with such satisfaction in 1858, has proved a failure, mainly because its provisions have not been carried out in their integrity. A parliamentary return, just issued, states that the number of medical officers who have retired from the army, under the provisions of the Royal Warrant of October 1858, include three inspectors-general, four deputy inspectors-general, and four regimental surgeons-major. In addition fourteen regimental assistant-surgeons, and thirteen staff assistant-surgeons, have resigned since January 1st, 1862. Amongst the vacancies now existing in the various grades of the army medical department, there are twenty-six regimental surgeons, and sixty-four assistant-surgeons still required.

"Until the authorities can give that position to their medical officers which is their due, it will be impossible to secure any number of professional men to enter the service, much less to attract to it the best educated and the best qualified members of our body.

"Whilst the necessity for improvement in the preliminary education of gentlemen intending to practise medicine, is most fully recognised, the Council contend that the present army medical officer is fully qualified to be placed on the most perfect terms of equality with all the other officers of the service.

"To secure, however, any efficient medical reform, it is absolutely necessary that some sufficiently powerful organisation should exist capable of representing the voice of the great body of the profession. This is to a considerable extent afforded by the British Medical Association, and its Branches; the Council therefore cannot too earnestly impress upon its members how large a field for extension there is, even in the South Eastern Counties. We have now rather more than two hundred members, and only one regular annual meeting; but if the numerous and influential members of the profession in Surrey, Kent, and Sussex, who are not yet enrolled, could be induced to join the Association and Branch, and if the plan of local meetings were carried out in the same admirable spirit as is shewn in th district meetings in Kent, we should have an organi sation for purposes of utility, social, scientific an political, which could not fail to carry due weigh with the public, with government, with the Medica Council, and with the various medical corporat bodies.

"Mr. Villiers, the chairman of the Poor-Law Re lief Committee, has stated in the House of Commons that he believed the report of the committee would b presented ere long, and in time for legislation thi session. Amongst the subjects on which it is under stood they have come to resolutions, are *medical re lief;* power of Poor-Law Board to dismiss officers and *superannuation of paid officers.* The medica officers of unions will therefore anxiously await th conclusions at which the committee have arrived.

"Before concluding the report, the Council have t record their bitter sorrow at the loss of their able an well-loved secretary, Mr. Peter Martin. A memoir o him appeared in the JOURNAL of November 21st 1863, written by one who knew and loved him well In it his character has been so perfectly portrayed that the Council make no apology for transferring some portions of it in their integrity to the report.

"'Following the bright example set before him i the daily life of one who survives in a green old age at 84, to mourn and feel but too acutely the loss of hi son, Peter Martin was not content to be useful t himself alone—his was a nobler nature. In the midst of the anxious and harassing duties of a large prac tice, he found time to study how best he might im prove the condition of his fellow-workers in the me dical profession (the proceedings of the Poor-Law Medical Reform Committee testify to his labours i one direction), and, not less anxiously, how to contri bute to the intellectual and social well-being of hi fellow-townsmen. Following his father (the founde of both Associations), he became secretary to th Surrey Medical Benevolent Society, and secretary and treasurer of the South Eastern Branch of th Provincial Medical and Surgical (now 'British' Association; and to the ability, tact, and judgmen with which he introduced and conducted the busines of these bodies is doubtless owing, in great measure their present flourishing and influential position.

"'Few men have left behind them so many sorrow ing friends. And this is no mere figure of speech Gifted by nature with an attractive person; with al good qualities, intellectual and social, looking ou through his clear blue eyes, and beaming in his ex pressive face and winning smile, there was that abou him which to the merest stranger was irresistibly at tractive. But this was not all. By those who ha the privilege of knowing him intimately will be long cherished the remembrance of those more solid attri butes of that inner life, to which the access was no so easy; and when to these are added his uncompro mising honesty, his fearless candour, and his gentl charity, all nurtured and harmonised and hallowe by faith, a more complete and noble character coul scarcely be imagined or portrayed.'

"Dr. Armstrong, your president, summoned th members of the Branch to pay the last sad tribute o respect to departed merit. A considerable numbe responded to his call, and followed Peter Martin's re mains to their last resting place, whilst many busy hardly worked practitioners sent letters of affectionat regard, expressive of regret at their inability to at tend. A proposition will be brought forward at thi meeting for perpetuating in some fitting yet simpl manner, the memory of one who laboured with n common zeal, and with rare ability in everything con nected with the best interests of the Branch, and th profession to which he belonged."

r. Sankey (Dover) moved a vote of thanks to the ident for his able address, coupling with it the ks of the Branch to Dr. Armstrong for the effi- manner in which he had discharged his duties ng his term of office.

r. J. Cordy Burrows seconded the motion, which carried unanimously.

r. Sankey moved, "That the report be re- ed and adopted." The remarks of their worthy esteemed President had his entire concurrence. h regard to gratuitous services, alluded to by the ident, there were one or two points which ought e mentioned. It was the privilege of the medical ession to exercise itself gratuitously. No one a spark of humanity in his bosom would hesi- to give his gratuitous services when needed; it had now not only become a request, but a and, on some persons' part; and this must be . With regard to apprenticeships, he had had a colts to break in, and for his own part could bear imony to the advantages to be derived from ap- nticeship. In two years, the young men should qualified to go to London to attend lectures, and ructed in the elements of pharmacy and medicine botany, and afforded every opportunity of seeing es. At the time when he had apprentices, he was sole surgeon of a dispensary, and had ample op- tunity of seeing two or three hundred patients in course of a week; and many of his pupils have l that they esteemed most highly the advantages ich they derived in compounding medicines in his gery. With regard to their late friend Peter rtin, he concurred most heartily in the proposal a memorial to his memory, whatever that memo- might be. With regard to the Army Medical partment, he had just been in conversation with army surgeon, who said, "our profession will go the dogs before long; they treat us in such a way, t we can't stand it, and they are now calling in aid of civil practitioners."

Mr. C. Trustram (Tunbridge Wells) seconded, l said he was quite sure they would join in the pressions contained in the report. With respect their Secretary, they might have gone further and ed worse. There was a time when he threatened withdraw, on account of the labour attaching to office; but they were all unanimous in their wish him to remain in office, and he did so. With pect to what had been said about his character, the members of the Association could endorse m. He was a man whom nobody could hesitate like, nobody hesitate to admire—a gentleman in deportment, a man of intellect, high character, d sterling honesty. He was quite sure that less uld not be done than to express their regret at his s by perpetuating his good deeds, not only through eir own generation, but to their children. The re modest the tribute, the greater and more last- g the benefit. It was not by costly structures that e feelings of mankind were perpetuated; but it was e solemn terse sentence that expressed the man. e had gone to a better rest, but they would every e of them never forget his kindness or his worth. e trusted their present Secretary would follow in s steps; surpass him, he could not. Their report ntained two or three points to which it was very sirable for him to advert. That the district meet- gs were doing good service, those who were living the eastern part of Kent could testify. He had d much pleasure at being at some of these meet- gs, and more friendly and intellectual meetings he d never attended. He lived as it were isolated m his neighbours; but he was quite sure their ciety numbered sufficiently strong for them to hold strict meetings in other parts. They were working good effect amongst themselves; and so long as they agreed together, they could make their power felt. That their profession had been neglected, every one knew and every one felt; they were called upon to do acts of charity which no other profession would do. They gave full credit for what other professions did; but he said it advisedly and boldly, that where their charity, using the decimal system, was counted by one, the medical profession's charity should be counted by hundreds. He was glad that the Association was increasing in numbers, but he hoped it would still further increase. He trusted they were coming to a better time when they would be all of one body; and he trusted the day was fast passing when they would need a medical assessor. He hoped the day would come when the country would not need the coroner's court.

The motion was then put, and unanimously carried.

The late Mr. Peter Martin. Dr. Armstrong moved—"That the members of the South-Eastern Branch of the British Medical Association, at their first meeting, beg to express their sincere condolence with Mrs. Martin and her family upon the irreparable loss which they have sustained in the death of Mr. Peter Martin. The Branch holds his memory in affectionate regard, and his services to the Association in grateful and lasting remembrance."

During the time when the question of a memorial was first mooted, he received a considerable number of letters (some of which he had with him), expressive of the strongest condolence, and also of a desire that something of a permanent character should be associated with the name of their esteemed Secretary. Mr. Martin's worthy successor gave great promise, and would, no doubt, prove a most efficient secretary.

Mr. Sankey seconded the motion, and said that, although there was great disparity in their ages, it did not lessen the affection between them; for Mr. Martin had always been to him as a son. He only regretted that the English language could not sufficiently express the feelings which actuated him at at that moment.

The motion was carried.

Mr. J. Cordy Burrows said that it was a question among many men and many minds how they could best testify in a lasting and memorable manner to their affectionate regard for the late Mr. Martin, and shew their grateful recollection of his services. He had a resolution which he would read, and then he would explain why he thought it was a proper mode of carrying out that which he was quite sure they all desired to do—which was, to testify that Mr. Peter Martin did not live in vain, and that in his death his good deeds did not die with him, and that in perpetuating his memory they wished others to follow his example. [*Applause.*] Having been a member of that Branch almost from its commencement, he had been brought continually into communication with Mr. Martin and his worthy father; and it was mainly owing to the efforts of the latter that this Branch was established. The mantle descended to the son, a worthy successor, a man esteemed in Reigate and its neighbourhood, and held in affectionate regard by every one who knew him. Throughout his career, he was very anxious that the South-Eastern Branch should do something specially to advance the profession of which he was such an honourable member. The motions which he (Mr. Burrows) had to propose, were as follows:—

"That in grateful and lasting remembrance of the services of the late Mr. Peter Martin to this Branch of the Association, a subscription be made by the members to establish one or more prizes to be given

annually or otherwise to the most deserving students at the Medical Benevolent College at Epsom.

"That a committee be formed to carry out the above, consisting of Dr. Ormerod, Dr. Armstrong, Mr. Cordy Burrows, Dr. Collet, Dr. Carpenter, Dr. Hall, Mr. Sisson, Mr. Trustram, Mr. T. Heckstall Smith, Mr. Hodgson, and Mr. Humphry."

Mr. Martin took great interest in the Medical Benevolent College; and he (Mr. Burrows) was told by more than one gentleman whose sons had been educated there, that a prize, such as the one contemplated, would be a great incentive to study, and would be of the greatest advantage to the institution. He was quite sure that, if they could have the opinion of their departed friend, he would have been the first to support such a resolution, if carried out under similar circumstances. Mr. Peter Martin's father had told him that he thought it would be a proper mode to carry out the affection shown towards his son, but he considered that it would tax too heavily the purses of the medical profession. But, if a certain sum was placed in the hands of trustees, to raise an amount of about £7 or £8 a year, it would be sufficient to provide for a prize or prizes; and it appeared to him that whilst they ought to do honour to their departed friend, they ought also to stimulate the desire for knowledge among the young in the profession. After striving for the prizes, the young men would leave the college imbued with a love for his memory, and with the earnest desire to be as good as he was; for, after all, the real intent of the monument was or should be to point out an example to those who follow after. A tablet in a church was a testimony to a man's goodness and greatness; and it was, as it were, a sermon to those who saw it. But he considered mural tablets to be out of place. If his resolution was adopted, the Branch would take the best possible course to perpetuate their love and esteem for their good and kind friend. [*Applause.*]

Mr. Sankey seconded the motion. He said that the subscriptions need not be confined to the Branch, but it might be thrown open to the whole Association. Let all contribute to the fund, so that instead of having a prize of £8, they might have one of £80.

Mr. Trustram suggested that, whatever might be done in the way of prize, a very small part of the sum contributed for the object should be expended in the erection of a tablet to be placed in the parish church of Reigate.

Dr. Collet had been under the impression that Mr. Martin's friends were adverse to a memorial to his memory; but, after the remarks of Mr. Cordy Burrows, he was relieved on that point, and he hoped the meeting would be unanimous in sanctioning such a memorial as might be worthy of the deceased gentleman. With regard to the question that it would press too heavily upon the pockets of some members of the Association, he would only say this, that he hoped those who were able would contribute largely, and that those who could contribute but little, let them contribute that little cheerfully and without hesitation. [*Hear, hear.*]

The President said he would like to know from Dr. Martin what his uncle's wishes were?

Dr. Martin said he had been in communication with his uncle, and he happened to know that he had written to Dr. Ormerod exactly to the effect of that gentleman's address.

Dr. Carpenter supported the proposition. There was nothing in it which could fail to satisfy the feelings of the deceased gentleman's family. It was as free from ostentation as it was possible for anything to be; and, if they could have had Peter Martin's own opinion, he would have said, "Support the Medical Benevolent College." Mr. Martin had his heart in the work, and did all he could to support it. It would be all very well of them to place a mural ta in Reigate Church, to do honour to his mem But the men of Reigate had anticipated their wis this respect, and had placed a tablet there; bu whom would the inscription on it be read? No the medical profession of England, to whom Martin had set so excellent an example. If a m were instituted, it would lead to the inquiry, "W was Mr. Martin? and why was the medal founde If the meeting did what Mr. Burrows had propo they would have the good wishes of the late Peter Martin's best friends, and would be doing violence to the feelings of the members of his fam

Dr. Armstrong said that, while he was in of there were three propositions placed before him w respect to honouring the memory of Mr. Peter M tin. One was the erection of a tablet; but general feeling among those by whom it was cussed was against it, as it would be confined to church of Reigate, where already there was a mo ment. Another suggestion was, that a fund sho be collected, and invested in Government securit so that every year a prize might be awarded to most successful essayist among the medical pro sion of the Branch. There were many supporters this scheme. Then came the proposition of Mr. B rows; and, as far as he (Dr. Armstrong) was able judge, there seemed to be fewer objections to it th to any other plan. It commended itself to them, cause it gave a stimulus to young men to act rightly, earnestly, and perseveringly.

Dr. Hall suggested that a gold medal, of ab £10 value, should constitute one of the prizes, if funds allowed it, to be given to the student of highest moral conduct, chosen by the students of Benevolent College themselves.

Mr. Hodgson and Mr. Steele also supported proposition, which was put, and carried unanimous

Army Medical Service. The Secretary read following memorial on this subject.

"*To the Right Honourable Viscount Palmerston, Fi Lord of Her Majesty's Treasury,*

"The memorial of the members of the Sout Eastern Branch of the British Medical Associati sheweth,—

"That your memorialists, being medical prac tioners in Surrey, Kent, and Sussex, have to requ the attention of Government to the present conditi of the Army Medical Service—a condition unpar leled in time of peace.

"That, during the Crimean War, the Army M dical Service *proper* confessedly broke down.

"That the Report of the Select Committee of t House of Commons in 1856 recommended that t pay and position of the Medical Officer should be i proved; and that the necessity for employing ci Assistant-Surgeons should, if possible, be avoided.

"That the Warrant of 1858 contained importa concessions to the Medical Officers, and ordered th they should have a certain rank relative to oth officers; and that this rank should carry with it precedence and advantages, except the presiding Courts-martial.

"That these concessions brought such a numb of candidates, that the authorities were enabled raise the standard of examination and qualification.

"That it soon appeared that the provisions of th Warrant, especially as regards relative rank, we systematically disregarded.

"That the Warrants of 1861 and 1862 contain provisions in direct contravention of the Warrant 1858 and the recommendations of the Select Com mittee of 1856.

The result of this has been, that educated mem- s of our body cannot be found to present them- es for commissions; and that the very evil sought e set aside by the Committee of 1856, of employ- civil Assistant-Surgeons is now, even in time of ce, obliged to be had recourse to; whilst the en- ement of these gentlemen is attempted on the ogatory terms of *temporary hiring*, with the pro- ct of discharge without notice.

The Parliamentary return just issued shows a e of the Service calculated to cause just alarm to se serving in the Army and to the Public; and r Memorialists would request that due inquiry uld be made by Government into the evils com- ned of.

Your Memorialists feel assured that, as long as proper position is denied to gentlemen qualified their preliminary and professional education to be ed on terms of equality with all the other Officers the Service, so long will those Practitioners be ting who ought, in justice to the Country and Army, to have charge of the lives of our Soldiers, l fulfil the responsible duties of Army Medical cers."

Mr. W. MARTIN, after a brief address, moved—

That the memorial be presented to Viscount merston, the First Lord of Her Majesty's Trea- y, praying the attention of Government to the dition of the Army Medical Service."

Dr. TAAFFE seconded, and Mr. J. C. BURROWS sup- ted, the motion. The SECRETARY urged upon the mbers present to press the subject upon the repre- tatives of either House with whom they might ne in contact.

The motion was then carried; and the memorial s ordered to be signed by the President on behalf he Branch.

New Members. The following gentlemen were una- nously elected members of the Branch:—J. Deans, q. (Cranbrook); Philip Whitcombe, Esq. (Graves- d); Albert Hind, Esq. (Gravesend); Arthur Kel- , Esq. (Reigate); John Newman Winter, M.B. righton); J. K. Tuke, Esq. (Brighton); Athol A. nson, Esq. (Brighton); David Richards, Esq. righton); W. Kebbell, M.D. (Brighton); F. J. ney, M.D. (Brighton); John Walters, M.B. (Rei- e).

Council of the Branch. The following gentlemen re elected members of the Council of the Branch: W. Addison, F.R.C.P., Brighton; W. Aitken, M.D., uthampton; J. Armstrong, M.D., Gravesend; F. J. own, M.D., Rochester; J. M. Burton, Esq., Black- ath; C. Chaldecott, Esq., Dorking; J. Dulvey, q., Brompton; W. Hoar, Esq., Maidstone; G. Low- l, Esq., Brighton; E. Ray, M.D., Dulwich.

Representatives in the General Council. The follow- g gentlemen were elected representatives of the anch in the General Council of the Association:— Armstrong, M.D.; G. Bottomley, Esq., Croydon; Boycott, M.D., Canterbury; J. C. Burrows, q., Brighton; A. Carpenter, M.D., Croydon; Collet, M.D., Worthing; F. Fry, Esq., Maidstone; . Sankey, Esq., Dover; T. Heckstall Smith, Esq., Mary Cray; C. M. Thompson, Esq., Westerham; d E. Westall, M.D., Caterham.

Place of Next Meeting. Dr. HALL (Brighton) pro- sed that the next meeting of the Branch be held at e Crystal Palace.

Mr. STEELE (Reigate) seconded the motion, which s carried.

Officers for the Ensuing Year. The following gentle- en were unanimously elected officers for the year 35:—*President:* E. Westall, M.D. (Caterham). *Vice- esidents:* Albert Napper, Esq. (Cranley); and A. Sisson, Esq., Reigate. *Secretary:* C. Holman, M.D. (Reigate).

The Martin Fund. Dr. ORMEROD, the President, was requested to act as Treasurer of the "Martin Fund".

Balance-Sheet. The balance-sheet showed a sum of £30:11 in hand in favour of the Branch, which was the subject of much congratulation; and a donation of £10:10 was voted to the Benevolent Fund.

As the hour had now somewhat progressed, two papers on the programme were necessarily left unread; but it was stated that they would be forwarded to the JOURNAL for publication. At the close of the meeting, the sum of £75 was collected towards the "Martin Fund". The company then adjourned to the Old Ship Hotel to dine, and a convivial evening was spent.

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE eighth annual meeting of this Branch was held at Woburn, on Thursday, June 23rd, at 2 P.M.; H. VEASEY, Esq., President, in the Chair. There were also present, Drs. Barker (Bedford); Bryan (Northampton); and Francis (Northampton); and Messrs. Ashdown (Northampton); J. Carter (Bedford); Hemming (Kimbolton); T. Heygate (Hanslope); Hochee (Fenny Stratford); Matthews (Ampthill); Moxon (Northampton); C. Terry (Newport Pagnell); H. Terry, jun. (Newport Pagnell); J. F. Williams (Cranfield); J. Williamson (Bedford); and as visitors, Drs. Graily Hewitt and Thudichum (London); and Messrs. R. McCormick (Aylesbury); T. Miller (Woburn); and J. Prichard (Aspley). All these gentlemen were entertained at luncheon at Mr. Veasey's, and then adjourned to the Town Hall at 2 P.M.

On taking the chair, Mr. VEASEY made a short speech; after which, the minutes of the last meeting were confirmed.

Officers and Council. The officers of the Branch were elected unanimously as follows; viz.: *President-elect:* G. Ashdown, Esq., Northampton. *Committee of Management:* W. C. Daniell, Esq.; D. J. T. Francis, M.D.; W. H. Gatty, Esq.; E. Lawford, M.D.; J. F. Morgan, Esq.; W. Moxon, Esq.; W. Paley, M.D.; H. Terry, jun., Esq. *Representatives in the General Council:* R. Ceely, Esq.; F. Duke, Esq.; J. G. Leete, Esq.; Jas. Mash, Esq. *Honorary Secretaries and Treasurer:* J. M. Bryan, M.D.; G. P. Goldsmith, Esq.

Autumnal Meeting. It was decided that the next autumnal meeting be held at Buckingham, in October.

New Members. The following gentlemen were admitted as members of the British Medical Association and South Midland Branch:—Chas. Bennett, Esq. (Braunston); F. Buszard, Esq. (Northampton Infirmary); Jabez Carter, Esq. (Bedford); James Matthews, Esq. (Ampthill); Eustace Olive, Esq. (Northampton).

Several interesting papers were brought forward, but most of them were postponed to the next meeting, thereby enabling the gentlemen present to make a pleasant tour of the Duke of Bedford's House and Park, which were kindly thrown open to them specially by the Duke.

Specimens of the Trichina Spiralis were exhibited by Drs. Barker and Thudichum.

Dinner. About eighteen gentlemen met at the Bedford Arms Hotel, Woburn, and partook of a dinner.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on Friday, June 17th; Henry Douglas Carden, Esq., of Worcester, President, in the chair. There were also present Sir Charles Hastings, M.D., and thirty-eight members. Dr. Seaton (Sunbury) and Mr. J. Wyman (Alcester) attended as visitors.

The retiring President (Alfred Baker, Esq.), after thanking the members for the kindness and courtesy shown to him during his presidentship, introduced Mr. Carden as his successor.

Vote of Thanks to the Retiring President. It was moved by Mr. Bartleet, seconded by Mr. Solomon, and carried unanimously—

"That the best thanks of this meeting be presented to Alfred Baker, Esq., for his courteous conduct as President during the past year."

Report of Council. Mr. Oliver Pemberton (Honorary Secretary) read the following report.

"The Council of the Birmingham Branch of the British Medical Association feel much satisfaction in laying before the members a statement of the transactions of the past year.

"For the first time since the formation of the Branch, monthly meetings have been held, in accordance with the wishes of the members as unanimously expressed at a meeting of the Society held towards the close of the last session. Several highly important papers have been read and discussed at these successive meetings; and various cases of scientific interest have been submitted for consideration. The number of notices of papers on the list, and the good attendance at the discussions, abundantly establishes the success of this movement.

"The papers and cases are comprised in the following list.

"1. A successful case of Ovariotomy; with remarks on the selection of Cases, and on certain Details in the operation. By Mr. F. Jordan.

"2. Some Observations on Trusses; with a Description of a new one recently invented by Mr. T. P. Salt. By Mr. Oliver Pemberton.

"3. Therapeutical Inquiries: III. Oil of Male Fern in Tapeworm. By Dr. Fleming.

"4. The two Circles of the Blood, historically considered. By Mr. Gamgee.

"5. A case of Hæmorrhage from Retained Placenta after Abortion, terminating fatally. By Mr. Lowe.

"6. Prolapsus Uteri; its Treatment by Operation and Mechanical Means. By Mr. Redfern Davis.

"7. Successful Case of Ovariotomy; with Observations. By Mr. J. Clay.

"8. On Amputation by a Single Flap. By Mr. Carden.

"9. The Origin of Bright's Disease of the Kidney. By Dr. Russell.

"The last meeting of the session was occupied in discussing the merits of a charge of neglect of professional duty preferred by the coroner for the district of West Bromwich, in the Southern Division of the county of Stafford, against Mr. John Manley, surgeon. Your Council, in expressing their concurrence with the resolutions which were unanimously passed, exonerating Mr. Manley from all discourteous or unprofessional conduct on the occasion in question, cannot but record their regret at the existence at any time of unpleasant feelings between any medical gentleman and an officer holding so important a position as that of a coroner; the most cordial relations between the profession on the one hand, and the coroner on the other, being at all times essenti to the due fulfilment of the duties of so responsil a court.

"The inefficiency in the last legislative Act r lating to compulsory vaccination has been recognis for a long time past by the profession; and now th the public take alarm at the extension of the prese epidemic of small-pox, it may be fairly expected th the earnest warnings that have been expressed l medical men on the subject will, at length, recei that consideration which their importance deman In the opinion of your Council, the recognition Poor-law unions of all medical practitioners, as pub vaccinators of persons unable to pay for themselv would be a pre-eminently salutary step, and wou tend more to diminish the number of unvaccinat children than almost any other measure. At t same time that this great change is effected, an ad quate remuneration should be made to all membe of the profession who may desire to undertake su duties.

"In the Queen's service, the paucity of applic tions for medical employment, especially in the arm has led the Director-General of that Department offer temporary appointments to any who may l willing to accept them. But the profession fe deeply on this matter, and can only point out to i members that a continued persistence in refusing apply under the existence of unfair regulations, w alone accomplish, in the end, the attainment of t great object which all who are acquainted with t medical service have so long desired—a ratio of r wards and a status of relative rank proportioned the dangers and responsibilities which have to be m by the non-combatant officers. On this subject, ho ever, the Metropolitan Counties Branch have so r cently as Monday last held an important meetin adopting a series of resolutions which, should th meet with your approval, would receive addition effect by being supported by a special vote of t members who may be present at this annual gathe ing of the Branch.

"The reply of the Council of the Royal College Surgeons of England to the memorial of the Pres dent and Members of the British Medical Associ tion, requesting the Council to take into consider tion the propriety of altering its bye-laws, so th non-resident Fellows of the College may be enabl to vote by proxy at the annual election of Membe of Council; viz., 'that it is not thought expedien by applying for a new or supplementary charter, endeavour to effect the object to which their memori relates', is, in the opinion of your Council, eminent unsatisfactory, and calls for the exercise of prom and strenuous action on the part of the country f lows, in order to obtain, with the least possible dela this most necessary privilege.

"Referring more nearly to the prosperity of t Branch itself, your Council have to record the additi of a very large number of fresh members from vario towns in the Central District, far more than compe sating the absence of those who, from change of r sidence or other circumstances, have withdrawn th names, whilst, happily, none have been removed death."

Dr. Wollaston moved, Mr. F. Jordan seconde and it was resolved—

"That the report of the Council now read be r ceived, approved, and entered on the minutes."

Treasurer's Account. The account for the pa year, read by Mr. T. W. Williams (Treasure showed a balance in hand of £36 : 13 : 6.

On the motion of Mr. Coleman, seconded by I Russell, it was resolved—

"That the financial statement of the Treasu

v read be received, approved, and entered on the nutes."

Election of Officers and Council. Mr. CLAYTON ved, Mr. DOWNES seconded, and it was resolved—

"That Dr. James Russell of Birmingham be the sident-elect for the ensuing year."

The voting-lists having been handed in to the Pre- ent, and examined, the following gentlemen were cted members of Council for the ensuing year: *untry Members*—E. H. Coleman, Esq. (Wolver- npton); D. Everett, Esq. (Worcester); G. Fayrer, D. (Henley); J. S. Gaunt, Esq. (Alvechurch); S. J. affreson, F.R.C.P. (Leamington); G. Lowe, Esq. urton-on-Trent); S. Roden, M.D. (Droitwich); H. F. Shaw, Esq. (Sutton Coldfield). *Town Members* A. Baker, Esq.; M. H. Clayton, Esq.; J. Clay, Esq.; S. Gamgee, Esq.; F. Jordan, Esq.; J. B. Melson, D.; J. V. Solomon, Esq.; W. F. Wade, M.D.

The following gentlemen were unanimously elected presentatives of the Branch in the General Coun- of the Association: Alfred Baker, Esq.; E. Bart- t, Esq.; H. D. Carden, Esq.; M. H. Clayton, Esq.; Fayrer, M.D.; J. S. Gaunt, Esq.; J. B. Melson, D.; W. F. Wade, M.D.; O. Pemberton, Esq. (*ex cio*).

New Members. The following gentlemen, members the Association, were elected members of the anch: 1, E. T. Griffiths, Esq. (Birmingham); 2, J. ıtler, Esq. (Great Bridge); 3, Joseph Smith, Esq. ozells); 4, J. H. Thornhill, Esq. (Willenhall); 5, G. yman, Esq. (Alcester); 6, Alex. M. Inglis, M.D. Worcester).

President's Address. Mr. CARDEN delivered an ad- ess, embracing a consideration of various points of terest in connection with surgery, and especially th the operation of ovariotomy.

At its close, it was moved by Sir CHAS. HASTINGS, conded by Dr. RUSSELL, and carried by acclama- on—

"That the best thanks of this meeting be given to enry Douglas Carden, Esq., for his admirable ad- ess, and for his considerate attention to the busi- ss of the day."

Dinner. The members afterwards dined together at e hotel, under the presidency of Mr. Carden; Dr. mes Russell occupying the vice-chair. The usual yal and professional toasts were given and re- onded to.

Correspondence.

TYPES OF FEVER AND BLOOD-LETTING.

LETTER FROM G. BOTTOMLEY, ESQ.

SIR,—In the BRITISH MEDICAL JOURNAL of the h of June is a letter from Mr. Allison, written in a ientific and gentlemanly style, without a single ord that could possibly be construed to cast unpro- ssional reflection upon any member of the medical rofession. From the early date of his career down the present time, I presume there can be but few, ke myself, who are able to compare notes with him; r I see Mr. Allison's diploma is dated 1817, my own 811; so that both Mr. Allison and myself have had long period of active practice; and I hope those ho were in practice at that time, and are living, nd willing to support Mr. Allison's statements, will o so at once.

I quite agree with every statement made by Mr. llison, who, I have no doubt, carefully diagnosed very case that came under his treatment; bled when he found bleeding necessary, and to the extent the case demanded, and not, as has been stated, according to fashion or custom, but treated every case upon scientific grounds. I could give very many similar cases to those related by Mr. Allison, but they would be merely repetitions. From about the year 1822 to the year 1832, diseases of all kinds assumed the sthenic type; and during that period it was my practice to let the blood flow from the arm into various cups or basins, with a view of ascertaining its inflammatory condition, both from the thickness of its buff coat and its cupping; and as soon as its buff coat and cupping disappeared, further bleeding was discontinued; and if the inflammatory symptoms and pain had not completely subsided, then leeches were applied; and, after that, blisters, etc.; and I am quite satisfied that, if that mode of treatment had not been steadily carried out, many more deaths would have occurred. That treatment, and that treatment alone, saved many from a premature grave.

I above stated the year 1832 as the period when the altered character of disease took place from the sthenic to the asthenic form. The year 1832 was the year of Asiatic cholera; and at the same time a low type of influenza prevailed. From that time to the present, very few acute inflammatory affections have prevailed; consequently, bleeding from the system has been almost abandoned. Its discontinuance has not arisen from fashion, or that the public opinion has been opposed to bleeding, which deterred medical practitioners from doing their duty. Such arguments only give encouragement to such men as the author of the *Fallacies of the Faculty* and homœopaths, who say that they, by their writings and doings, brought about the change in the treatment of disease, and were the cause of putting a stop to bleeding.

The bulk of the medical practitioners of the present day came into practice since the year 1832, now thirty-two years since; consequently, they could not have witnessed the sthenic character of disease that existed at that time, and are now led into the error that no such form of disease ever existed.

Facts, according to the old saying, are stubborn things; and seeing is believing; and, as Mr. Allison justly observes, "various phases of fever and inflammations have taken place from the year 1814 to the present day".

I recollect well the time when George the Fourth (who, I believe, was then Regent) had an inflammatory attack when at Brighton. He was ordered to be bled by his physicians, who believed he had been bled quite enough. But His Majesty thought otherwise; and he sent for the assistant-surgeon of an Irish militia regiment that happened to be quartered at Brighton at the time, who took more blood from His Majesty. His Majesty afterwards made a good recovery. I need not say (for, no doubt, it is still in the recollection of many) that the militia assistant-surgeon became a leading physician. And, as Mr. Allison further states, "however that might be, George the Fourth's illness required a very different mode of treatment from that which destroyed the life of the Prince Consort".

I sincerely hope a different feeling will prevail in the treatment of disease, and that every medical practitioner will treat disease as he finds it, and not empirically; that he will bleed when required, and act diametrically opposite when necessary; not being led away, as it has been said, either by fashion or public opinion. Changes in the form of diseases have been going on, and no doubt will go on, in this country. The change from the asthenic to the sthenic form may take place again; and, instead of the non-bleeding and stimulating mode, the opposite may be

required, and it is impossible to say how soon; and, as Mr. Allison justly says at the end of his letter, "What would be more scientific or better practice, during all ages, than to adapt treatment to the type of a fever or the violence and degree of inflammatory action?"

I have at all times treated disease as it has presented itself; bled either generally or locally, as the case may be; or abstained altogether from bleeding—unbiassed, unprejudiced, either by public opinion or the feelings expressed by some members of the medical profession. I am, etc.,

GEORGE BOTTOMLEY.

Croydon, June 18th, 1864.

GRATUITOUS MEDICAL SERVICES.

LETTER FROM WILLIAM OGLE, M.A., M.D.CANTAB.

SIR,—The invitation from Dr. Gibbon (June 11th, 1684), that Dr. Ogle will favour the Association with an exposition of what his views *really* are on gratuitous medical services, unfortunately escaped my observation till this afternoon. The Association is already in possession of a full statement in a letter entitled "Provident Medical Association the Remedy for Hospital Abuses," May 31st, 1862. I adhere in the main to the opinions that are expressed in that letter. It was written after a great deal of thought, and is at least an attempt to go to the root of the matter. The good of the patient is made the prime consideration. The payment of the medical man is not overlooked, but is wholly subordinate. A professional advocate cannot invert this order, still less can he put the question of payment alone before the public without exposing himself to the charge of being "narrow and self-interested." I regret very much that Dr. Gibbon's resolutions did not embody the sentiment, which in his letter he so well expresses, as to the inefficiency of the present system.

I endorse and carry out into practice the recommendations of a country surgeon near Bath. I never give "advice gratis" at home. I am, etc.,

WILLIAM OGLE.

Derby, June 21st, 1864.

IMPETIGO CONTAGIOSA OR PORRIGO.

LETTER FROM THOMAS HILLIER, M.D.

SIR,—As Dr. Tilbury Fox has mentioned my name in his paper on impetigo contagiosa or porrigo, I shall be glad if you will allow me to make one or two remarks on the disease in question.

Dr. Fox finds fault with me for stating that he had *mixed up* several diseases under the head porrigo. Dr. Fox's arguments to prove a connection between vaccinia and impetigo contagiosa proceed on the assumption that the disease of which he is treating is a disease of recent date, introduced since the prevalence of vaccination. It is quite certain, however, that it was a common disease in Bateman's time, when the practice of vaccination was far from general.

Dr. Fox, in referring to his paper read before the Harveian Society, says: "It is evident that, not only was my differential diagnosis and description of the disease very full, but that the confusion, if any, existed in Dr. Hillier's mind." I must confess that, after hearing the paper read rapidly on that evening, there was a certain amount of confusion left in my mind, and I may go further to say, that my confusion has not been much diminished by a careful perusal of the paper which has been published in recent numbers of your JOURNAL. Dr. Fox's one statement that impetigo contagiosa is "chiefly a mixed disease possessing now the vaccinal, now the impetiginous phase in excess, at other times both in a tolerably equal gree," is to my mind rather confusing.

Dr. Jenner entertains the opinion that impetig a contagious disease; and there is, in my opinion, doubt that cases of impetigo are frequently transn ted by direct contact from one child to another from one part of the same child to another part p viously healthy.

Of late years it has become the tendency to beli that no skin disease is contagious except by the m dium of an animal or vegetable parasite; and this been laid down as a dogma in a recent number of *British and Foreign Medical and Chirurgical Revi* This is, I believe, not true. I see no difficulty supposing that the contagious character of impet is analogous to the contagiousness of some forms ophthalmia; and it is quite unnecessary to resort the theory of a connection between impetigo and v cinia, or to suppose that the contagion is depend on a parasite as was recently suggested by Dr. Du

I am, etc., THOMAS HILLIER

Upper Gower Street.

BLOOD-LETTING.

LETTER FROM W. WEAVER JONES, ESQ.

SIR,—Having read the excellent papers which h lately appeared in the JOURNAL respecting "venes tion" and the "change of type," I am induced mention a few cases that have occurred in my o practice. In the year 1816, I assisted a general pr titioner, who always told me that bleeding and tart ised antimony were the "sheet anchor" in pneumon

CASE I. A gentleman's groom, 25 years of age, v bled on three successive days to the extent of sixt or twenty ounces each time; leeches were applie and salines with tartar emetic given. On the fifth d I saw the patient at 7 o'clock A.M.; he was breathi with great difficulty; pulse 130; cough incessa sputa rusty. I took two ounces of blood, which lieved the respiration considerably. At 1 o'cl P.M., the difficulty of respiration had increased. repeated the venesection to ten ounces. At 8 P. I again visited him; the previous venesection h relieved him, but he was becoming worse every ho and the case appeared hopeless. I took a third a traction of blood, which again relieved the sym toms. Mr. C., the gentleman I was with, had l home for the day, and the case was in my han Upon his return in the morning, he called to see t patient; and, the unfavourable symptoms having turned, he repeated the bleeding. We gave neith wine nor spirits, and the man got well.

Since my residence in Cleobury Mortimer (upwa of forty-three years), I have successfully treated n merous cases of pneumonia, bronchitis, pulmona apoplexy, rheumatic fever, enteritis, congestion a inflammation of the liver, and puerperal peritonit by free and repeated venesection, mercurials, et *without* stimulants.

CASE II. In 1837, on my return home through village, a cottager's wife requested me to see her litt girl, three years old. She appeared to be dying fr congestion of the lungs. I took ten drachms of blo from the arm, and gave several doses of calomel a ipecacuanha. She recovered.

CASE III. Mr. W., 25 years of age, robust and ve intemperate, had congestion of the brain. July 18 I bled him five times within seventy-two hours aft the accident (the amount of blood taken was six ounces), and administered calomel, with salines, e On the fifth day, Mr. Carden of Worcester saw hi the mercury had affected the gums. He was deli ous; the circulation was rapid; he had subsult

um, and he passed his evacuations involuntar-
Mr. Carden prescribed digitalis with ammonia
lines with great benefit. The patient recovered
time. He had sustained a fractured leg in ad-
to the concussion.

E IV. January 1864. Miss E., aged 57, had
itis, with congestion of the lungs; the pulse
ft; respiration hurried; expectoration difficult
wheezing; no pain; countenance congested.
es, blisters, calomel, and expectorants were the
ies used. On the fourth day the respiration
embarrassed, that I felt assured she could not
nless the lungs were relieved. I took twelve
s of blood from the arm, which gave much relief.
llowing day, Sir Charles Hastings came to see
The gums were tender, and he urged a persist-
n the expectorants, with the aid of blisters, and
e administration of wine. She was in a precari-
ate for several days; the pulse continued rapid,
e expectoration difficult. Sir Charles Hastings
sted digitalis; this had a very salutary effect,
e recovered.

ing the last twenty years, I have not *so fre-*
y met with cases requiring depletion to the same
as in former years; from which I infer a change
e.

I am, etc.,

WILLIAM WEAVER JONES.

bury Mortimer, Salop, June 13th, 1864.

GRIFFIN TESTIMONIAL FUND.

LETTER FROM ROBERT FOWLER, M.D.

—At a meeting of the Committee of the
politan Poor-law Medical Officers, held on the
nstant, the following resolutions were unani-
y adopted.

That, in the opinion of this Committee, the
aw medical officers of England are under a deep
f gratitude to Richard Griffin, Esq., of Wey-
, for the untiring zeal, energy, and time, which,
rly ten years, he has bestowed upon the cause
r-law medical reform. That the concession to
oor-law medical service recommended by the
Committee on Poor Relief (England) is doubt-
a very great measure, due to the perseverance
rcibleness with which Mr. Griffin has invari-
dvocated the claims of his Poor-law medical
en. That, therefore, it is hoped the whole
aw medical staff of England will unite with a
o some suitable acknowledgment of his past
us services.

That the present Committee of the Metropolitan
w Medical Officers, with power to add to their
r, do form themselves into a Committee for the
e of giving practical effect to the above resolu-

That Dr. Robert Fowler, of 145, Bishopsgate
Without, be appointed Treasurer and Hono-
ecretary to the Griffin Testimonial Fund.

That the Honorary Secretary do issue printed
rs to all the metropolitan Poor-law medical
, soliciting their active co-operation and sub-
n for the object of, firstly, defraying the out-
ng expenses pertainable to Mr. Griffin's Poor-
edical Reform Fund; and, subsequently,
g the whole body to present him with
testimonial as may hereafter be determined

st to have a handsome response to this appeal.
or-law medical officers will, I am sure, acknow-
not only that our indefatigable champion must
out of pocket by his exertions in our behalf;
o, that he deserves something more than bare thanks at our hands. I beg, therefore, the means to give him a practical expression of our gratitude.

I am, etc., ROBERT FOWLER, M.D.,
Hon. Sec. and Treasurer.

145, Bishopsgate Street Without, June 25, 1864.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Saturday, June 25th, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College.

Fagge, Charles Hilton, M.D.Lond., 43, Trinity Square
Harrington, James Douglas, M.B.Oxon., The College, St. Bartholomew's Hospital
Lattey, Abraham H. H., 4, Gloucester Gardens, Hyde Park
Mackenzie, Morell, M.D.Lond., 13, Weymouth St., Portland Pl.
Murray, William, M.D., Durham, Newcastle-on-Tyne

APOTHECARIES' HALL. On June 23rd, the following Licentiates were admitted:—

Bradley, Charles, Nottingham
Smith, Thomas Haywood, Alcester, Warwickshire

At the same Court, the following passed the first examination:—

Adams, Frederick William..Bristol Medical School

APPOINTMENTS.

ARMY.

BARNETT, Staff-Assistant-Surgeon O., to be Assistant-Surgeon 12th Lancers, *vice* C. J. White.
CRERAR, Staff-Surgeon J., to be Surgeon 106th Foot.
DAVIE, Assistant-Surgeon G. S., M.D., 79th Foot, to be Staff-Assistant-Surgeon, *vice* T. Dolan.
DOIG, Staff-Assistant-Surgeon A., to be Assistant-Surgeon 79th Foot, *vice* G. S. Davie, M.D.
FRASER, Staff-Surgeon D. A. C., M.D., to be Surgeon 103rd Foot.
GILLESPIE, Assistant-Surgeon F., M.D., 35th Foot, to be Staff-Assistant-Surgeon, *vice* D. S. Skinner.
GILLESPIE, Assistant-Surgeon R., M.D., 74th Foot, to be Staff-Assistant-Surgeon, *vice* A. Doig.
M'GOWAN, Staff-Assistant-Surgeon A. T., to be Assistant-Surgeon 63rd Foot, *vice* W. W. Mills.
MADDEN, Assistant-Surgeon F., 69th Foot. to be Staff-Assistant-Surgeon, *vice* W. M. Webb.
MEIKLEHAM, Surgeon-Major G. C., M.D., 70th Foot, to be Staff-Surgeon-Major, *vice* D. D. M'Donald.
MILLS, Assistant-Surgeon W. W., 63rd Foot, to be Staff-Surgeon, *vice* D. A. C. Fraser, M.D.
READ, Surgeon R. W., 30th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.
SINCLAIR, Staff-Assistant-Surgeon E. M., M.D., to be Staff-Surgeon, *vice* J. Crerar.
SKUES, Staff-Surgeon W. M., M.D., to be Surgeon 109th Foot.
WEBB, Staff-Assistant-Surgeon W. M., to be Staff-Surgeon, *vice* D. C. Wodsworth.
WHITE, Assistant-Surgeon C. J., 12th Lancers, to be Staff-Surgeon, *vice* W. M. Skues, M.D.
WODSWORTH, Staff-Surgeon D. C., to be Surgeon 70th Foot, *vice* G. C. Meikleham, M.D.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

HALL, F. R., Esq., to be Assistant-Surg. 1st Cambridgeshire R.V.

DEATHS.

FOOTE, Richard F., M.D., at 16, Blomfield Street, Westbourne Terrace, aged 37, on June 16.
LINGEN. On June 8th, at sea, aged 20, Charles James, eldest son of *Charles Lingen, M.D., of Hereford.
SQUIRE. On June 27th, at Portland Cottage, Studley Road, aged 68, Charlotte, widow of the late William Squire, Esq., Surgeon, Wandsworth Road.

THE PRINCE AND PRINCESS OF WALES have done Dr. Sieveking the honour of standing sponsors at the christening of his child. The christening took place at St. Thomas's Church, Marylebone, the Prince and Princess being represented by the honourable Mrs. Stonor and Mr. Wood of the household. A gift

of a fine gold cup, with spoon, knife, and fork, were presented, bearing the inscription "Alexander Edward Sieveking, from his godfather and godmother, Albert Edward, Prince of Wales, and Alexandra, Princess of Wales. June 24th, 1864."

Poisoning by Buttercups. At Dartford lately a child was poisoned through eating buttercups.

Royal College of Physicians. The following gentlemen were on June 25th, elected officers of the Royal College of Physicians. *Censors:* P. Black, M.D.; C. West, M.D.; C. H. Jones, M.B.; W. R. Basham, M.D. *Treasurer:* J. Alderson, M.D. *Registrar:* H. A. Pitman, M.D. *Examiners: a—on the Subjects of General Education:* F. Hawkins, M.D.; J. Spurgin, M.D; H. Thomson, M.D.; *b—on the Subjects of Professional Education. Anatomy and Physiology:* W. O. Markham M.D.; W. S. Kirkes, M.D. *Materia Medica, Chemistry, etc.:* G. O. Rees, M.D.; W. Odling, M.B. *Principles and Practice of Medicine:* T. A. Barker, M.D.; J. R. Bennett, M.D. *Principles and Practice of Surgery:* F. Le Gros Clark, Esq.; C. G. De Morgan, Esq. *Midwifery and the Diseases peculiar to Women:* A. Farre, M.D.; R. Barnes, M.D. *Librarian:* W. Munk, M.D. *Curators of the Museum:* J. Alderson, M.D.; G. H. Roe, M.D.; W. Wegg, M.D.; F. Sibson, M.D.

Dr. A. Macdowall, of Helensburgh, died at Helensburgh on June 10th, after a long and tedious illness, at the early age of 33. On the breaking out of hostilities in the Crimea, he volunteered as surgeon in the Turkish Contingent force, which was quartered at Kertch and Yenikale. In his capacity of regimental surgeon, Dr. Macdowall distinguished himself by his exertions in promoting the sanitary condition of the troops. For these duties he was specially mentioned in the despatches of the Director-General, and was among the few who were selected to receive from the Sultan the decoration of the Order of the Mejidie. He afterwards settled at Helensburgh.

Superannuation of Union Officers. A Bill to provide for Superannuation Allowances to Officers of Unions and Parishes has been printed by order of the House of Commons. Under this Bill, the guardians may, with the consent of the Poor-law Board, grant to any officer in their service who shall become incapable of discharging the duties of his office with efficiency, by reason of permanent infirmity of mind or body, or of old age, upon his resigning or otherwise ceasing to hold his office, an annual allowance not exceeding in any case *two-thirds* of his then salary. No officer shall be entitled to such allowance on the ground of age who shall not have completed the full age of sixty years, and shall not have served as an officer of some union or parish for twenty years at the least.

University of London. On Friday June 14th, Lord Palmerston received a deputation from the University of London, to urge the claims of the university to a distinct and appropriate building, if possible, upon the northern part of the Burlington House site. It was urged upon Lord Palmerston, not only that the claims of the university had been admitted by past governments of both political parties, but that the largely increased number of candidates, which now exceeded 1,000 annually, rendered at the present time a larger amount of space indispensable for the conduct of the examinations, and particularly of those in the practical department of anatomy in such a manner as to secure a continuance of the confidence the public at large had shown in the university. Sir F. Goldsmid particularly reminded his lordship that there was an implied undertaking on the part o government of which Mr. Spring Rice was Chan of the Exchequer, when University College su dered the charter empowering it to grant degre favour of a wider and more truly national institu that a building adapted to the wants and positi the university should be provided for them. Palmerston expressed the favourable view he to the claims of the university, and begged that should be laid before the government showing cl the amount of space required. Earl Granville (C cellor of the University) stated that the registra in communication for that purpose with the arch of the Board of Works.

The Surgeon of the Alabama. A meeti the students of the Charing Cross Hospital was on the 27th ult., for the purpose of considering steps should be taken to erect a memorial to th Mr. David Herbert Llewellyn, surgeon to the *bama*, and formerly a student and silver medall the school. Mr. Travers, having been called t chair, said that as at a former meeting of the dents it had been resolved to open a list for sub tions, so that a suitable memorial might be er to the memory of their late fellow-student, of noble disinterestedness so much had already beer on the present occasion he wished only to state th medical and surgical officers of the hospital we sirous of cooperating with the students in the m and that Dr. Headland had kindly consented to treasurer. A committee of six gentlemen wa cordingly chosen. It was resolved that, with concurrence of the latter committee, advertise should be inserted in the morning papers an weekly medical journals, so that former stu might know of the movement, and the public rally join in erecting some kind of memorial to their estimation of the late Mr. Llewellyn's disinterestedness in sacrificing his life rather imperil the lives of the wounded sailors in the ing *Alabama*.

Milliners and Tailors. In the House of on June 16th, the Earl of Carnarvon said that time ago, a commission was appointed, in conseq of the death of a milliner's workwoman under p circumstances, to inquire into the state of the in which they worked and into their hours of l He wished to know when the report of that co sion would be produced. He also wished the earl to accelerate the production of the report commission with respect to tailors' working Earl Granville was understood to say that there be no objection to do what the noble earl ha gested; and as to the report of the commission had made inquiries and he found that it wo presented before the end of the present session Earl of Shaftesbury thought the commissione formed a wrong judgment in not presenting th port in reference to the milliners and dressma the beginning of the session. But he understoo instead of doing that the commissioners had to combine with it their report on the needle a women working at the East-end of London. I glad his noble friend had called attention to th of the tailors; for, although they did not come the classes to be inquired into, yet the waste amongst them was such as to make it of the g importance to them and their families that th which affected them should be redressed. The importance of the matter could not be measure by the waste of life, but by the waste of also, which every year threw thousands upon t rates.

Abstract of Lectures

ON THE

PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

LECTURE II.

QUITTING the merely preliminary and general matters which had engaged him in the first lecture, Mr. Fergusson proceeded, in his second, to announce a subject well calculated, when promulgated by him, to stimulate the curiosity of his audience to the utmost; viz., "Conservative Surgery". After some general observations relating to the importance of the free admission of new ideas and inventions in our art, Mr. Fergusson proceeded to introduce his subject in these terms.*

"Amongst various characteristics of modern surgery, I shall now venture to draw special attention to a field in which I have myself been a humble labourer. To save life and limb is a grand feat; it may be said to be the highest reach in surgery. There is a stronger feeling abroad at the present time than when I was young, that amputation should be avoided by every possible reasonable means. Whilst watching on my own account, I perceived around me indications that others as well were thinking on this subject; and, already, proof had been given that the amputating-knife was no longer necessary in many instances like those where it had previously been freely applied. That such a result has finally come about no one can hesitate to admit; and, as a familiar illustration, I may at once refer to the treatment of disease of the elbow-joint. If synovial membranes, cartilages, and bones seem irremediably diseased, or, in other words, beyond hope of cure within reasonable time, instead of performing amputation, the tissues chiefly affected are removed by a local operation; and the forearm, with hand, are left so little damaged that the limb may ultimately, as has often been proved, be nearly as useful as its fellow."

After this illustration, which indeed is sufficiently familiar, the lecturer went on to speak of other matters still more so—such as the mistakes that are sometimes made with reference to the possibility of saving the end of a finger or thumb when the phalanx is diseased. This, however, hardly seems an illustration of Mr. Fergusson's subject. That subject, if we understand it rightly, is to show that, in hopeless and incurable disease of certain parts, a partial operation (as that of excision) is preferable to the radical operation of amputation. To this theory of partial operation Mr. Fergusson has applied what appears to the present writer the very happy name of "conservative surgery". But this theory is not in any way illustrated by the unfortunately undeniable fact that surgeons may be found so ill educated or so negligent as to recommend amputation of the end of the thumb when no operation whatever is requisite, nor indeed anything in the way of treatment at all, except to pick away a piece of bone when it becomes loose. There is no question of principle here: the theory of the case would have been admitted, as well by the surgeon who recommended amputation, as by Mr. Fergusson, who told the patient to wait till the bit of bone became loose, had the former been able to diagnose the facts of the case. But the question involved in the theory of conservative surgery is quite different. The facts and diagnosis of the cases of diseased knees which Mr. Fergusson excises, and which some surgeons amputate, are as well known to the one as to the other; but their theory of treatment is different: the one deliberately prefers excision as the treatment; the other, as deliberately, and with as full a knowledge of the case, recommends amputation. Mr. Fergusson apologised for his cases of necrosed phalanx as being trivial; but the real objection to them was, that they were irrelevant.

The lecturer then went on to claim the term "conservative surgery" as his own invention.

"With a conviction, founded on practical experience, that many limbs and members had been sacrificed by amputation which might have been saved; that deeds had been done which, on a superficial glance, seemed as high art in our profession, when in reality they were indications of weakness, being the very *opprobria* of our calling, I ventured to draw attention to such matters in a paper in the *Medical Times and Gazette*, published on the 3rd of January, 1852, wherein I first made use of the term '*Conservative Surgery*'."

"Since my views on conservative surgery were first disseminated, I have observed with regret that some have alluded to the term without having a proper appreciation of its meaning. To treat a fracture in the ordinary way, to cure an ulcer, to deal successfully with a chancre with or without mercury, have been alluded to as examples of this sort of practice. Surgery is emphatically preservative or conservative in such cases; but the phrase was coined and used as applicable to a line of practice whereby the loss of a limb might be averted, and the meanest act of surgery—namely, amputating for seemingly incurable local disease—might be superseded by more perfect adaptation of surgical science and art."

As instances of what is truly to be called conservative surgery in the sense in which Mr. Fergusson first used the term, he brought forward Sir B. Brodie's operation of trephining the tibia in chronic abscess, and John Hunter's of tying the femoral artery in aneurism, as being in either case the substitute for amputation of the limb. In the sequel of the lecture, Mr. Fergusson produced many more illustrations of "conservative surgery". By comparing all these illustrations together, the reader will see that Mr. Fergusson understands by this term that branch of surgery which, in cases where operations are necessary, teaches by what operation the disease can be cured with the smallest possible mutilation. These illustrations were as follows. In the first place, in order to show that extensive disease in the soft parts, provided such disease was not cancerous, is no necessary obstacle to the success of operations performed in the diseased region, Mr. Fergusson referred to drawings of a case (we presume, in his own practice) which was one of the first excisions of the elbow in this city; showing how great was the disease in the soft parts before the operation, and how completely it subsided after operation. We quote the following remarks on this subject.

"I believe that there are few doubts now on this subject, as regards this individual locality; yet how many will admit, how many will deny, the doctrine as applicable elsewhere? Are there six surgeons in

* In extracting from the text of these lectures, I have made use of the reports in the *Lancet*, from the author's MS.

England who have amputated at the knee for white swelling? Is the scrofulous swelling round the diseased ankle, are the foul ulcers and sinuses in such swelling, not, even yet, considered as serious, aye, insuperable, objections to amputation at that joint? and has it not been proved beyond doubt that the sinuses and ulcers close, and the swelling subsides, soon after the diseased articular surfaces are removed?"

Next, in the removal of tumours, he dwelt on the very important fact that it is hardly ever necessary to sacrifice any of the skin which covers them. His illustration of this was most striking; viz., drawings of a patient, before and after operation, from whom Mr. Liston removed an enormous tumour of the face. Though the tumour seems to have been half as large as the whole face, and the skin was therefore enormously stretched, and though the portion of skin taken away was only "an oblong strip, about an inch or more in breadth, from the mouth to the temple," and though the edges of the wound came nicely together at the time; yet the patient, on recovery, had a large gap opening into the mouth.

The next illustration was taken from tumours of the jaw, in which Mr. Fergusson dwelt on the importance of removing only the diseased part, so that the base of the lower jaw, or the orbital plate of the upper, may be left to obviate mutilation. He added the necessary caution, "provided the tumour is not malignant, for then even the removal of the whole bone is a questionable step."

The same doctrine—viz., that it is not necessary to remove the whole bone in cases of innocent tumour—Mr. Fergusson went on to apply to the long bones; so that, in case of innocent disease of the lower end of the tibia, it would not be necessary to amputate in the thigh; and protested formally, "as Professor of Human Anatomy and Physiology", against the doctrine "that there is a peculiar circulation in a long bone, whereby, if disease be removed by amputating one end only, the vessels will be sure ere long to work in a similar manner in the end that is left." If such a doctrine is really held by any surgeon, no doubt Mr. Fergusson's protest has banished it from the minds of his hearers; but we can hardly imagine any one to hold a doctrine which would involve the idea that if the leg be amputated for caries of the lower end of the tibia, the disease will recur in the knee-joint.

After a rapid glance at the various examples of conservative surgery which might be drawn from the partial excisions and amputations in the foot and hand (in which part of the lecture surely the recent revival of the excision of the wrist by the Scotch surgeons deserved more distinct notice), the lecture concluded with three more illustrations of conservative surgery. The first was the excision of the scapula, illustrated by the exhibition of a tumour nearly the size of the fist, implicating the lower angle of the scapula, and removed by a partial excision of that bone. Two years have now nearly elapsed without a return of disease. In connexion with this case, Mr. Syme's original operation for removing the scapula was mentioned, and a figure was produced of the patient from whom the late Mr. Jones of Jersey removed the scapula. It may, however, be remarked as to the latter case, that the operation bears so close a resemblance to the mere extraction of a sequestrum that it can hardly illustrate any new point of practice. Mr. Fergusson's second illustration was a much more interesting one; viz., a contrast between the figure of a man from whom Mr. Syme removed first the head of the humerus implicated in a tumour, and afterwards the scapula, in which the disease had returned, preserving an useful arm, and the figure of a patient from whom Mr. Fergusson himself removed the scapula, after the arm had been removed at the shoulder-joint by another surgeon. This was a real and striking illustration of the value of conservative surgery, allowing that the cases were originally similar. The perfectly useful forearm and hand and partially useful arm of the former patient contrasted most impressively with the miserable mutilation of the latter. Lastly, Mr. Fergusson showed drawings of the lower limbs extensively affected with necrosis of the femur and diseased knee, with drawings of the necrosed bone removed, and casts of the limbs after excision of the knee. In one case, the treatment, though successful as far as the limb went, was frustrated by the occurrence of hip-disease; in the other, the lad is still alive, and was exhibited in the theatre. Mr. Fergusson concluded in these words, "Here is the boy himself, with the leg that was preserved. He can stand upon it for hours, and walk miles daily. Of all my feats of conservatism, I know of none of which I am prouder."

Such were the principal topics of Mr. Fergusson's lecture on Conservative Surgery—a lecture in which some topics that ought to have been subordinate were put forward so prominently that it was difficult at first to catch its real drift and importance. It almost seemed, at first hearing, as if the chief merit which Mr. Fergusson wished to claim for himself was that of having invented the name Conservative Surgery.* Now, this name, though it may be a happy one (and we think is so), could have been given by any one; its invention is a matter of no importance—a matter which a man like Mr. Fergusson could afford to pass over without notice. But the merit of this lecture is that it brought together a large number of striking, and most of them incontestable, examples of the important fact that, in operations for innocent disease (whether inflammation and its results or new growths), much more of the body might be saved than any surgeon thought possible fifty years ago—more than many surgeons believe even now. His lecture, though necessarily destitute of method, and, perhaps, somewhat wanting in clearness, shows how fertile in results this great idea is, and what the lecturer has done in realising some of those results.

* Calling surgery "conservative", seems to us very much like asserting of sugar that it is sweet, like the painting of a rose, or the adding of a scent to the violet. All surgery is essentially conservative. The surgeon's object is to preserve limb and life and restore health. If surgeons now save limbs in cases where surgeons formerly cut them off, all that is to be said about the fact is plainly this: that surgical knowledge is more advanced now than it was formerly. The term "conservative surgery", we confess, sounds to us as a pleonasm; or it suggests, that those surgeons who differ, or who have differed, from others, in points of practice, are engaged in "destructive" surgery. EDITOR.

LUNATICS IN IRELAND. In the House of Commons on the 1st inst., Mr. Blake called the attention of the Chief Secretary for Ireland to the necessity for amending the laws relating to the administration of lunatic asylums in Ireland, and for making better provision for the care of imbeciles confined in the union workhouses. Sir R. Peel said he did not think there was any need of further legislation, and replied to various points raised by Mr. Blake, observing that the subject had not failed to attract the attention of the Irish government.

SPONTANEOUS GENERATION. The lectures of M. Joly, on spontaneous generation, at the Ecole de Médecine, attract as many hearers as did either those of Renan, Minet, or Michelet, at the College of France. Each evening that M. Joly lectures many a paletot is sacrificed in the rush which is made by several hundred men.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture III.

The Treatment of Fibrous Tumours.

Mr. President and Gentlemen,—The treatment of uterine fibrous tumours forms the subject of our consideration to-night; and I shall speak, first, of the therapeutical measures which have been recommended; and, secondly, of the surgical appliances which have been found most efficacious.

I. Therapeutical Remedies. Several remedies have been recommended; but of these, the only three to which I shall refer are mercury, iodine (and its analogue bromine), and the liquor calcii chloridi.

From the time of Sir A. Cooper down to the present day, the discutive properties of *mercury* have been well known in cases of internal enlargement, and especially in cases of uterine disease. Combined with local depletion, I know of no more efficient remedy in arrested involution of the impregnated uterus, and in hypertrophy of this organ. But I have seen some cases of uterine fibroid where I think the enlargement has diminished under its use. I do not say that it has entirely disappeared. In mere thickening and hypertrophy, it is without doubt very efficient.

On the use of *iodine* and *iodide of potassium*, the writings of Dr. Ashwell are so well known and explicit, that incidental allusion only is required. He gave iodine internally, and applied an iodine ointment locally to the cervix. The resolution was sometimes effected in from sixteen to eighteen weeks. This was especially the case with cervical tumours. In hard tumours of the walls, however, he admits that the remedy, as a discutient, was of no avail; at most, it prevented only further increase. Dr. Simpson, on the other hand, recommends the bromide of potassium. In my hands, I must confess, that these remedies have not proved so useful as the bichloride of mercury.

More lately, Dr. M'Clintock has recommended the use of the *liquor calcii chloridi* (*Dublin Pharmacopœia*); but I have no experience in its use. In one case only, I gave it to the extent of eighty drops three times a day for four months. It seemed to give the patient comfort, and a slight relief to her symptoms; but the tumour did not become sensibly smaller.

The absorption, however, of fibroids which are imbedded in the uterine walls, is precisely that which we have been chiefly discussing; and these tumours are exactly those upon which those remedies are least operative.

Hæmorrhage. The symptom which seems to give rise to the greatest inconvenience in these cases, and calls most for treatment, is hæmorrhage. If this depend on hepatic congestion, or be accompanied with it, I believe no remedy is so efficient as mercury. In these cases, also, oxide of silver, in doses of one to three grains with half a grain of extract of Indian hemp, has often acted very decidedly; although, in some instances, the oxide of silver has appeared to purge. In other instances, no such operation has been observed; but the hæmorrhage has ceased. Sulphuric acid and gallic acid, also, as most of us have doubtless observed, are powerful remedies in arresting the hæmorrhage. Without doubt, however, turpentine is the surest remedy, if the patient's stomach can bear it. Better still is a mixture of dilute sulphuric acid and turpentine; but the women that can bear to take this atrocious compound are very few and far between. Ten minims of oil of turpentine in a mixture three times a day has sufficed to arrest the flow of blood in two or three days. Sometimes, however, all these remedies fail; and more energetic measures are demanded, and these are chiefly *local* in character.

There are three ways in which, locally or by manual operation, the hæmorrhage may be arrested—at least, for the time. These are: 1, injection; 2, cutting open the internal os; 3, directly cutting upon that part of the mucous membrane which covers the fibroid projecting into the uterine cavity. I do not, of course, allude here to polypi.

1. *Injections.* It is unnecessary that I should refer to this method of arrest at present, as I have already published my views on this subject at length, in a paper which you may all read, in the *Obstetrical Transactions*. I will only add a few words, in justice to a colleague of mine, Dr. Savage, whose name, although I gave him due credit in that paper for the discovery, has been overlooked. The scraping of the uterus by an uterine gouge was a French innovation. The injection with tincture of iodine, *after* dilatation by a sponge-tent, was Dr. Savage's discovery. The previous dilatation allows the escape of the fluid subsequently injected; and then those acute pains, which occasionally determine peritonitis when the uterus is injected without previous dilatation, are avoided. Dr. Savage prefers to inject iodine; that is, the strong Edinburgh solution undiluted. I like the tincture of sesquichloride of iron. I have never known an instance where, under this treatment, the hæmorrhage has not ceased for the time; I mean in fibroids. Of course, in ordinary cases of menorrhagia, the result is permanent.

I may mention two cases of fibroid tumour. One was a patient of Dr. Savage's, whom he transferred to me. She had an enormous uterine fibroid. At every monthly period the catamenial flow was profuse. The plan adopted was to inject the cavity, *after* dilatation by a sponge-tent, after the first or second day of the flow. It was always arrested, and never recurred till the next period, when it was again arrested in the same manner. The patient had time thus to rally and gain strength, and left the hospital much relieved.

The other case was remarkable in more ways than one. It was a case of fibroid and cancer combined, occurring in a young woman aged about 28. She came into the hospital completely exsanguine—with all the marked uncomfortable symptoms of anæmia. The tumour was very large, and extended above the umbilicus. The hæmorrhage was copious, amounting to

flooding at every period. The odour of the blood was in no way cancerous. This patient had *sponge-tents first used;* and in the exploration by the index finger, these fungoid growths here shewn were made out, but supposed to be merely mucous polypi. Portions of these were scraped away by the gouge, and she was consequently injected with tincture of sesquichloride of iron. The hæmorrhage was arrested instantaneously; and it was quite pleasant to see how the patient rallied during the month, getting flesh and colour and walking about, in fact, able once more to enjoy life. This treatment was repeated three or four times, and she was greatly better. A fifth time the menstrual period recurred; and I was thinking of injecting her the next day. On my arrival, I found her in a state of high fever, with abdominal tenderness. It proved to be acute peritonitis. It was fortunate for me, that I had not injected her now, else I should have concluded that the peritonitis had been due to the injection. The *post mortem* examination revealed the state of things you see represented in this drawing. The tumour was fibrous, with cancerous masses here and there.

2. Another means of arresting the hæmorrhage is by *incising the os.* I do not stop here to inquire as to who was the discoverer of this mode of procedure, and as to whether the merit is to be claimed by America, England, Ireland, or France. Of its practical value, I am convinced. It is a plan we have carried on at least for two years at the Samaritan Hospital. I explained the *modus operandi* of this incision in my second lecture.

3. Equally effective is Dr. Atlee's plan of *incising the mucous membrane* over a tumour projecting into the cavity. To the *modus operandi* in this case, I also referred in my previous lectures; and, therefore, I need not detain you any longer upon this point.

Treatment by Electricity. It is now many years since I was consulted by a lady for what appeared to be a fibrous growth of the breast.

It was a large tumour, of about the size of a turkey's egg, very hard, resistant, and producing some sickness on pressure. It gave rise to considerable anxiety at the time; more especially as the mother had just died of cancer, and an aunt had also succumbed to the same affection. Reflecting on the fact that, if in an ordinary galvanic battery a quantity of fresh meat is placed in connection with the positive pole, this rapidly putrefies, and believing that this fact, which I noticed years ago, was explanatory of the putrefaction of meat even in very cold countries at periods when the atmosphere is surcharged with positive electricity; it occurred to me that, if I could place this tumour in the same position, I should lead to its oxidation or decomposition, and so cure my patient. I did so. A zinc plate was moulded to the affected breast; a copper one to the healthy one. Interposed between the breast and plate, in both cases, was a piece of calico dipped in vinegar. In six weeks the cure was complete.

I was not so successful in a case of fibro-cystic disease. Here the disease made its progress apparently unaffected, and I was compelled at last to amputate the breast. The disease was radically cured.

Another case in which I tried electricity was one of fibroid of the uterus. C. B., aged 44, was admitted under my care, at first for a few days, subsequently for a longer period. (My notes of her case on first admission are meagre.) The patient was a rickety diminutive subject. She had been married nineteen years, but was childless. She had been usually regular till within the last twelve months, since which period she had suffered from dysmenorrhœa, and the catamenia had occurred only three times. Then they were copious, lasting four or five days, being very dark and clotty. They last appeared three weeks before admission. She first noticed the tumour eighteen months previously, in the iliac region of the right side. This was free from pain. She now complained of a great deal of pelvic pain and discomfort, and her motions were with difficulty passed. On vaginal examination, the os was found to be small, and the cervix prolonged. On the right side, in the position of the ovary, but lower down, was a hard tumour, which pushed the womb to the left side, and was seemingly attached to it, moving the latter slightly when moved itself. The movement, however, in the tumour itself, was limited. It filled the entire pelvic cavity, and extended above the pelvis. Pressure made above was felt in the vagina on the finger. The tumour was intensely hard except at one point. Here it was doubtful if there were not obscure fluctuation.

She was re-admitted December 11th, 1853. Since her former admission, the patient had been taking bichloride of mercury, except for about a month when she caught cold. The following points were now made out. The sound penetrated only three-fourths of an inch. Two tumours could now be felt in the abdomen; one to the left side and towards the median line, and projecting about an inch above the pubes; the other tumour, much larger and thicker, projecting two or three inches above the pubes, and placed more towards the right side. Pressure from above was responded upon the index finger in the vagina. The pelvis, as before, was occupied by a large tumour, which seemed to be made up of the entire uterus uniformly enlarged. The os was very small, looking backwards and downwards.

An attempt was made to dilate the os by sponge-tents. This failed. Subsequently, assisted by my friend Dr. Althaus, I passed a strong electrical current of high intensity through the tumour, placing as the positive pole an iron sound covered with gutta percha except at its distal end within the os as far as it could go; and the negative pole at the back opposite the sacrum. This was continued unremittingly for two hours. The effect was to cause the os to dilate a very little. It gave rise to a great deal of pain in the back, described by her as that of a large pin sticking into her. This was at once relieved on disconnecting the pole. This treatment was persisted in for four days. No greater effect upon the os was produced. The electricity seemed to give her pain subsequently to its removal. The catamenia appeared on January 1st, when the treatment was suspended, to be resumed again on the 4th. No effect appeared to have been produced upon the tumour by the electricity up to the 17th, when she left the hospital. An ulcerated spot had appeared on the back; no doubt, induced by the current; and a similar spot upon the os uteri and part of the cervix. This was more to be regretted, as the latter gave rise to as severe a gonorrhœa in the husband as I ever saw. In the long run, however, it seemed to do good. The tumour, in the course of a year, was become about as small as the fist, and all unpleasant sensations in connection with it had disappeared. I have seen this patient lately. The tumour is not now to be felt.

The employment of electricity to act upon fibroids is comparatively new. In future experiments, I purpose applying it by means of wires in the centre of the tumour; in this way, destroying and solidifying all the blood about the needles, without contact with the external air. I hope I may thus succeed in ex-

iting in it the process of absorption. The following remarks by Dr. Althaus are interesting, as exemplifying the absorptive action of electricity in cases of glandular tumours.

"Faradisation and galvanisation may be usefully employed for certain tumours, especially of the glandular kind, and some forms of struma; and are chiefly to be recommended where surgical operations are impracticable, on account of the seat of the tumour, or where the patient is averse to such operations. A striking case of this kind occurred a short time ago in the practice of Professor Langenbeck and Dr. Meyer of Berlin. The patient suffered from a hard glandular tumour, as large as the head of an adult, and lodged between the head and the right shoulder, filling up the space between the lower jaw, the mastoid process, and the linea semicircularis inferior of the occipital bone, and extending backwards in the direction of the vertebral column, which was dislodged towards the left side. The circumference of the left side of the neck was only six inches, while that of the right side was no less than fourteen. After fifty-six applications of the induced current, the tumour was reduced to one-half of its previous size, and by further treatment its bulk was still more diminished. In such cases, each operation should last for about an hour, and the treatment must be persevered in for a considerable time if beneficial results are to be obtained. Galvanisation seems, in the treatment of these affections, equally valuable as Faradisation."

[*To be continued.*]

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL ALBERT HOSPITAL, DEVONPORT.

COMPOUND HYDATID CYSTS OF LIVER: PERFORATION OF DIAPHRAGM.

Reported by VIVIAN WEARNE, Esq., House-Surgeon.

CHARLES A., aged 49, a mason, was brought in dead on January 26th, 1864. The history of the case was that, after ascending a ladder with a hod of mortar on his back, he stumbled forward on reaching the scaffold, and expired immediately. Previously, he had made no complaints of being in ill health. He had been a temperate man, and enjoyed good health.

AUTOPSY forty-eight hours after death. The body was in good condition. The brain was congested, but normal. The heart was flabby; there was slight thickening of the mitral valves. The lungs were intensely congested, but swam in water. On the right side, the diaphragm encroached on the cavity of the thorax, extending as high as the fourth rib; on the left side, as high as the fifth rib. A white albuminoid substance was adherent to the thoracic surface of the diaphragm. On removing it, some jelly-like matter, followed by some small hydatid cysts, exuded through a perforation of the diaphragm. The liver was adherent to the diaphragm, stomach, duodenum, and vertebral column: it was very friable. The left lobe was occupied and replaced by a large collection of hydatid cysts. One large compound hydatid cyst, of about the size of a child's head, had its base of attachment from the right lobe; on its under surface was a thin layer of liver-substance, about a quarter of an inch in thickness; this was the only remains of the left lobe. This cyst was filled with hydatid cysts and shrivelled hydatids. These secondary cysts, over two hundred in number, varied in size from that of a hen's egg to that of a pea. There were other large primary cysts; one, about the size of an orange, contained a clear fluid, with many hydatids in the fluid; another one contained only shrivelled hydatids. The whole formed a huge mass, and had formed adhesions to, and afterwards perforated, the diaphragm. The kidneys were healthy. The stomach was loaded with the contents of a recent meal, of healthy structure; it was adherent to the liver.

I would only remark on the slight derangement to the general health, from a disease which must have had its origin at some distant period. The congestion of the lungs was the immediate cause of death; whether it was caused by the perforation of the diaphragm, or by active exertion after a hearty meal by a man with a feeble heart, could not be ascertained.

Original Communications.

"'TIS SIXTY YEARS SINCE."

DR. GEORGE FORDYCE.

By THOMAS MARTIN, Esq., Reigate.

IT is generally admitted that biography is one of the most pleasing and interesting, and perhaps one of the most useful, departments of our literature; and medical biography must be more especially so to members of the profession.

In the obituary of the *Gentleman's Magazine* for 1802 (p. 508) is a memoir of Dr. George Fordyce; and there is also an article in Dr. Aikin's *Biography* (vol. iv, p. 162) on the same eminent physician, medical writer, and lecturer. Either or both of these memoirs are sufficiently full and ample for the general reader; but the profession may have no objection to something more; and I am enabled, from personal knowledge of Dr. Fordyce as his pupil, to offer my recollections of additional facts and circumstances respecting him to the readers of this JOURNAL, in the following statement.

On the 1st of October, 1796, I attended the introductory lecture of Mr. Cline at St. Thomas's Hospital. There was a well filled theatre. The lecture was delivered with a calm dignity in appropriate and impressive language, and was listened to with deep and silent attention by all who were present; and at the conclusion there were no noisy demonstrations of applause, often so inconsistent with propriety and good taste. Mr. Cline was always listened to with profound attention by all who were present; and, at the conclusion of each session, his valedictory address to those students who were about to leave the school would produce even tears from some who heard him; but it never occurred to the students of that day audibly to applaud a medical or a scientific lecturer.

It was determined that my school should be that of the then united hospitals. I must, therefore, have a lodging near at hand; and I took rooms at 22, St. Saviour's Church Yard, next door to Dr. Haighton's

houses, now removed to give additional space to the Borough Market.

Intending to have the benefit of Dr. Fordyce's lectures, after hearing Mr. Cline's introductory, I waited on Dr. Fordyce at his house at the bottom of Essex Street, in the Strand, introduced myself to him, and entered as a perpetual pupil to his lectures on the Practice of Medicine, Materia Medica, and Chemistry. These lectures were commenced at seven o'clock every morning; and, being given in immediate succession, we were often in attendance until ten o'clock. To be in time, I often did not walk—*I ran*; and this early morning exercitation, I have no doubt, contributed to my uninterrupted good health during my residence in the Borough.

The upper part of the house was appropriated to the use of the class, which was composed of three or four from the Borough, a good many from St. Bartholomew's, several from Dr. Marshall's school in Bartlett's Buildings, and others.

In addition to the morning lectures, there was, every Thursday evening, a lecture on chronic diseases in organs, previously lectured upon in the acute forms. On these occasions, we were allowed to meet half an hour before the lecture began for a sort of *conversazione*, when there would be a brilliant assemblage. Young men, half asleep in the morning from early rising, were radiant with vivacity and smiles. Those from Bartholomew's were eloquent as respected Mr. Abernethy, who was their idol; Marshall's pupils looked up to him as their *Magnus Apollo*, who brought a good deal of Barclay's Edinburgh with him to London. We from the Borough school had not much more to say, than that Cline—the admirable Cline—was above all praise.

Some wag occasionally sent a barrel-organ down the street to entertain us during the lecture; but the Doctor, having a very quick ear, sent the performer an angry message that, if he did not depart immediately, he would break his instrument all to pieces.

Before my time, the Doctor had a country house at Chelsea, where he used to entertain parties of his students with beef and pudding; but latterly he gave them plain dinners in Essex Street.

Dr. Fordyce was one of the most intimate friends of Dr. William Hunter; the trustees of whose celebrated Museum, in addition to Dr. Fordyce, were Dr. Pitcairn and Dr. Combe. These latter being dead, Dr. Fordyce, the only survivor, kept the keys of the cabinets and the book-cases, and occasionally gratified parties of his pupils with the inspection of this magnificent collection of works of Art and Nature, rich in gems, medals, coins, and minerals—for mineralogy was studied to good purpose, although the modern science of geology—the anatomy and physiology of the cuticular surface of the earth—was then unknown. In fact, this department of science, now so much cultivated, is new, scarcely more than half a century old. In the Museum were most valuable manuscripts; early printed books—Caxton's and Wynkin De Worde's, the productions of the chief continental presses, the *incunabulæ* of the fifteenth century; and all the most magnificent specimens of typography on vellum and paper of the fifteenth and sixteenth centuries—the tallest and finest copies of the Greek and Latin classics. There were beautiful works of Italian art, in a vast variety of forms.

The anatomical preparations were numerous, and were collected from several sources. They were used by Mr. Cruikshank to illustrate his lectures.

These treasures, it is well known, were lost to our metropolis. The government of the day, Lord Bute's ministry, having made a sad mistake by their apathy and folly in neglecting Dr. William Hunter's repeated applications, he bequeathed his Museum to the University of Glasgow, after a term of years for Dr. Baillie's use. This sad blunder on the part of the government manifested that at that time they were never sufficiently mindful of the importance and interests of science.

Dr. Hunter continued to add to his collections almost to his dying day; and Mr. Chevalier was of opinion, that he had expended on them to the amount of a hundred thousand pounds.

One of the most remarkable incidents in the life of Dr. Fordyce was the experiment he made, in conjunction with Sir Charles Blagden, on their own persons, by subjecting themselves to high temperatures in heated rooms. These experiments were made three times. On the third occasion, they ventured so high as 260° of Fahrenheit's thermometer; that is to say, to 48° above the heat of boiling water. Eggs and beef-steaks, placed on a tinned iron frame, were roasted as at a kitchen-fire, and as they themselves would have been, but for the conservative influence of the living principle. During the time they were exposed to this excessive heat, the pulse indicating the action of the heart was doubled in quickness; but in other respects these gentlemen, having completed their experiments, were not the worse for the trial they had undergone. The particulars are stated in the *Philosophical Transactions*, vol. lxv.

In the year 1788, the College of Physicians published a new edition of the *Pharmacopœia*. Sir George Baker was then the President of the College. He was not only the most learned physician, but, as respected classical and general literature, one of the most learned men of his time. He and the other heads of the College entrusted to Dr. Fordyce the task of reforming the Codex, which he cheerfully undertook; and that edition bore abundant proof of the knowledge, skill, and judgment with which he completed and brought into effective utility the component parts of each formula. In fact, it was a perfect model of pharmaceutical and chemical talent. The new nomenclature also denoted the principal ingredient in each formula.

In Dr. Fordyce's lectures on the Practice of Medicine, he did not profess to follow any recognised theory or system; although he seemed to take Cullen's *First Lines* as a model, and he had attended Cullen's lectures. He enunciated certain principles as he went on, and introduced a good deal of physiology, or what he called the "natural history of the human body"; and the *methodus medendi* was the result of his own experience. Certainly he had no blind devotion to any given nostrum or any particular theory; he prescribed according to what he considered to be the indications. He was always anxious to reduce the pulse from being hard and wiry to a soft pulse; and this a good deal by relaxants, of which the chief were, in the first instance evacuants of the stomach and bowels, and then antimonials. His endeavour was to correct the secretion, and induce a return to harmonious action of the various internal organs. He did not hesitate to use the lancet in appropriate cases and in moderation, and much in the way that Dr. Clutterbuck afterwards was remarkable for. He was sometimes satisfied with emptying the bowels, and then giving the "Darby and Joan", with an appropriate diet, more or less supporting; and of the materia medica, he gave a good deal of sarsaparilla and of Peruvian bark. His practice, on the whole, was very successful. He was the senior physician of St. Thomas's; the other physicians being Drs. Lister and Ainslie, and Dr. Wells (celebrated for his researches on dew) assistant-physician.

On reflection and recollection, I cannot conceive of a physician who could be more *judicious* in practice;

prescribing for each case according to the circumstances and peculiarities, for which he had a quick discernment; and certainly he was not addicted to any "extremes in practice".

His Thursday evening lectures on Chronic Diseases were equally the result of a wise and judicious application of his experience as to diagnosis, prognosis, and treatment. He always insisted much on the importance of discriminating between inflammation and irritation; and disapproved of the word *fever* being applied to mere quickness of pulse. He insisted also on the necessity of distinguishing between patients from Spitalfields and those from the country.

The syllabus of Dr. Fordyce's lectures on the Practice of Medicine was an octavo volume of 376 pages, a copy of the sixth edition of which I have before me. It comprehended a sketch of human physiology, or, as he styled it, the "natural history of the human body"; and, I have no doubt, was then conformable to the newest and best elements of that branch of science.

In the history of the phenomena of diseases of the general system, or of particular organs, he seemed to have a pleasure in incorporating as much physiology and pathology as he could to illustrate his subjects.

In the doctrine of diseases, he was very clear on the subject of fevers, respecting which he was writing the results of his observation and experience on the symptoms, the distinctions, the diagnosis, the prognosis, and indications of cure, with the appropriate remedies. The same course of procedure he followed with respect to inflammations; and interspersed are fifty-five formulæ of medicinal compounds.

The Thursday evening lectures on Chronic Diseases were always, with their attendant circumstances, looked to with especial interest and pleasure. Dr. Fordyce's lectures on the Materia Medica were chiefly drawn from the *Pharmacopœia*, making more or less use of the *Materia Medica* of Cullen. The lectures on Chemistry were more pharmaceutical than scientific. He, however, rendered due homage to Black, Priestley, Cavendish, and others.

Many bodies hitherto considered to be elementary —that is, never having been decomposed—he had no doubt were compound bodies, and would some day prove to be so. For example, he had no doubt that the alkalies were compound bodies; and, shortly afterwards, Sir Humphry Davy touched them with his magic wand, and proved them to be so.

In lecturing, as well as in conversation, he retained his broad Scotch accent, apparently never having wished to get rid of it; but the delivery of his lectures was always attractive, from its being characterised by correctness and propriety of language. I always considered myself fortunate to have lived in the time of my venerable friend Dr. Fordyce, and to have enjoyed the benefit of his professional wisdom and knowledge; and, so long as I am spared, shall entertain for his memory sentiments of the highest honour and gratitude; presuming also that these few reminiscences of an eminent teacher may not be unacceptable to the readers of this JOURNAL.

In reference to the Borough school of the years 1796, 7, and 8, I may mention that tobacco-smoking was entirely unknown among all the officials of the hospitals, the medical staff and students, and, as I believe, among the patients, excepting a few old sailors and soldiers, who smoked their pipe after dinner. The subject was never mentioned, or in any way adverted to. We had a few Americans and West Indians, and one Dutchman (Dr. Outyd); but they never took the liberty of smoking, or ever mentioned the subject.

PRACTICAL REMARKS ON THE TREATMENT OF CONGENITAL CATARACT.

By GEORGE LAWSON, Esq., Assistant-Surgeon to the Royal London Ophthalmic and the Middlesex Hospitals.

IN the treatment of congenital cataract, the extent of the opacity of the lens, and its form, whether nuclear or striated, will influence very materially the mode to be adopted. In certain cases, the opacity is entirely nuclear; the eye, in a moderate or rather bright light, possesses very imperfect vision; but in twilight, or with the eye shaded, the sight is very materially improved. Such an eye, examined by oblique illumination after the pupil has been fully dilated with atropine, will exhibit a nuclear opacity of the lens, whilst its circumferential matter is quite transparent. The size of the central opaque portion varies considerably; and upon its extent will depend, in a great measure, the choice of the operation to be performed.

If it be not large, and a clear circumference exist, the operation of *iridodesis*, first introduced by Mr. Critchett, is called for. By altering the shape of the pupil, a clear portion of the lens is exposed, sufficient to allow the rays of light to permeate and to form a correct image on the retina. This application of the operation of artificial pupil to the treatment of certain cases of congenital cataract is an undoubted advance in ophthalmic surgery. It is an operation which, if properly performed, is perfectly free from danger. If, from an error of diagnosis or any other cause, it fail to give the benefit anticipated from it, it in no way precludes any other mode of proceeding which may be deemed advisable. If it succeed, as in well selected cases it will, it enables the patient to see and perform all his ordinary duties without the aid of spectacles; but this is not all, for the patient, seeing through his own lens, possesses a power of accommodation for near and distant objects; whereas, if he had to use spectacles, he would only have two distinct points of vision, his near or reading, and his distant sight.

There is yet another congenital state of the lens in which the operation of iridodesis is followed by very excellent results. The central and posterior part of the lens is opaque, but very limited in extent, and there are marginal striæ, but between these striæ there are clear and tolerably large interspaces, and the vision is materially improved when the eye is shaded sufficiently to cause a moderate dilatation of the pupil. Such an eye is qualified for the operation, but it requires to be performed with neatness and dexterity, for the new pupil must be made to correspond exactly with one of the large intervals between the striæ.

The operation of iridodesis having been decided on, the question is, in what position should the artificial pupil be made?

There are many points which influence the answer.

1. Supposing the eye to be a healthy one, with a normal fundus, a good range of movements of all the muscles, with control over their action; perfect steadiness in fixation, and without any of the oscillatory movements which are not uncommon in congenital cataract; a good field of vision, and a nuclear cataract, but with a perfectly transparent, broad, circumferential portion—then the position of the pupil which gives to the patient the best sight is slightly downwards and inwards.

2. If the lens exhibit opaque striæ, the choice of the situation of the pupil will be influenced by them. An interval as large as can be found between the striæ will be best suited, and the pupil should be

made either downwards and inwards, or downwards and outwards, according as the case permits.

3. In all cases, a careful examination of the eye should be made, to determine whether the fundus is healthy, and to ascertain the exact state of the field of vision, in order that a pupil may be so placed as to throw the image on the most healthy part of the retina.

It should be remembered that eyes afflicted with congenital cataract are, as a rule, congenitally weak eyes. They are usually below the standard in size of healthy eyes, and occasionally are very small. When both eyes are affected, which is commonly the case, one may be smaller than the other, and the small one is the most imperfect. Oscillatory movements of the eyes are frequent in congenital cataract; they always indicate a more or less unsound state of the fundus, and such are more prone to do badly after operation than eyes which are free from this defect.

Operations for getting rid of the opaque lens in cases of congenital cataract are by no means free from danger; for such eyes, being naturally weak, require to be dealt with, with even greater care, if possible, than eyes not similarly circumstanced; as they are often unable to resist the active inflammation which even a well performed operation sometimes occasions. A proper selection of cases, a judicious choice of the operation best qualified for each individual case, and a strict attention to minute details, will, however, in skilful hands, generally produce favourable results.

Against selecting iridodesis for the relief of congenital cataract, it might be urged, that a cataract once commenced in a lens will continue to increase until the whole is opaque. Such is usually the case in the cataracts of advanced life, but not in the congenital form. The opacity which was present in the lens at the time the child was born, may continue unaltered until he dies. Sometimes, however, after remaining stationary for many years, the nebulosity from some cause or other, difficult to explain, increases, and the whole lens becomes cataractous.

Iridodesis may, therefore, be performed in all cases which are fitted for it, without anticipating the future, as should the lens in time become more opaque, the artificial pupil will in no way interfere with the efficient performance of solution or linear extraction.

Linear Extraction. The operation known as Gibson's operation is well adapted to the large majority of cases where it is desirable to remove the opaque lens. It is, however, an operation which requires great care and great delicacy in the manipulation. The whole chance of success depends on the manner in which the different steps of the operation are performed, and on the careful fulfilment of every detail. It has been said that this operation is not nearly so successful as that commonly known as keratonyxis, or solution of the lens, by allowing the aqueous to permeate its interior through a small puncture of its capsule. Possibly, there may be truth in this assertion; but I believe that a large amount of the failures have depended on a want of a due appreciation of the difficulties which beset it, and a consequent neglect of the precautions necessary for a proper performance of it.

The operation may be divided into two stages.

1. To break up the anterior capsule of the lens so as freely to allow the aqueous to act on the lenticular matter.

2. To remove, by the smallest opening, the broken down lens from within the eye.

Prior to performing the operation, the pupil should be fully dilated with atropine, so that the whole of the lens may be under the observation of the operator, and the iris may be drawn away as far as possible from the chance of injury.

The first stage of the operation is to break up with a fine needle the anterior two-thirds of the anterior capsule of the lens, and by carefully moving the needle through the soft lenticular matter from point to point, so to break it up that every portion of it may be brought into contact with the aqueous. Often this may be best effected by giving to the extremity of the needle after it has entered the lens, a sort of stirring movement, during which pieces of soft matter will often float into the anterior chamber, and not unfrequently the nucleus or harder central portion will also come forward.

1. Great care must be taken not to injure the posterior layer of the capsule of the lens, as by so doing the hyaloid membrane will be ruptured, and the vitreous, mixing with the particles of the lens, will materially interfere with the due action of the aqueous humour on them, and also render more difficult the second part of the operation.

2. In breaking up the anterior capsule with the needle there is danger, if it be tough, of rupturing the suspensory ligament of the lens, so that the lens within its capsule can be freely moved at the point of the needle.

3. It is of the utmost importance not to bruise the iris, in the frequent movements of the needle.

4. The aqueous humour must be maintained within the anterior chamber until the termination of the operation.

To fulfil all these objects, this, the first part of the operation, may be performed as follows. The patient lies on a couch with his face towards the window, the pupil of the eye to be operated on having been previously thoroughly dilated with atropine. The surgeon stands behind and at the head of the patient. The needle to be used should be a fine one, with a short spear-shaped point, to allow of an easy entrance. The shaft should be perfectly cylindrical, slightly conical—that is to say, slightly thicker two or three lines from the point than at the point itself—and highly polished. Tried upon the drum, it should perforate without sticking, and, on attempting to withdraw it, should raise the leather-work with it. In short, it should fill the aperture in the cornea which it makes so completely, that no aqueous humour can escape, until its withdrawal from the eye at the finish of the operation.

The lids being kept apart by a spring-speculum, the needle is made to perforate the cornea obliquely one or one-and-a-half lines within its margin, so that during its movements it may not in any way injure the iris.

Mr. Bowman is very urgent on the advisability of penetrating the cornea well within its margin, and of the great importance of maintaining the iris untouched during the operation. The distance within the cornea at which the needle should enter will depend partly on the extent of the dilatation of the pupil; as, if not widely dilated, the needle should be made to penetrate nearer the centre. Different operators follow different plans of breaking up the anterior layer of the capsule of the lens. The object to be attained, is to tear up the anterior two-thirds of the lens capsule, without inflicting any injury on its posterior layer; to destroy, in fact, that portion of it which occupies the pupillary space, even when the pupil is slightly dilated.

One method is, having introduced the needle, by a series of movements of the point of the instrument from the circumference towards the centre of the lens, to destroy the anterior layer of the capsule within the pupillary space, and then by a semi-rotatory or stirring motion to break up the lenticular

atter, and urge it, as it were, forwards into the anrior chamber.

Another mode of proceeding is to act first on the ntral portion of the anterior layer of the capsule, id to proceed gradually towards its circumference.

A third method is merely to prick the capsule very eely, first by a series of punctures around the cirunferential border, and then to make two or three the central part, so as to allow the aqueous humour well in and act upon the lens-matter.

The first action of the aqueous humour on lenticular atter is to render all which is transparent, opaque; id, in so doing, to cause it to swell and occupy more ace; then it acts as a solvent, gradually melting down prior to its absorption.

After the operation is completed, the needle is ithdrawn, and the pupil is to be kept widely dilated ith atropine; the patient should be in a darkened om, but not in bed; and a solution of atropine, of ie strength of a grain to an ounce of water, should e dropped into the eye twice a day.

[*To be continued.*]

Transactions of Branches.

BENGAL BRANCH.

PRESIDENT'S ADDRESS.

By EDWARD GOODEVE, M.B.

[*Delivered at the First Annual Meeting, Feb.* 2, 1864.]

ENTLEMEN,—It was my intention to have occupied he chair to which you have called me, without saying iore than my thanks for the honour which you have one me; but some of my native friends have exressed a wish that I should address a few words to ou—a sort of confession of my faith as regards the Soiety. I beg, therefore, to make a few observations o my old friends and pupils.

In the first place, I have to thank you for the onour which you have done me in electing me to the residency of your Association for the ensuing year. he gratification which I feel, however, is tempered y the fear that want of health and leisure and want f acquaintance with public business of this sort, will ause me to be but a poor substitute for my able preecessor in this chair. I regret that I have been so ttle able to attend our past monthly meetings. My bsence, I assure you, must be attributed to anything lse but indifference towards the Association and its bjects. The Society has, indeed, my most cordial ishes for its continuance and prosperity. I have een rejoiced to see the formation of this Association; ecause I think that the time has certainly come hen the European and native representatives of Western medicine should combine together for the ultivation of professional subjects. It has been reolved that this Society should become a Branch of he British Medical Association. This resolution as, I know, caused some discussion and difference of pinion; but as the majority of our associates have o willed it, I hope that many of our members who till hold aloof from enrolling themselves as members f the British Society, will encourage me in the step hat I have taken, and add their names to the English ist; and, also, that many of our brethren who have ot joined the institution, either as members or assoiates, will give us the advantage of their co-operaion.

I said just now that I heard with pleasure, during ny absence from Calcutta, of the formation of this Society, under the energetic advocacy of its founder, Dr. Chuckerbutty. I have since willingly joined it, because I look upon this Association as a fitting sequence to the establishment of the Medical College itself, and as an evidence of the great step that has been made in India since the opening of the dissecting-room of the College in January 1836, when my old friend, Modoosuddun Gooptoo, whose portrait now adorns this hall, made the first irrevocable step which committed the modern Hindoo to the practice of dissection, and, by this act, led the way to link together the Eastern and Western nations in the pursuit of the same medical science.

I feel certain that the institution of such an Association as this must be a gratifying circumstance to those first pioneers of English education in this country, by whose energetic representations the mode of teaching medicine in India was changed from that of the system of the old School of Medicine in Calcutta to that of the new one. To such, the growth of an Association such as this, the effort of the manhood of the pupils of older days, must be a source of legitimate gratification, also to those of the original teachers of the College who still survive. By those teachers who first embarked in what was then thought to be a frail ship, bound on a doubtful voyage, on a sea of prejudice and superstition, the formation of this Society must be hailed with the greatest satisfaction, as a proof that their labours have not been unavailing.

But it is not merely as proof of success of the efforts of past days that we must look upon this Society; but we must chiefly consider the advantages which it may give to us in the present time.

The cultivators of all branches of science find a necessity for union in the different objects of their study; hence, in all parts of the world, and for all branches of learning, there spring up societies, academies, and institutions. Medicine, not less than these, demands the same means and the same methods; and, perhaps, there are peculiar circumstances connected with medicine which call strongly for this union. Medicine, now as ever, is assailed by all sorts of scepticism, and opposed by all sorts of rivalry, contending for superiority in the cure of disease. Many of these rivalries spring from pure imposture; many from the overstrained use of some fragment of therapeutic knowledge; means which may be useful in some particular state being applied in an universal manner.

We are too often judged of in the world by persons who have no knowledge whatever which may serve them as a basis from which to judge us. We see daily that men gravely commit themselves, and those nearest and dearest to them, to those of whose worth they absolutely know nothing, and whose pretensions they cannot measure. To have our art assailed in this way is, indeed, depressing and painful; and it requires all our confidence in its resources to enable us to bear up against the reproach which is thus made to us.

The antidote to all this, as far as our own feelings are concerned, is in the thorough instruction of ourselves. We may be assured that, the more versed we are in our own study, the better prepared we shall be to meet the attacks to which we are exposed, and the more satisfied we shall be of the value of our own calling. If we knew no better, we might feel sorrow when we are told that all medicine is empiricism, and that our art has no better claim for consideration than any other scheme which asserts its own merits. We might, indeed, feel humiliated if we were ill informed of the mode in which medicine is really studied; if we were ignorant of the force of intellect which is at work on the great questions of physiology and medicine. To few questions have greater minds

given their lives and thoughts. The powers thus employed are not subject to the reproach of being cramped or limited to a single groove. Wherever truth can be disentangled or pursued, it has been and is being unravelled. Any one who, even at a humble distance, has followed the progress of rational medicine during the present generation, cannot but admit the force, the energy, and the untrammelled thought, with which it has been pursued by men of the highest order of mind, and with the most disinterested objects. Surely, if this be the case, there is at once comfort in that which buoys us triumphantly upwards, when we hear that the fervent labours of the scores of men who might be named, both in past and present days, are weighed in the scale against the vain pretensions of a Morison, or a Hahnemann, or a Priesnitz, and others. And, even if the unreflecting multitude condemn us, we can take comfort when we reflect that the verdict is one which ignorance gives when it judges between Ignorance and Truth.

It is in the promotion of the diffusion of this desirable thorough knowledge that these societies lend assistance; not, indeed, acting as medical bodies militant, but as instructive bodies—because I think we shall, indeed, all find improvement in them. The interchange of ideas, the discussion and conversations which ensue, are all of use in keeping us readily alive to our situation, and to keep us to our studies. Men who would remain dormant after they have passed through their studies, or learn only such mere trifles as are sufficient to keep them fit for practice, would find their minds sharpened, their enthusiasm kindled, their energy renewed, their application restored, by attendance on the meetings of professional Associations.

As the iron and the flint may remain quiescent and useless in the mine, but when struck together give forth sparks which may kindle a wide-spreading light, so may attrition of men's minds in these matters kindle much enthusiasm, improve the reasoning power, strengthen the power of debate, and lead more and more to inquiry and improvement. Professional improvement then, and all its advantages, spring from these unions, and should urge us to join them.

But it is not for the intellectual advantages alone that I think that these associations are of use. We may fairly consider that all the men who join us by so doing pledge themselves to a code of professional honour and bearing. The medical man worthy of the name must not be merely an intellectual machine—he must be guided by higher rules than those which knowledge or self-interest will give him. By entering the profession at all, indeed, he takes upon himself vows of charity to all men. By entering into our brotherhood or society, he formally renews the obligation. He reconsiders his promises of friendly bearing towards his brethren; he renews his vows of seeking no self-advantage at the expense of another; he maintains his determination not by his own representations to prosper by another's loss. Indeed, we may fairly hope that one of the great advantages of the establishment of this Society, beyond those of mere intellectual benefit, will be in setting up a standard of high professional feeling, and in the development amongst us of the great precept, which indeed includes all that I could say if I spoke ever so lengthily, "Do unto others as you would be done unto."

I trust that, both in promoting our own professional zeal and improvement, and in binding us down to high standards of professional honour and bearing, our present society will be completely successful. But I would ask, if, situated as we are here, we should be content with this? Cannot this Society be a means through which something may be added to the general stock of medical knowledge? I hope that, if individual members do not undertake investigations and collections of facts, sections of the Society will be established for undertaking researches. There are many diseases, many points of physiology, many points of social hygiene, that the members of this Society are well situated for working out. I merely mention the subjects of the dietaries of the races of the various districts; as well as leprosy, elephantiasis, the epidemic fevers, the various manifestations of malaria, and numerous other subjects, upon which it would be tedious to enter, but which might receive illustrations from your hands, and which you are better placed for investigating than most people.

There is another matter which I hope will also be attempted one of these days; and that is, the formation of a good medical library. On its value and importance I need not dwell. We may begin in a small way at first, but let us soon begin it; and, as we hope for permanence of the Association, let us look forward to the time when it may have a collection of books worthy of the profession which it represents and of the capital of India.

And, looking down the vista of years, I hope to see the Society possess not only a library, but a habitation of its own. Surely it is not too much to hope that, in future years, some hall of science shall be reared in Calcutta, in which, as an important section of human knowledge, this Society shall find a home, in common with many others, and in which, permanently placed and working much good, it shall prove that our present aspirations have been earnest, and that they have prompted us to real work. In future, this Society will, I trust, raise a reputation for itself by the judicious use of the materials at its command, and by perseverance and industry render this Branch of the British Medical Association celebrated in the land of the parent Society.

I hope that you will not think that I have imagined a future too ambitious for you. Surely there is nothing beyond our reach in what I have sketched out. I feel confident that it is in our power to realise it.

A CASE OF HEPATIC ABSCESS.

By Mohendro Loll Sircar, M.D.

[*Read March 8th*, 1864.]

The patient, M. C. G., was about 26 years old. He was under my treatment from October 28th to November 23rd, 1863. Ere this he had had malarious intermittent fever, off and on, for about three months, for which he was not under regular treatment. He had some tenderness and some trifling enlargement of the liver. A few days before he first came under my treatment, his wife had died of puerperal fever. I was informed that he used to drink pretty freely after his wife's death, to drown sorrow. In consequence of this, he soon got relapse of the fever, with considerable enlargement and acute tenderness of the liver. The very acuteness of the pain, supervening upon a chronically enlarged liver, made me suspicious of the case; and the patient was at once put on a course of tonic doses of quinine and generous diet. Though the fever abated to a considerable extent, the liver continued to enlarge, and the tenderness became greater day by day, till, at the end of a week, bulging made its appearance at the right hypochondrium, with obscure fluctuation. The tumour became more and more prominent, and bulging was also observed in the right lumbar region below the false ribs. In a day or two, fluctuation became more distinct in the prominence at the right hypochon-

ium, and was now obscurely felt also in the promi-ence behind. The stethoscope revealed friction-ound between the abdominal parietes and the nvex surface of the liver, during the abdominal re-iratory movements. These movements were not, owever, in the least interfered with; they conti-ued perfectly free; so that it was quite evident that dhesion of the opposed surfaces had not taken place. o encourage this, I applied a light poultice over the umour; and, to my astonishment, I found the pro-inence considerably less the following morning. he patient was gradually becoming weaker and eaker. He lost all appetite. His stools became umerous, but contained nothing but blood-tinged ucus; occasionally they were thin, feculent, yel-wish, but very fœtid. There never was observed ny pus in the stools, from the beginning to the ter-ination of the case.

Dr. Goodeve was called in consultation on the orning of November 13th. Arrangements were ade for us to meet on the following morning, to pen the abscess. When, however, Dr. Goodeve was one, the patient's mother and other relatives ob-ected to operation. In the course of the night, pain ecame general in the whole abdomen, and was ex-ruciating in character; there was likewise consider-ble tympanitis—all pointing to general peritonitis, esulting from the bursting of the abscess into the eritoneal sac. Dr. Goodeve called in the morning, s appointed; but, of course, we had to abandon all dea of opening the abscess. If I remember aright, Dr. Goodeve remarked that an earlier opening of the bscess would not have been injurious, to say the east. A day or two after this, pus appeared in the rine, and was occasionally seen in that fluid for two lays only, when it disappeared altogether.

A week after the supervention of general periton-tis, the abscess, or perhaps a second, burst into the tomach; the patient vomiting a large quantity of us and blood. He survived only two days, and died n the morning of November 23rd, 1863.

Remarks. The chief points of interest in this case were, that while the contents of the abscess escaped irst into the peritoneum, then into the pelvis of the ight kidney, and last of all into the stomach, it did not burst either into the large or the small intes-tines; and that the adhesions, if there were any, be-tween the liver and the abdominal parietes, were very imperfect. Again, it seems to be a general opinion that a malariously enlarged liver never sup-purates; whereas this case shows that a liver enlarged under the undoubted influence of malaria may, under peculiar circumstances, run on to suppuration. The patient sank so rapidly, more from inanition, as he had lost all appetite from the very beginning.

I have brought forward this case, however, only to invite discussion on the question of opening hepatic abscess externally. Are we justified in opening the abscess when we are satisfied, as any one could have been in this case, that there has been either no adhe-sion, or very slight, if any? In a patient reduced to the very lowest ebb of vitality from the first appear-ance of the hepatic prominence, are we justified in having recourse to one or other of the methods for encouraging adhesion—as, for instance, by the potassa fusa, or by laying open the abdominal wall down to the peritoneum? Are we to trust to Nature, as re-commended by Budd? or are we to consider delay as dangerous, and, without waiting for discoloration of the skin, even for œdematous infiltration, nay, not even for fluctuation, are we to proceed to operate at once, as recommended by Frerichs? The fear of en-trance of air into the sac of the abscess during the operation is out of the question, now that we can use the improved trochar and cannula, by which such an untoward event can certainly be avoided. But can we prevent the entrance of air afterwards? I saw a case some time ago, in which the abscess was opened externally, and in which it had subsequently burst into the stomach; and in which, despite all our plas-ters, which were constantly washed off by the profuse discharges, air was regularly sucked into the sto-mach at each act of inspiration, and expelled thence through the œsophagus at each act of expiration. In cases of extreme debility, there is such a tendency to gangrene and rapid extension all around, that per-haps it would not be dangerous delay to pause and wait before we plunge in either the trochar or the bis-toury, especially when we are satisfied that adhesions have not taken place.

British Medical Journal.

SATURDAY, JULY 9TH, 1864.

POOR-LAW MEDICAL RELIEF.

The Committee on Poor-law Relief have issued a Report; and we fear from this that medical Poor-law officers must no longer look to Parliament for relief.

The Report gives a sketch of the different inquiries which have been made by the House of Commons on the subject of medical relief. It states that there has been a progressive increase of the remuneration of the medical officers; and that their *status* has also been improved.

"In 1840 there were 2,376 medical officers, whilst in 1861 there were 3,479. Unions during that period had increased 5 per cent., whereas medical officers had increased 46 per cent.

"Again, the money expended for medical relief has been constantly increasing, either as direct remuneration to the medical officers, or for purposes which either immediately diminished their duties, or afforded increased facilities for performing them. In 1838, the expenditure was £136,775; in 1848, it was £197,954; and in 1861, £238,233. In 1840, vaccination fees arose. These fees range up to £40,000, and even to £50,000, a year; and a large portion of them are paid to the union medical officers. In 1842, additional payments—namely, fees for surgical and other services—were first directed to be made to the medical officers. In 1847, those fees were increased in number, and they now approach £40,000 a year. Lately a new class of payments has sprung up—namely, fees for visiting lunatics—amounting to a considerable sum. Further remuneration is made to the medical officers by special gratuities for extraordinary services rendered during outbreaks of fever, etc., or in consideration of lengthened attendance upon particular cases of accident, or upon protracted illness. The cost of medical relief has steadily increased from 1834 to the present time. The increase in 1851, as compared with 1841, was 36 per cent. The increase in 1861, as compared with 1851, was 13 per cent.; whereas the number of unions has not been added to in anything like a corresponding degree."

The Committee does not approve of many of the changes advocated by Mr. Griffin; and mainly, it would seem, on the ground of expense.

"The Committee, moreover, do not find that any practical difficulty is experienced in securing the

services of competent medical practitioners as union officers; and, looking to the large number of medical officers now employed, the progressive diminution in extent of districts, the care taken to ensure the engagement only of properly qualified medical men, their augmented remuneration, and their improved *status*, they believe that the system has been greatly improved, and that the poor were never so promptly attended to, or so effectually relieved during sickness, as they are at the present time."

The Committee conclude with the following resolution.

"That there are no sufficient grounds for materially interfering with the present system of medical relief, which was made the subject of special and lengthened inquiries by Select Committees of this House in the years 1844 and 1854. The recommendations of those Committees were for the most part carried out by the orders of the Poor-law Board; and the system of medical relief appears to be administered with general advantage. Your Committee, however, recommend that in future cod-liver oil, quinine, and other expensive medicines, shall be provided at the expense of the Guardians, subject to the Orders and Regulations of the Poor-law Board."

Mr. Griffin has answered the above statements of the Committee; and most assuredly his explanations show a very different condition of things. The Committee, he says, have been grossly misled by Mr. Cane's Report.

"The return made to Parliament in 1857 shows that although there were 3307 medical officers' names, there were but 3037 individuals, as 251 medical officers held appointments in two unions and nineteen in three unions; and there were in December 1862, nominally 3362 medical officers, but in reality only 3073 officers, as 273 held office in two unions, and 16 in three unions; so, in fact, the actual increase of officers between the years 1857 and 1861, a year later than that named by Mr. Cane, is only 36, or an increase of 7 annually, and not 41, as Mr. Cane's figures would lead you to believe; and when the additional number of acres added to the unions in that period (in 1854 there were 34,320,161 acres, and in 1861 37,248,026 acres), and the great increase in the population is considered (in 1854 the population of the unions, parishes, and incorporations, was 17,802,662, and in 1861 19,941,221), it clearly proves that the increase in the number of medical officers has not kept pace with the increase in the size and population of the unions.

With regard to the stated increase of the money expended for the medical relief of the poor, Mr. Griffin says:

"If we compare these figures with the population at the different periods named, we find that in 1838, it was 15,155,000, or 2*d*.2 per head. In 1848, the population was 17,304,000, or 2*d*.7 per head. In 1861, the population was 20,062,000, or 2*d*.8 per head, which shows that the only increase between the years 1838 and 1848 was six-tenths of a penny per head, and between 1848 and 1861 but one-tenth of a penny per head on the population. The number of acres contained in the unions, etc., at the dates specified by Mr. Cane, I am unable to give; but it will be sufficient to show that in 1842 there were but 33,689,808 acres, whilst in 1862 there were 37,284,026. Now, in 1842, the medical relief cost £153,481, or 1*d*.1 per acre; in 1861, it cost £238,233, or 1*d*.2 per acre. These figures prove that medical expenditure, as far as the salaries of the medical officers of mos unions are concerned, have not increased at all."

The "additional payments" of which the Repo speaks are scarcely worth mentioning, and, besides, a included in the sum of the general expenditure.

As for the vaccination fees, Mr. Griffin says trul enough, that the medical officers have had a vas amount of extra work to do through vaccinatio and may reasonably enough expect to be paid extra.

The fees for visiting lunatics are at the rate o 2*s*. 6*d*. a visit; and surely this is no great extra pay ment, when it is recollected that the surgeon i under a penalty of £20 if he fail to make his quar terly report to the Lunacy Commissioners.

In the same way does Mr. Griffin answer all th positions unfairly assumed by the Report; and w only regret that our crowded columns prevent u publishing in full his reply.

From all this it appears that our Poor-law medica brethren only look in vain to Parliament for any hope of obtaining a due remuneration for their services If they do not help themselves, help will not come t them. Again and again have we shown in thes pages how completely the profession has in its ow hands its destiny. How can Parliament help a pro fession which will not help itself? We put it to th common sense of our brethren if it is not hopeles to call upon Government, for example, to increas the official salaries of Poor-law officers, so long a medical men will outbid, or rather underbid, eac other for these appointments. It seems to us hopin beyond hope to expect that a free-trade House o Commons will ever force ratepayers to pay more fo the services of an official than the official himself de mands for his services.

If our brethren throughout the country could onl see this matter in its true light, and would hang to gether, combine together, in defence of their rights we should soon find that the medical labourer woul receive a due reward for his services. What a gran thing it would be if the whole profession could b brought into a state of active unity!

In the meantime, alas! little remains for us but t hope and to deplore; to deplore the hard line which force professional men to labour for suc wretched pay, and to hope that the evil may a length become so great as to effect its own cure.

For a sixteen ounce mixture, a London druggis will often charge some three to five shillings; an for four shillings Doctors of Medicine and othe practitioners undertake to visit and treat and physi a pauper at his own house, miles away, it may be from the doctor's residence; and for a quarter of a year! Yes; the London druggist charges as muc for one pint of physic as the doctor charges fo attending and supplying medicines to a patient during thirteen weeks! The doctor places himsel at the service of the pauper, and finds him physic

c., during thirteen weeks, for four shillings! What medy can any Parliament administer to such a deorable state of things as this?

Our attention has been recently recalled to these ings by a dispute which has for some time past en going on between a body of guardians and eir medical officers. The adjustment arrived at tween the disputants is a tariff at the rate re mentioned. Four M.D.'s, we understand, nongst others, have undertaken the duties at this te of payment. They engage themselves to attend bours, to perform capital operations, reduce dislotions, put up and take charge of fractures, at the te of four shillings per case!

On a previous occasion we put this question on her grounds than those of the interests of medical en. We asked the profession if it be possible to do stice to the patient on such terms. We ask the rofession if it be possible to perform the duties of oor-law medical officer at a positive loss. And is it ot evident that whoever attends sick people, cones women, performs operations, at four shillings er head, must do the work at a loss? Can the rofession believe that the pauper can be supplied ith proper medicines and duly attended to on such rms as these? We know well enough that there is o profession which, as individuals, makes more sacrices than our profession does—which does so much enevolence; but we must still ask the question: ught men, in conscience sake, to undertake work f the kind on such terms? In other words, do the aupers, who are attended on such terms, really reeive the attention which they require and ought to ave? It is useless for us to tell the guardians that ie poor cannot be properly attended to on such rms. Their answer is: Why then do you underake the work? Really we address this question to ie conscience of those of our professional brethren ho labour for this wretched payment. Why not ttempt one great united movement? Success would s certainly follow thereon, as it will follow in the ase of the army medical officer. If candidates preented themselves in abundance at the Army Medical Board, what chance would there be of any improvement of the Army Medical Service?

THE CHLOROFORM REPORT OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday last, the Report of the Committee appointed by the Royal Medical and Chirurgical Society bout two years ago, to inquire into various points elating to the uses and administration of chloroform, vas presented to the Society. The Report was a oluminous document, and was supplemented by a till more voluminous series of appendices, containing he histories of experiments, tables of cases, etc. On account of the length of the Report, portions only were read; but it was announced by the President that it would be on the library table during a fortnight for the inspection of members.

The Committee had arranged themselves into three sections, undertaking respectively the physiological, the surgical, and the obstetrical departments of the inquiry. The physiological section, it was explained by the chairman, Mr. Curling, had especially devoted much time and labour to the subject; and, altogether, seventy meetings of the various sections had been held. The Committee had also received much valuable assistance from other members of the Society, and from members of the profession not connected with the Society.

Among the topics embraced in the Report were the following: How chloroform destroys animal life; Effects of chloroform on the heart's action, and on the respiration; Effects of division of the pneumogastric nerve; Effects of chloroform on the glottis and fauces; Effects of ether; *Post mortem* examination of animals destroyed by chloroform; Resuscitation in apparent death from chloroform; Rules to be observed in cases of threatened death from chloroform; Uses of chloroform in surgery, and in obstetric practice and the diseases of women and children; etc.

In investigating the manner in which chloroform destroys life, the Committee had made a number of experiments, chiefly on dogs. Mr. Clover's apparatus was used for the administration of air impregnated with from 1 to 14 per cent. of chloroform; and, for mixtures of air and chloroform containing 40 per cent. or more of the latter agent, an apparatus was employed which allowed heat to be applied. The duration of animal life was found to be in an inverse ratio to the strength of the chloroform. A mixture containing from 1 to 2 per cent. was generally safe. When the strongest doses of chloroform were given, the pulse and respiration ceased almost simultaneously; while the action of the heart continued somewhat longer. When the chloroform was inhaled in full doses through an aperture in the glottis, death was more rapidly induced, and the heart's action ceased before the pulse; while the results of the administration of small or moderate quantities in this way differed little from those obtained by ordinary inhalation.

Observations with the hæmadynamometer shewed that the administration of chloroform was first attended with an increase of the heart's action, which was observed even when there was but slight struggling on the part of the animal. This increased action, however, seldom continued above a fraction of a minute; after this, there was a gradual diminution, which, however, was liable to interruptions. The arrests in the fall of the heart's action appeared to correspond with the periods when respiration was lowered, and were therefore believed to be connected

with a diminution in the quantity of the poison imbibed: they were also modified by the introduction and withdrawal of air.

In several instances, movements of the heart were observed, after the cessation of the rhythmic action of the organ. The duration of the rhythmic action of the heart was longest in cases where the strongest doses of chloroform had been used; and this was explained by supposing that, in such instances, the cessation of movements denoting life is more rapid, while the heart is more gradually and thoroughly enfeebled by the prolonged administration of smaller quantities.

With regard to respiration, it was observed that the concentrated vapour of chloroform produced spasm of the fauces and glottis, but only for a few seconds. After this, and when moderate doses were given, the respiration was increased in quickness for a time. The inspirations were at first deep; but subsequently became more and more shallow and less frequent, until arrest took place. Recovery could be produced in from twenty to forty seconds, if the chloroform were withdrawn; and this could be repeated two or three times. The explanation of the recovery offered was, that the entrance of the chloroform into the lungs was interrupted by the arrest of respiration, while at the same time that which had already been introduced was eliminated.

The effects of ether were found to differ from those of chloroform in several respects. This agent exerted on the heart a stimulating effect, less sudden and more prolonged than that of chloroform; and, during insensibility, the pressure of the column of blood in the hæmadynamometer was maintained up to the period of death, and until respiration had ceased; while its failure under chloroform occurred at an earlier period.

The Committee had collected 122 cases in which death could be without question assigned to the inhalation of chloroform; but they believed that this did not represent the entire number of fatal cases. There were also numerous instances where life had been placed in jeopardy during the administration of chloroform.

The Committee had made observations with the object of ascertaining the best means of avoiding accidents in the use of chloroform, to the agent employed, and to the method of administering it.

A mixture containing from 2 to 4 per cent. of chloroform vapour and 96 or 98 per cent. of air might be inhaled without danger to life; and, if necessary, 4 or 5 per cent. of chloroform vapour might safely be used; but 10 per cent. was liable to produce dangerous symptoms. Ether to a certain extent fulfilled the conditions required; but the slowness of its action and its disagreeable odour were objections to its employment. In the absence of any other known anæsthetic agent capable of fulfilling the indications required, of efficacy and prompt action combined with safety, the Committee had made experiments with certain combinations of chloroform and ether; viz., *a*, a mixture proposed several years ago by Dr. Harley, containing 3 parts of ether 2 of chloroform, and 1 of alcohol; *b*, one containing 4 parts of ether and 1 of chloroform; *c*, a mixture of 2 parts of ether and 1 of chloroform. The mixture *b* was found to be very similar in its effects to ether; air containing 15 per cent. of it might be inhaled with safety, but its action was very slow. The mixtures *a* and *c* were very similar in action, and were in this respect intermediate between ether and chloroform. In the human subject, insensibility could be produced by them with sufficient rapidity, and in animals could be maintained thirty or forty minutes without destroying life. The action of these mixtures on the heart was less distressing than that of chloroform, the amount of insensibility induced being equal. The Committee suggested that further trial should be made of these mixtures; and they gave the preference to the mixture *a*, on account of the uniformity with which the ether and chloroform were blended with the alcohol, and also because it was probable that the alcohol acted as a stimulant and sustained the action of the heart.

The effects of chloroform, the Committee have been led to conclude, depend much more on the degree of concentration of the agent than on the mode of administering it. It would be very desirous to have some means of measuring the amount of vapour inhaled as readily as doses of medicines can be weighed; there was, however, but one apparatus which fulfilled this requirement—that of Mr. Clover; but it was not very portable, and further experiments with it were required. In the absence of any means of determining the quantity of chloroform vapour, the Committee thought the plan of administering chloroform on a handkerchief or lint least liable to objection. It should be held an inch and a half from the mouth, so as to freely admit air.

In regard to resuscitation after apparent death, the result of the inquiries of the Committee was that artificial respiration by Dr. Silvester's method, *applied early*, was the most efficacious and easy plan. The cold douche on the face and chest was very inferior. Electro-galvanism and electro-magnetism were in many instances very effectual; but they were not to be preferred in desperate cases, and were not equal to artificial respiration. Indeed, the Committee held that artificial respiration should never be delayed in order that other means might be tried; it should be employed instantly, when alarming symptoms set in.

The Committee were of opinion, that chloroform ought never to be administered by careless or inexperienced persons. It should not be administered immediately after food, but three or four hours after

ds; and, in cases of much depression, a little ndy might be first given to the patient. The re- bent position was preferred; in the sitting pos- , there is danger of syncope. The chloroform ld be given slowly, and sudden increase should voided as being dangerous. The person adminis- ng it should carefully watch the respiration, and p one of his hands free, so as to be able to exa- ne the pulse from time to time. When pallor, ure of the pulse, or other dangerous symptoms, ear, the chloroform must be withdrawn, and free ess of air allowed; the tongue should be drawn ward, and the mouth and fauces cleared; the pa- nt must be kept in the recumbent posture, and l water should be dashed on his face, and the rax compressed so as to favour respiration. In re severe cases, artificial respiration must be em- yed at once. The period within which resuscita- n is possible varies from two to ten minutes.

n surgical practice, the administration of chloro- m, in the opinion of the Committee, is not contra- icated by the presence of heart-disease; but fatty eneration of the organ required care. Chloro- m may be given, with proper management, in rations on the mouth and throat. In operations the deeper parts of the eye, it is undesirable, m the vomiting which may be induced. In hernia, is highly valuable; and in operations about the s it is indispensable. The examination of the ults of 2586 capital operations performed before oroform inhalation was introduced, and of 1860 rations of similar character performed subse- ently, proved that the rate of mortality had not n increased since the introduction of chloroform.

In obstetric practice, the use of chloroform in tural labour is not attended with danger; no well thenticated cases of death from its use having ne to the knowledge of the Committee, although netimes unfavourable symptoms have been pro- ced. It may, in moderate doses, protract labour; t does not always do so. It does not predispose to nvulsion, nor does it interfere with lactation or th the general condition of the mother and child. artificial labour, the inhalation of chloroform is y useful in many cases; but, as a rule, should t be employed when there has been much hæmor- age, unless stimulants be also given. Chloroform also useful as a means of facilitating diagnosis in seases of women; and, both inhaled and applied a liniment, in severe cases of dysmenorrhœa, uralgia, etc. Chloroform inhalation was also fa- urably reported on as a remedy in the convulsive seases of women and children.

The above is an outline of some of the principal rts of the report; and, on a future opportunity, may be able to give more. The Committee have idently laboured most diligently in the investiga- n of the important subject entrusted to them, and have, from their own experiments and from the information furnished to them, put the whole matter into a shape that cannot fail to be of high prac- tical value. As the whole Report was not read, it is impossible to say that the Committee omitted to notice any point of importance. One was, however, alluded to, in the discussion which followed, by Dr. Hyde Salter, as a question which would necessarily require some years' investigation; viz., the effect on the system of the habitual inhalation of chloroform. As far as Dr. Salter had observed, this effect was similar to chronic alcoholism. We doubt not that on this, as well as on other matters, various members of the Committee will continue their inquiries; for, as was observed by several members, the Report, while aiming at laying down rules in regard to some points, equally suggests others for further discussion.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

What is the first step to be taken to advance in the direction in which we have been endeavouring to lead the Council of the College in the direction of reform? It is manifestly this. The Council meet on the 14th instant—next Thursday. On that, the very first occasion which offers, we urge upon Mr. Paget that he should at once hand in a written notice that he will, at the first meeting of the Council in October, bring under the considera- tion of the Council the present constitution of the Court of Examiners, with a view to its alteration. The very fact of the introduction of such a notice into the Council will be in itself the loud sound of a coming reform. It will bring prominently home into the very ears and minds of the Council, the ab- solute necessity for setting their house in order, and at once preparing for the work.

We will venture to say, after the facts which have been again and again so prominently detailed in these pages, and in face of the most faulty constitu- tion of the College management which they demon- strate, that no one will venture, even in the Council Chamber, to sing the tale of optimism—to assert that things are going on there in a state of perfection —that "whatever is, is best." The utmost that the most determined Conservatives may venture to say will be, that reform is inopportune at this moment; that it should be a gradual affair; that hasty legisla- tion is bad; that things, when they are out of order, will right themselves in the course of time; and so forth.

But these excuses, under the bright light of the press and public opinion, will no longer avail. The system has been tried long enough; it has been weighed in the balance, and it has been found wanting.

The proclamation of such a notice as that above

referred to within the very walls of that secret chamber, will be the certain knell of existing abuses, the sure harbinger of better things to come. And once more we say, we blame no one in this matter. We blame alone the measures which have naturally (speaking in a worldly sense) made men what they are in Council. But we will add that, when reform comes, it will be to the lasting credit of the country Fellows that to Mr. Paget was due the first positive action in Council which brought about so excellent a consummation, and which relieved the College of the many grievous abuses which at present tarnish its lustre, and grievously impede its usefulness and its interests. Let this be the answer to those narrow minded men who hold that country Fellows should have no seat in the Council.

LEGISLATION FOR PROSTITUTION.

A Bill called, for the sake of euphony, we suppose, "Contagious Diseases Bill", has just been presented to Parliament. By its provisions, it is intended that "the spreading of certain contagious diseases, meaning venereal disease," in particular places, shall be prevented.

Now, we will venture to say that, since the days of Charles I, no such iniquitous interference with the liberty of the subject has ever been proposed in the House of Commons. Thus, for example, by the tenth clause it is proposed that any superintendent or inspector of police, "having good cause to believe that any prostitute found in any public place, for the purposes of prostitution, has a contagious—venereal—disease, may by an order direct a constable to take her into custody, and bring her before a justice." Now, what are the grounds upon which the inspector is to make his diagnosis? It is not, we suppose, meant that the inspector of police shall inspect and examine the woman. On what grounds, then, is he to form his suspicion? We suppose he is to be allowed to draw his conclusions from *rumour*—from the *report* that the woman has communicated the disease to Private X, or to Corporal Z. We put it to members of the profession, who know the difficulties which so often attend the tracing of this disease to its true origin, whether anything can be more outrageous than to permit an inspector of police to have a *suspicion* that such a woman has the venereal disease, and thereupon to take her into custody. Except on the grounds that these "unfortunates" are so completely outcasts as to be bereft of all their civil rights, Parliament can never sanction so shameful a violation of the liberty of the subject as that of allowing an inspector of police to take a woman into custody on *suspicion of having a venereal disease.* Ten times more reasonable and fitting and legal would it be to register all prostitutes, and force them to submit to periodical examinations—in fact, boldly to introduce the continental system.

When the woman is thus arrested by the inspector *on suspicion of having a contagious disease*, she is to be taken before a justice of the peace, who may, if he likes, have the prostitute examined, to satisfy himself whether she be diseased or not; and still all on suspicion. And more than this: if the justice be satisfied that the woman brought before him is a prostitute—is affected with the disease—he shall order her to be sent to a hospital; and if it be proved in addition, that she knew she was so diseased while plying her trade of prostitute, the justice may order her to be imprisoned for one, two, or three months!

Then, again, we find that any keeper of a house who "knowingly induces or suffers any common prostitute having a contagious disease" to resort to his house, shall be liable to fine or imprisonment. But how is it possible to obtain proof that the prostitute or the keeper of the house knew that she was diseased?

We need say no more to show the character of this proposed Act of Parliament. It is manifestly a most bungling attempt at legislation on a most painful and difficult subject. Those who produced it are totally ignorant of the nature of the disease whose dire effects they would arrest. No medical man could have had anything to do with the framing of such clauses as these. We will venture to say that Parliament will never permit such gross injury to be done to the liberty of the subject, even for the sake of doing a great good to the army. We willingly admit that the whole subject is one of extreme difficulty; but we are fully satisfied that no scheme for arresting the evils of syphilis can be admitted in this country which conveys in it such a violation of personal liberty—which allows an inspector of police to arrest a prostitute on suspicion of her having the venereal disease.

The election of Councillors has resulted in the return of Mr. F. Le Gros Clark, Mr. Henry Hancock, and Mr. Thomas Blizard Curling. The candidates, and their number of votes, are as follows: Mr. Clark, 147; Mr. Hancock, 139; Mr. Curling, 136; Mr. Gulliver, 106; Mr. Turner, 96; and Mr. McWhinnie, 63. About 285 Fellows voted.

The mode of election of Fellows of the College of Physicians does not work satisfactorily. Whatever pains and honest trouble the Council take to make a good selection, they cannot please the Fellows. All parties, indeed, concerned are dissatisfied under the present *régime*. The Council, who select, naturally are angry with the Fellows, who elect, for questioning their choice. The Fellows are not unnaturally disappointed if they see, or think to see, good men

l over in favour of juniors on the list who are etter men; and, as the Fellows have the power ecting, rightly or wrongly, they sometimes avail selves of the privilege, and so very ungraciously e the care and trouble which the Council have wed upon their list of proposed Fellows. An tunate encounter of this kind has characterised lection of Fellows of the present year. The ws, to a certain extent, took the matter into own hands, and would not altogether accept Council's list. It is, however, only right to say no objection of a personal kind was felt towards of the gentlemen on the Council-list. The tion was merely of the kind above mentioned. Fellows took it into their heads that some of the bers on the list had been unduly passed over, herefore resorted to the only means they had of essing their opinion. They were obliged to do a harm, in order, as they thought, to do a greater . The result of this *contretemps* will, however, ably eventuate in a reform of the present mode ocedure. Every one admits it to be a bad mode, one need be surprised if it occasionally produces fruit. The Fellows have, therefore, resolved to about for an improved method of electing or se- ng Fellows, if haply they may hit upon one. To a better plan, however, is not an easy thing; and ho will discover a scheme which shall satisfy the al parties concerned will be entitled to great e and much thanks. We shall regard him as a inventive genius.

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next army medical competitive examination s off on August 8th. We have heard that the ber of candidates coming from the Dublin ol is about twenty-five, and therefore not the whelming number suggested.

Daily Telegraph draws the following moral from tale of the gallant young Llewellyn. How is it non-professional men can all see these things so rly, and that our own Army Medical Direction is lind to their patent truth?

There is a moral to the proud story, too, which erns ourselves, our services, and the War-office Admiralty. This is the breed of men we want edeem our hospitals between decks and in the l from some of the horrors of war. At this mo- it war is in the air. And what have our authori- done to get good and true men of the Llewellyn np to follow our march, and sail upon the sea h our fleet? They have done, we reply, every- ig they possibly can to deter them from joining, to make the medical department in the army ous and unpopular. There has been a stupid jea- sy set on foot between 'combatant' and 'non- ibant' officers—as if the slayer were superior to healer—which is having the effect of utterly de- alising the medical division of our services. lful and humane doctors have been so persistently onted by the regulations, and students so dis- raged by the action about the Warrant of 1858, that every lad of promise turns his face from the service, and men grown grey in honourable exertions take their scanty pension and quit their uniform with disgust. 'Non-combatant officers' forsooth! as if heroism enough has not been shown in the Crimea, in India—in 'charging' cholera, and 'forming square to receive' typhus and typhoid—to spare science this ignorant and suicidal insult. But, in the future, our soldiers will have to fight with no such certainty that, wherever they fall, a brave heart and cool hand will bandage their hurt under fire, and snatch them from death. We are carefully taking measures to keep men like Llewellyn out of our own ranks, and drive them to Confederate cruisers, foreign service—anything and everything sooner than the regiments and ships where they are officially snubbed. Appointments once honourably striven for are now going a-begging; and, for the army's sake in these times of peril, we take a moral from the brave young doctor's death, to point out the ignorant and indifferent set with which the Horse Guards are doing their best, or worst, to recruit our departments."

The term "acting assistant-surgeon", as applied to the army, seems to have been borrowed from America. There also is illustrated, it appears, the well known saying, that if you want a good article you must pay a good price. The *American Medical Times* says:

"On account of the present depreciation in paper currency, the pay of our surgeons is necessarily narrowed down to quite a small figure, and the acting assistant-surgeons, who, as far as remuneration is concerned, are at the bottom of the list, necessarily suffer the most. This being the case, we can easily understand why the demand for this class of medical labourers is still urgent. Until the Government chooses to increase the pay, it cannot expect to have its wants supplied. No respectable practitioner can, for simply a hundred dollars a month, be tempted to leave his business for any length of time, even for temporary service; and the hospitals of the country will necessarily soon get filled with young irresponsible medical striplings. If the Government wishes first-class men, it must pay first-class prices."

We recommend this editorial opinion to the attention of our own Army Medical Direction.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 12, 3.30 P.M.
Reading. [Annual.]	George Hotel, Reading.	Wednesday, July 20th, 4 P.M.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held at Birmingham, on June 30th, 1864.

Present—Sir Charles Hastings, M.D. (in the Chair); Mr. Bartleet; Dr. Bryan; Mr. Cartwright; Mr. Clayton; Dr. Falconer; Dr. Richardson; Dr. Styrap; Dr. Stewart; and Mr. Watkin Williams.

The Report to be presented at the Annual Meeting was approved.

The Programme for the Annual Meeting was approved.

The Laws of the Hull Branch were approved, and the Branch recognised.

The Laws of the Bengal Branch were approved, and the Branch recognised.

T. Watkin Williams, *Gen. Sec.*

13, Newhall Street, Birmingham, July 1st, 1864.

MIDLAND BRANCH: ANNUAL MEETING.

The thirteenth annual meeting of the Midland Branch was held at the Exchange Rooms, Nottingham, on Thursday, June 23rd, at 2.30 P.M.; W. H. Ransom, M.D., President, in the chair. The following members of the Branch were also present: Drs. Goode (Derby); C. H. Marriott (Leicester); Marsh (Nottingham); Morris (Spalding); Ogle (Derby); Robertson (Nottingham); C. Taylor (Nottingham); and Messrs. J. W. Baker (Derby); S. H. Evans (Derby); S. W. Fearn (Derby); Johnson (Bassingham); J. Marriott (Kibworth); Paget (Leicester); Stanger, F. Stevenson, H. Taylor, Joseph Thompson, and White (Nottingham); and the following gentlemen as visitors: Drs. Brookhouse, Howitt, Tatham, Watchorn, Wilson, and Messrs. Morley, J. H. Osborne, E. Smith, T. A. Stephenson, Varley, and Waters.

The Next Annual Meeting was appointed to take place at Leicester; and the members of the Branch resident in Leicestershire were requested to nominate a gentleman to act as President for 1865.

Report of Council. Dr. Goode presented a report from the local Council relative to the progress of the Branch during the past year.

Representatives in the General Council. The following members of General Council were elected; viz., for Derbyshire, J. Heygate, M.D., F.R.S., J. Hitchman, M.D.; for Leicestershire, J. Marriott, Esq., T. Paget, Esq.; for Lincolnshire, E. Morris, M.D., T. Sympson, Esq.; for Nottinghamshire, G. E. Stanger, Esq.

Secretaries. The following gentlemen were re-elected Secretaries of the Branch: Derbyshire, A. H. Dolman, Esq.; Leicestershire, John Sloane, M.D.; Lincolnshire, G. Mitchinson, L.K.and Q.C.P.; Nottinghamshire, Joseph White, Esq.

Communications. The following papers, etc., were communicated.

1. The President, instead of the usual address, read a very interesting paper on Diphtheria.
2. Case of Excision and Disarticulation of the Lower Jaw. By S. W. Fearn, Esq.
3. Case of Ovariotomy. By C. H. Marriott, M.D.
4. Case of Removal of Polypoid Growths from the Larynx. By T. Wright, Esq.
5. Dr. Morris of Spalding exhibited numerous specimens of Trichinæ, free (alive) and encapsuled; giving a history of these parasites, and making some interesting and valuable remarks on the subject of Trichiniasis, the result of some elaborate experiments recently made by him.

The following communications, which had been announced, were unable to be brought before the meeting for want of time:

1. Case of Multiple Aneurism. By G. E. Stanger, Esq.
2. The recently improved Methods of Extracting in cases of Cataract. By C. Taylor, M.D.

Dinner. At half-past five o'clock, the members of the Association and friends dined together at the George Hotel, when about thirty-three gentlemen were present. The chair was occupied by Dr. Ransom, the President of the Branch; the vice-chair by G. E. Stanger, Esq.

BRITISH MEDICAL ASSOCIATION ANNUAL MEETING.

The Thirty-second Annual Meeting of the Bri Medical Association will be held at Cambridge, Wednesday, Thursday, and Friday, the 3rd, 4th, 5th days of August next.

President—John A. Symonds, M.D., F.R.S. Clifton.

President-elect—George Edward Paget, M Cambridge.

All the General Meetings of the Members will be in the Senate House.

Wednesday, *August 3rd.*

12 noon. Meeting of Committee of Council in Arts School.

2.30 P.M. Meeting of the General Council in Arts School.

4 P.M. First General Meeting of Members. retiring President (Dr. Symonds) will resign office. The new President (Dr. Paget) will deli an Address. The Report of the Council will be p sented, and other business transacted.

9 P.M. The Members of the Association are invi by the Master and Fellows of Gonville and Ca College to a *Conversazione* in the College Hall.

Thursday, *August 4th.*

8.30 A.M. The Members of the Association a their friends will breakfast together in the Gu Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the N Council in the Arts School.

11 A.M. Second General Meeting of Membe Papers and Cases will be read.

4 P.M. Third General Meeting of Members. Address in Medicine will be delivered by Edwa L. Ormerod, M.D.

The Report of the Medical Benevolent Fund w be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invi by the Master, Professors, and Fellows of Down College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of Provost and Fellows of King's College, there will Full Choral Service in the College Chapel at 3 P.M

Friday, *August 5th.*

10 A.M. Fourth General Meeting of Members. Report will be read from the Committee appointed Bristol to consider the desirability of establishin Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. Address in Surgery will be delivered by G. M. Humphry, M.D., F.R.S. Papers and Cases will be rea

6.45 P.M. The Members of the Association a their Friends will dine together in the Hall of G ville and Caius College. Tickets One Guinea ea Gentlemen intending to be present at the Dinner requested to send notice to Dr. P. W. Latham, S ney Street, Cambridge.

Members are requested to enter, immediately arrival, their names and addresses in the Recept Room at the Guild Hall, when cards will be suppl which will secure admission to all the proceedings

A Clerk will be in attendance at the Recept Room, and will give information respecting lodgi houses.

The principal Hotels are the "Bull", the "Eagl the "Red Lion", and the "University Arms".

nbers who wish for information previous to the ng, may communicate with Dr. P. W. Latham, y Street, Cambridge.

ices of Motion. Dr. Styrap will move the fol- g alteration in Law xv. To insert, after the "One Guinea annually", "provided that such shall be paid not later than June 30th; after date, each Member shall pay, in default, £1:5." . Watkin Williams will move to alter Law xv, serting "the 1st of December", instead of "the of December."

pers have been promised by Mr. Spencer Wells don); Mr. Sydney Jones (London); Mr. Bridger enham); Dr. Sansom (London); Dr. Barker ford); Mr. Solomon (Birmingham); Dr. Woakes on); Dr. Richardson (London); Dr. Martyn on); Dr. Philipson (Newcastle-on-Tyne); Dr. anan (Glasgow).

T. Watkin Williams, *General Secretary.*

Newhall Street, Birmingham, July 1st, 1864.

ROPOLITAN COUNTIES BRANCH: DEPUTATION TO THE SECRETARY OF STATE FOR WAR.

Tuesday last, the 5th inst., a deputation of members of the Metropolitan Counties Branch had an interview with the Right Hon. the Earl De Grey and Ripon, Secretary of State for War, on the subject of army medical service. The deputation, which introduced by J. Abel Smith, Esq., M.P., consisted Dr. Sibson, President of the Branch, and the following members: Dr. Burrows (President of the Medical Council); Mr. Skey (President of the Royal ege of Surgeons); Drs. Camps, Andrew Clark, e, Harley, Henry, Richardson, Routh, Hyde Salter, ph Seaton, Stewart, and G. Webster; and Messrs. nes Coote, Curling, Dunn, H. Lee, Lord, W. Mar- Millar, and C. H. Moore; as well as Drs. Chowne Sharpey, and Mr. Barwell, members of the Asso- on.

r. Sibson said that the Metropolitan Counties nch had taken up the subject of the army medical ice for two reasons; first, because the medical ers of the army were precluded, by considerations iscipline, from stating their own grievances; and ndly, because the Branch contained among its abers gentlemen connected with all the London pitals and medical schools, who consequently were stantly in contact with those who might become lidates for admission into the army. Some time , the teachers in the schools have been accused to urge their pupils to enter the army; but circumstances were altered, and they could no ger do so. The Association of which this was a nch, had always taken much interest in all that ted to the welfare of the profession. Dr. Sibson n presented the following memorial.

the Right Honourable the Earl De Grey and Ripon, Secretary of State for War.

Memorial of the President and Members of the Metropolitan Counties Branch of the British Medical Association

MBLY Sheweth—

That the attention of your Memorialists has been wn to the condition of the Medical Service of the ay.

That it is well known to your Memorialists, that number of candidates for admission into the Medal Service of the Army is far from being commenate with the number of vacancies; and that, in sequence, gentlemen engaged in civil practice have been invited to undertake the charge of troops at home.

Your Memorialists are of opinion that the members of the medical profession have ceased to apply for admission into the Medical Department of the Army, because, owing to the successive changes in the Warrant of 1858 (which Warrant gave general satisfaction), and to the practical departure from that Warrant by the Executive, they have lost confidence in the good faith of the military authorities.

They are further of opinion, that the frequent non-enforcement of the Precedence granted by the Warrant of 1858, and the modification of that Precedence by the Warrant of 1863, disqualifying the Medical Officer from presiding at boards (although on other than purely military matters), even when he is the senior officer present, have, by lowering his status, done more than any other grievance to deter members of the medical profession from joining the service.

Your Memorialists are further of opinion—

1. That the Warrant which expresses the terms of service under which Medical men enter the Army should in future be clearly defined, so that no misapprehension may arise.

2. That no alteration should be made in such Warrant without an inquiry, which inquiry should be open to the Medical service, and should be of the same extent, and involve the same amount of consideration, as that which led to the first promulgation of the Warrant.

3. That any such alteration should be made with formality and publicity, and after an explanation to the Medical Officers of the grounds on which it has been considered necessary to alter the terms of service.

Your Memorialists are further of opinion, that the Warrant of 1858 should be the basis of future regulations for the Army Medical Department, subject to the following modifications:

1. The proper definition and enforcement of the Precedence of the Medical Officer, in accordance with his rank, at boards, mess, and committees of all kinds.

2. Increased pay of Assistant-Surgeons and Surgeons.

3. Promotion to the rank of Surgeon after, at most, ten years' full-pay service.

4. Optional retirement after twenty years' full-pay service on an adequate pension.

5. Controlling power and free agency to the Medical Officer in his own department.

6. Regular leave for the Medical Officer, and sick leave on the same footing as is granted to all other Officers.

7. Non-deduction of pay for expenses incurred in the execution of his duty.

8. The abolition of the system of confidential reports by the Surgeon on the conduct of the Assistant-Surgeon.

9. The infliction by the military authorities of all punishments ordered by them; the Medical Officer's duty on such occasions being limited to the protection of the soldier from serious injury.

Your Memorialists are further of opinion, that the systematic employment of Deputy or Acting Assistant-Surgeons without examination ought to be discontinued; since it will inevitably introduce an inferior class of Medical men into the service, and inflict great hardship on the military Medical Officer by increasing indefinitely the period of foreign service; and so still further deter medical men from entering the Army.

Finally, your Memorialists would especially insist that although, since the issue of the Warrant of

1858, an examination has very properly been instituted, the intention and effect of which have been to exclude from the Medical Service of the Army all but highly qualified candidates, the inducements to enter the service have been considerably lessened. The inevitable consequence of thus discouraging the better members of the Medical Profession from entering the Army is, that the soldier must suffer. And your Memorialists are persuaded, that the services of thoroughly competent men of high tone and character will not be obtained, until the Medical Officer is upheld by the Military authorities, and is permanently placed in that honourable position which is due to himself and to the profession to which he belongs.

Your Memorialists therefore respectfully urge your Lordship to take this Memorial into your favourable consideration, and to adopt such measures as will tend to secure at once the welfare of the soldier, and the interests of the Medical Department of Her Majesty's Army.

Signed on behalf and by the authority of the members of the Metropolitan Counties Branch,

FRANCIS SIBSON, M.D., F.R.S., *President.*
A. P. STEWART, M.D. } *Secretaries.*
ALEXANDER HENRY, M.D. }

Dr. BURROWS, President of the Medical Council, cordially supported the prayer of the memorial. He had been during thirty years a teacher and physician in St. Bartholomew's Hospital, and could aver that the statements made in the memorial were correct, and that there was great dissatisfaction among the students. They were unwilling to enter the army, because they could not rely on the fulfilment of the engagements entered into. That this was the case, must be very apparent from the deficiency of applications for admission. As President of the Medical Council, he had, during the recent session of that body, heard the astounding revelations made by Dr. Parkes of the sad want of professional information on the part of those who came forward as candidates for admission: proving that many of those who applied were not fair representatives of the average class of young men entering the medical profession, but those who thought to become admitted into the army on easy terms. He thought himself justified in saying, that the memorial embodied the feelings of the teachers and pupils in the London medical schools.

Mr. SKEY, as President of the Royal College of Surgeons, expressed the deep regret of himself and his colleagues in the Council of the College at the condition of the medical officers of the army. He hoped that his Lordship would do something for its amelioration. When it was considered that medical men were eminently representatives of science, and that there were but one or two in a regiment, it seemed unfair that they should be held down. The chaplain of a regiment—performing indeed functions of the highest character—had a proper status; and he thought the surgeon ought to be also placed in an honourable position.

Lord DE GREY AND RIPON said that he was glad to have an opportunity of seeing so many members of the medical profession, and of discussing the subject with them. The memorial involved two points: 1. The renewal of the Warrant of 1858; 2. Increased pay, etc. He would ask in what respects it was considered that the Warrant of 1858 was not carried out.

Dr. STEWART: With regard to relative rank.

Lord DE GREY AND RIPON said that Clause xvii was then the portion of the Warrant referred to. In 1861, a warrant was issued, by which the surgeon ranked as junior major. This, as the deputation was probably aware, was repealed by the Warrant of 1863. He supposed that the principal objection the latter was in regard to the part treating of position of the army medical officer on boards, etc

Dr. STEWART said that was the point of object The deputation had also been informed that the dical officer ranked as junior in mess; and there reason for questioning whether the Warrant carried out in its integrity. But the right of medical officer to be president of boards was the point. The military authorities, he was aware, looked on the presidency of boards as a specie command, not to be held by civil officers. But term civil was misapplied in the case of the me officers; they were exposed to the risks of war, were sacrificed in large numbers; they received tary rewards and honours; and, in a letter addre to his lordship and recently published, it was st that a greater proportion of medical than of other officers had received the Victoria Cross.

Lord DE GREY AND RIPON: The Warrant of laid down that medical officers were non-combat and he presumed that they did not wish to inter with military command. He could not unders why so much importance was attached to the p dency of boards.

Dr. STEWART would remind his lordship that, superior class of medical men was to be induce enter the army, proper marks of distinction and s courtesy must be extended to them.

Dr. SIBSON would put the matter in a worl form. According to the present Warrant, a me officer might appear at a board as a witness c with a junior officer as president. At sanitary bo the medical officer should take his place accordin his rank.

Lord DE GREY AND RIPON understood, from w had been said, that the deputation did not desire the presidency of courts-martial or of boards purely military matters should be open to the m cal officers; but that on certain boards—sanitary instance—the medical man should be placed acc ing to his rank. [*Assent.*] He would give the posal to renew the Warrant of 1858 his best consi ation; but he feared he could not support som the other doctrines laid down in the memorial. regarded the changing of warrants, this was the rogative of the Crown; and, while he quite ag that it would be undesirable to make changes w out reason, it was inconsistent with public disci that changes should not be sometimes made.

Dr. SIBSON said it was not desired to inte with the Royal prerogative; but that alteration sh not be made without sufficient reason.

Lord DE GREY AND RIPON would ask whet within the last few years, there had not been an crease in the number of good appointments where, which had drawn off medical students entering the army; and whether, at the same t there had not also been a diminution in the num of those entering the profession.

Dr. HARE said that formerly students used to the medical schools with the view of joining army; but now this was not the case.

Dr. RICHARDSON said there had certainly be very serious decrease in the number of the me profession; since 1854, he believed, the decrease not been less than four thousand. This was very portant as regarded competition; but it did not a the duty of the authorities to render the army at tive to medical men.

Lord DE GREY AND RIPON was quite ready to a that it might be necessary to offer increased pec ary advantages to medical men entering the a But he believed that there was an organised agita going on among the army medical officers; and

ıment must set its face against anything of this

Sibson would positively assure his lordship that essure whatever had been exercised on the de- ion by the army surgeons. The members had, d, gained the information which they possessed, some trouble and difficulty.

Stewart observed that, although pay might reased, more would be required to restore confi- .

er some further discussion and explanation of al portions of the memorial,

d De Grey and Ripon said that the return to Warrant of 1858, and the proper establishment e precedence of medical officers, were questions might well be considered. On other points, he l not encourage the deputation in hoping for a ge.

e deputation, having thanked his lordship, then lrew.

Reports of Societies.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, May 6, 1864.

. W. Barclay, M.D., President, in the Chair.

pus Exedens Successfully Treated by Caustics. By olmes, F.R.C.S. The patient, a girl aged 10 years, was shown to the Society previously to discuss- had been, in October last, under the care of the ician at the Children's Hospital. She was then akly child, with hazy opacity of the cornea, deaf- , and chronic irritation of the larynx. The pa- s of the child were ascertained to be healthy, and from syphilitic taint. Their other children were thy. Those that had died had died of teething ther complaints common to children. The pa- could talk when quite young; but from the age years became deaf, and gradually dumb; with ease of the laryngeal irritation. In February , acute laryngitis set in, which necessitated the ing of the trachea.

on after the operation, a foul discharge took place the nares; and from that time the lupus com- ced. When Mr. Holmes first saw her in July, alæ of the nostrils were quite gone, and the pa- t quite dumb. Constitutional remedies, chiefly de of potassium, had not affected the lupus, but e a little good for the cornea and the larynx; ıge of air was, therefore, proposed; but Mr. mes first treated the tuberculated edges with ride of zinc, which caused a free discharge from part, and a healthy surface. She was then sent Margate, when the disease began rapidly to spread; air of the place, and the cod-liver oil she took lst there, having no good effect. The disease had destroyed the nose, and involved both lower eye- . She, therefore, was brought back to town; and Holmes applied the potassa fusa well to the edges, omitting the eyelids, and again produced a lthy surface. The disease now seems to have suc- ıbed to the local treatment, as no further progress he disease has occurred, and the parts are cica- ed over.

he case was of interest in that in many points it mbles lupus of syphilitic origin, but without the ory of that origin; in that the constitutional re- lies usually tried, arsenic, mercury, cod-liver, and nge of air, failed to do good; whilst, on the other d, the most beneficial effects followed the local ıtment employed.

The case was corroborated by another, a woman, with lupus; in which case more good had followed the local treatment as above described than any previous constitutional measures.

Mr. Nayler considered the cases brought forward by Mr. Holmes of value; inasmuch as they showed how necessary it was to have recourse to local treatment in dealing with lupus exedens; but he was not prepared to admit the utility of such powerful caustics in all stages, even of this form of lupus; still less of their application to other varieties, as the erythematous, or lupus with hypertrophy. When, for example, lupus exedens was met with in the very early stage, it might be destroyed with nitrate of silver; but, in other cases, the acid nitrate was to be preferred. Again, great benefit was often received from using a powder or paste consisting of calomel and arsenious acid, which was largely used by Mr. Startin at the Hospital for Skin Diseases. The statistics of that hospital for the years 1861, 1862, and 1863, showed a total of 170 new cases of lupus admitted under Mr. Startin's care, of which 131 belonged to the female, and 39 to the male; but the ratio between the two sexes varied considerably in the different varieties, and especially in the erythematous, which was almost peculiar to the female. The influence of age was most strikingly exhibited in the several divisions of lupus. The application of the acid nitrate was also of great use in the treatment of cicatrising lupus; but it was rarely necessary to have recourse to any such caustics in the erythematous kind, and which was treated generally by carbolic acid. As regarded constitutional treatment, cod-liver oil should not be omitted, particularly when the disease was more or less connected with struma, which was generally the case; and it should also be combined with mercury in small doses. The value of this treatment was chiefly seen in lupus exedens and in strumous lupus, as also in impetiginous lupus. Syphilitic lupus was mostly benefited by mercury, with iron or the iodide of potash; so was, sometimes, lupus exedens and lupus erythematosus, which alone was sometimes relieved by arsenic.

Mr. Prescott Hewett had not seen lupus exedens in so young a child, and stated that he had not had to employ caustics; but had found great benefit to result, in most cases, from the use of cod-liver oil and steel; and that they had cicatrised under that treatment without the use of mercury. The local application had generally been zinc ointment. He mentioned the case of a boy with an excrescence on the nose having a malignant aspect, to which nitric acid had been applied, and who recovered without any course of medicine; the zinc ointment was applied, and the part kept clean.

Mr. James Lane thought too many cases were attributed to syphilis as to their origin; but considered that the local treatment by caustics did good in allowing the constitutional treatment a fairer chance. He would use nitrate of silver only to stimulate the edges, and the stronger caustics to destroy the tuberculated tissue.

Mr. Milner said he had found lupus to be very common in the Brazils, whereas struma was not so.

Bequests. Under the will of the late Mr. F. R. Magenis of Grosvenor Place, £1,000 is to be divided in equal sums to the Royal Free Hospital, the Convalescent Institution, Walton on Thames, the Middlesex Hospital, the Dreadnought Hospital Ship, and the Royal Sea-Bathing Infirmary, Margate. The late Mr. Samuel Brooks, a wealthy banker of Manchester, has bequeathed £1,000 to the Royal Infirmary of that city.

Correspondence.

RENAL CALCULUS (?): TUMOUR IN RIGHT HYPOCHONDRIUM.

SIR,—I send you the following case, in the hope that some of the readers of the JOURNAL will give it their attention, and let me, the unfortunate patient, have the benefit of their diagnosis, that I may apply the appropriate treatment.

In April 1859, I was exposed to rapid alternations of heat and cold, with considerable fatigue, which produced an attack of what I thought to be lumbago, from which I had suffered when at college. The attack did not last long, but it recurred at intervals, sometimes of days, sometimes of weeks. At length I noticed that the attacks were attended with pain along the course of the ureter, and in the testicle, which was retracted; and sometimes with a diffused pain over the abdomen on that side (the right), reaching to the median line in front, and backwards and upwards to the spine and edge of the ribs. Besides being subject to rheumatism, I have always suffered from acidity of stomach, with occasional deposit of lithic acid sand in the urine; but, since these attacks began, I have never seen any deposit or unnatural appearance of the urine, though I have carefully examined it for sand, pus, blood-globules, and albumen. Its specific gravity varies from 1016 to 1020; and it is always limpid, and has only a deep straw-colour even in hot weather. Formerly I could retain it for a long time; now I cannot for more than four hours; and there is some difficulty to get rid of the last few drops, probably owing to some enlargement of the prostate.

The attacks, which are never attended with nausea, seemed at first to come on spontaneously; but after a time I could generally explain them by over-exertion some hours previously, especially long journeys on horseback, and driving over rough roads. But I can still walk a considerable distance without bringing them on. At first, they only lasted a few hours; and frequently, if I could lie down at once, only a few minutes; and this has been the case up to the last, from which I am now suffering. This I can attribute to no other cause than the general concussion produced by sharpening the ends of some tough pea-sticks (which I held under my left arm) with a blunt knife; and, as it has been the longest and most marked, an account of its course will, I think, throw most light upon the rest.

I must premise, what I have omitted to mention, that, sitting up at night, as well as horse-exercise, bringing on the attacks, I have been compelled to relinquish my practice; and I always sit on a low chair, avoiding the upright posture, except when at work in my garden.

At 6 A.M. on the 9th inst., I was cutting the pea-sticks; and between 9 and 10 P.M, I was sitting on a high chair at a friend's house, when I felt a dull pain in the right loin, soon followed by a more acute one in the right ilium, passing thence into the right testicle. Hitherto I had said nothing; but, hoping to put a stop to the attack, I now changed seats with a friend, and felt immediate relief from getting into a very low easy chair. It was, however, too late: the pain returned, first in the loin, then in the ilium and testicle, and over the right half of the abdomen, which became tense and tender, but still resonant on percussion. Feeling I could sit no longer, I borrowed a stick and walked home (about three-quarters of a mile), going to the water-closet before I we bed. Having taken some bitter beer lately, I h it might produce sleep; but I could only doze, the pain; and, finding that some French plums I eaten were producing heartburn, towards morni took some carbonate of soda, and about 7 A. small dose of morphine and chloroform. I now a examined my side, which was much more pai and found, just below the point of the loose r hard solid tumour, of the size of an egg, very te to the touch, from which the pain radiated tow the median line, the whole of which space was tender; the rectus was quite tense. Here percus was clear, but over the tumour it was dull. Du the night, I passed urine several times, each occa being preceded by priapism. After waiting s hours in vain for relief from the morphine, I another dose; and, fearing to apply a sinapisr usual, lest, if I were obliged to apply leeches, would not bite, I injected seven minims of solu of morphia under the skin immediately above tumour; and then remarked that the skin round former perforation was white like a gnat-bite, that the reintroduction of the syringe caused no whatever. I did not go to sleep as usual; b found myself free from pain and tenderness, tho the tumour had not subsided, in thirty-five minu I was congratulating myself on my supposed c and thinking of getting up for dinner, when luncheon was brought and placed to my left s The instant I turned in bed to eat it, I felt so thing turn over as it were from the seat of the mour towards the median line; and all my pains turned, and became so severe, that in the eveni applied six leeches over the tumour; but, as the was infected by the morphine, they drew but l blood, and gave me no relief. I had a very night, though I took a strong dose of morphine chloroform; and next morning I sent for a hot b in which I remained for an hour and a half in con rative comfort. Just before my bath, I was vis by an eminent medical friend, who thought me l ing better than on a previous attack, which much more violent, but which ceased, and the tun disappeared, during his visit. After the bath, pain again returned; and I applied a mustard pla first to the left sacro-iliac region, to which it had extended; then to the right; then over the r kidney; and, lastly, over the tumour. From all t parts it expelled the pain in succession; so t when my friend called again in the evening, tho the tumour remained, but decreased in volume thought I should be well again the next day.

I slept as well as usual that night, only awak twice to pass urine, and only once with priapi and after breakfast, finding no pain nor tender though there was still some fulness of the right I took my bath, shaved, and dressed, in about th quarters of an hour. The pain then again return but, instead of returning to my bed, I passed day on the sofa.

June 11th. On awaking this morning, afte tolerable night, to my great disappointment, I fo a return of the pain generally, but worst over right sacro-iliac region; and fulness over the s of the tumour, which, however, was no longer tinguishable. The leech-bites had, as usual w myself, produced so much irritation that I appl water-dressing to them for thirty-six hours; and this had brought on an eczematous eruption, so t I could do nothing more than apply cotton wool o them and the tumour. A mustard plaster, howe over the sacro-iliac region, relieved the pain, tho it did not remove it; and at 4 P.M. I was in compa tive ease, though afraid to leave my bed, lest the p

return; my easiest position being to lie on ht side, with the right thigh slightly bent.
e 13th. Towards morning, I had a return of in in the seat of the tumour and in the right or which I applied a mustard poultice, and a little morphine. These removed the pain, a little tenderness on pressure. I remained the whole day, and on the 14th till 2 P.M.; all pain and tenderness having ceased, and a little fulness remaining in the right hypo-rium, I got up again.
e 15th. I was much troubled with priapism the night; and, after passing urine this morn-found a quantity of lithic acid sand in the pot, almost the first time I had seen any since the ning of my complaint, five years ago. I have water since without any further appearance of ; and now there is neither pain, tenderness, velling over the abdomen.
ave been thus prolix—tedious, I fear—in this nt of my case, in order that I might lay the of the facts before your readers, some of whom ive me the benefit of their ideas of its nature. vn is, that I have a renal calculus in the cor-portion of the right kidney; and this locality think, explain the absence of any change in rine, of any tenderness of the kidneys when ed, except during the attacks, of any nausea, lso the long period that usually intervenes be-the action of the exciting cause and the occur-of the pain. But why should irritation of the al part of the kidney cause a diffused pain over bdomen, with tension, if not spasm, of the rectus le, and fulness, and a tumour in the right hypo-rium—a tumour which sometimes subsides than it rises? I have thought the renal cap-night be affected, as its loose texture admits of tain degree of enlargement; but the greatest find recorded in the *Pathological Transactions* is inches long by half an inch thick; besides that s diseases hitherto described are chronic ones, ttended with a cachectic condition; whereas, I hankful to say, my health, with this exception, cellent, as well as my spirits, though I think medical men would draw an unfavourable pro-is from the above symptoms.
e calculus, if there be one, I must hope will, to he expression of a friend, "go to pot" before lf. But how am I to treat this Will-o'-the-wisp umour, that is here to-day, and gone to-morrow? Mr. Editor, let me have your opinion, if I can le you so far. I am, etc., CADOVENSIS.
ne, 1864.

ur correspondent is a highly respected and well n member of the profession, and may well enlist ympathies of his professional brethren. EDITOR.]

ARMY MEDICAL DEPARTMENT.

R,—As an army surgeon, I desire, through the um of your JOURNAL, to offer sincere and hearty ks to the members of the Metropolitan Branch e Association, for the excellent resolutions agreed t the special general meeting held on the 13th Every one of the opinions expressed, and re-tions agreed to, at that meeting, were admirable; collectively they embody all the just and reason-grievances of the Army Medical Service. I ld not wish a word to have been left unsaid, but ttempt to add thereto would be a work of super-ation. To you, sir, also, I would desire to ex-s deep gratitude for your very able article in the RNAL of the 18th inst., which for truth and com-eness could not be surpassed.

May your exertions, and those of the gentlemen who so kindly attended the meeting on the 13th inst., be attended with success. I am, etc.,
FORTIS EST VERITAS, M.R.C.S.L.
June 23rd, 1864.

Medical News.

APOTHECARIES' HALL. On June 30th, the following Licentiates were admitted:—
Fry, Augustin Barber, Sleaford, Lincolnshire
Grewcock, George, Folkingham, Lincolnshire
Marshall, Francis John, Moulton, Northamptonshire
Rooth, Samuel, Chesterfield

At the same Court, the following passed the first examination:—
King, John, King's College Hospital
Manby, Frederic Edward. Guy's Hospital
Oakley, John, King's College Hospital
Stevens, George Jesse Barnabas, Guy's Hospital

APPOINTMENTS.

UNIVERSITY OF DURHAM. The following appointments have been made in the Newcastle-upon-Tyne College of Medicine in connection with the University of Durham.
ARNISON, W. C., M.D., to be Lecturer on Botany, with Mr. Thornhill.
EMBLETON, D., M.D., to be Lecturer on the Practice of Medicine, with Dr. Charlton.
MURRAY, W., M.D., to be Lecturer on Physiology.
NESHAM, T. C., M.D., to be Lecturer on Practical Anatomy.
PHILIPSON, G. H., M.D., to be Lecturer on Pathological Anatomy, with Dr. Gibb.
WATSON, John, Esq., to be Lecturer on Practical Anatomy.

ARMY. To be Acting Assistant-Surgeons:

BEAMISH, F. P., M.D.	HUNT, T., Esq.
CAMPBELL, J. G., Esq.	KIERNAN, P. K., M.D.
CRAVEN, J., Esq.	LAWRIE, J. T. B., M.D.
DIXON, J., Esq.	LEE, P., Esq.
GELSTON, R. P., Esq.	TYRELL, T. P., Esq.
HAGAN, R. E., Esq.	WALLACE, R., Esq.
HAYNES, W., M.D.	

ROYAL NAVY.
BAIN, A. G., Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
BROMLAW, T. D. A., M.D., Acting Assistant-Surgeon, to the *Racer*.
GRANT, William, M.D., Acting Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.
HANNAGAN, M., Esq., Acting Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.
JONES, William, Esq., Acting Assistant-Surgeon, to the *Fawn*.
KELL, George, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
MITCHELL, A., M.D., Acting Assistant-Surgeon, to the *Cordelia*.
WOOD, Charles B., Esq., Surgeon, to the *Orlando*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—
HIGGINS, Charles H., M.D., to be Surgeon 1st Cheshire Engineer Volunteers.
HOYLE, R. C., Esq., to be Honorary Assistant-Surgeon 21st Devonshire R.V.
MORTIMER, W., Esq., to be Honorary Assistant-Surgeon 13th Aberdeenshire R.V.
WATKINS, R. W., Esq, to be Hon. Assistant-Surgeon 2nd Northamptonshire R.V.

BIRTH.

PARSONS. On July 5th, at Frome, the wife of *J. Parsons, Esq., of a son.

DEATHS.

BOWIE, William, M.D., at Bath, aged 71, on July 2.
DALTON. In New Zealand, aged 30, John D., son of William Dalton, Esq., Surgeon, Cheltenham.
FIELD. On June 27th, at Brighton, aged 38, Eliza Barrow, wife of A. G. Field, Esq., Surgeon.
HEELAS, N., Esq., Surgeon, at Wokingham, aged 29, on June 25.
SWINHOE. On July 3rd, at New Swindon, aged 6 weeks, Ethel-dreda, infant twin daughter of *G. M. Swinhoe, Esq.

The Lunacy Act. The act which was passed in consequence of Townley's case has just been printed. It appears that in future, on the Home Secretary having reason to believe that a prisoner under sentence of death is insane, he may desire medical aid to inquire into the same, and on being satisfied as to the insanity, may order a removal to an asylum. On becoming sane, the prisoner may be removed to undergo the sentence originally passed, whether death or otherwise.

Testimonial to Mr. Skey, F.R.S. An elegant testimonial, for which nearly £300 has been subscribed by the past and present pupils educated at St. Bartholomew's Hospital, has just been presented to Mr. Frederick Carpenter Skey, F.R.S., on his retirement after long and faithful services as surgeon to the charity, and as an expression of the high esteem which is entertained for the private worth, and for this and other public services of this accomplished surgeon, who now occupies the president's chair of the Royal College of Surgeons.

Gratuitous Medical Services. The City Orthopædic Hospital held its annual dinner at the Albion Tavern lately. The chairman, Mr. J. G. Fry, in proposing "Success to the Hospital," said that not only was surgical assistance given gratuitously, but that patients were admitted without letters of recommendation. At first they had to pay their secretary, but, owing chiefly to the kindness of Dr. Pollock, that expense was now saved. A reversionary interest of £1000 had been left by Dr. Oak, a late member of the medical staff.

The National Association for the Promotion of Social Science will hold its eighth annual meeting in York, from the 22nd to the 29th of September, under the presidency of Lord Brougham. In each of the departments three special questions are put, and a day is to be devoted to the discussion of each; the voluntary papers being read and discussed on the remaining days. The following are the questions for department of public health:—1. What are the best means of disposing of the sewage of towns? 2. What are the causes, and what are the means for the prevention, of excessive infant mortality? 3. What is the influence on health of the overcrowding of dwelling-houses and workshops? and by what means could such overcrowding be prevented?

The Association of Medical Officers of Asylums and Hospitals for the Insane will hold its Annual Meeting at the Royal College of Physicians of London, on the 14th inst.; Dr. Monro in the chair. Dr. D. Skae, retiring President, will deliver an address. Papers will be read by Dr. Morel, on the Present State and Future Prospects of Psychological Medicine; by Dr. Toler, on the Advantage of the Cottage Plan above all others for the Accommodation and Treatment of the Insane; by Dr. Lockhart Robertson, on Asylum Dietetics; by Dr. Toler, on the Propriety of Thinking a Knowledge of Right and Wrong any test of the Responsibility of the Insane; and by Dr. Morel, on the Gheel System of Colonisation. The annual dinner will afterwards be held at the Crystal Palace, Sydenham.

Southampton Medical Society. The annual gathering of this association took place at Winchester, on the 18th ult., at the Deanery. The party was about fifty in number, and included most of the principal physicians and surgeons of the Winchester, Southampton, and Netley districts. The president was Henry Dayman, Esq., of Millbrook, the vice-chairman, Mr. Lawrence. The anniversaries of the society, as Dr. Burnett remarked, were divested of all medical and chirurgical matters. The day was always spent as a holiday for real enjoyment, and the society con that this was one of the most agreeable and suc ful meetings the society has held since its incor tion in 1852.

London Hospital. The foundation stone o new west wing of the London Hospital was la the 4th inst., by the Prince of Wales. His Highness was accompanied by the Princess of W The Prince of Wales said that it was a source of gratification to him to be present at the enlarge of an institution of which his illustrious relative Duke of Cambridge) who was ever foremost in all of charity, was president. The call for the new had been made so manifest by the increased nu applying for admission, that he most heartily scribed to the necessity of completing so g work. Of course, a very large assemblage greete Prince, and the whole affair went off right royal

OPERATION DAYS AT THE HOSPITA

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for and other Diseases of the Rectum, 1.30 P.M. ritan, 2.30 P.M.—Royal London Ophthalmic, 11

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—Uni College, 2 P.M.—London, 2 P.M.—Royal Londo thalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Opht 1 P.M.—Great Northern, 2 P.M.—London S Home, 2 P.M.—Royal Orthopædic, 2 P.M.— London Ophthalmic, 11 A.M.

Friday.....Westminster Ophthalmic, 1.30 P.M.—Royal Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 King's College, 1·30 P.M.—Charing Cross, 2 Lock, Clinical Demonstration and Operations. Royal Free, 1.30 P.M.—Royal London Ophth 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal *to be ad to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields,*

Correspondents, who wish notice to be taken of their comm tions, should authenticate them with their names—of cour necessarily for publication.

Errata.—In Mr. W. Weaver Jones's letter on Blood-letting, week's Journal, in line 7 of Case I, for "I took *two* ou blood", read "I took *twelve* ounces of blood"; and in li Case IV, for "20", read "120".

South-Eastern Branch.—In the list of the names of new me of this Branch, in last week's Journal, the name of O J. Kent, Esq., of Eastbourne, was accidentally omitted.

If Mr. Le Gros Clark will again read our remarks, we he will find that there is not the slightest grounds for hi gestion, that our animadversions in any way applied to him. assuredly they did not do so.

A Point of Professional Etiquette.—We have already expressed our views on the question. The ethics of the prof seem perfectly clear in the matter. No medical man has to visit the patient of another medical man at the instan third party, without communicating with the medical attendance. If Mr. John Adams, as surgeon of a railway, a patient who was under the charge of Dr. Smith in Dr. S absence, and without Dr. Smith's permission and knowled in our opinion, clearly committed a breach of profession quette. The rule is clear enough in every ordinary case; a simply absurd to suppose that a man has a right to transgr usual laws of professional intercourse merely because h himself surgeon to a railway company. This would indeed introduction of "railway law" into medical practice!

Abstract of Lectures

ON THE

PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

LECTURE III.

Mr. Fergusson introduced the subject of his third lecture (hare-lip and fissured palate) by remarking that the operation for hare-lip was the first formal operation that he ever performed—in 1828. "Since then," he said, "I have seen many hundreds of both kinds of cases; and, being about to frame a lecture for the present occasion, the question naturally arises, Have I anything new to say?" On the first part of his subject, at any rate, we do not think that Mr. Fergusson had much to say which was new to any of his audience. That "hare-lip" differs from the lip of a hare in this, that in the deformity the cleft is always* on one or both sides of the middle line, while in the animal's lip it is in the middle line, is a point which, besides being of little importance, has been constantly dwelt on. Mr. Fergusson, however, spent a good deal of time on this point, showing that the fact of the cicatrix after operation coming into the middle line has deceived persons into thinking that the cleft before operation was so. He then exhibited two figures of those rare cases in which a cleft extends outwards through the cheek, or downwards through the lower lip. So rare are the latter cases, that their very existence has been denied. We regret that Mr. Fergusson's drawing, as well as the copy of it in the *Lancet*, was so obscure as to be hardly intelligible. He then turned to the complicated cases of hare-lip, in which a large intermaxillary portion projects from the cleft, hanging to the end of the vomer. Mr. Fergusson explained clearly the arrangement of this projection, with respect both to the cleft and to the vomer; and, on the subject of its anatomy, made the following candid statement. "Some foreign histologists, as Von Ammon and Vrolik, have displayed great research on this subject; but I know of no more minute anatomy in the English language than that in my own work on *Surgery*." The German and French surgeons, however (and more merely "foreign histologists"), have done so much in expounding the anatomy and surgery of hare-lip, that a lecturer can hardly hope to put before his audience a complete view of the subject who quite ignores all that has been done by every one except himself. It was curious, too, to see that, after having so openly claimed a preference on account of the minuteness of his anatomy, Mr. Fergusson's anatomical description was very vague. He did not even allude to the varying number or the varying direction of the teeth which are found in the intermaxillary portion; nor, of course, to the arguments derived from such variations for or against regarding this as the true "incisive bone". With respect to the surgery of such cases, Mr. Fergusson gave merely a sweeping recommendation to remove the projection in all cases. We quote the passage.

"When the fissure is double, it has been proposed to bend the projection back by pressure, or after breaking its narrow neck; but I have noticed, on trying both plans, that the mass has been an impediment to a very satisfactory operation on the lip, and whilst I do not positively object to the occasional use of either of these plans, I give a decided preference to the removal of the projection altogether. If bent backwards, it will probably be at the damage of the vomer and septum; whether bent or broken, the teeth will be thrown on a new plane, and will be likely to project backwards. I have recently heard it proposed to cut out a piece of the narrow neck, so as to let the knob fall backwards into a better place; but if this were done, I should doubt if the knob would not die for want of circulation. Of course, if the part can be preserved in its natural position, that will be best; and if there be any slight projection, that will be gradually remedied by the pressure of the lip after the operation. However wide the gaps in such cases, it is remarkable how they close as years roll on, for in many instances the opposite sides approximate so closely that a fissure will almost elude observation. I have never seen a complete osseous closure. Close approximation gives strength to this condition of the upper jaw. In early years, when there is no lateral support, the intermaxillary portion and the central incisors must be of little value as regards prehension, incision, or mastication; for the narrow neck and vomer will give but little stability in such acts. Indeed, in making such preparations as these in the infant head, it is difficult when the parts are moist to keep the projection *in situ*."

One great argument for the preservation of this projecting piece is passed over without notice by Mr. Fergusson; viz., the very disagreeable appearance of the face in profile after its removal—the lower jaw projecting beyond the upper, so as to give the extreme grade of the "under-hung" expression.

As to the causes of hare-lip, Mr. Fergusson, after rejecting the influence of the imagination, offered the following.

"If I may, or dare, venture a theory of my own, I am of opinion that the defect arises from the breed, and that it occurs where there is a predisposition in the parents. I fancy that I can detect this in the features of father or mother or of both."

Of this explanation we can only say, that it seems rather more difficult to understand than the fact which it is intended to elucidate.

Mr. Fergusson's personal experience of the operation extends, he tells us, to between three and four hundred cases. Since the invention of the hare-lip truss by Mr. Hainsby, he has always used this apparatus; the number of such cases being upwards of two hundred and fifty. Three have died, "from some child's ailment, such as thrush or diarrhœa". Convulsions have not occurred in a single instance; and, if we understand Mr. Fergusson's statement rightly, union has failed in only one case, in which it was afterwards obtained by a second operation. We are not quite certain whether this statement is meant to apply to the whole number, or only to the cases of double cleft.

As to the incision, the following was all that was said on that subject.

"After trying a variety of lines of incision, and seemingly cunning devices for adaptation of opposite surfaces, so as to give the best possible appearance to the lip, I confess that, with few exceptions, the old-

* Perhaps not, in strictness of speech, always; for we believe that there exist preparations in which the cleft is in the middle line, one of which is in the Museum of the College of Surgeons.

fashioned straight line, from the root of the cleft to the free margin of the lip, appears to me to be the best. If a notch or irregularity is left in the lip, it arises generally, I believe, from too little having been cut away from the margins of the fissure."

No reference was made to Malgaigne's process of leaving the flaps attached to each side of the lip, in order to fill up the notch which often remains after the operation, and which several of Mr. Fergusson's sketches exhibit; or to Nélaton's operation (spoken of by him as the *procédé de Clemot*, in honour of some forgotten surgeon, who is said to have operated in this way), in which the flaps are also left attached to each other by their apex, as well as to the lip, by their bases, so that the wound has a diamond shape ◊. We have often seen this process used with success (and have so used it), in remedying the deformity left after a partially successful operation. The unsightly notch is replaced by a projection or knob, which gradually wears down, and is no permanent defect, while the red line of the lip is usually perfect. If these are among the "cunning devices" which Mr. Fergusson's practice has led him to regard without confidence, we are somewhat disappointed to hear it, having been inclined to form favourable anticipations from our limited experience of them. As to sutures, their material, and the best time for withdrawing them, Mr. Fergusson says nothing; which surely is an odd omission in a lecture on hare-lip. But we gather, from the way in which he speaks incidentally of "introducing the needles", that in this, as in other parts of the operation, Mr. Fergusson prefers the old-fashioned plan. In fact, while claiming the position of a "liberal conservative" in other parts of surgery, he seems to profess the most absolute toryism in hare-lip.

In speaking of cleft palate, Mr. Fergusson commenced with a short history of the introduction of the operation of staphyloraphy, and of the circumstances which led him to fix his attention on the subject, amongst which one of the chief seems to have been the accident of his having, at an early period of his career, had the fortune to meet with a specimen of fissured palate in the dissecting-room, and the industry to make a careful dissection of it. The results to which this dissection led were so important that, we doubt not, the perusal of Mr. Fergusson's lecture will be an additional stimulus to the zeal of students in dissection; for it was his observation of the great strength and development of the muscular apparatus in this cleft palate, which led Mr. Fergusson in after years to conceive the happy idea of applying myotomy to the treatment of this deformity also, as Stromeyer had to club-foot, and Dieffenbach to squint. Mr. Fergusson gave full credit to Roux for his energy in introducing and practising staphyloraphy; and referred, with just pride, to his own paper in the *Medico-Chirurgical Transactions* for 1845, as having first correctly expounded the physiology of the muscles of the soft palate, and explained how their action often interferes with the success of the operation as practised by Roux. We cannot do better than quote the following remarks, which contain the essence of Mr. Fergusson's teaching on this matter, and clearly show the important practical bearing of his views on the success of the operation.

"The influence of the constrictor muscles of the pharynx in the process of deglutition was well known to physiologists; but how, during that process, the gap of the cleft palate was closed in vacant space was an enigma, until I had the good fortune to show that the parts are pushed together by the action of the superior constrictor particularly, so that the gap between the pharynx and the nostril is as completely closed during deglutition as if the velum were entire. Then, for the surgical aspect of the investigation, showed that by temporarily taking off the influenc of such muscles as in common action tended to dra the two portions of the soft palate aside, there was probability of such entire rest that union in the cen tral line was most likely to take place—certainly, a any rate, more likely than with these muscles in fu vigour, irritated, too, as they might be by the wounds by inflammation, and by the presence of stitches The almost intolerable distress, the depressing in fluence, the actual danger, associated with the injunc tion against swallowing laid down by Roux an others, made the early operations of this kind ex amples of human endurance which few could follo out to the full extent. Such injunctions had bee occasionally disregarded, and Sir Philip Crampto gave some notable examples of this kind. Since showed, anatomically and physiologically, that dur ing deglutition the parts are actually pushed to gether, that process is no longer forbidden; and no a fair share of suitable nourishment is freely adminis tered—a matter of great consequence as regards suc cessful issue."

The success with which Mr. Fergusson has carrie out his views is remarkable. Out of 134 cases i which he has operated, 129 have been successful We should not, however, perhaps, attribute this re markable percentage of success to the use of my otomy only; for Mr. Fergusson did not blink the fac that Mütter of Philadelphia succeeded in ninetee out of twenty-one operations before Mr. Fergusson' proposition for dividing the levator palati and palato pharyngeus had been made. Evidently, therefore manual dexterity and delicacy in manipulating th raw edges which are to be united, have a great shar in obtaining success.

With respect to operations on the hard palate, Mr Fergusson justly attributed the priority in this oper ation to Dr. Mason Warren; and gave his due mee of praise to the late Mr. Avery, who was the firs surgeon to practise the operation on the hard palat in this country.

Mr. Fergusson did not describe precisely hi method of operation; indeed, it is too well know to require precise description. In two particular only does he seem to have varied from his origina method; viz., that he now finds the divisio of the palato-pharyngeus seldom necessary, and tha he now generally puts the patient in the recumben posture. Regarding the kind of incision to be use for the division of the levator palati, Mr. Fergusso said:

"My own success, if I may so call it, I attribut chiefly to the division of the levator palati, and nex to the relaxation which the wound for that divisio involves. For mere relaxation, the incision of Dieffen bach is probably the most perfect. I know that i has been particularly successful in Mr. Skey's hands and in Mr. Pollock's; but, with all deference, I an still disposed, from all I know of the subject, to prefe a free incision above the soft palate, whereby th levator palati may be divided to a certainty. I addition, I look upon this wound as of great servic in this respect—the lymph effused upon it acts as splint, whereby the palate is kept fixed as a boar until union in the mesial line is complete."

As far as this relates to Mr. Pollock's practice, it i by no means accurate. Nothing can be less lik Dieffenbach's incision than that which Mr. Pollock makes. Dieffenbach (*Operative Chirurgie*, i, 443) say that, when the cleft is large, and there is much ten sion on bringing the sutures together, lateral inci sions are necessary, which he thus describes: "On side of the palate is perforated with the scalpel at distance of half an inch from its lower border an

alf an inch from its raw edge, and the velum is cut hrough with a sawing motion of the blade upwards, s far as the commencement of the bony palate. A imilar incision is made on the other side." He then oes on to say that the palate after this hangs down ke a damp curtain, and that "the lateral incisions ppear as a pair of large oval openings, through hich one or two fingers could be passed." On the ther hand, Mr. Pollock's plan for the division of the evator palati consists in simply passing the knife hrough the tissue of the soft palate by a mere punc-ure, and pressing its edge against the upper surface f the velum, so as to divide the fibres of the levator which lies above the tensor), but without in any anner interfering with the integrity of the rest of he tissue. Thus, after division of the levator palati y this method, nothing is seen on the oral surface f the velum, except a minute puncture; and the isk to nutrition, which must be involved in the weeping incisions of Dieffenbach, is quite avoided. he plan is a simple one, and very effective, as I can ersonally testify; but Mr. Fergusson has apparently ound such good results from his own method that he as not thought it worth while to make himself ac-uainted with it.

We will conclude this notice of Mr. Fergusson's ecture by extracting the passage in which he endea-oured to explain his reason for preferring the recum-ent position.

"As to attitudes in this operation, the patient may it or lie, as may best suit convenience. Latterly, I ave made most use of the recumbent. I find that he head can be kept best on the same line in this osition; and as regards my own views on the ana-omy and physiology of the parts concerned, I deem he subject of some importance. For instance, if the atient sits with the head slightly thrown backwards, he palato-pharyngei, when irritated, pull the soft alate downwards towards the epiglottis, so as to eave a space between the palate and the base of the ranium; but if the head be thrown far backwards, he axis of action is altered, and these muscles draw he soft parts upwards, or, in other words, bring the oft palate towards the base of the cranium, and thus dd to the difficulties of the surgeon by limiting the pace above the soft palate where he has to work vith the needles in introducing sutures. Here, as in are-lip, the surgeon has generally stood before his atient, but I invariably select his right side in pre-erence to all other places."

Such were the main points which struck us in vhat Mr. Fergusson said about hare-lip and fissured alate. The impression which was left by the lecture n the hearers' minds must, we think, have been that Mr. Fergusson's experience in these operations has een very large, and his success beyond that of most urgeons; that as far as hare-lip is concerned this uccess must be due entirely to operative skill, while n staphyloraphy, Mr. Fergusson is justified in claim-ng the introduction of myotomy into the operation, n original and very happy suggestion.

Naval and Military Hospitals. Haslar costs bout £14,000, and Netley Hospital about £12,000, a ear.

University College, London. At a session of he Council held last Saturday, a vote of thanks was iven to the Hon. Rustomjee Jamsetjee Jejebhoy, for donation of £1,000 to the hospital. The title of ellow of the College was conferred on the following ormer students of the College, who had graduated in nedicine with honours at the University of London: . H. F. Routh, M.D.; W. Roberts, M.D.; G. Buhanan, M.D.; and T. Hillier, M.D.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture III. (*Continued.*)

The Treatment of Fibrous Tumours.

II. Surgical Treatment. The surgical treatment of fibrous tumours is one which requires greater consideration, and to which we must have recourse in many cases, as the tumours, if left to themselves, prove fatal. This may be of two kinds: 1. Enucleation of the tumour; 2. Removal of the tumour by Gastrotomy.

1. *Enucleation.* My labours on this point have been considerably lightened by the papers of Mr. Hutchinson, published in the *Medical Times and Gazette* for 1857, regarding which it is difficult to state to which part of the subject so graphically described by him the greatest merit is due; whether to the collection of cases, and the succinct manner in which he has detailed them, or to the practical emphatic conclusions to which he has attained. His results were founded upon thirty-nine cases, in which enucleation was practised. To these, I have added twenty-one cases. It is upon these sixty cases that my observations will be founded.

The operation for the removal *per vaginam* of fibrous tumours will be best considered under two heads: 1. Primary enucleation, where the enucleation has been completed at the time, or within a day or two; 2. Enucleation by inducing gangrene—*i. e.*, when part has only been performed, and death of the tumour has been induced, which thus comes away with sloughing. I shall follow the same order, only I shall speak of incision of the os and tumour as a means of cure, and removal by gastrotomy, as a third division.

Primary Enucleation. Mr. Hutchinson enumerates eighteen cases under this head. Of these, twelve recovered, or 66.7 per cent. In nine cases out of twenty which I have added, primary enucleation was performed, and followed by recovery in all but two. The principal rules laid down by Mr. Hutchinson are: 1. The tumour must be well depressed into the pelvis by an assistant. 2. The first incisions must be very free, and pass deeply down into the tumour; thus not only completely dividing the capsule, but facilitating its bisection, should that afterwards be found requisite. 3. The opened capsule must be separated by the fingers, or, if needful, by blunt-pointed scissors, the finger being used as a director. Strong and large vulsella, with midwifery forceps, should be at hand; to be used for traction, if necessary. 4. The grand object is to draw down, after separation of the tumour, the uterus inverted with the tumour to the external parts, or as near as possible to them, which facilitates the operation. 5. After eversion has been completed, an examination should be made with the finger, also *per rectum*, etc.,

TABLE I.—*Cases of Fibrous Tumour of the Uterus for which Enucleation was practised.*

No.	Operator and Locality.	M. or S.	Age	Previous History.	Size, Weight, etc.	Steps of Operation.	Immediate effects and after progress.	Final Result.	Remarks.
1	I. B. Brown. *Braithwaite*, 43, 318. London Home, 1859.	S.	35	Sickness, pain, floodings, of seven years' duration.	Intrauterine.	Os first incised. Three minutes afterwards a piece gouged out.	Suffered little. Tumour broke up. Dysmenor. wh. ceased 1860.	Recovered completely.	..
2	Ditto. *Ibid.* p. 219. Ditto, 1859.	M.	30	Hæmorrhage, quite anæmic, tonic and styptic treatment. May 27, losing blood freely.	Intrauterine. Fibrocystic.	July 5th. Os first incised; no bleeding subsequently. 26th. Tumour broken down with sharp scissors.	Tum. lessened. Offensive discharge. Sympt. of pyæmia in August.	Dec. 10, left Home relieved much. Tumour smaller.	..
3	Ditto. *Ibid.* p. 320. Nov. 1859.	S.	46	Hymen imperforate, intact.	Intrauterine. Duration 12 years. Size of a 6 months' fœtus.	Nov. 19. Os divided, and tumour found embedded in left side of uterus as low as os internum. Capsule cut through; a piece gouged.	Little hæmorrhage. 20th. Rigors. Pyæmia.	Died. Pus in pleura.	Supposed due to having gouged and bkn. dn. hymen at same time.
4	Dr. T. Robertson. *Path. Trans.*, xi.	..	50	Tumour growing five years. Began to protrude from labia, giving rise to much pain and flooding.	Found in vagina. Os not to be felt. mass seemed to extend above it.	Sept. 27th, 1860. A portion removed from vagina. Enclosing membrane bled freely, but not the tumour. After some days, another examination discovered os. On 17th Nov. whole mass removed by pulling. Os seemed to give way, and tumour came out.	At first favourable. Os found open; smooth piece of mucous membrane projecting as if tumour was attached there.	Rigors, 25th and 27th.	Died 29th. No *P. M.*
5	Dr. J. Hall Davis. *Obst. Trans.* ii, 17.	W.	51	Once pregnant. Uterine hæmorrhage. Retention of urine. Cervix obliterated. Adhesions to anterior wall of uterus.	Intrauterine. Sound penetrated 4 to 5 inches.	Half lower portion enucleated 1st day. 2nd day whipcord applied with Gooch's cannula around separated portion. 3 days after, by much traction and manipulation, entirely removed.	Sickness, supposed due to chloroform. No hæmorrhage. Part of tumour putrefied, but greatest part removed.	Recovered.	..
6	Dr. F. Hinkle, *Amer. Journ. of Sciences.* 1856. 52, 365.	..	64	General fever, cramps, irritable bladder, bearing down pains almost continuous. Tumour resting on sacrum.	Sound penetrated 2½ inches. Tumour in posterior wall of vagina extending to uterus.	Post. wall incised. Tumour exposed. Ergot given. 5 days afterwards bistoury again used. 15th. Operat. repeated; about ¾ of tumour remov. Desisted from faintness of patient. 22d. Tumour entirely removed in two parts by tenaculum.	Bearing down pains increas'd. No hæmorrh. Metritis for 17 days after 1st operation, followed by diarrhœa.	Died from enteritis.	..
7	Alex. Ramsey. *Gaz. des Hôpitaux*, 1859, 290.	..	27	Primipara in labour; waters burst; placenta det., came agst. a body; semi-elastic tum. on ant. wall; punct. without result; next day from trochar op. tum. could be felt.	Parietal.	Trochar opening enlarged. Posterior tumour could not be detached. Next day, ergot being given, the remaining fibrous band cut with hysterotome.	Fœtid discharge for several days, Tumour came away fourteenth day with some bleeding; after this, all favourable.	Recovered.	..
8	Alexis Moreau *Bulletin de la Société Anat.* xxv, 364.	..	..	Reg. up to preg.; deliv. of a living child; uterus aft. deliv. still large, sup. to be another child; 9th day aft. deliv. a sac gave way internally, exit of bloody serum up to 13th day, then great lochial flow.	15th day Professor Moreau called in, and recognised a fibrous tumour as large as a head.	Enucleation performed on three-fourths of tumour. No result. Next day repetition: desisting by reason of syncope in patient. At night, tumour having descended, is extracted.	Great relief at first, then fever returns, with faintings, etc.	Death 3 days after operation.	..
9	M. Marcet. *Ibid.* p. 446.	S.	50	Large abdominal tumour felt in median line. Hæmorrhage. Leucorrhœa. Marked anæmia.	On examination, os open size of 5-franc piece, thro' which finger came on tumour. Tumour not adherent then. No pedicle.	M. Velpeau incis. cervix on both sides; extr. tumour by pincers without much difficulty. Extr. part of inf.; vagina had to be cut to let out tum'r, which was large.	..	..	..
10	M. Parmentier. *Ibid.* xxix, 208.	..	51	Symptoms of uterine engorgement called for treatment twice at intervals of 11 years; last year uterine hæmorrhage supervened.	Tumour projecting from os, between mucous membrane and uterine walls; size 25 centimet. by 26.	Drawn down by forceps. Mucous membrane cut. Tumour enucleated with fingers and spatula, but owing to its large size removed in pieces.	Cold compresses applied; slight bloody discharge for a few days.	Recovered.	..
11	M. Berard, with Amussat. *Ibid.* xvi, 82.	..	..	Long continued menorrhagia.	Tumour parietal, anterior wall.	Transverse incision to enlarge os; also longitudinal on ant. lip. Enucleation now practised on exposed tumour, then left, and ergot given.	Action of uterus insufficient; became weaker.	Died of Peritonitis 3 wks. aft. op. *P.M.* Perit. adhesion of tumour to uterus very close.	..

TABLE I—*continued.*

No.	Operator and Locality.	M. or S.	Age	Previous History.	Size, Weight, etc.	Steps of Operation.	Immediate effects and after progress.	Final Result.	Remarks.
12	Amussat. *Annales de Chirurgie*, v, 192.	..	54	Severe menorrhagia; a fibrous tumour in anterior wall.	Size of an ostrich egg, weighing nearly 14 oz.	Anterior lip incised. Tumour extracted by a rotatory motion by pincers.	..	Recovered.	..
13	Chaubart. *Ibid.* v, 335.	M.	50	Multipara; retention of urine 24 hours; abdomen large; catheterism impossible; uterus reached 4 inches above pubes. Cervix not to be felt.	Large tumour filling pelvis; had passed cervix; this pushed up, and urine drawn 1 litre; violent labour pains; no advance: wgt. found to be 2½ kilog.	Pulled down by pincers, and brought down to vulva; a few days afterwards excised.	Slight bleeding checked by acidulous drinks.	Recovered.	..
14	Langenbeck. *Deutsche Klinik*, i, 1859. *Quart. Rev.* xxiv, 553.	M.	35	Two children; now in labour; severe flooding; tumour descended after 3 days' labour in vagina, mistaken for head of a child.	Pains ceased and patient became collapsed; tumour in cervix and anterior wall.	Entire part of exposed tumour beyond vulva incised. Under layer so cut, white fibrous mass appeared, which could be easily separated both by finger and scissors.	Hæmorrhage slight. Dead child extracted immediately afterwards. General collapse.	Died following night.	..
15	Langenbeck. *Ibid.*	..	37	Profuse menorrhagia; Nov. 26, very anæmic; os uteri high up, op.	Tumour as big as an egg; post. wall and cervix; anterior wall thin.	After eight days' attempt to expand os, tumour extirpated.	Bleeding very slight. Two ms. after normal catamenia.	Recovered.	..
16	Ditto. *Ibid.*	M.	35	After two normal labours and one miscarriage, menorrhagia; anæmic.	Tumour intrauterine, size of fist. Post. lip doubled in size, ext. to post. cervical wall. Ant. lip thin, through which a tumour size of egg is felt, projecting 1½ inch into rectum.	Extirpation practised. Difficult and long, tumour being nowhere distinctly bounded, and everywhere very resisting.	Slight bleeding at first followed by suppuration from the uterus for 5 months.	Recovered.	..
17	Kiswisch. *Klinik Vortrage*, Bd. i, 8, 571. *Deutsche Klinik*, Jan. 1, 1859.	..	..	..	Size of a hen's egg; situated in anterior wall.	Operated two days after admission.	..	Recovery 10 days after operation.	..
18	I. B. Brown. Communicated	M.	35	Sterile; married 13 months; increase of pain and size last 9 months; menstruat. every 14 days; flooding; great anæmia.	Enormous tumour, occupying whole uterus.	Os and cervix incised Feb. 27. Tumour subsequently broken up March 27.	After incision of os, no bleeding. After 2nd operation, fœtid discharge, with gradual diminution of tumour.	Recovered.	..
19	Ditto. Communicated	S.	..	One year ago, menorrhagia began; constant for last six months; tumour enlarging; extreme anæmia; os very high up.	Intrauterine fibrous tumour, as large as the head of a 9 months' child.	Os and cervix incised Feb. 27. Tumour broken up March 20.	Gradual decrease of tumour; menstruation normal.	Recovered.	..
20	M. Borlée. *Presse Médicale Belge*, 33, 1863.	S.	47	Regular; 3 years ago, got a blow from the horn of a calf; from this time menorrhagia and yellow leucorrhœa; very anæmic: micturition impossible, except on raising abdomen.	Tumour size of fist felt through a very narrow vagina; abdomen as large as at full period of gestation, ext. 3 in. above the umbilicus. First part removed weighed 1350 grammes.	First oper. attempt to remove with forceps failed. Then enucleated in part with hand; large portion like placenta removed. 30 days after 1st operation removed remaining portion of tumour now in vagina.	Favourably for 10 days aft. op., then pyæmia, death imminent. Treated with quinine intern. and chlorine injections; got better in 30 days. After 2nd operation, not one bad symptom.	Recovered.	..
21	Dr. Storer. *Bost. Med. and Surg. Journ.* 55, 101.	..	60	Menstruated at 13; catamenia ceased 10 years since; recurred with menorrhagia 4 years since threatening a fatal issue.	..	Ergot given & sp'ge tents appld. Tumour p'sent'd. Ecraseur attempted to be appl'd but fail'd owing to broad attachmt. of tum'r, chain slipping & finally breaking. Tumour now crushed by litho. forceps, & then as much rem. as poss. by Simpson's p'tome	Bleeding rather free, but arrested by plugging.	Recovered 52 days aft. operation.	..

so as not to cut through an inverted pouch of peritoneum in separating the final attachments of the uterine tumour. 6. The uterus is then returned. Ice, ergot, stimuli, etc., are to be given as indicated by the symptoms.

The views here epitomised are so very much in accordance with common sense and sound surgery that I do not wish as a whole to controvert them. To one point only of these I would take exception. I do not believe that the grand object is to draw down the inverted uterus after separating the tumour, so as to bring the tumour as near as possible to the external parts, because this renders the operation easier.

It cannot be doubted that simple traction of the uterus will often suffice to determine inflammation in and about the peritoneum around the organ. In the fatal cases of enucleation, death seems to have been due to phlebitis or peritonitis. Upon this practical point we can learn a lesson from the experience of

practitioners in the removal of *polypi*, as a rule, a far easier operation if the uterus be pulled down.

One case is mentioned by M. Gaubrie (*Bull. de la Soc. Anat.*, vol. xvii, p. 209) where a polypus, supposed to be attached to the cervix (but found after death to be attached to the fundus), was pulled down forcibly. The pedicle yielded and it came away; yet that patient died from latent peritonitis. After death, the uterus was found healthy; but pus was found in the pelvis. Another case is mentioned by M. Demeaux (*Ibid.*, vol. xviii, p. 41) in which an enormous polypoid growth filled the cavity of the uterus. It was pulled down to the vulva, removed, and the parts replaced. There was no bleeding. Peritonitis followed, and death two days subsequently. The *post mortem* examination revealed pus in the pelvic cavity. No uterus could be found in the pelvis; but a puckering and sunken-in portion, within which the ovaries and a vaginal tumour, which was the inverted uterus, were found. This inversion, it is true, was supposed to have been the result of the weighty polypoid growth before traction had been employed. Yet death from peritonitis was the result of the operation. A more remarkable case, however, is quoted by M. Pigné (*ibid.*, vol. xiv, p. 11). This was a polypus as large as a fist, which was taken from a dead woman. During life an attempt was made to remove it; but the finger being first introduced within the rectum, no uterus could be felt. All extraction was now stopped, on the supposition that the tumour was an inverted uterus. Peritonitis and death followed. The *post mortem* examination revealed a pediculated polypus within a very small and anteverted uterus. No injury whatever of the peritoneum had taken place. The traction alone produced the peritonitis. Dr. Greenhalgh has informed me of a case which he saw at Würzburg, where the mere traction of the uterus downwards produced peritonitis and death.

In the recorded cases of enucleation, where traction is mentioned particularly as having been made, the results may be referred to two heads; viz., where the uterus or the tumour was pulled down by fingers, a string, or other violent means; and, secondly, where this was done by forceps. The result in the two cases is very different. Of eight cases, in all but two of which the operation was that of primary enucleation—one being secondary, the other failing altogether—in three, the uterus was for the time completely inverted. Three cases died; in one of these, eversion had occurred; in another, forcible attempts were made to pull down the uterus, which failed.

In eight other cases, in all of which but one (where the operation failed, although the tumour sloughed away afterwards) the operation was primary enucleation, and the forceps were used, no deaths occurred. In two, the uterus was inverted. In two cases, it was the uterus which is stated to have been pulled down by the forceps. In the remaining six, it was the tumour which was so drawn down. All did well, except one patient, who had phlegmasia, and whose convalescence was not established till two months. All the tumours, however, where it is stated, were small; except in the patient who had phlegmasia, where it was large; and in another, where the tumour weighed eighteen ounces, and the diameters were four inches by six.

Was this difference in the result due to the better regulated traction which can be exerted by a forceps, or to the better direction given by it? Probably, where the forceps were used, the tumours were low down in the true pelvis, and so easily included in them. Short forceps were used in every case; and, therefore, it would seem that the traction was less forcible. Whenever these were used, the results were more satisfactory. The fact is indubitable. Still, it seems difficult to say to what cause the occurrence of peritonitis is due, where it so occurs; when we know that in very many other cases, where traction is employed, it does not occur.

In explanation, I have but three suggestions to make. In cases of retroversion, I have never seen peritonitis follow traction, to restore the organ to a straight direction, so as to allow the admission of the sound. Is it because in these cases the peritoneum is no longer in its normal state, already changed by the very unusual disturbances to which it has for some time past been subject? This is certainly true in many cases of ovariotomy, where numerous adhesions exist. Secondly, peritonitis, and accidents of like nature, are rare, if our patients have been well purged and prepared by remedies before operation; a precaution which, in the case of polypoid growths, is often neglected. Will this explain the difference? Thirdly, there is doubtless, in some cases, idiosyncracy and a predisposition to peritonitis.

The practical conclusion, at any rate, to be deduced is, that the very traction which is necessary in these cases is often in itself a source of danger and a cause of death; and therefore, if possible, it should be avoided.

Enucleation by the Induction of Gangrene, or *Secondary Enucleation*, as it is called, is a much more tedious operation. Out of fifteen cases mentioned by Mr. Hutchinson, nine recovered, or 60 per cent.; and six died, or 40 per cent. In my table, of ten cases, in one the result was not stated. Of the remaining nine, four died, or 44.4 per cent.; and five recovered, or 55.6 per cent.

Mr. Hutchinson has concluded that, if other unpublished cases were taken into the account, the results of the two modes of operation would be identical. The above figures, however, so far as they go, prove that enucleation by the induction of gangrene is positively less fatal than primary enucleation. Is this due to the traction which is employed being less marked?

The modes in which this operation has been practised have been various. The French method consists in using the knife, in most cases without the use of ergot at all. Dr. Atlee's consists in using, in the first place, ergot in repeated doses, so as to influence the uterus to contract and forcibly eject the tumour. Then the incision is made through the capsule, the ergot being continued, and the tumour gradually separated from the cyst by the finger, cutting, by the knife or scissors, any adhesions which may interfere with such separation. This is continued from time to time; the tumour in the meanwhile sphacelates and comes out by pieces, until the whole has come away, or what remains is capable of enucleation and removal. There can be no doubt that Dr. Atlee's method is an improvement upon that of the French school. It provides a *vis a tergo* to assist the operator.

Again, Dr. Atlee does not limit his operation of enucleation to the *uterus*. In several cases where, from the size of the tumour or its position low down in the pelvis, while the uterus is high up or difficult

o reach, and in cases of extrauterine fibroid, which occupies similarly a true pelvic position, he does not hesitate to cut right through the *vagina*, so enucleating the tumour. This he performed in several cases; and, so far as I know, he was the first to attempt this mode of procedure.

In estimating the degree of mortality due to enucleation by the induction of gangrene, we learn again a lesson from what occurs in some cases of polypi, which are tied and allowed to slough away.

The experience of Drs. Robert Lee and McClintock gives the following numerical results of cases in which the ligature was applied.

	Cases.	Deaths.	Per cent.
Dr. Robert Lee.....	20.....	9.....	.45
Dr. McClintock	10.....	3.....	.30
	30	12	40

And, no doubt, with a large sloughing mass in the vagina, exposed to the air and putrefaction, the absorption of putrid pus is a natural result. The same is true with regard to the fibroid within its cyst, only to a greater degree. In the case of the polypus, we have merely mucous membrane, which is our absorptive surface. In the case of the enucleated fibroid, we have a raw ulcerated surface of the cyst, that part which is the vascular part of the tumour, and therefore eminently absorptive, ready to take into the system the vitiated pus. The surprise is that, in such cases, recovery ever occurs. Fortunately, the *vis medicatrix naturæ* is often powerful enough to accomplish it. It is for this reason that I think Mr. Brown overrates the beneficial results of his modification in the operation, in first incising the os and allowing it to heal before he proceeds to gouging or enucleation. It is of use, doubtless, as it removes one additional source of absorption; but others remain.

The practical lesson which is taught by these remarks, is the necessity of frequent injections and washings with disinfectants, and obviating the production and long contiguity with ulcerated surfaces of effete and putrid matters.

Enucleation by Gouging, and inducing gangrene subsequently, is a modification of Mr. Brown's.

The instrument which he uses I now show you. It has already been exhibited before this Society, and, therefore, need scarcely detain us long. It was originally devised by Mr. Philip Harper. It consists of a hollow tube of steel with cutting knives. Contained in this tube is a hook, which can be pushed up by a spring, and thus grasps the tumour, whilst circular knives are carried through by means of a screw. In this way, a piece can be actually cut out of a tumour much in the same way as the central piece is cored out of an apple.

In the *Obstetrical Transactions*, Mr. Brown has published several cases exemplifying this mode of treatment. I may remark, however, that it is restricted by him to *intrauterine fibrous tumours of the non-pedunculated form*, growing from the inside of the uterus from a broad base. Mr. Brown has given us four cases in which he gouged in this manner. In three, a cure followed; but in one, the operation led to a fatal result. This death he attributes to the absorption of putrid pus through the cut edges of the cervix, which was previously laid open to expose the contained tumours. Hence, at present, his mode is in the first place to lay open the cervix, and to wait two or three days, or longer, till this has healed, before he proceeds to gouge.

The method pursued after the gouging, is to plug up the hole thus made by oiled lint, to arrest hæmorrhage and provoke sloughing of the tumour.

In three of his published cases, however, the tumours were not gouged. In one, the tumour was broken up by a pair of sharp scissors.

I may say that, through the kindness of Mr. Brown, (who has given me the notes of several of his cases, even hitherto unpublished), I know of two more examples in which, after the incision of the os, the tumour was broken up by scissors; in all of which recovery, in one case disappearance of the tumour, followed.

But a method which is likely to supersede in great measure these more bloody operations, is simple incision of the os, subsequently carried right through a portion of the tumour.

A published case of Mr. Brown, given in the *Obstetrical Transactions*, vol. iii, p. 76, is, however, peculiarly interesting, as the cure was open to ocular inspection, a piece of good fortune not always met with.

This was the case of a single woman, in whom, some seven years previously, he had removed from the os uteri a fibrous growth of about the size of a walnut; and in whom, at the time of the second operation, he had distinctly made out three fibrous tumours just within the os and projecting into the vagina. The os and cervix were freely cut open; and then each of these tumours was deeply cut into; the cut surfaces being dressed with oiled lint, and the vagina plugged. All these dressings were removed in forty-eight hours, and the vagina daily injected. A month afterwards, two out of the three growths had entirely disappeared, and the third was reduced to half its size.

In two other unpublished cases furnished to me by Mr. Brown, the same result was as conclusively observed. I do not dwell on these, because they are as yet unpublished. Altogether, he has mentioned to me ten cases in which this simple plan of incision of the external os was practised with the best results. As these are, however, only a few among several which will shortly be made public, I only ask you to wait and judge for yourselves.

Here we have, then, a practical lesson taught us. The mere incision will suffice to cause the absorption of the tumour. It is a lesson thus taught, from which Mr. Brown appears himself to have profited, as I now learn that in most cases he no longer gouges, but makes free incisions. The plan is safer. Sloughing in the tumour is thus set up, and this is disintegrated, and diminishes in size, and finally disappears.

The treatment which I have pursued in the Samaritan Free Hospital, where the tumour could be reached from the external parts twofold, has been the following: Sponge-tents from time to time; scraping the mucous membrane; and injecting iodine solution or the tincture of sesquichloride of iron. It is not in every case thought necessary to cut open the os.

In April 1861, I employed this method on a woman, aged 43, who suffered from menorrhagia induced by a large fibroid. This filled the pelvis, and was situated in the posterior wall. The os could be felt high up behind the pubes. The sound penetrated about

three inches. The os was dilated. An attack of peritonitis supervened; from which, however, she recovered well. She left the hospital relieved, feeling much better, and conscious that the tumour had diminished in size.

The supervention of peritonitis, after even so simple an operation as opening the cervix, should here be borne in mind in estimating the mortality. Mr. Brown has lost three out of the ten mentioned. I have known of two cases of death from the same cause, and several in which peritoneal symptoms supervened, but were happily successfully combated. Patients seem also liable to peritonitis for some time afterwards. In a case of flooding from a fibroid, a free incision through the os and tumour was followed by the most satisfactory results, both in stopping the hæmorrhage and reducing the size of the tumour, and the patient returned apparently cured to her own home; but in a few days subsequently peritonitis set in. The *post mortem* examination revealed cellular abscess, which had burst into the peritoneum.

We must, therefore, be prepared, even in so simple an operation as the mere incision within the tumour, for accidents. Upon the whole, however, if we bear in mind that the tumour, if once wounded, will not heal, and must undergo partial sloughing or absorption, it is clear that an incision, if performed within prudent limits, is equally as efficacious as the gouging or breaking down of the tumour. These limitations must, however, be attended to. A series of small and successive wounds will produce less constitutional disturbance than one large one. Between the operations, the patient has time to rally and gain strength. The operations may not be so grand and striking; but they are safer for our patients, and this, after all, is the great end of every surgical interference.

Another point, however, has to be touched upon. In my second lecture, I spoke of the difficulty of making a correct diagnosis of the exact position of fibroid tumours, if high up above the true pelvis. It is true, that I then pointed out to you how, by the pelvimeter, you might often make out the diagnosis more correctly. Still, if the cavity of the uterus be short, if the bladder do not extend high up, if the rectal examination be not satisfactory—then the diagnosis must be obscure; and you may, by incising the os, get into the peritoneum, as occurred in one case I then mentioned. There is another disadvantage, also, which will at once strike you from what has been before said; that, in attempting enucleation in a case where the fibrous tumour is above the true pelvis, and not easily reached from below, the traction exercised to bring it down must of necessity be more forcible, and the risk of the operation proving fatal by peritonitis following the traction be greater. Any attempt, therefore, at enucleation in such cases must be very doubtfully determined upon, and even mere incisions very carefully made, lest the peritoneum—of the posterior or anterior *cul-de-sac* especially—be wounded.

[*To be continued.*]

Mortality among Physicians. Five members of the resident medical staff of Bellevue Hospital, New York, have paid the forfeit of their lives, and ten more have barely escaped death, since the 1st of May last, from fever, contracted in the discharge of their duties.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

TWO CASES OF NECROSIS OF THE BONES OF THE GREAT TOE, TREATED CONSERVATIVELY WITH SUCCESS.

Case i. F. F., aged 52, was admitted November 10th, 1863, under the care of Dr. Page, with necrosis of the bones of the great toe. There was a fistulous opening and considerable enlargement; the fleshy parts were otherwise in a healthy condition. The patient was unable to walk on the foot. The operation was as follows. An incision was made in the track of the diseased bones, and another across the metatarso-phalangeal articulation; the first phalanx was removed with a forceps, and the head of the metatarsal bone nipped off. The wound was brought together with sutures, and water-dressing applied. The patient was discharged cured in twenty-one days.

Case ii. H. G., aged 54, was admitted March 1st, 1864, under the care of Mr. Porson, with partial necrosis of the phalanges of the great toe and the head of the metatarsal bone. The operation and result were the same as in the previous case. The patient was discharged cured in twenty-six days.

These two cases are interesting as examples of conservative surgery. Mr. Fergusson, in his second lecture at the College of Surgeons, alluded to one or two cases where the thumb or finger was saved; and a case is reported in the *Lancet* of June 4th last, at the West London Hospital, of partial necrosis of the phalanges of the forefinger, under the care of Mr. Teevan; several pieces of dead bone were gouged away, and an useful finger was the result. In both the cases treated at the Portsmouth Hospital, though the first phalanx of the great toe was removed, with the head of the metatarsal bone, no lameness followed. The patients, both labourers, are now following their usual avocations, doing heavy work. A short time ago, amputation would have been performed in both cases.

Original Communications.

FOREIGN BODIES ON THE SURFACE OF THE EYE: THE SUBSTANCE OF A LECTURE.

By Haynes Walton, F.R.C.S., Surgeon to the Central London Ophthalmic Hospital, and to St. Mary's Hospital.

Gentlemen,—You will not long be in practice before being called on to exercise your skill in the removal of substances from the eye. From the commonness of the accident, you cannot escape an application. The frequency of it, and the pressing necessity, causes the aid of non-professional persons to be sought.

The nature of the injury varies from the most trivial and temporary inconvenience to consequences

fatal to the eye; and the ill result depends on the size of the thing that is lodged on the eye or entered, the force with which it is projected, and the mode of attachment. So that the eye may be damaged or destroyed at once, or ultimately by secondary causes.

It is wholly unnecessary to describe minutely the symptoms of a patient thus injured; the thing is self-evident. The sensation, the irritability of the eye, with the flow of tears, and the almost impossibility of opening it, all point to the fact.

When a substance is lodged within the eyelids, the patient may be able to define its exact seat—a matter of some moment; but when he cannot, and a survey of all the exposed parts of the eye fails to detect it, the eyelids should be retracted, and a greater surface of the globe of the eye exposed, the entire cornea, and some of the sclerotica beyond, rendered visible, Should that not suffice to reveal it, the interior of the eyelids must be searched—the under by depressing it and pulling it from the eyeball, which should be directed upwards; the upper by reversing it, that is, turning it inside out. Nineteen times out of twenty, the object sought will be found about midway on the tarsus, and rather near the edge. Yet, with all this, a small extraneous substance may still remain concealed, as the recess of the upper eyelid has not yet been exposed; and to unfold or open it to view, a narrow spatula, or paper-knife, or something of this kind, is required. But a minute particle may still escape observation in this situation, especially by artificial light; for the peculiarity of this recess may prevent perfect and satisfactory exposure. A jet of tepid water, thrown up from a syringe with a bent pipe, projected with sufficient force, should be employed whenever, in such a case, there is reason to suppose that anything remains. There are occasions when, from the multitude of the particles, the syringe cannot be dispensed with.

From less sensitiveness of the oculo-palpebral fold of conjunctiva of the upper eyelid—the sinus, as it is more frequently called—the presence of a body may not be felt, or suspected, till suppuration or inflammation ensues, or a fungus sprouts out.

It is strange, indeed, that in these instances the occasion or time of the intrusion of the substance may have been quite disregarded, or brought to mind only when questions are put about the probability of such an occurrence; and weeks and months may elapse between the period of the accident and the first symptoms of distress, which are generally ushered in by conjunctival inflammation, with mucopurulent, and ultimately purulent, discharge, like an ordinary purulent ophthalmia. Many of such remarkable cases have been treated by me; and some of which I have recorded in my ophthalmic work.

On the cornea, next in frequency to the inside of the upper eyelid, do the intruded particles attach themselves. When very minute, they are apt to be overlooked, especially if opposite the pupil. They may merely rest in opposition, or be embedded in the anterior elastic lamina, or impacted in the true corneal tissue. In all instances, they should be removed. The chief difficulty consists in retracting the upper eyelid, and steadying the eyeball. This preparatory step demands well doing; and, as it is required in all the difficult and important operations on this portion of the eye, it should be well learned. Some men never thoroughly master it, and therefore such individuals must ever be inferior operators. Of course, if any assistance can be got from retractors and other appliances, they ought to be used. The best instrument for detaching, or hooking out the particle, is a miniature gouge. It is more generally applicable than any other, and injures the cornea less. I have succeeded with it, when other men have failed with needles, cataract-knives, and other angularly pointed blades. A little nicety is required in the manufacture; but this is well understood by Weiss. A minute pair of forceps I have found useful in removing wood splinters. In some few cases, I have incised the cornea a little before I could extract certain bodies.

Everything that relates to injury or disease of the cornea should be regarded with deep interest, as the sense of sight is more frequently impaired by the spoiling of this part of the eye than any other.

Always persevere in your attempts to extract a body, so long as it has not passed beyond the cornea. The exception must be under very peculiar circumstances. In the natural process of separation by ulceration, or by sloughing, there is more or less risk to the integrity of the eye from opacity or partial staphyloma; and more certainly there is danger of entire destruction of the organ from suppuration of the cornea, and, it may be, of the eyeball. Even the remarkably rare occurrence of a body being encysted is not without its perils; for I have known the accompanying action prove fatal to the integrity of the retina, and destroy sight. I have seen ulceration of the cornea, and prolapse of the iris, occasioned by the presence of a particle of iron that had entered a week before, but which was so diminutive that a surgeon did not detect it.

I could quote many parallel cases of danger to the eye, even when the foreign body had been superficially placed. The only exception, I imagine, to interfering, except to gratify a patient, with any extraneous substance in the cornea, is when we find it deeply embedded, and many days or months have elapsed without any ill effects arising—the surrounding portion of the cornea not being hazy; and pain, vascularity, and lacrymation absent; or when there has been complete cessation of all acute symptoms.

In such cases, the process of encysting takes place; a layer, or bed of new material is deposited. But such a chance must not be trusted to, nor at all calculated on; for it is a very rare occurrence, and may never happen in the long experience of a man. Besides, the form of a body, and the peculiarity of impactment, may prevent it, as in the case of a bit of iron, with one end protruding on the inner side of the cornea. The irritation that is then set up is sure to spoil the eye. Notwithstanding the long and persevering attempts that I have made many times to remove deeply embedded things, I have never had any ill result. Never has there been suppuration of the cornea; nor in the anterior chamber; nor has there been inflammation of the eyeball.

After a metallic fragment, especially of iron, has been removed, some rust, or mark, or stain, may remain. This is of no consequence, and should not be pricked at, nor be attacked with chemical reagents; for it is soon cast off. Very little practice enables a surgeon to ascertain when the particle has been removed. Carbonised and other substances act similarly; and without a knowledge of this, unnecessary injury may be inflicted. I have known vegetable matter produce stain.

The employment of magnets has repeatedly been suggested as an easy and effectual means of extracting bits of iron and steel; and various shapes have been given to them, some pointed, some crescented, and so on; but they are mere playthings, and not of any practical value.

After-treatment is seldom required; the symptoms disappear as readily as they were manifested. When inflammation has been severe, and there is pain, with heat and intolerance of light, a fold of thin rag, large enough to cover the eyelids, dipped in cold water,

applied, and renewed every few minutes, will soon give relief. The addition of some narcotic to the water may be useful. This, with rest to the eye, quiet of body, moderate abstinence, amply suffice for every case.

In all instances, the eye should not be rubbed and irritated. The sensation of something remaining often exists long after the extraction.

I suspect that the majority of metallic particles that get imbedded in the cornea are forced in by the common habit of rubbing the eye when anything enters.

No advantage would accrue from my enumerating the various substances in the mineral and vegetable kingdoms that may enter the eye.

The conjunctiva may be penetrated, and a particle of matter remain between it and the sclerotica. Encysting is likely to follow. I have seen several examples —I should say many—although I have never operated. The patients have either applied to me on account of something else, or I have met with them accidentally and spoken to them about the matter. Iron and copper have remained encysted for years.

The sclerotica itself is often penetrated, and retains bodies without much inconvenience. I have several times removed them when troublesome by snipping through the conjunctiva, raising it from its attachment, and then accomplishing the desired end. Generally it has been metal that has entered, and forceps have been required for the extraction. I do not include in these remarks, injury to the eye from lime and other chemical agents.

The larvæ of insects are sometimes found beneath the eyelids; and this is not very astonishing when we remember that flies deposit their larvæ in different parts of animals. The occurrence has been noticed after a fly has accidentally entered the eye. It has occurred to drunken men asleep in fields. Several cases are on record of the successful removal of the worms. I know of one only in which the eyeball was damaged through perforations.

DEATH WITH TETANIC SYMPTOMS: THE CORONER'S COURT.

By T. C. Leah, L.R.C.P.Ed., Hyde, near Manchester.

Elizabeth Shaw, aged 14, the daughter of a beer-house-keeper, a stout robust girl, previously in good health, was seized about 2 P.M. on Thursday, June 30th, with violent tetanic spasms, persistent in the trunk of the body—opisthotonos—but alternating with relaxation in the extremities. The slightest touch, as the act of examining the pulse, brought on a return of the spasms in the extremities, as if from an electric shock, and increased the trismus. The head was forcibly drawn back; the face flushed; the surface warm and moist; the pulse weak and irritable; the muscles of the abdomen were much retracted; the feet incurvated; the intellect was unimpaired. There was no vomiting from the commencement of the symptoms to the time of death, which occurred before any remedial measures could be adopted, and under an hour from the first attack.

In reply to inquiries, the mother reported that the girl had not partaken of dinner, nor of food nor liquids since breakfast, so far as she knew; that she had not complained of illness, not taken any medicine; had received no wound nor bruise; had no cause for mental anxiety; that, in fact, she had been unusually cheerful during the morning, and had taken an active part in household duties and the family washing till the seizure. The catamenia, which commenced on the previous Saturday, had ceased on the evening before the seizure; and to this circumstance the girl had directed her mother's attention.

I declined to certify the cause of death, and advised the case to be reported to the coroner for the district. An inquisition, I understand, was held on the 2nd inst.—the day but one following the death. No medical evidence was taken; no *post mortem* examination was made; and a verdict of "Died in a fit" was returned.

The details of this case may possibly be interesting, as affording an illustration of the inefficient manner in which coroners' inquests in sudden and doubtful deaths are frequently conducted, and verdicts recorded, without the slightest medical evidence. A medical coroner would, I think, have considered a full and rigorous investigation imperative, with such characteristic symptoms present during life, conjoined with so rapidly fatal a termination.

[There can be no question that not holding an inquest in a case such as here described is quite inexcusable. The symptoms assuredly much more resembled those of poisoning than of disease. Editor.]

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF DISEASED HUMERUS.

By Charles Steele, M.R.C.S., L.R.C.P.

[*Read at Clifton, April 28th*, 1864.]

The patient, from whom the specimen now before you was taken, was seen by me for the first time in August 1863. The history of the case then given to me was as follows.

About eighteen months previously she felt aching pain, similar to that of rheumatism, in her right shoulder. In addition to this pain, there were soon perceived puffy swellings, between the metacarpal bones of the thumb and index finger, and of the index and middle fingers; these swellings used occasionally to appear, continue for a short time, and in a few hours subside. Aching pain from the hand to the elbow, and from the elbow to the shoulder, was also felt. These symptoms, occasional and slight at first, gradually increased in frequency and intensity. The suffering was noticed from first to last, to be most severe at one o'clock in the night. The following occurrence, which took place in November 1862, with its consequent alarming increase of symptoms (the pains having previously not been very much noticed or complained of) was the first to draw the serious attention of the patient and her friends to her state, and make them seek assistance beyond their own household remedies.

One day she perceived her son, who was near her, slip; and, in order to prevent his falling down, suddenly extending her right arm, gave him a good push (bending back her fingers in doing so). She immediately felt as if she had struck first the elbow and then the shoulder, and as if the arm were broken. The same night she complained of great pain in the shoulder. After this she was never able to cut her own meat, or to raise a teapot or any such weight; but could for some time feed herself, and perform slight actions. The hand swelled much, and was obliged to be kept in a sling. The upper extremity also required to be kept warm, as increased pain was complained of on its becoming at all cool. At first, and for some long time, considerable relief was experienced from the application of hot water; this failing, ease

as obtained by bathing with camomile fomentation, nd afterwards with poppyhead fomentation. Then the arm becoming too tender to bear bathing) flannels, wrung out in hot water, and laid on the painful arts afforded comfort. Sleep followed the relief occasioned by each of these consecutive remedies.

In February 1863, the scapula seemed to drop backwards and outwards from the ribs. At the same time swelling, which was always of a rounded shape, ormed over the last cervical vertebra; this was variable in size, sometimes hard, remaining so for a week r longer, then softening. Pain was occasioned by it, which, when the swelling was large, was extended with a dragging sensation into the eyes. In August 863, this enlargement began to diminish, but it never vanished; it was relieved and lessened by a iniment containing turpentine, camphor, and vinegar.

In January 1863, swelling began in the deltoid region of the right shoulder; this, rounded in form, ometimes very large but variable in size, was at imes hard, afterwards becoming soft, but always stiff after being hard. The veins also of the forearm became varicose. A slight see-saw motion backwards nd forwards continued for a short time gave relief, nd appeared to the patient to put something in place n the shoulder; the same motion from the side outwards greatly aggravated the suffering.

For many weeks during the months of March, April, and May 1863, the patient used to have at one o'clock at night fearful attacks of pain, during which she could let no one touch her, and not unfrequently did not know those around her for a short time; she screamed dreadfully, being heard in the street and neighbouring houses. She flung off the clothes, and threw about freely the right arm (which, except during these paroxysms, she could not bear to be moved). These attacks lasted an hour or more, and after them she sometimes fell into a stupor, but at other times continued restless. For some months subsequently, these attacks were of less frequent occurrence.

Previously to my seeing her in August 1863, she had been attended by other practitioners, and had out of many remedies tried, found most relief from a mixture of carbonate of iron and treacle, which even prevented her having the paroxysms of pain so frequently. This, however, had to be discontinued, on account of its causing constipation and pain in the bowels. Chlorodyne internally gave temporary relief, easing her much and causing sleep, but it caused sickness. Externally, a liniment containing chloroform gave relief for the first few days. Oil of horse-chestnut gave much and prolonged relief at first, but lost its effect in eight applications. Pine oil increased the pain. Laudanum mixed with water gave temporary relief, deadening the maddening pains.

In August 1863, when I saw her first, I found her a large, fat, flabby woman, of pasty complexion, aged 59 years, lying on her back with her right hand lying on her epigastrium and looking helpless, having considerable swelling on the deltoid region as previously described, which, however, was so tender as not to bear touching for examination, but only slight swelling on the last cervical vertebra, complaining of the afore-mentioned pains, and also of a feeling in the skin of the forepart of the forearm, as if it were scraped with a knife. This sensation was greatly relieved, in fact almost removed, by painting the part affected with volatile solution of nitrate of silver. She had very little appetite, it having been bad from the commencement, and remaining so until the end of her illness, her main food throughout being a very little thin bread and butter to eat, and water to drink. Spirits, wine, beer or porter, each time they were tried, greatly aggravated her sufferings, and consequently were never used. At this time she was able to pass from one room to another and lie on a sofa during the day; but after November 1863, she never could leave her bed.

I tried various external applications, but none gave real relief except aconitina, one grain of which in a drachm of fat gave at first a night's rest, then a few hours' quiet, and lastly, not more than two; and then the pain produced by the exposure to air and rubbing on the ointment became so severe, as to cause this to be discontinued, and nothing but flannel to be applied. One regular temperature of about 70° in the room could alone be borne; any increase or diminution of heat directly bringing on intense agony in the arm. Of internal remedies which I prescribed, very great comfort was experienced from the following:—

℞ Sodæ hypophosph. gr. x; acidi phosphoric. dil. ♏x; syrupi et aquæ ad ℥i. M. Fiat haustus ter die sumendus.

My patient more than once remarked to me respecting it, "There must be something to cause sleep in that medicine, for I often fall asleep in the day-time after taking it"; and on several occasions when she was unable for some days to procure the medicine, she *invariably* became worse. This mixture she took from September 8th, 1863, till a fortnight before her death, which took place on January 23rd, 1864. This, however, could not ward off her fearful night attacks, and hyoscyamus with camphor, conium, and belladonna, having failed to abate them, recourse was had to morphia. This, from being taken in drachm doses of solution of acetate of morphia once or twice a week in September, and giving occasional good nights' sleep, was increased in quantity and frequency until latterly it was necessary to give it every night in doses of eighty or even ninety minims, with sometimes a repetition of a drachm; and even then sleep was not always obtained. On one occasion one hundred minims were given at a dose. Latterly, the afore-mentioned frightful paroxysms of pain became of daily as well as nightly occurrence. It may be wondered that I did not administer chloroform during these attacks; but I was deterred from doing so by my patient giving evident manifestations of having a fattily degenerated weak heart.

In Christmas last, vital energy appeared to be succumbing to the torture; but she rallied, and lasted until January 23rd, when after one week of sinking, during which she could take nothing but a few drops of water at a time, she expired.

The friends willingly acceded to my desire to make a *post mortem* examination; which, however, owing to the medical friends, whom I could ask to be present, not being able to attend, and my having only the assistance of a female relation, was not so complete as was desirable. The shoulder only was examined. It was greatly swollen; the prominence being principally in the deltoid region, and giving an elastic feeling to the touch. A longitudinal incision being made, skin, a half-inch layer of fat, and a layer of attenuated muscle, were exposed; then a membrane-like layer of fascia, containing first a thin layer of soft white brain-like substance, and within this a large accumulation of thick brown mucilaginous fluid, which escaped freely. The finger introduced through this fluid impinged on these long slender laminæ and spicula of osseous growth, now to be seen in the specimen before you. The bone was remarkably brittle, scarcely requiring the use of the saw to divide it; and the soft connections about the head of the bone readily tore away with an occasional touch of the knife. The upper two thirds of the humerus, and the scaphoid fossa and inferior border of the scapula were denuded and roughened on all parts; there, however, being very few spicula, and those few very short, on the scapula.

These laminæ and spicula stand at right angles to

the shaft of the humerus, are very thin and fragile—are densely packed except where large interspaces are left; some of the spicula are an inch and a half long, most half an inch to an inch long. They are most prominent on the deltoid region of the bone, and again, on the inner border of the shaft.

One fact mentioned in description of ordinary osteo-sarcoma is that little pain is felt. In this case pain was the leading feature, so constant and intense, as to lead me to expect to find at the *post mortem* examination, cancer, probably cerebriform, in relation to the brachial plexus of nerves. But these two circumstances appear to me to account for the great suffering; namely, the extremely soft nature of the inter-osseous substance leaving the spicula of bone bare and prominent, and the close relationship of the brachial nerves to the diseased mass. The inevitable result being the constant free application of a large bone brush to the assembled number of the main trunks of the nervous supply of the whole right upper extremity. The scraped sensation experienced in the cutaneous nerves of the forearm is interesting in a physiological view, it being doubtless caused by scraping of the main trunks near the shoulder joint by some bony point; and is closely analogous to the feeling experienced in stumps, as if the amputated toes or fingers still remained in connection with the body.

British Medical Journal.

SATURDAY, JULY 16TH, 1864.

THE ARMY MEDICAL SERVICE.

THE exertions lately made by the British Medical Association to improve the condition of the army medical officer cannot fail, sooner or later, to have a beneficial effect. If red-tapism and dull officialism still choose to shut its eyes and ears to the plainest facts and the most unmistakeable of hand-writing, still there is happily a force—that of public opinion—that can see and duly appreciate them. And it is, we fear, through this influence alone that we can hope to see reforms effected in the Army Service. All experience teaches us the lesson. The movement referred to, it is true, can hardly be passed over without producing some useful effect. When the President of the Royal College of Physicians, the President of the Royal College of Surgeons, and the President of the Medical Council, backed by a powerful body of leading members of the profession, all unanimously appear at the door of the War-Office and of the Horse Guards, and tell the chiefs of those departments that the medical profession will not enter the army unless a due and fitting position is assigned to its members—when this consent of opinion is thus forcibly demonstrated—the movement cannot be pooh-poohed. It is a fact which must receive due attention.

But so far as the War-Office and the Horse Guards are concerned, we must candidly say that, as far as we can read the results of the interviews of the deputations with them, little is to be hoped for from them. There is little hope that any amelioration of the army surgeons' condition will spring from any action of theirs. To us the results of those meetings seemed to say, it is only by pressure from without that anything can be gained.

Most strikingly was this exemplified in the interview with the Commander-in-Chief. He had two steady stereotyped answers to every statement that was urged: That point, gentleman, is a matter of *discipline*; the army lives and breathes through discipline; discipline is its soul and essence; and that other point, gentlemen, is a matter of *finance*. We must, above everything, maintain discipline, and your demands interfere with discipline; therefore, they cannot be listened to. And as for the other point, really we cannot touch it; the Chancellor of the Exchequer holds the purse-strings of the country, and what you ask is really all a money question. You must go to the Exchequer about that.

The position, therefore, assumed by the army authorities seems to be well defined. They will, of their own motion, grant nothing. "Whatever is, is best", in their esteem.

Unfortunately, in the House of Commons, we have no medical representative who is capable either of understanding our professional sentiments, or of bringing them forcibly under the notice of public opinion. But there is one gentleman there, at all events, General Peel, who is thoroughly acquainted with the whole history of this affair, and who has always shown himself a warm friend of the army medical surgeon. Why should not this gentleman be requested by our Association to bring the subject under the notice of the House? In cases of this kind, before all things, what is wanted is publicity and discussion before the public. We throw out this suggestion, and hope it may fructify.

But, in the meantime, we must strongly urge upon the profession, this one thing above every other, that they hold together. Let our brethren be resolved to maintain the position they have assumed, and assuredly they will gain their point. Why? Have we not manifestly got the game in our own hands? Let men refuse to take service on terms which they hold to be derogatory, and necessarily they will win the day.

Most assuredly, unless we have misread the intentions of the Horse Guards, so long as medical men—qualified medical men, of any age or description—can be got to do the work of the army, so long will the present condition of the army surgeon remain unchanged. As for high-classed men, it is certain, that they are neither sought for nor desired in the army. The Duke of Cambridge has manifestly a dislike to competitive examinations; and, in fact, as he said, regards them as one of the chief causes of

lling off of applicants for army medical honours. he Horse Guards theory and the Netley School eory are evidently totally opposed.

For our own part, we cannot but regret that the eputations did not refer more markedly to the pro- ssional grievances under which the army medical fficer labours. These grievances, at all events, are istinct and tangible, and can be traced home irectly to the Horse Guards. They are grievances hich originate and date from the Horse Guards; nd the Commander-in Chief could not in their de- ence have sheltered himself behind the plea of dis- ipline or finance. His department alone is respon- ible for them. Our own opinion is, and has been rom the first, that many of the most positive evils hich affect the army medical officer may be traced ome to the immediate management of the medi- al service. Let any of our readers look at the long ist of professional grievances of the army medical fficer detailed in the pages of this JOURNAL, and sk himself if these are not of a kind which lie olely at the door of the Army Medical Direction? Who is responsible for the burthensome economy which presses in all directions upon the army medical officer? Who is responsible for the wrong and harass which meets him when he would faithfully perform his duties outside of a dull routine? Who is responsible for the system of confidential reports, which requires of the surgeon that he should report touching the estimation in which his assistant-surgeon is held by the commanding officer of the regiment? Who is responsible for the short shrift given to the medical officer when sick? In a word, who is responsible for those many professional grievances of which the army medical officer so sorely complains, and which we have elsewhere fully detailed, except the Army Medical Direction?

Admitting that the Medical Direction has no power over Queen's Warrants and Horse Guards' Orders, still it is manifest and clear that it has an immense power in the direct management of the department over which it presides—over the details of the medical service. Will any one believe that, if the Army Medical Direction had shown and manifested a warm and fitting sympathy with its army medical brethren, it would have so thoroughly alienated their feelings? Are we to believe that the body of army medical officers would have been so grossly unjust as to complain of a chief who had done his best to promote their interests? Are we to believe that these gentlemen would not rather have come forward and expressed their deep sympathy with him, than have so widely and so loudly uttered their complaints?

We admit the difficult position in which the Army Medical Direction is placed. But that Direction is a very high and a very responsible position; and happy and well is it that he who occupies it should feel that he has to give an answer to his profession, as well as to his superiors, touching the performance of his duties. Instead of cavilling at that Direction, gladly would we give our aid to it in the carrying out of reforms in the Army Medical Service. But, in the performance of our public duty, we feel that there are others who have a claim upon our consideration—a far greater and higher claim; we mean our army medical brethren. By their very peculiar position, they are debarred from the making of complaints. In the army, and most properly, to hear is to obey. It is, therefore, in their behalf especially that we feel bound to speak firmly and uncompromisingly. It is only through us and the profession that their complaints can be heard—their just demands receive a hearing. Glad also are we to find that not a single one of the many complaints of the army medical officers detailed in these pages is capable of disproof, as being untrue. We have admittedly stated the simple truth. Let the Army Medical Direction only exercise all the influence which it possesses—which it must possess—in favour of the army medical officer, and we will promise the Direction that, even if its efforts fail in accomplishing the ends desired, it shall still receive the warmest thanks, the best support, and the sympathy of the profession at large. Let the Direction only put forth its best exertions in the alleviation of the army medical officer's grievances, and we will promise that, whether its exertions be or be not crowned with success, it shall still receive the applause and thanks of the whole Army Medical Service. But in so far as that Direction is responsible for the grievances of the army medical officer, and so long as the Direction takes no action to alleviate those grievances, over which it has undoubted control, so far and so long shall we consider it our duty to call that Direction to account at the bar of professional opinion.

In conclusion, we must in justice observe that the different deputations were received with the greatest courtesy, and listened to attentively. The Duke of Cambridge expressed the highest admiration for the medical profession; all his combatant brethren in the army look upon the medical officer as a friend and a brother, and have the warmest and best feeling towards him when he conducts himself properly. Dr. Gibson assured the deputation which waited on him, that he had always had his heart and best wishes in his profession; and that, since he had presided over the department, he had done everything he could to advance the position and secure the comfort of the army medical officer, and most anxious was he still to do so.

But what is the upshot of the deputations, when we come to look *ad rem*—when we come to total up the actual proceeds? There was that impalpable quantity (which, of course, must be estimated according to the different impressions derived from the

various interviews by the gentlemen who formed the deputations) represented by the moral influence exercised on the heads of departments; and, as we have already said, such an unanimous expression of professional feeling can hardly be without some useful effect on the official mind, even though it be merely of a temporary character. But there was also, alas! to every proposition the convenient official reply of a *non possumus*. Infallibility itself could not have more blandly uttered the impassable negative. Moreover, unless we misread the official Horse Guards mind, behind the expressed *non possumus* there peeped out an unmistakable *nolumus*. There was no spark of that *will* shown which is notoriously so often the father that points out the *way* how to do it.

Such is the impression which we derived from these interviews. We think it right, therefore, to throw out no false hopes to our brethren either in or out of the army. We tell them that the conclusion we have arrived at is this: that, if ever they get the things they now ask for, it must be through their own action, or rather complete inaction. There is little hope of help to be had by appealing to Jupiter. They must put their own shoulders to the wheel to get them out of the mire. So long as qualified men (we mean in the legal sense) can be persuaded to come forwards by the hundreds in answer to such a degrading advertisement as that issued by the Director-General, so sure may the profession be that the condition of the army surgeon will remain unchanged. The Horse Guards does not expect, nor, as we fancy, desire, that first-rate men should enter the army. It dislikes the competitive examination. It does not pretend to attract the *élite* of the profession. Men in the third class at Netley, it confesses, are quite good enough for its purposes. As we were last year told, at the meeting of the Branch of the Association at the Crystal Palace, by a competent army authority, a gentleman not of our department in it: "Gentlemen, by your own right arms alone can you ever obtain what you ask for. Use them, and you will obtain it." To his words we fully subscribe.

In conclusion, however, we must observe, that Lord De Grey, unlike the Horse Guards, did show some signs of a desire to do justice, although he promised but little. His lordship has, happily, not yet got his mind thoroughly tied up and docketed with Horse Guards' red tape. He showed himself to the deputation to be thoroughly master of the subject of the army medical service, and promised to give it his most careful consideration. That Lord De Grey's promises are not mere words of compliment, we have the proof in the fact, that he has already appointed a commission, consisting of Sir James Clark, Dr. Parkes, and Dr. Sutherland, to investigate the subject. He has been happily inspired (and the sign is a hopeful one) to take none of the Horse Guards officials into his councils. The report of this commission will be a most important one; and it is hard to see how Lord De Grey can escape from adopting its conclusions. A commission appointed by himself and composed of men of the above position, cannot fail to have great weight with the country, and to influence the opinion of the Government. That it will have any influence on the stolid pachyderms of the Horse Guards, we do not for a moment believe; but even his Royal Highness the Commander-in-Chief is amenable to public opinion.

Our associates who intend to go to the meeting at Cambridge will be probably gratified to learn that the local committee have made arrangements with the Great Northern and Great Eastern Railway Companies for the issue of return tickets during the period of the meeting, available up to the 6th August inclusive. Members, to obtain them, must produce vouchers, which may be had on application to Dr. P. W. Latham, Sidney Street, Cambridge.

Professor Panum of Kiel has lately published, in Virchow's *Archiv*, a treatise on the quantity and the quality of the blood in animals deprived of food. His experiments bring forth conclusions totally opposed to those which have been hitherto accepted as the legitimate results of Chossat's and Bidder and Schmidt's researches. Panum maintains, contrary to these observers, that changes in the quality and quantity of the blood are not to be regarded as the main facts in the fatal effects which follow inanition. Panum maintains: 1. That neither the quantity of the blood in relation to the weight of the body, nor its essential constituents, especially the blood-corpuscles and the fibrine, are altered in any marked degree even under complete inanition; 2. That the colouring matter of the corpuscles is not essentially altered by inanition. And from this it follows that the blood is not *in toto* the nutritive material, but only its means of conveyance, or the medium of applying the nutritive matters taken up in the stomach, etc.; that neither are the blood-corpuscles nor the fibrine essentially nutritive materials; that a certain portion of the albuminous matter of the serum must be regarded as essentially nutritive matter of the body; that the essential symptoms of inanition do not result either from want of blood, nor from impoverishment of it, nor from deficiency of red corpuscles; but upon weakening of the nervous and muscular systems, and of the circulatory organs, consequent upon the absence of the nutritive materials required for their support. Consequently, it results from this, that transfusion of blood cannot help those suffering from inanition; and that such transfusion will impede rather than assist recovery.

The annual meeting of the Metropolitan Counties Branch was held at the Crystal Palace on Tuesday. In retiring from the presidency, Dr. Sibson gave a sketch of the proceedings of the deputations which had lately waited on Lord De Grey and Ripon, the Duke of Cambridge, and Dr. Gibson, on the subject of the Army Medical Service. The proceedings of the deputations apparently gave universal satisfaction to the members of the Branch who were present. The Lancashire and Cheshire, the West Somerset, and the North Wales Branches have adopted memorials similar to those presented by the Metropolitan Counties Branch. On account of the length of the reports of the deputations, we are obliged to defer the reports of several Branch meetings until next week.

We last week gave a condensed account of the Chloroform Committee; and our readers will not think the Report has come any too soon. We now regret to have to state that, within the last week or two, three deaths from chloroform have occurred in London hospitals.

The July number of the *Journal of Mental Science* contains an original article on a Classification of the Sciences; Dr. MacCormac treats of the Ulster Revival; Dr. Davey has a lecture on Combe; W. M. a paper on Unlearning; Dr. Clouston contributes Cases of Phthisical Insanity; Dr. Westphal, Cases of Tabes Dorsalis, etc.; and Dr. Ogle, Cases of Primary Carcinoma of the Brain.

The annual meeting of the Council of the Royal College of Surgeons, for the election of officers, took place on the 14th inst., when Mr. Joseph Hodgson, F.R.S., of Westbourne Terrace, was elected President of the College, in the vacancy occasioned by the retirement of Mr. F. C. Skey, F.R.S., of St. Bartholomew's Hospital; and Messrs. Thomas Wormald, of the same hospital, and Francis Kiernan, F.R.S., were elected Vice-Presidents for the ensuing year. At this meeting of the Council, Messrs. Frederick Le Gros Clark, of St. Thomas's Hospital, and Thos. Blizard Curling, F.R.S., of the London Hospital, the recently elected Councillors, were sworn in and took their seats.

Mr. Turnbull has obtained, through M. Flourens, a commission, who are to decide, in due course of time, as to the value of the process by which Mr. Turnbull undertakes to restore their hearing to those who are not wholly deprived of the sense.

Dr. Fischer has written a treatise on the treatment requisite after tracheotomy. He dilates upon the extreme care required in the matter of clothing, bedding, rooms, food, etc. We fear it is too often forgotten, that the success of tracheotomy depends far more on the subsequent management of the case than on the mere operation.

M. Foley has discovered the uses of "inspiration of oxygen". The customs and habits of the present lead men to exhaust themselves *plastically;* and the oxygen inspirations, we suppose, counteract or repair the aplasticity (if we may invent the term).

At the Paris Exhibition of Paintings, there is a portrait of M. Velpeau—"An Anatomical Lesson", the catalogue says. Velpeau, with his large white apron, sleeves turned up, and his arms held forwards, is about to proceed to work upon a dead body in the theatre. Students are grouped around him, in deep attention. The critic hereupon objects to the details. Velpeau has long since given up anatomical demonstrations. Then, again, where is the dissecting-room? Certainly not at La Charité, nor at the dissecting-schools; for a straw chair is not to be found there, nor a stone table, such as are represented in this picture. Velpeau looks, again, as if he were blessing a great naked boy; and the persons around look as if they didn't know what he was about. Besides, as every one knows, he has no nail on the index of his right hand; and the finger does not bend. Why, then, has M. Feyen given him long academical hands, adorned with beautiful nails? M. Velpeau becomes handsome as he grows old. His elevated thoughts, and the constant exercise of noble functions, have at length removed the once harshness of his features. His face is now marked with a calm dignity and a somewhat mournful serenity. *C'est un beau vieillard!* So says *L'Union Médicale.*

All the world will, we fancy, fully agree with the remarks of M. Bouillaud touching the interminable debate going on in the French Academy on the subject of the movements of the heart. "It seems astonishing that a debate on so simple a subject as that of determining the movements of the heart could last so long. One would think that any person possessed of eyes and ears might settle it; and yet for two hundred years it has been matter of debate! M. Beau, however, is alone in his opposition to all the world. The position which he has assumed is interesting, dramatic, and I might even say enviable."

A Savoy doctor gives some account of the "demoniacal epidemic" raging at Morzine. "It is generally believed that one of the predisposing causes of the disease is the Protestant propagandism carried on in this commune, whereby the minds of the people are kept in the region of the supernatural and the invisible, and consciences are troubled. The disease is confined to the parish; and the patients believe that their seizures can only occur within the parish limits. At Annecy, as at Chambery, the head clergy are disposed to leave the matter in the hands of the doctors; for, although they do not reject *possession* altogether, they do not see any signs of *possession* at Morzine. The doctors, who have been sent to investigate the matter, are assisted by soldiers."

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

My rather protracted silence arises not from dearth of material; for, on the contrary, the last two months have been particularly productive of interesting and important cases under observation in our hospitals; and I will endeavour to select from my note-book whatever I think will interest the general body of your readers.

I must allude, to commence with, to the numerous cases of hydrophobia that have occurred in this town. A short time ago, a boy, aged 11, was admitted into the Royal Infirmary, under the care of Mr. Long. He was bitten four weeks prior to admission. Mr. Long ordered tobacco enemata to be given; and, though the case proved fatal, Mr. Long considered that the nicotine of the tobacco acted beneficially in subduing and retarding the violence of the paroxysms. This is, I think, the sixth case that has occurred in this town and neighbourhood; and the frequent appearance of such a malady has naturally created feelings of apprehension in the mind of the public. Stringent measures have been taken by the municipal authorities. The owners of all dogs "at large" are fined, and all stray and suspicious-looking animals are immediately executed by the police. The number of people mulcted in a penalty amounts, I should say, to thirty per day; and upwards of a thousand dogs have met with an untimely death—the genus "mongrel", I presume, suffering a greater diminution in their ranks than their more aristocratic relatives. It is to be hoped that these means will prove effectual, and that we shall have no further instances of so distressing a disease.

The wards of the Infirmary have lately offered excellent opportunities to those interested in the cure of aneurism, there at present being three varieties of proceeding for effecting the same object; viz., ligature of the artery on the distal side of the sac; ligature on the cardiac side; and lastly, flexion of the limb. As the first mode is not often adopted, I think a few notes of the case may not be considered out of place.

J. L., aged 35, a sailor, was admitted into the Infirmary on May 5th, suffering from a large pulsating tumour involving the parts on the right side of the neck. Above, the tumour extended to a level with the hyoid bone; below, to the second rib; externally, to a point situated midway in the clavicle; and, internally, it encroached slightly on the other side of the median line, the upper portion of the sternum being absorbed. The tumour projected considerably from the contour of the body, and pulsated synchronously with the heart. The right and left pulses were of equal volume, no alteration being apparent. No *bruit* was to be heard anywhere. The patient's voice was peculiarly creaking, and his respiration hurried and stridulous. The diagnosis was, aneurism of the innominate artery. As it would have been almost impossible to place a ligature on this artery, Mr. Bickersteth determined to tie the artery or arteries on the distal side of the tumour, according to the plan recommended many years ago by Brasdor, and practised by Wardrop. On May 10th, Mr. Bickersteth tied the common carotid above the omo-hyoid muscle. The operation gave immediate relief; the pulsations in the tumour were considerably diminished; the voice assumed its natural tone; and the man breathed freely and without stridor. In addition, he was bled from time to time after the operation. On the ninth day after the operation, he complained of general uneasiness; and, on placing the fingers over the right radial artery, hardly any pulse could be detected, the pulse on the other side being of considerable volume. This condition still remains, though it is not so well marked. The ligature came away on the thirtieth day, and the wound is now entirely healed. On June 28th, Mr. Bickersteth tied the subclavian artery outside the scalene muscles. The operation, never an easy one, was attended with unusual difficulties, arising from the limited incision which the position of the tumour necessitated; the communication of the aneurismal thrill to the parts around, masking the true position of the artery; and, lastly, the great depth of the artery from the surface—three inches at the least—the clavicle being pushed upwards by the swelling. The external jugular vein was tied, and cut across, as it traversed the central line of the incision. A very considerable diminution in the pulsation of the aneurism immediately followed the application of the ligature. So far (July 2nd), the operation itself promises to be as successful as the one performed on the carotid just seven weeks ago; but as opinion with regard to its effect on the tumour would now be premature, I shall reserve for a future occasion a further consideration of this very important case.

The second variety—or I might, perhaps, regard it as the rule—is a case of popliteal aneurism, in which Mr. Bickersteth tied the femoral artery in Scarpa's triangle. In this case, it was feared that the aneurismal sac had given way. The patient has done well, though a considerable tumefaction still remains from effusion between the sac and the skin.

With regard to flexion, Mr. Stubbs and Mr. Bickersteth have each in their wards a case where cure of popliteal aneurism has been effected by flexing the leg and retaining it in this position, the treatment being continued interruptedly for a fortnight. Both patients were under twenty-five years of age. All these cases being in the house at the same time rendered their observation and comparison particularly interesting.

Mr. Bickersteth at the Infirmary, and Dr. Grimsdale at the Lying-in Hospital, have each had a case of ovariotomy. In Mr. Bickersteth's case, the prognosis was not very favourable. The patient was 40 years of age, and had never enjoyed very good health. She was exceedingly anxious to undergo the operation. She died from exhaustion. There was

t the slightest peritonitis; in fact, the parts about e wound were entirely destitute of action. Dr. imsdale performed his operation on June 17th. iere were considerable adhesions behind. The pa-nt, I hear, is going on very well, and bids fair to d another to Dr. Grimsdale's list of successful ses.

At the Northern Hospital, Mr. Lowndes informs e that he has been making use of Dr. Simpson's an of acupressure for arresting hæmorrhage after mputation, and so far has been well pleased with e trial. He considers that the stumps heal faster; d there is much less suppuration, and consequently ss risk of pyæmia or secondary hæmorrhage. The st case in which he made use of it was one of am-tation at the shoulder-joint; the patient, so far, is ing well.

At the Children's Infirmary, Mr. Hey has had a tle patient under his charge suffering from disease the knee-joint, where either amputation or resec-on was required. Mr. Hey decided upon the latter ternative. The child has made a good recovery.

Seldom can your correspondent bring his letter to conclusion without having forced upon him the inful duty of recording the death of some brother actitioner. On this occasion I have to mention the mes of two, both of whom were for a considerable riod connected with our local charities. I refer to r. W. B. Wall and Mr. Newton Heelas. Both were the prime of life—both house-surgeons at the orthern Hospital. The former held this office for n years; and, on his retirement, was appointed siting-surgeon to the Toxteth Park Workhouse, here, like many others holding a similar office, he et his death whilst ministering to the comforts of ne poor; typhoid fever proving fatal in a few days. he later (Mr. Heelas) held office for three years, and y his uniform kindly disposition gained the esteem all with whom he came into contact, and by whom is loss is deeply deplored.

In concluding, I may mention that the new wards the Infirmary, erected and endowed by the munifi-ence of the late Mrs. Thornton, are now completed; nd, in compliance with her wish, will specially be evoted to the diseases of women.

To increase the facilities of the study of patholo-ical anatomy, Dr. Rawdon has been appointed patho-gist for conducting the *post mortem* examinations, nd giving instruction in morbid anatomy, in con-exion with the Infirmary. Dr. Graham, for the uture, will give all his attention to the museum con-ected with the school, Mr. Harrison succeeding him s the demonstrator of anatomy.

Aerolites. MM. Daubrée and Cloez give a very nteresting account of some meteorites which fell in he neighbourhood of Orgueil on the 14th of last nonth. The most curious fact mentioned by M. Cloez s that the stone he examined contained a notable uantity of chloride of ammonium, with chlorides of otassium and sodium and sulphates of magnesia and me. Five per cent. of the stone, in fact, was soluble n water.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

President—John A. Symonds, M.D., F.R.S.Ed., Clifton.

President-elect—George Edward Paget, M.D., Cambridge.

All the General Meetings of the Members will be held in the Senate House.

Wednesday, *August 3rd.*

12 noon. Meeting of Committee of Council in the Arts School.

2.30 p.m. Meeting of the General Council in the Arts School.

4 p.m. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 p.m. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

Thursday, *August 4th.*

8.30 a.m. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 a.m. Meeting of the Members of the New Council in the Arts School.

11 a.m. Second General Meeting of Members. Papers and Cases will be read.

4 p.m. Third General Meeting of Members. The Address in Medicine will be delivered by Edward L. Ormerod, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 p.m. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 p.m.

Friday, *August 5th.*

10 a.m. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 p.m. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. Humphry, M.D., F.R.S. Papers and Cases will be read.

6.45 p.m. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. Latham, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception

Room, and will give information respecting lodging-houses.

The principal Hotels are the "Bull", the "Eagle", the "Red Lion", the "University Arms", and the "Hoop".

Return Tickets to Cambridge from London and such other stations on the Great Eastern and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

Notices of Motion. Dr. STYRAP will move the following alteration in Law XV. To insert, after the words "One Guinea annually", "provided that such sum shall be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law XV, by inserting "the 1st of December", instead of "the 25th of December."

Papers have been promised by Mr. Spencer Wells (London); Mr. Sydney Jones (London); Mr. Bridger (Cottenham); Dr. Sansom (London); Dr. Barker (Bedford); Mr. Solomon (Birmingham); Dr. Woakes (Luton); Dr. Richardson (London); Dr. Martyn (Clifton); Dr. Philipson (Newcastle-on-Tyne); Dr. George Buchanan (Glasgow); Dr. Christison (Edinburgh); Dr. Routh (London); Mr. Erasmus Wilson (London); Dr. B. Squire (London); Dr. Hillier (London).

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, July 1st, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
READING. [Annual.]	George Hotel, Reading.	Wednesday, July 20th, 4 P.M.
SOUTH-WESTERN. [Annual.]	Torbay and South Devon Club, Torquay.	Wednesday, July 20th, 2.30 P.M.

METROPOLITAN COUNTIES BRANCH: DEPUTATION TO H.R.H. THE COMMANDER-IN-CHIEF.

ON Saturday last, the 9th inst., a deputation of members of this Branch had an interview at the Horse Guards with His Royal Highness the Duke of Cambridge, Commander-in-Chief of the Army, on the subject of the Army Medical Service. The deputation consisted of Dr. Sibson, F.R.S., President of the Branch; F. C. Skey, Esq., F.R.S., President of the Royal College of Surgeons; C. F. J. Lord, Esq., President-elect, and Dr. B. W. Richardson, Vice-President, of the Branch; R. Barwell, Esq., Assistant-Surgeon to Charing Cross Hospital; Holmes Coote, Esq., Surgeon to St. Bartholomew's Hospital; T. B. Curling, Esq., F.R.S., Surgeon to the London Hospital; Dr. G. Harley, Professor of Medical Jurisprudence in University College; Dr. A. Henry, Joint-Secretary of the Branch; C. Holthouse, Esq., Surgeon to the Westminster Hospital; Dr. Handfield Jones, F.R.S., and Dr. Markham, Physicians to St. Mary's Hospital; William Martin, Esq.; Dr. E. Meryon; Dr. J. W. Ogle, Assistant-Physician to St. George's Hospital; Dr. C. H. F. Routh; and Dr. Stewart, Physician to the Middlesex Hospital and Joint-Secretary of the Branch.

Mr. SKEY introduced the deputation, and expressed, as President of the Royal College of Surgeons, his concurrence in the statements made in the Memorial.

Dr. SIBSON said that many members of the Metropolitan Counties Branch were teachers in the medical schools of the metropolis; and that, therefore, they had had full opportunities of observing the deficiency in the number of candidates for the medical service of the army. Formerly, many of the best informed students in the medical schools used to be desirous to enter the army; now, however, they were reluctant to do so, because they felt that they could not be sure that their treatment would be such as medical officers had a right to expect. Whether this feeling were right or wrong, he would not now say; but it existed among the students. It had not been instilled into them by their teachers, but had been acquired in their intercourse with society outside the schools. The medical teachers had all along been desirous of securing the services of the better educated men for the army; but it had been felt that there was some jealousy on the part of the combatant officers, and hence a denial of the Warrant of 1858, which had given universal satisfaction to the medical profession. Dr. Sibson then read and presented the following memorial.

To Field-Marshal His Royal Highness the Duke of Cambridge, Commander-in-Chief of Her Majesty's Army,

The Memorial of the President and Members of the Metropolitan Counties Branch of the British Medical Association

HUMBLY SHEWETH—

That the attention of your Memorialists, many of whom are teachers in the Medical Colleges of the metropolis, has been turned for some time to the great and growing deficiency of candidates for the Army Medical Service, and, of late, to the advertisement which has in consequence been issued, inviting gentlemen who are engaged in civil practice to undertake the charge of troops at home; and that the intervention of your Memorialists has been entirely unsolicited by any of Her Majesty's Medical Officers.

That your Memorialists, judging from the unqualified satisfaction which the Warrant of 1858 diffused throughout the Medical Profession, are convinced that the maintenance in its integrity and the steady enforcement of the said Warrant, would have made the Army Medical Service highly attractive to well-qualified candidates.

That, on the contrary, the practical neglect of that Warrant by the Executive, and the successive changes made in it during the last three years, have so seriously shaken confidence in the good faith of the military authorities, that desirable candidates have ceased to apply for admission to the Medical Department of the Army.

That the frequent denial of the Precedence granted by the Warrant of 1858, and the modification of Clause 17 by the Warrant of 1863, which lowers the status of the Medical Officer by disqualifying him even when he is the senior officer present, from presiding at boards, *although on other than purely military matters,* have been the chief sources of dissatisfaction.

That, whereas the two-fold object of the Warrant of 1858 was, by holding out greater inducements to attract the better members of the Medical Profession and by a stringent examination to exclude the less worthy, the effect of subsequently lessening the inducements has been to discourage Medical Men of high tone and character from entering the Army, while the examination, still properly enforced, forbids the entrance of those who now present themselves, most of whom are of an inferior class. The effect, on the other hand,

ıitting *without examination*, as Acting Assistant-geons, men who have confessedly failed in civil tice, will be to inflict great hardship on the mili- Medical Officer by increasing indefinitely the od of foreign service, and ultimately to bring the le Medical Service of the Army into merited con- pt.

hat your Memorialists, in the interests of the lier, for whose welfare the military authorities the British nation are responsible, would gladly l their aid in promoting a satisfactory solution of present difficulties. But they cannot conceal n your Royal Highness, that the question is now ch more complicated than in 1858. For, not only e the military authorities to regain lost confi- ıce, but the field of choice is narrowed by the re- t considerable decrease in the medical population the kingdom. In these circumstances, your Me- rialists, whilst recognising in the fullest manner right of Her Majesty to alter from time to time Warrant the regulations of all departments of r Majesty's Service, would respectfully but ear- tly submit to your Royal Highness the convic- ns which have been forced on them by a careful ısideration of the subject. They can see no pro- ct of any satisfactory arrangement, without—

. The full restoration of Clause 17 of the Warrant 1858, with clear definition of the Precedence of the dical Officer in accordance with his rank;

2. Some guarantee for the enforcement by the ecutive of the Warrants which define the terms der which Medical Men enter the Army; and

3. Some security that principles recognised, and gulations issued, after long and careful deliberа- n, shall not be modified in their essential features thout an inquiry at least as comprehensive as that which they were originally founded.

Your Memorialists believe that, in order to secure full supply of eligible candidates, it may now be cessary to make the following additional conces- ns:—

1. Increased pay of Assistant-Surgeons and Sur- ons.

2. Promotion to the rank of Surgeon after, at ast, ten years' full-pay service.

3. Optional retirement after twenty years' full-pay rvice on an adequate pension.

4. Controlling power and free agency to the Medi- l Officer in his own department, especially in cir- mstances of emergency.

5. Regular leave for the Medical Officer, and sick ave on the same footing as is granted to all other ficers.

6. Non-deduction of pay for expenses incurred in e execution of his duty.

7. The abolition of the system of confidential re- rts by the Surgeon on the conduct of the Assistant- rgeon.

8. The infliction by the military authorities of all nishments ordered by them; the Medical Officer's ty on such occasions being limited to the protec- n of the soldier from serious injury.

Your Memorialists believe that Your Royal High- ss and they are at one, in the earnest desire to tain for the Medical Service of the Army gentlemen ıd men of ascertained ability: but they are per- ıaded that the services of such men will not be tained until the Medical Officer is upheld by the ilitary authorities, and is permanently placed in ıat honourable position which is due to himself and the profession to which he belongs.

May it therefore please Your Royal Highness, with view to the safety and welfare of the Soldier, to use ur high influence to obtain for the Medical Officer ıe recognition of his just claims; and to enforce by your authority such regulations, in accordance therewith, as Her Majesty may be graciously pleased to sanction.

Signed on behalf and by authority of the Members of the Metropolitan Counties Branch of the British Medical Association,

FRANCIS SIBSON, M.D., F.R.S., *President.*
A. P. STEWART, M.D., } *Secretaries.*
ALEXANDER HENRY, M.D.. }

Dr. SIBSON said, that the memorialists earnestly desired to aid His Royal Highness in securing for the medical department of the army the services of the very best men; and would especially assure His Royal Highness, that the Branch had taken up the matter entirely from their own motion, and not at the instigation of the army medical officers; and that, in fact the information possessed by members of the Branch had been obtained by them with difficulty.

Dr. STEWART produced letters from Dr. Burrows, President of the Medical Council, and Dr. Watson, President of the Royal College of Physicians, expressing regret at their unavoidable absence, and cordially concurring in the statement and objects of the memorial. The object of the memorial itself might be arranged under two heads: 1, certain conditions without which the confidence of the medical profession in the army authorities could not be restored; 2, other proposals regarding some of which there was confessedly a difference of opinion, but which were put forward because, in consequence of the present deficiency of medical candidates for the army, and of the operation of causes which, by their greater attraction, drew away the better members of the profession from the service, it was very probable that it would be necessary to make some additional concessions in the form of increased pay, etc., besides these which were laid down as absolutely essential. But the practical denial of the Warrant of 1858 was the great obstacle to be removed. There could be no doubt that some of those who had entered the medical service of the army had not done credit to their profession, but these were exceptional cases; and unless something were done of the kind suggested in the memorial, there was reason to fear that that which had hitherto been the exception would become the rule. With regard to the presidency of boards, none of the memorialists had the least desire that army medical officers should be entitled to preside over courts-martial, or that they should in any way interfere with military matters; and, indeed, the great mass of the medical officers of the army would scout such an idea. It was also believed, that the application of the term "civil" to the army medical officers was at the bottom of much of the existing difficulty. The army surgeon was as much a combatant officer as other officers; he was equally exposed with them to danger, and received military honours and rewards. Strictly speaking, the soldier was the only "combatant" in her Majesty's army.

The DUKE OF CAMBRIDGE said that he was very glad to have the opportunity of meeting so many members of the medical profession, for two reasons. First, it was very satisfactory to be able to learn what were the great causes of dissatisfaction with the army medical service, and he hoped to be able to shew that this dissatisfaction was less well grounded than was supposed. He also was glad of having this, the first, opportunity of expressing to the medical profession his annoyance and sorrow that it should be supposed that he, or others connected with the administration of the army, had any desire to depreciate the services of medical men. But, very odd characters were sometimes met with in the army. Early in his military career he had been connected with regiments, and had always found that the

army surgeons were on the best terms with their brother officers. He had never observed any other than the best disposition towards them; in fact, whenever the medical officer was a man that could be respected, he was always looked up to by the others. He (the Duke) would make a few observations on military discipline. It was on the ground of discipline that Clause 17 of the Warrant of 1858 had not been carried out. He was sure that no one wished to place the army medical officer in a false position. He admitted that the army surgeon is to some extent a combatant officer; but he believed, that it was not the desire of the deputation that the surgeon should assume military command if the officers of a regiment senior to him should happen to be killed in action. The supreme command must rest with the senior combatant officer; and it was on this principle that the medical officer was excluded from the presidency of courts-martial and also of other boards, and by no means from any desire to give offence. As regarded the other points in the memorial, most of them were matters of finance, with which he could only deal if his advice were asked by the Secretary of State for War. As for leave of absence, there was no objection, but it was a matter of finance. There must be a medical officer present with a regiment; and no obstacle was ever thrown in the way of leave, provided the performance of the duty were secured. The system of reports he believed to be rather a wholesome regulation. In the army, confidential reports were made on every officer; but no charge was ever made without the officer accused being informed of it; and he believed that the same rule was followed in the army medical service. The operation of branding or marking was in fact tattooing, such as was repeatedly done by sailors; and the only reason why the medical officer was directed to be present, was in order that no cruelty might take place. The proceeding was required for security, as men of bad character were apt to endeavour to be readmitted into the army.

Dr. Sibson observed that the operation was in reality done by the surgeon, inasmuch as he provided the instruments for the purpose. As to precedence, it was not for a moment desired that the medical officer should preside at courts-martial, or interfere with military command in any way; but there were boards, such as of sanitary inquiry, in which medical men ought to have the opportunity of presiding.

The Duke of Cambridge said that a regiment was analogous to a family; and the commanding officer of the regiment, as the head of the family, was thought to be the proper person to preside at all boards. The matter was entirely one of discipline; it was not that the medical profession was regarded otherwise than kindly and warmly.

Dr. Sibson replied, that it was not desired to put the medical officer in the place of the senior combatant officer. The Warrant of 1858 gave very complete satisfaction; and he could not understand that military discipline could be interfered with by conceding to medical officers the right of presiding at boards. He could assure His Royal Highness that the better class of medical men would not apply for admission into the army until the Warrant of 1858 was renewed; and he would earnestly beg him to endeavour to divest himself of his purely military nature, and to take the matter into his most serious consideration, on other grounds than that of discipline.

Dr. Markham would refer to some things of which the army surgeons complained, that were not alluded to in the Memorial, and of which probably his Royal Highness was not aware. He then recapitulated the alleged grievances which were enumerated in the Journal for June 18th (p. 668); and inquired to whom the profession must look for the placing matters in a proper position.

The Duke of Cambridge said that many of t points referred to were matters of finance. A certa sum of money was placed at the disposal of the arm authorities; and they must apportion it as well as th could. He was willing to do all he could for the medic officers; but he begged the members of the deput tion to instil into the minds of students that the was no feeling in the army against the medical pr fession.

The deputation, having thanked His Royal Hig ness, then withdrew.

DEPUTATION TO THE DIRECTOR-GENERA OF THE ARMY MEDICAL DEPARTMENT.

On Monday last, a deputation, consisting of Dr. Si son, F.R.S., President of the Metropolitan Cou ties Branch, R. Dunn, Esq., Dr. Henry, C. F. Lord, Esq., Dr. Markham, W. Martin, Esq., I Richardson, Dr. Routh, and Dr. Stewart, had interview with Dr. Gibson, C.B, Director-General the Army Medical Department.

Dr. Sibson presented to the Director-General memorial from the Metropolitan Counties Branch.

The memorial was similar to that presented H.R.H. the Commander-in-Chief, with the followi alterations.

For the sixth paragraph there was substituted—

"That your Memorialists, in the interest of t Soldier, for whose welfare the military authoriti and the British nation are responsible, would glad lend their aid in promoting a satisfactory solution the present difficulties. But it must be known you, as well as to them, that the question is mu more complicated than in 1858. For, not only ha the military authorities to regain lost confidence, b the field of choice is narrowed by the recent con derable decrease in the medical population of t kingdom; yet not so narrowed as to interfere with adequate supply of candidates for the Navy Medic Service, which has always been less popular than th of the army, where the vacancies are very numerou Such being the present very serious posture of affai your Memorialists see no prospect of any satisfacto arrangement without," etc.

The last two paragraphs were altered as follows.

"Your Memorialists believe that it is your wish, it is theirs, to obtain a better position for the Medi Officers of the Army, and a steady supply of gentl men and men of ascertained ability as candidate but they are persuaded that the services of such m will not be obtained until the Medical Officer is u held by the military authorities, and is permanent placed in that honourable position which is due himself and to the profession to which he belon And they are happy to believe that you will welcor the support and countenance of your brethren e gaged in civil practice, as likely to strengthen yo hands and to give increased weight to the remo strances you may feel it your duty to make to t Heads of other Departments of Her Majesty's Arm

"They would, therefore, earnestly urge upon y the importance, with a view to the welfare both the Soldier and of the Medical Officer, of representi to the Right Hon. the Secretary for War and H.R. the Commander-in-Chief, the absolute necessity of r storing in its integrity the Warrant of 1858, whi its framers did not consider likely in any way to i terfere with discipline—an anticipation which w substantially confirmed during the period of its ope tion. They would also earnestly request you to ta steps in your own Department to relieve the Medi Officer from the pressure which has seriously ha

d him in the discharge of his duties, and so often ived the sick Soldier of his proper medical com-."

r. Sibson said that the deputation felt that to the ector-General was confided the immediate manage-t of that important branch of the public service, Army Medical Department; and that their desire to give him support and countenance. Of course, ome matters he (the Director-General) could do nore than give advice; but the Secretary of State War and the Commander-in-Chief would there- of necessity apply to him, and great weight ld be attached to anything that he might say; so , most probably, to the position assumed by him ld be due the condition of the army surgeons. would not go over the various points touched on he memorial, but would mention that sedulous e had been taken to exclude all observations on Director-General's special department. The de-ation hoped to have his aid in redressing the vances which had prevented medical men from ing forward for the medical service of the army.

r. Stewart said it was important, in the first e, to state that this intervention had not origin-l with the army medical officers; but that he and er members of the profession in civil practice had ught it might be useful to make some stir in the tter. It was generally believed that there were ut two hundred vacancies in the British and lian army; and this supposition was confirmed by recent issue of what he must term a most extra-inary and ill-advised advertisement, which would much to deter good men from entering the army. e Metropolitan Counties Branch contained many chers in the London medical schools; and, he could te that none of these would advise young men en-ing the profession to go into the army. He be-ed that there were now, lying at the University London, commissions which no one could be per-ded to take. The restoration of the Warrant of 8 was a matter on which no concession nor com-mise could be accepted. There were indeed points army discipline with which those belonging to the il departments would rightly take no part—such as presidency of courts-martial; but, he believed, me-al men could not be made to understand that disci-ne would prevent medical officers from being pre-ents of boards on the state of barracks, hospitals, ., and even of boards of survey, on account of ir knowledge of natural science. So far from the dical officer being out of his place on such boards, ought to be placed on them; and not in an in-ior position, but as president if actually senior in k. The great object of the deputation was to nt out that the abrogation of the Warrant of 1858 s the grand reason of the dissatisfaction with the ny medical service. As to interference with the yal prerogative, he would say that, so far as he ld see, the only persons who interfered with Her jesty's prerogative were those who declined to ry out the Warrant.

The Director-General said that the deputation d but done him justice in believing that he desired promote the welfare of the army medical officers. e had also always desired to cultivate the acquaint-ce of his brethren in various places, wherever he ght be. Much had been said in the journals and ong the profession regarding the army medical vice; but, in his situation and as a point of eti-ette, such statements were never contradicted pub-ly. As to himself, he had been told that the gene-l feeling was that he had not properly supported e department, and that all the grievances com-ained of had occurred since he became Director-neral. The right of presiding at courts had been granted to army medical officers by the Warrant of October 1858; but Clause 17 had been abrogated by a General Order in December of the same year, directing that medical men should not be members of boards. (Dr. Gibson produced official documents in support of his statements.) This had occurred before he became Director-General. In 1861, the warrant was issued which gave the surgeon the rank of junior major. Great pressure had been put on him to have the surgeons reinstated in their former position. He had not remonstrated; because, if he had done so, and that warrant had in consequence been withdrawn, the matter would have been shut up for ever; whereas, by leaving it as it then was, he saw that the restoration of their privileges was only a question of time. And so it turned out; for, in 1863, they were reinstated in their former position, with the exception of the presidency of boards and committees. The army surgeons, therefore, were in a better position than when he took office. As to the operation of marking, it was not done by the medical officer.

Dr. Stewart: But he provides the instruments for the purpose.

The Director-General said that the instruments were provided at the public expense.

Dr. Stewart: The medical officer is the only officer who is present at the infliction of the punishment.

Dr. Sibson: We wish the surgeon to be present, to prevent serious injury to the soldier; and also a military officer to superintend the infliction of the punishment.

Dr. Stewart observed that, in flogging, a military officer stood by to superintend.

Dr. Markham: If the branded men died, of erysipelas for instance, on whom would the responsibility fall?

The Director-General: On the hospital-sergeant who performed the marking. But, as regarded the state of the man's health when the punishment was inflicted, the surgeon was responsible.

Dr. Sibson said that the marking question appeared only a small matter; but it had much influence with students in preventing them from entering the army.

The Director-General: Would it be satisfactory if the orderly officer of the day were always present on such occasions?

The deputation assented.

The Director-General, referring to the presidency of boards, said that this involved military command. Medical officers were not accustomed to sit in courts-martial and military boards, for which a special aptitude was required. In presiding over such boards, the medical officer would be placed in a position of command, in which it might be necessary for him to order the arrest of one of the other members; and this was equally the case in sanitary as in other boards. It was found soon after the Warrant of 1858 that inconvenience arose from the position of the civil officers on boards; and hence the withdrawal of Clause 17. The Queen's regulations provided that the senior combatant officer should preside at such boards. As to mess, the medical officers became presidents in their turn.

Dr. Stewart said that the remarks made by Dr. Gibson opened up an important question, viz., whether the medical service of the army should be formed into a scientific military corps. The application of the term "civilians" to the army medical officers was strongly objected to; and, he believed, the objection was so strong that medical men would not enter the army unless they could be placed in a position which would allow them to become presidents of certain boards.

The Director-General said that it had occurred

to him that it might be advantageous to form the army medical officers into a scientific corps. They would be thereby removed from the bottom of the list of regimental officers; and any objection arising from difference of uniform would be obviated. Again, under the present system, the army medical officers were put to much expense by frequent exchanges; as when a surgeon is obliged to return from India, on account of his health, he is placed on the staff. The formation of a scientific corps would obviate all this; but the feeling of the medical officers themselves was strong against the proposition. He had been told that they would consider themselves degraded. At present, he believed, there was a little feeling among them in favour of the change; but not enough to warrant him in recommending it. He believed that the examinations did much to prevent men from entering the army. It was scarcely fair to expect superior men to enter the army in large numbers.

Dr. STEWART. They did enter the Indian army.

Dr. SIBSON said it was perfectly clear that the Director General had no concern with the withdrawal of clause 17 of the Warrant of 1858; but, on looking through the memorial, he would find that no blame had anywhere been attached to him. The memorialists considered that the injustice had been done by the military executive. He believed that the issue of the Order of December 1858, abrogating clause 17 of the Warrant, was a direct breach of the royal prerogative. As to the statement that the better educated men could not be expected to enter the army, St. Mary's Hospital always used to send its best men; but now it did not do so. He would ask whether there were not boards of sanitary inquiry, in which the medical officer might take a part? In Napoleon's army, the mixed boards formed by Baron Larrey, of medical and military officers, were found highly advantageous. As to the presidency of boards it was only asked that the medical officer should preside, if he was the senior officer present. He hoped this would be well placed before H.R.H. the Commander-in-Chief. The memorialists strongly approved of the existing system of examinations, and of the mode in which they were carried on.

The DIRECTOR-GENERAL said the medical officers of the army all acquitted themselves well, wherever they were placed; this was shewn by the reception by many of them of the Victoria Cross, which was not given by favour. Their contributions to the Army Reports also shewed them to possess great attainments.

Dr. RICHARDSON said he had come into contact with many medical men in the provinces, and had found the expression of professional feeling (whether right or wrong, he would not say) against entering the army as strong as in London. With regard to the alleged deficiency of first-class men, arising from keeping up the present standard of examination, he would say that, even if there should be a deficiency, and an attempt were made to fill it by means of such an advertisement as that lately issued, the supply would soon fail. Unless some inducements were held out, which men of good attainments would grasp at, the deficiency would go on increasing, through the decrease of the medical population of the kingdom, even though the very worst men were taken to fill vacancies. The grievances complained of in the memorial had been all admitted to exist by the Director-General. He would earnestly recommend to the Director-General an analysis of the medical profession in proportion to the population.

Dr. MARKHAM would be glad if he could have the opportunity of putting right any statements that had been incorrectly made in the medical press, so far as he was connected with it. Statements had been made him, on what he believed to be undoubted authorit and he had mentioned certain grievances to H.R. the Commander-in-Chief. He would now ask wheth they were facts; viz., the reduction of the mon grant to the Army Medical Department; the cor dential reports; the want of proper leave; etc. had been told that, in consequence of the difficult thrown in their way, many surgeons of regimer followed out the reduction of extras for the sick minutely as to order none.

The DIRECTOR-GENERAL said that the present m entering the army, though not first class men, w not inferior; the examination secured good third cl men. As to the acting assistant-surgeons, this w a measure that would be resorted to for only a f months; those who had been selected out of three hu dred who had applied, had been sent to depôts, wh there were already army medical officers. Rega ing the reduction of expenditure, he produced a di table, which, he said, was so framed as to enable t medical officer to meet every case; and much of t reduction had arisen from the utilisation of the sto returned from the China war. When extras were dered, brief reports of cases only were required. to confidential reports, the word "confidential" w simply used to prevent the documents from bei laid where they might be seen by everybody. It v important that he should know the characters of t assistant-surgeons, and the special attainments wh any of them possessed, that he might employ th accordingly. He could not gain this information curately, except through the surgeons. If a surge spoke unfavourably of the assistant-surgeon, t latter was invariably written to and advised by t Director-General.

Dr. SIBSON believed that many surgeons objec to make the confidential reports; but he thought t objections would be removed if the assistant-surge were allowed to see the reports.

The DIRECTOR-GENERAL said that the assista surgeons could see the reports before they were se Regimental surgeons in India were not preven from exchanging in the same way as other surgec The question of sick leave was a very important o There were about thirty combatant, and two medi officers (in India, formerly two but now three), in e regiment. Of course, the duty of any one of thirty combatant officers could be performed with inconvenience during his absence; but it was not with the medical officers. The case would be erent, if six assistant-surgeons could be allowed each regiment.

Dr. STEWART said that the period of sick le allowed to the medical officer was often very insu cient for the recovery of his health.

The DIRECTOR-GENERAL said that army med officers were allowed a sick leave of from nine twelve months before being placed on half-pay. to the alleged slowness of promotion, there were present no assistant-surgeons of more than ele years' service.

Dr. RICHARDSON would ask whether it was to understood that the Director-General would not d further on the three hundred who had applied the post of acting assistant-surgeons, if the pres deficiency continued.

The DIRECTOR-GENERAL replied, that he held h self at liberty to employ as many of them as mi be necessary to carry on Her Majesty's service.

The deputation then withdrew.

EAST ANGLIAN BRANCH: ANNUAL MEETING.

annual meeting of this Branch was held at the eral Hospital, Bury St. Edmunds, on Friday, e 17th; W. E. IMAGE, Esq., President, in the r. There were also present: Drs. Chevallier wich); W. Cooper (Bury St. Edmunds); C. M. rant (Ipswich); Goodwin (Bury St. Edmunds); (Norwich); J. Williams (Bury St. Edmunds); Messrs. F. T. Barkway (Lavenham); W. Ebden ughley); R. Faircloth (Newmarket); H. Fuller ry St. Edmunds); Fyson (Newmarket); G. J. nell (Bury St. Edmunds); R. E. Jones (Long ford); J. Kilner (Bury St. Edmunds); B. F. Matws (Norton); and H. Taylor (Ixworth).

ew Members. The following gentlemen were ted members: F. T. Barkway, Esq.; G. W. W. h, Esq. (Norwich); H. Fuller, Esq.; G. J. Hin-, Esq.; B. F. Matthews, Esq.; H. Taylor, Esq.; J. Williams, M.D.

resident's Address. The President delivered an ress, which will be published in the JOURNAL.

esolutions. The following resolutions were unaniisly carried:

1. That the thanks of this meeting be given to Copeman for his able services as President during past year."

2. That A. H. Bartlet, M.D., be the President-t; and that the next annual meeting be held at wich."

3. That the following members be added to the ncil of the Branch: E. Copeman, M.D.; T. W. sse, Esq.; J. S. Gissing, Esq.; J. W. Goodwin, D.; R. Growse, Esq.; R. E. Jones, Esq.; W. W. ller, Esq."

4. That the following members be the Representves of the Branch in the General Council: W. lge, Esq.; E. Copeman, M.D.; R. Faircloth, Esq.; E. Image, Esq.; J. Kirkman, M.D.; and B. Chelier, M.D., *Honorary Secretary.*"

Papers. The following papers were read.

. Circumscribed or Suppurative Inflammation of Liver. By J. W. Goodwin, M.D.

2. Cases of Embolism. By C. M. Durrant, M.D.

3. Cases selected from Practice. By W. Cooper, D. I. Retention of Urine of some years' duration; Impacted Gall-Bladder and Ducts; III. Severe emorrhage of doubtful source. The patient sufing from hæmorrhage was subsequently introduced the meeting, and carefully examined; but no deled diagnosis was arrived at.

4. Some interesting Pathological Specimens of ent occurrence were also brought under the notice the members, and led to much discussion.

The Army Medical Service. At the instance of the tropolitan Counties Branch, the present position the Army Medical Department was taken into nsideration; and the resolutions passed at their e special general meeting on the subject were apoved of.

Provident Fund. A communication was read from r. Gorham respecting the establishment of a society connexion with the British Medical Association, provide annuities for all members of the profession on attaining the age of sixty years and upwards; t time did not permit a full discussion of this conssedly important subject.

Dinner. The members afterwards dined together the Angel Hotel, reinforced by some friends, who d been unable to take a part in the more scientific oceedings of the day; and it need hardly be added at the evening was spent most harmoniously.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

APRIL 6TH, 1864.

H. OLDHAM, M.D., President, in the Chair.

FOUR gentlemen were elected Fellows.

Ovarian Tumour. Dr. OLDHAM exhibited an ovarian tumour removed from a lady under his care by Mr. Spencer Wells.

Simple Hypertrophy of the Cervix Uteri. Dr. GREENHALGH exhibited a specimen removed by the wire-rope écraseur.

Dr. Braun's Cephalotribe and Perforator. Dr. RITCHIE exhibited these and described the mode of using them.

Dr. BARNES considered it an objection to the perforator that it required two to work it, and was complicated. He thought the cephalotribe of Dr. Braun better than the French, and that the instrument had been perhaps too much overlooked in this country.

Dr. GRAILY HEWITT shewed a cephalotribe from Paris, used by Pajot, which he considered more simple than Braun's.

SPONDYLOLISTHESIS: WITH AN ACCOUNT OF A CASE OF PELVIC CONTRACTION, IN WHICH PREMATURE LABOUR WAS INDUCED BY THE AUTHOR'S METHOD. BY ROBERT BARNES, M.D.

The memoir embraced a history of the literature of this affection and a summary of the cases hitherto recorded. It was first described in 1853 by Kilian, who defined it as a slipping downwards and forwards of the last lumbar vertebra upon the sacrum, so that one or more of the lumbar vertebræ fell into the cavity of the pelvis, encroaching upon the space required in labour. In several cases the Cæsarean section had been necessary in order to deliver. The author added a case in which he believed this form of distortion was the cause of difficult labour. A woman, previously healthy, had been injured in the back. Considerable contraction of the pelvic brim followed. There was a marked depression in the lumbar region, and a projection internally above the promontory of the sacrum. Dr. BARNES brought on labour by his method at about the eighth month. The child was extracted by turning with some difficulty, still-born. The entire labour occupied less than five hours. The mother recovered. The remainder of the memoir was devoted to the discussion of the causes of the deformity, concerning which very conflicting views were entertained in Germany.

Mr. W. ADAMS had listened to the paper with great interest, as the vertebral deformity or displacement described was but little known, and required further investigation. It seemed to him that the condition described as spondylolisthesis might depend upon several causes. Rickets might give rise to it; but this would be at once apparent by the general evidences of rickets in the development of the skeleton, distortion of the legs, etc. Caries of the first sacral bone might give rise to it; and some years after destructive disease had ceased, and anchylosis had been produced, the prominence forward of the last lumbar vertebra might encroach considerably on the pelvic cavity. Mr. Adams had seen a few examples of this, and had one now under his care at the Orthopædic Hospital. In this case the girl presented extreme lordosis in the lumbar region, with corresponding projection of the stomach, and a sharp posterior angular prominence corresponding to the first and second sacral bones. In all probability this girl, now twenty-one years of age, could never have a living child, in

consequence of the projection of the last lumbar vertebra into the pelvic cavity. Congenital dislocation of both hip-joints produces extreme lordosis in the lumbar region, and, therefore, would probably give rise to the condition described as spondylolisthesis; and Mr. Adams had also seen it produced to some extent by a sharp rotation movement, and lateral distortion affecting the lower lumbar vertebræ, as in a case described by him in the *Medico-Chirurgical Transactions*, vol. xxxvii. It was evident that a variety of causes might produce the vertebral displacement mentioned by Dr. Barnes, whose analysis of the cases recorded in the paper would form the basis of further observation of the subject.

Mr. Brodhurst considered that the affection in question was not a true dislocation; and that it differed materially from ordinary lordosis, and from those forms of lordosis which are produced by congenital dislocations of the heads of the thigh-bones by some very rare forms of caries of the bodies of the vertebræ, etc.; but it was induced, he said, by softening of the bodies of the vertebræ, and especially by softening and yielding of the ligaments which unite the lumbar vertebræ and the sacrum. Thus was occasioned some displacement of the bodies of the lumbar vertebræ downwards. The positions of the spinous processes showed that caries was not the cause of this affection, as had been suggested, and a section of the bodies of the vertebræ showed this fact more clearly. He contended that this condition was due to rachitic inflammation and softening of the osseous and ligamentous structures.

Dr. Barnes had felt the want of a more extended practical knowledge of diseases of the bones than he possessed, and was therefore glad to have the assistance of Mr. Adams in discussing it. He was quite prepared to believe that caries of the upper part of the sacrum might cause the deformity. It was one cause, and did not exclude the possibility of other causes; nor did he gather from Mr. Adams's observations that that gentleman regarded caries as the sole cause. The case of the child figured by Robert, of Coblenz, was not an undoubted case of spondylolisthesis; and he was much interested in the suggestion of Mr. Adams, that the deformity was probably due to disease of the hip-joints, causing extreme lordosis of the lumbar vertebræ, without dislocation. He wished it to be borne in mind that this deformity consisted in a real slipping down of the fifth lumbar vertebra from the sacrum. It was a true dislocation, and not simply a curvature, of the spine. It was seen quite independently of rickets. It caused serious obstruction to labour, even in cases where the pelvis itself was free from distortion. He believed that this and other vertebral deformities possessed a great obstetric interest, and would when more attention was directed to the subject receive further illustration.

Mortality in London. In the thirteen weeks ending July 2nd, the mortality in London was high; the deaths were 17,346. The mean temperature of the air was 53.5°. There were 2,798 deaths from diseases of the respiratory organs. The mortality from zymotic diseases was also high; it included 4,325 deaths, of which 116 were from small-pox, 844 from measles, 593 from scarlatina, 143 from diphtheria, 198 from croup, 639 from whooping-cough, 783 from typhus, 321 from diarrhœa. Measles was the most fatal epidemic disease of the season, and next to it typhus. Of 616 violent deaths, 510 were by accident or negligence, 30 by homicide, 75 by suicide, and one by public execution. Of 2,919 deaths in public institutions, 1,555 were in workhouses, 34 in prisons, 75 in military and naval asylums, 1,181 in hospitals, and 74 in lunatic asylums.

Correspondence.

THE EXAMINERSHIPS IN THE ROYAL COLLEGE OF SURGEONS.

Letter from Thomas Paget, Esq.

Sir,—A leader in your last number urges me notify on Thursday to the Council of our College tl I "will, at its first meeting in October, bring un its consideration the present constitution of the Co of Examiners, with a view to its alteration."

I am ready to move in any direction that m seem likely to lead to an improvement in the "C lege management", and quite assent that it is unw to retain the stinted range whence Examiners ha hitherto been elected. But before taking any su step as the one suggested, I would invite you to c culate with me the chance of doing good by t movement.

Is it not from a body in the Council, entirely ind pendent of all prospect of the Examinership, that must look for support in the effort you propose make? There are now, I cannot doubt, membe who, for the good of the profession and its Colleg are ready to forego office, or the chance of it future; but, with all "the loud sound" any noti might make, must we not look for substantial su port, in any reform of the Court, to a body in t Council wholly out of the category of Examine actual, probable, or possible? in short, to membe whose distant residence and practice, though adm ting attendance at Council once, or oftener, in t month, quite preclude them from accepting the Ex minership with its almost daily duty.

I would submit, then, that we are driven to wi up our calculation of chance of present change by conclusion that, until the body of Fellows shew higher appreciation of the value of an influenti provincial component of the Council, any attempt alteration in the constitution of the Court of Exan ners would be simply a Quixotic exploit, damaging effect to the object it would promote.

I am, etc., Thomas Paget.

Leicester, July 12, 1864.

[We are most pleased to find that Mr. Paget views are exactly our own touching existing abus in the Council of the College; but we must total differ from his opinion that the attempt of alterati the constitution of the Court of Examiners under e isting circumstances is Quixotic. We will ventu to prophesy that professional opinion alone, echo through the press, will sooner or later work refo there. Deeply, however, we must confess, is the missness of the country Fellows at the late electi to be lamented. Editor.]

CORONERS' FEES FOR INQUESTS ON PAUPE PATIENTS.

Sir,—Seeing the report in your impression of Ju 25th of the case of Manley *v.* Hooper in the Coun Court of Oldbury, I am induced to ask your opini as to how far you think it agrees with a case th happened recently to myself.

I was struck with its similarity, in being charg by a jury with neglect in not *forcing* a nurse upon pauper patient under my care, contrary to the wish the latter expressed to me, as she had a relative w

aily to render her assistance, and her husband home with her at night (they lived in one room.) he evidence adduced at the inquest, it was ad- that no blame attached to me.

inquest was adjourned for the purpose of hav- y evidence; and, after attending to the coro- summons, I on the following morning called him for my fee. He told me "there was no me, as I was summoned on the inquest to clear of the charge of neglect." The summons was cording to the prescribed form for a medical s (nor was Mr. Manley's), although it required should attend and give evidence touching the of death of the deceased, and at the same time counterfoils of all orders given by me upon the ng officer for extras for her. I was sworn, and evidence accordingly, stating my opinion as to use of her decease.

e seeing the report of Mr. Manley's case, I alled again on the coroner, who, while repeat- s former opinion as to my right to the fee, ap- tly shelters himself under the excuse that as counts have all been passed he is not in a posi- o allow it. He has further told me that medi- ficers of public institutions have no right to fees for attendance at inquests; that although my cases he allowed them, mine he considered ception.

looking over the portions of the Act of Parlia- relating to the payment of medical witnesses e Coroners' Court, I find that hospital and dis- ry medical officers are not entitled to fees at sts in respect of cases in connection with those ntments, but I cannot discover that cases under oor-Law are included.

e question I desire to ask is, whether, as a dis- surgeon under the Poor-Law, I can claim a fee tendance at an inquest held on a pauper patient lies under my care, when summoned to do so by oroner?

you confirm my opinion, I shall adopt the same as Mr. Manley did for its recovery. I enclose ard, and am etc., A SUBSCRIBER.

lymouth, July 2nd, 1864.

S. I enclose the report of the adjourned inquest, he editor's disavowal of the seeming charge of ect, which completely exonerates me from all ie.

We should advise our correspondent by all means llow the course pursued by Mr. Manley. We no doubt that the verdict of a county court e would be the same in his case, as it was in that r. Manley. EDITOR.]

MALL-Pox is very prevalent at Stafford.

BRITISH MUSEUM. In the House of Commons, on day, July 11th, Mr. Walpole, in proposing the for the British Museum, said the increase of 86 might be accounted for chiefly by two special chases which have been made. The first of these the purchase of the collection recently found in a in the south of France, and brought here under superintendence of Professor Owen. He looked n that as one of the most valuable acquisitions could have been gained for the benefit of the ntry at large. For that collection £1,000 had n given. The other purchase was a bronze lamp, nd on the site of Julian's Palace. It was sup- ed to be of Greek workmanship, of a date prior to Christian era. It was of most beautiful work- nship, and a description of it would be found in last number of the *Journal of Science and Art.*

Medical News.

DEATHS.

*BIRD, James, M.D., late Physician-General to the Bombay Medical Board, at Fern Acre Lodge, Gerrard's Cross, Bucks, aged 67, on July 10.

DAVIDSON. On May 16th, at Magomalle, near Jaffna, aged 38, Robert William, eldest son of Alexander Davidson, M.D., Inspector-General of Hospitals.

PARLIAMENTARY VOTES. The sum of £19,704 was on Monday last voted to the Scottish Universities, £2,462 to the Queen's University in Ireland, and £5,400 to the Queen's Colleges in Ireland.

MR. HENRY THOMPSON has received from the King of the Belgians the flattering distinction of the Cross of the Order of Leopold, and the title of "Surgeon Extraordinary to His Majesty". Mr. Thompson may certainly boast of a great surgical triumph in the case of the King. More than a year has elapsed, we learn, since the operation was performed; and there is no return of the symptoms; and His Majesty's health remains excellent.

THE FIRE AT QUEEN'S COLLEGE, CORK. On Monday, when the vote of money to the Queen's College was proposed, Mr. Hennessy asked for some information with regard to the fire at Queen's College, Cork. Sir R. Peel was happy to be able to inform the committee that the accusations made some time since with regard to Cork University had been cleared up. Dr. Bullen had written a handsome letter of apology, and he trusted the matter would be allowed to rest. Mr. Hennessy said it was a remarkable fact that all the investigations into the matter had been conducted with closed doors. He had heard a rumour which might account for the whole occurrence. A man of the name of Burke was at that time in Clonmel Gaol, awaiting his trial on a charge of having poisoned his wife. A portion of the viscera of that wife had been sent to the Cork College; and it was supposed that the friends of Burke were under the impression that those remains were lying in that part of the building which had been burnt down. It was further stated, that a young woman who was attached to Burke, and to whom he was to have been married after the death of his wife, had arrived in Cork shortly before the day when the fire broke out; and the conclusion drawn from all these facts was, that she or some other friend of Burke had probably bribed one of the officers of the college to destroy the building, and with it one of the evidences of his crime. Sir R. Peel said that that rumour had reached the Irish government, but they had no means of ascertaining whether or not it had any foundation in reality.

THE LATE PROFESSOR MILLER. For several years past, Mr. Miller's friends have observed with distress that his fine face and manly figure were not as once they were and should still have been; that his expression was often haggard and exhausted; and that he was yielding gradually to the continued strain of overwork. Of this he himself frequently admitted the truth, and he wisely allowed himself longer periods of summer holiday than had been his wont. But although he thus far took proper care of his health, he continued to abnegate the use of stimulants to a degree which many of his friends thought prejudicial to him. He would not consent to become a habitual drinker of wine on any terms. Whether this was a just decision in the case of a man who had for the greater part of his life used stimulants moderately, and who had far

too much and too anxious occupation of body and mind, we shall not here attempt to decide. So great also was his devotion to the advancement of religion and of social ameliorations, that he was undoubtedly, and often not in ignorance, led to add to his strictly medical engagements a very great amount of business and hard work, more than any ordinary man can continue to bear. And he was not a strong man; he had been treated for pericarditis by Dr. Abercrombie; he had an almost constant but varying dyspepsia; he had frequent slight attacks of gout, which he inherited from his father; and he had some ten years before his death contracted, by a prick of his bistoury, an infection which could not but add materially to his other sources of weakness. Latterly, he became increasingly dyspeptic; then he grew decidedly hypochondriacal; from gay he became gloomy. This state of mind about a fortnight before his death greatly deepened; active disease of the brain showed itself passing on to a state of imperfect coma, in which he continued till the last. Only in his last hours he was able, with a clear mind, to bid his family an affectionate adieu. He died at the age of fifty-two.

Royal College of Surgeons. A meeting of Fellows favourable to an alteration in the mode of conducting the election of members of the Council of the College was held at the Freemasons' Tavern on July 7th; George Southam, Esq., of Manchester, in the Chair. The following resolutions were unanimously agreed to. 1. Moved by Mr. Lund, of Manchester, seconded by Mr. J. Z. Laurence, of London—"That whereas, under the present charter of the Royal College of Surgeons of England, it is directed, in the election of Fellows as members of the Council of the said College, that the election shall be conducted by personal voting; and whereas there are upwards of twelve hundred Fellows of the said College, of which upwards of seven hundred reside in the provinces, a large proportion of whom are prevented from recording their votes at each election,—it is expedient that a supplementary charter be obtained, by which those who reside beyond a certain distance from the College shall be allowed to vote by means of voting-papers properly authenticated." 2. Moved by Mr. Mellor, of Manchester, seconded by Mr. Dagleish, of Wigan—"That the foregoing resolution be forwarded to the Council of the Royal College of Surgeons; and that the following gentlemen, viz., Mr. Southam (Manchester), Dr. Hatton (Belvedere), Mr. Mellor (Manchester), Mr. Wraith (Over Darwen), Dr. Bates (Manchester), Mr. J. Z. Laurence (London), Mr. Dagleish (Wigan), Mr. Lund (Manchester), Mr. Martin (Hammersmith), and Dr. Morris (Spalding), be appointed a committee, with power to add to their number, to assist in carrying out the same in any way which they may deem most desirable. 3. Moved by Mr. Lund, and seconded by Mr. Dagleish—"That Dr. Hatton, of Belvedere, North Kent, be requested to act as Honorary Secretary to the committee."

Mr. Turner on the Royal College of Surgeons. At the annual dinner of the Fellows on July 7th, Mr. Turner of Manchester, on his health being proposed by Mr. Le Gros Clark, in connection with provincial schools, replied to the following effect. He thanked the London Fellows on behalf of the provincial Fellows for the kind manner in which they had responded to the toast proposed, and thanked the proposer for having so courteously spoken of him (Mr. Turner personally.) He stated that upon that occasion their positions were different. Mr. Clark having been the successful candidate for the councillorship, whilst he (Mr. Turner) was unsuccessful; but although conquered, he was not cast down, and, if called upon to defend himself in speech, he would not use the wo of bitterness, nor if called upon to write, would dip his pen in gall, but in the milk of human ki ness. Rivalry is a part of the battle of life; an conducted honourably the result must be submit to. Mr. Turner alluded in unmistakable language the disadvantageous position of the provincial comparison with the London Fellows; and war referred to the necessity of facilitating the admiss of Fellows upon other terms than those requirin long residence in London after becoming a mem of the college—terms which cannot in many cases complied with. He dwelt on the necessity of progr in privileges in the ratio of the increasing intellige of the profession. To stand still is, he said, to re grade. The chairman had alluded in his speech the state of medical associations a century ago, a compared them with their condition at the pres time. Taking up this line of argument, Mr. Tur asked what was the state of the College of Surge one hundred years ago? Our predecessors w "barber-surgeons"; and barber-surgeons we sho have remained, had not knowledge advanced a privileges been ceded to the college. In the analy made of the different candidates for the council ship, he had been announced as a reformer. And he was in the virtuous and legitimate meaning the appellation; but he contended that reform a conservatism must go hand in hand. He was an vocate for progress; not consisting in violent a sudden changes, but in such progressive alterati in the statistics, and in the machinery by which th were worked as would meet the circumstances of times, the growing intelligence of the people, dignity of our profession, and the urgent dema of justice.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addre to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their commun tions, should authenticate them with their names—of course necessarily for publication.

F. A.—We have much pleasure in informing our correspondent, t Dr. C. R. Drysdale is not the gentleman mentioned in the ad tisement of "*The British Journal of Homœopathy*, edited by D Drysdale, Dudgeon, and Hughes."

M.B., M.A.—We are sorry to say that we can see no hope of redress in the case, except what may be obtained through a c of law. The bowels of mercy, and of justice too, are not cha teristics of Poor-law government.

The Proposed Provident Fund.—A correspondent writes: rumour is afloat, that it is under the consideration of the Brit Medical Association to form a Provident Fund, which would g relief to its members in time of sickness. The accomplishm of the object would be a practical inducement to join your ra which I and many others have never felt before."

[The establishing of such a fund has been contemplated seriously taken into consideration. The surest way for the ca ing out of the project is, that those gentlemen who are particul anxious for it, should join our ranks, and then use the influenc the Association for the purpose. Our correspondent may be s that he and his friends will meet with the warmest sympath the Association in this matter. Editor.]

Griffin Testimonial Fund.—Sir: The following subscripti have been further received on behalf of the above Fund:—He Ewen, Esq. (Wisbeach), 10s.; A. B. Ewen, Esq. (Wisbeach), 1 J. Smart, Esq. (Bethnal Green), £1:1; Robert Cuff, Esq. (B born), 10s. 6d.; John Blundell, Esq. (St. Helen's, Lancashire), J. Bryant, Esq. (Clerkenwell), 5s.; Dr. W. Garstang (Blackbu 10s.; Robert Lamb, Esq. (Islington), 5s.; R. W. Watkins, E (Towcester), 10s. 6d.; Dr. J. T. Barrett (Ashton-under-Lyne), 1 S. E. Piper, Esq. (Darlington), £1:1; A. D. Harston, Esq. (Isli ton), £1:1; Dr. J. Rogers (Strand), £1:1; Dr. Whiteman (Putn 10s. 6d.; Dr. G. E. Nicholas (Wandsworth), 10s. 6d.

Amount previously announced, £7:2.

I am, etc., Robert Fowler, M.D., Treasurer and Hon. Sec

145, Bishopsgate Street Without, July 13th, 1864.

Abstract of Lectures

ON THE

ROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

LECTURE IV.

R. FERGUSSON'S fourth lecture much surpassed its edecessor in interest, on account of the novelty the doctrines which it contained on one of the ost important of the surgical questions of the day, ithotrity. On the subject of lithotomy, what Mr. ergusson said may be summarised in very short mpass; since he confined himself wholly to the eration as practised in children, and took special tice of two points only. The first of these was, at the stone may be missed, and the operation be andoned, in consequence of the operator having t between the bladder and rectum, and made a vity there with his finger, which he mistakes for e bladder, and in which, of course, no stone is to be und; while all the time there is a stone in the adder, which could be discovered and extracted if e incisions were carried a little deeper. Mr. Fer-sson left his audience under the impression that e is disposed to attribute the greater number of ilures in discovering the stone to this cause. It is an cident which, he says, he witnessed in the early ys of his career; and it is one which, no doubt, ten occurs. We quote the passage.

"In my early days of study, I was struck and ex-ted by the circumstances that a surgeon of repute ad cut into the bladder of a child to extract a stone here none could be felt. The case was considered a example of error in diagnosis. The patient re-vered from the wound, but the symptoms of stone ntinued, and about three months afterwards another rgeon extracted a stone of considerable size from e bladder by the ordinary operation of lithotomy. nother case of a like kind came under my cogni-nce about the same time; and the impression on my ind was strong, that in neither instance had the ladder been reached in the first operation.

"In early life, I assisted an experienced operator in is proceeding on the adult. Having, as he sup-osed, cut into the bladder, the stone could not be uched. Here I had an opportunity of examining e wound, and, a suggestion having been made that e bladder had not been opened, the operator, with markable dexterity, cut further in the right direc-on, opened the viscus, and, with great rapidity, ex-acted the stone, which he had previously detected y sounding. In this instance, I had no doubt what-er that the surgeon had not originally cut deep ough, but had made a space with the forefinger of is left hand, between the pubes and neck of the ladder, which he had for a time mistaken for the ladder.

"These and other similar instances which occasion-ally came to my knowledge, gave me a strong impression that, in those cases where surgeons were stated to have cut for stone where one had not been present, they had probably not reached the bladder at all. In the course of time this impression has become much strengthened; and in giving, by this lecture, greater currency than heretofore to the frequent clinical observations which I have made on this subject, I feel assured that my experience and views will not be lost upon those who are earnest in the study of this most interesting operation."

There can be no doubt that the surgeon, in lithotomy on children, if he be not very careful, is apt to slip away from the groove of the staff, after he has opened the urethra for a short distance, into the cellular tissue between the bladder and rectum, and there make a cavity (by feeling about with the finger) which might be taken for the bladder. We have ourselves seen this accident occur more than once. The next point which Mr. Fergusson noticed refers to an accident which would be still more dangerous; viz., to the possibility of tearing through the urethra altogether, and pushing both prostate and bladder before the finger into the pelvis. This accident occurred in Mr. Fergusson's own practice, and is thus related by him.

"On the 17th of March, 1849, I had to operate on a boy four years of age at King's College Hospital. I used a scalpel, as I had often done before, and made the ordinary incisions for lateral lithotomy. A grooved staff with a large curve was the director into the bladder. In making the deepest part of the incision I purposely used the cutting instrument as lightly as possible, with a view to open only a part of the membranous portion of the urethra, and notch the prostate and neck of the bladder. These objects being effected, the point of the forefinger of my left hand was, as usual, placed on the staff, and pushed gently towards the bladder. The finger went on, but I was aware that it had not got between the urethra and the staff. With an insinuating movement (much to be appreciated by the lithotomist who, as I do, professedly makes a small incision in this locality), I endeavoured and hoped to get its point as usual into the urethra and neck of the bladder. But here I felt conscious that I had failed. I was aware that the finger was getting deeper as regarded the depth of the perineum, but that I was not materially nearer the bladder. I could feel a considerable space at the point of my finger, and was convinced that the upper part of the membranous portion of the urethra, as well as the sides above the wound, had given way to the pressure of the point of the finger, and that now, as the latter was getting deeper into the wound, I was only pushing the prostate gland and neck of the bladder inwards and upwards. These parts seemed to recede before the smallest imaginable force, whilst I felt that I could in a manner make any amount of space round the bare part of the staff. I had no difficulty in distinguishing between the surface of this space and that of the mucous membrane of the bladder. Moreover, I knew that I had never crossed that narrow neck which is always felt as the finger passes into the bladder when a limited incision is made. An impression came over me that I was about to fail in getting into the bladder, and I had the idea that, unless I could open the urethra just in front of the prostate more freely, I should possibly never reach the stone. Any additional use of the forefinger of the left hand only endangered the further separation of the prostate and neck of the bladder from the pubes, and I was conscious that the only safety lay in cutting a little more freely on the groove of the staff. This I effected with great caution, and then I could appreciate the

passage of the finger as usual through the prostate and neck of the bladder. The stone was thereafter easily touched and removed; but, when all was finished, I was forcibly impressed with the idea that I had nearly failed in the performance of the operation."

There is no doubt of the occurrence of the first accident; and we may accept Mr. Fergusson's testimony for the reality of the second, though it may be observed, that no evidence of the fact seems to have been furnished by dissection. It seems strange that any force which the finger of a judicious operator could apply to the wound on the convex part of the lithotomy-staff should tear through the whole urethra, including the part which is supported and defended by the concave part of the staff. But Mr. Fergusson rather passed over the fact that cases of cutting for stone, where no stone was found, and where the bladder was unquestionably cut into, have occurred, and have been proved by *post mortem* examination to have occurred—as witness the celebrated case which was lately published by Mr. Paget of Leicester. The surgeon requires to be cautioned, it is true, against the operative errors which Mr. Fergusson spoke of; but the caution against undertaking an operation which is utterly superfluous is surely equally necessary, particularly as such an operation, performed in the absence of a stone, is more dangerous than an ordinary operation for lithotomy, because more time will be spent on the fruitless hunt.

The lecturer concluded this part of his subject by referring to his own experience in the matter; viz., 159 operations for lithotomy on the whole, 50 of which were in boys (or patients, for Mr. Fergusson did not state whether females as well as males were included) under 15 years of age, and of these latter 2 died.

In lithotrity, Mr. Fergusson justly claimed some right to speak from experience. Having, as he said, "treated between 250 and 300 cases of stone by lithotomy and lithotrity," it will follow, from the statement in the last sentence, that he must have had experience of more than a hundred cases of lithotrity. The chief particulars in which this large experience has led Mr. Fergusson to differ from his colleagues are, that paralysis of the bladder rather favours the operation than otherwise, and that it is better to withdraw the fragments with the lithotrite (provided proper instruments be used) than to wait for their spontaneous expulsion. The former proposition is a corollary on the latter. If the bladder is to be the engine for expelling the fragments, its paralysis would be an insuperable bar to the operation; if, on the contrary, the surgeon is to fish them out with the forceps, the less irritability there is about the viscus the better. The following extract is the one which conveys Mr. Fergusson's meaning the most clearly.

"My chief object in this portion of my lecture is to draw attention to this subject (viz., the extraction of the fragments by means of the lithotrite or scoop, instead of waiting for their spontaneous expulsion). It is comparatively little known; and, moreover, a very general impression prevails that it is incorrect to extract fragments. The various instruments and mechanical devices which have been from time to time recommended or used for this purpose, or to facilitate their escape, have generally proved of so little service, that they have been in a manner overlooked or laid aside by the practical lithotritist. It has even been taught that no attempt should be made to extract fragments; and, as I have already stated, so strong is the feeling in this respect, when stone in the bladder is conjoined with paralysis of that organ, that the operation of lithotrity is considered highly objectionable, if not impracticable, because there is no likelihood of the fragments passing away, excepting through a large-eyed catheter or scoop made specially for the case.

"With the instruments which it is my object to recommend, the process of lithotrity, and I believe the distress of the patient both bodily and mental, may be considerably abbreviated; and instead of paralysis being objectionable, it is perhaps the condition most favourable to the operation, as it generally happens that with paralysis there is a callousness of the mucous membrane of the bladder which permits a freer use of the blades than under ordinary conditions.

"In early days, a large instrument was thought essential for the due performance of lithotrity. The risk of bending or breaking was deemed considerable and serious, and on these grounds the largest instrument which the urethra would admit was selected for use. If a catheter or so-called scoop was used afterwards, its magnitude was thought of equal importance; and to give every advantage in this respect, it was recommended that the urethra should be dilated, and, if needful, the orifice in the glans enlarged by incision, prior to the use of lithotritic instruments.

"As to the advantage of a large urethra, there can be no doubt; but I believe that large instruments are by no means so essential. Indeed, I feel assured that comparatively small-sized ones are an advantage, and in certain stages of the treatment I believe them of great value."

Mr. Fergusson exhibited the instrument which he recommends and uses, having a narrow shank, which allows of easy movement in the urethra and bladder, and a large end, whereby the stone is more easily grasped and seized; the female blade of the instrument being closed, so that the fragments of stone are retained in it. With such instruments, Mr. Fergusson is accustomed to clear away the *débris* of the stone after it has been crushed, and thus to shorten the process in a successful case, doubtless, to the patient's great comfort and convenience; seeing that, if the stone be of moderate size, he is hardly confined to the house at all.

Mr. Fergusson gave an instance in which a gentleman was relieved of the fragments of a "moderate sized stone" in a single operation, left town the next day, and remained free from symptoms for four years. After this he again presented himself, and then Mr. Fergusson removed with the scoop three stones so small as not even to require crushing. In a few days all irritation had subsided, and he was able to go home. Finally, in July 1859, an entire stone, about half an inch in diameter, was removed by the same instrument, and he has since remained free from symptoms.

Doubtless, in cases such as this, the practice recommended by Mr. Fergusson is not only the best but, as far as we know, is the one always adopted. That is to say, when small stones or small fragments of stone have been long in the bladder, so that it may fairly be concluded that their rough angles are worn down, and when, on being grasped by the lithotrite, they seem so small as to be able to pass through the urethra without undue stretching or violence, few lithotritists would hesitate to extract them at once. We have often witnessed the advantages of this proceeding, which is, indeed, precisely analogous to the practice pursued in the extraction of foreign bodies. The only peculiarity of Mr. Fergusson's method is the small size of the instruments which he employs;* a peculiarity which may reasonably be

* But this Mr. Fergusson regards as an essential feature, for he concluded the whole lecture with the following passage:—"The small instruments which I now show are essential to the practice which I advocate, and with these I maintain (as I have amply tested in numerous cases) that lithotrity can be abbreviated and brought to a certainty such as has not been claimed for it hitherto."

taken to be an advantage on the strength of Mr. Fergusson's authority, which, in matters of operative manipulation, must surely be supreme.

But a much graver and more uncertain question connected with Mr. Fergusson's method of performing lithotrity is, whether he is right in recommending the instant removal of the *débris* in cases of crushing a stone of large size. We should remember that, in this case, the fragments are of uncertain size (for, after all, the width of the opening of the lithotrite only shows one diameter of the fragment); their angles are fresh and sharp; and the bladder has perhaps already borne as much manipulation as is prudent. Further, we should remember that (with the exception of the small shank of Mr. Fergusson's scoop) this is the method which was originally adopted, and abandoned on account of the pain, laceration of the urethra, and after-complications which ensued. It would, perhaps, be invidious to quote one author against another; but it is allowable to say, in general terms, that lithotritists of the largest experience, who have had ample opportunities of knowing the minutest particulars of Mr. Fergusson's system of manipulation, still avow their preference for the plan of awaiting the spontaneous expulsion of fragments. Evidently, therefore, the question resolves itself into one of experience; and, as to Mr. Fergusson's experience, his expressions were rather more vague than we could have wished. He said:

"In the last sixty cases I have adopted this practice generally, and, with few exceptions, have had every reason to be satisfied. Occasionally, when over-anxious for a rapid cure, I have extracted fragments rather too large to come readily along the urethra, particularly in the prostatic or membranous portion, or at the triangular ligament. In some, when the urethra nearest the neck of the bladder has been rather roughly used, there has been considerable irritation; in others, even under such circumstances, there has been no irritation whatever; and in many instances I have been able to effect in one or two operations within ten days what, according to custom, would take weeks, or possibly months. I have done, in fact, by a precise surgical manipulation, that which according to ordinary rule is left entirely to chance. Experience has taught me that it is almost hopeless to trust to chance in all such cases; that in many instances the fragments may be weeks, or months, in coming away, even with attempts to coax them through catheters with large eyes and other instruments devised for the purpose. Here are the fragments of stone crushed in a man whose bladder acted regularly, yet only a few of these passed spontaneously; all the rest were removed by the scoop in question in three or four operations. From first to last there was not a single bad or even troublesome symptom. The patient was detained scarcely an hour in bed beyond his regular period of rest. I never saw one suffer less distress; yet, before he came under my notice, he had been strongly urged by an eminent surgeon to submit to lithotomy."

If Mr. Fergusson had preserved such notes of his cases as would have enabled him to say precisely in how many cases he had removed the *débris* at the time of operation, how many of these had had troublesome symptoms, what these symptoms precisely were, and what were their results, it would have been more satisfactory, and would have put us in a better position to draw a comparison between his method (or rather his revival of the old method) and that which is in more general use. What struck us, after hearing what Mr. Fergusson said on this matter, was, that if a patient with stone were fortunate enough to be in Mr. Fergusson's hands, he might perhaps have his cure somewhat accelerated (though probably at the risk of increased suffering at the time of operation) by this plan of removing the fragments; but that, if he had fallen into the hands of some less ingenious manipulator, he would be lucky if his surgeon were not in so great a hurry to send him away cured. In fact, we could not repress a latent suspicion that the old adage of "*Festina lente*" might, after all, express the better policy.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture III. (*Continued.*)

The Treatment of Fibrous Tumours.

2. *Treatment by Gastrotomy.* I have now to speak of another mode of cure; viz., *gastrotomy.* At the outset, I may say that, in the consideration of the cases in which this operation has been had recourse to, we labour under three disadvantages. 1. Several cases, I know, have been unpublished; and, therefore, the instances quoted fall short of the actual number of examples that have occurred. 2. The records of these cases are by no means full. The details are often so meagre as to leave little room for philosophical deductions. 3. It is possible, on the other hand, that I am exaggerating the number of examples, and that the same cases are repeated. This was undoubtedly so with one of Dr. Clay's cases; which that gentleman, however, kindly explained to me. In Atlee's cases, again, it is just possible that this source of error exists. In such instances, however, the mistake is due to the imperfect records and disagreements between them, more especially in regard to dates of recovery, of death, age, married or single state, size, weight of the tumour; in which particulars the records, otherwise resembling each other, disagree.

Altogether, gastrotomy for fibrous tumour has been performed forty-eight times. In fifteen cases, however, the tumour, either in whole or in part, was not removed. In the remaining thirty-three, the entire or part of the tumour was removed. This *resumé* admits at once of division into two classes.

1. The cases of uterine tumour in which gastrotomy was performed, and extirpation not completed, were fifteen. These include four of Dr. W. L. Atlee, one of Dr. Cutler, one of Mr. Lane, one of Mr. Lizars, one of Dr. R. D. Massey, one of Dr. N. Smith, one unknown, one of Mr. Walne, one of Dr. Deane, and three of Mr. I. B. Brown. (See Table II.)

In five of these, the exact locality of the tumour is not given: two were fibrocystic; one extrauterine; one a double example—*i. e.*, intrauterine and extrauterine; six parietal, one of these last being combined with pregnancy.

Of these fifteen cases, eight recovered from the operation. But, of these, three subsequently died; one six months afterwards, from erysipelas; another seven

TABLE II.—*Cases of Uterine Tumour in which Gastrotomy was performed, and Extirpation not completed.*

No.	Operator and Reference.	Age	Previous History, etc.	Steps of Operation.	Progress.	Final Result
1	Dr. W. L. Atlee, Philadelphia. *Am. Journ. of Med. Sci.*, April 1855. Clay's *Kiwisch*, Table iv.	33	Single. Tumour noticed four years ago, since which irregular. Tapped, and blood only escaped. Uterine sound passed two inches and a half only.	Operated May 22, 1849. Incision from umbilicus to near pubes. A syphon tent placed in lower part of wound. No adhesion. Wound united by interrupted and twisted sutures.	Recovered operation, and sat up nine days afterwards.	Died 6 month afterwards fro erysipelas.
2	Ditto. *Ibid. Ibid.*	43	Single. No account of duration, etc. Tumour after operat. found to be uterine, incorporated with large cystiform bodies. Fibrocystic.	Operated Oct. 13, 1849. Incision from near umbilicus to pubes. No adhesions.	..	Recovered. Died four yea afterwards.
3	Ditto. *Ibid. Ibid.*	41	Unmarried. Woman of colour. No account of duration, etc. Uterine tumour not adherent.	April 13, 1850. Incision from near umbilicus to pubes. Intestines were forced out, and could scarcely be returned, in consequence of the anæsthetic agent inducing a cataleptic cond. of muscular parietes.	..	Recovered. Still living. April 1855.
4	Ditto. *Ibid. Ibid.*	42	Married. No account of duration. An extrauterine fibrous tumour.	Operated Dec. 20, 1851. During the operation, an abscess deep in the abdomen was opened and a quantity of pus discharged.	..	Recovered. Still living. April, 1855.
5	Dr. Cutter, of Woburn. *Am. Journ. of Med. Sci.*, 1851.	33	Single. First noticed tum. 7 yrs. ago; 2 yrs. afterw. very percept. in l. hypogastrium. Developm. attended w. attacks of peritonitis & dysuria, leading to use of catheter. Catam. regular, lately accomp. w. hæmorr. Soreness of abdomen followed by ascites, for which she was twice tapped since her health failed, Feb. 1853. Tumour felt low per vaginam. Simpson's sound penetrated 5 in. Case pronounced hopeless, but wom. so urgent for operat., it was tried. Cervix & fundus uteri involved. A large tumour from wh. several smaller ones projected in cavity of abdomen. Parietal.	Operation performed Oct. 12, 1853. Incision 9 inches in median line. Tumour found to be fibrous. Connexions forbad removal. Tumour punctured and bled profusely, so as to require ligature. Wound closed.	Several days suffered but little pain under use of opium.	Died 12 da after operatio *P.M.* Very litt peritonitis. tegum ts heal and opening uterus also.
6	Mr. Lane. London. Clay's Trans. of *Kiwisch on Dis. of Ovaries.*	22	Single. Disease of many years' duration. Health good. Found after operation to be a large fleshy tubercle of uterus. Parietal.	Operated 1847. Incision from umbilicus to pubes. Tumour too much connected with uterus for removal. Wound closed by 15 interrupted sutures not through peritoneum.	Wound healed.	Recovered. b died five wee after operatic Suicide suspe ted. A 3 mont fœtus found utero.
7	Mr. Lizars. of Edinburgh. *Liz. Ext. of Dis. Ovaries*, pp. 19-20.	34	Unmarried. Tumour observed six years ago. Catamenia irregular; urine occasionally suppressed; general health good; had considerable muscular strength, but earnestly entreated something might be done to relieve her.	Operated April 24, 1825. Incision from sternum to pubes. The tumour was pierced and incised twice, but nothing but pure blood followed. The wound was then closed by sutures and adhesive straps.	..	Recovered in fortnight. Di Nov. 23, of Ap plexy. *Ed. burgh Journ* March 1851.
8	Dr. R. D. Massey. America. *Hamilton's Rep.*	..	No account of duration, etc. After operation found to be a tumour in uterine walls. Parietal.	Operated 1850. Large incision.	..	Died from haustion fo teen hours aft wards.
9	Dr. N. Smith. America. *Lyman's Rep.*, Boston, 1856. Case 248.	..	No account of duration.	Long incision. Uterus found to be involved, and constituting largest part of tumour. Wound closed.	..	Recovered.
10	Unknown. Germany. *Scanzoni's Beiträge*, 1858. *Sim's Table.*	36	Hard tumour in abdomen, with ascites.	Found to be cancerous tumour connected with uterus. Wound closed.	..	Death in th days.
11	Mr. Walne, of London. 1844. *Med. Gaz.*, Mar. 10. p. 47.	45	Uterine disease; fibrous tumour; cysts of ovary, solid and fluid. Parietal.	Long incision.	..	The tum'r re ing agst. incisi was supposed have caused flammation a death.
12	Mr. T. B. Brown. London Home.	43	Admitted Oct. 12, 1860. Tumour first noticed right side of abdomen, about size of an egg, 9 years ago; increased gradually; general health good. *Examination.* Large mass of fibrous tumour discovered within the uterus; also a fibrous tumour attached externally to fundus, to be felt through parietes. After the first operat. the tumour was found to be growing, and having a feeling of fluctuation not to be defined. Fibroid, vascular, intrauterine and extrauterine.	First operation, os uteri and cervix uteri incised on each side, under chloroform. Jan. 24, 1861. Exploratory incision made through abdominal parietes. A large fibrocellular tumour discovered by which whole pelvis was modelled, and which had grown above brim, and was so firm as to be immovable. Fluctuation evident. On cutting in, tumour was found to be made up of a number of engorged vessels which bled freely. The incision was deep. Brought together by 3 silver sutures. Abd. closed in ord. way.	Not a bad symptom after gastrotomy. Wound healed. Left the Home.	Recovered i perfect heal Tumour p sive, no inco venience.

TABLE II.—*Continued.*

No.	Operator and Reference.	Age	Previous History, etc.	Steps of Operation.	Progress.	Final Result.
13	Mr. I. B. Brown. London Home. Communicated	30	Married four years. Admitted Nov. 26, 1862. No children. Always healthy till six years ago, when she first perceived the tumour. This increased at each epoch, subsiding with its cessation. Catamenia copious. Health failing in 1860, was tapped. Two quarts of dark fluid drawn off. Catamenia regular. *Examination.* Large multilocular ovarian tumour diagnosed; also what appeared to be undoubted umbilical hernia of omentum. *Fibrocystic.*	Operated Dec. 11, 1862. After primary incision, large quantity of ascitic fluid escaped. A cyst then came into view, which looked like intestine, and on exam. tumour was fnd. to be composed of several hard masses (like scirrhus) and very adherent in every direction. It was attached to the whole omentum, liver, and uterus, being also quite immovable. A quart of pale yellow fluid was drawn off from 2 of the cysts, and the wound closed with silver sutures.	Went on well till 17th, when coughing violently, wound was forced open, serous fluid coming out. Contd. for a few days. Dec. 26, small abscess opened at upper part of wound. Stimulants, wine, and acid given. Tumour refilling. Sickness. Wnd. gaping.	Died, January 6, 1863.
14	Mr. I. B. Brown. Ditto.	41	Married 7 yrs.; no child.; 2 miscarr. Admitted Feb. 2, 1863. Irregul. since marr. 18 mths. since had severe pain, l. hip, wh. persisted spite of treatm. Six mths. after perceived a sm. tumour in r. ovn. region. This increas'd gradually & became central. Latterly menstr. more irregul., *suppressed* since Nov. last. Whole abdomen filled w. tumour larger than full twin pregnancy. Irregular in outline, w. 2 small outgrowths superiorly. In parts indistinct fluct. or elasticity. Pelvis was so filled up with tumour and os so drawn up behind pubis that sound could not be introduced. General health bad. Patient urgent for operation. Diagnosis obscure. *Parietal.* Fibroid complicated with pregnancy.	Feb. 26. Exploratory incision, 3 inches long. Tumour found very vascular, more like muscle than cyst of ovary. Trochar plunged in to make sure, giving exit only to a little blood. Closed by silver wire. Abdominal parietes also.	Some tympanitis, yet prog. well till Mar. 3. when she had a rigor; fever persisted till 12th. 13th, inflammtn. of tissues around right eye. Insensible; tenderness of abdomen. Fœtus came away.	Died exhausted, 17th. *P.M.* 2 pts. of pus in peritoneum. Tumour adherent to pelvic fascia, and to about 2 square inches of liver. Tumour size of a peck basket, with smooth & regular surface, with two small lumps of size of a filbert attached. Tumour all fibroid, involving whole left side of uterus. Fœtus must have lain to left side, also occupying position parallel to tumour, half being impregnated uterus, and half tumour. Parietes containing fœtus in no way contracted. Several purulent points in kidneys and liver.
15	Dr. Dean. *Brit. Med. and Surg. Journ.*, 39, 221., Oct. 1848. *Amer. Med. and Surg. Journ.*, vol. 43, 258.	..	A globular symmetrical tumour, resting on pubis in front and sacrum behind. Raised in recumbent position and free impulse given to it. In erect immoveable. Length perhaps 8 or 9 in. long by 5 or 6 brd. Seems to spring from right ovary, still might be uterine. Functions of uterus normal, no deviation. No pain, but increasing rapidly. *Uterine.* Parietal.	Incision made on the left side of umbilicus, carried down to pubes. Round polished solid tum. expos. covered with very large vessels. No adhesions. Intestines forced out. Found to be a solid fibrous tumour of uterus involving left half. Operation stopped after consultation, and parts returned. No bleeding of any note occurred.	Inflammation, folld. with spasmodic twitchings which continued till 8th day; removed by depletion.	Recovered in a fortnight.

months afterwards, of apoplexy. The third, one of the fibro-cystic disease cases, died four years afterwards.

The remaining seven died. In two of these, the tumour was combined with pregnancy. One died five weeks after the operation, and there was some reason to suspect suicide. The second seems to have died of peritonitis. One died of slight peritonitis, in twelve days; another, of exhaustion, in fourteen hours after the operation. Another died of inflammation of the tumour; one of abscess. The cause of death in the last is not stated.

The first two fatal cases here mentioned should clearly be excluded. We cannot doubt that the diagnosis was most difficult, if not impossible, during life. This we are assured of from the character of those in whose practice the cases occurred. Still, if the principle so forcibly insisted upon by Dr. Greenhalgh had been adopted, and in which I fully concur—never to operate unless you can introduce the sound *in uterum*—which was in one of these examples, at least, tried several times, and without success, these cases would not have been operated upon. Thus we have thirteen cases and five deaths—a mortality which seems to justify the operation, if an operation be imperatively called for. One of the fibro-cystic cases, indeed, recovered and lived four years afterwards. It is not to be presumed, therefore, that she was otherwise than benefited from the operation.

[*To be continued.*]

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

HEMIPLEGIA ON THE RIGHT SIDE, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

IN a very interesting letter to this JOURNAL (May 21st, 1864), with the title prefixed to the present paper, Dr. Hughlings Jackson makes the following statement: "I have noticed that when defect of speech occurs with hemiplegia, the hemiplegia is, so far as my experience goes, invariably on the right side." Any statement by so laborious and accurate a student of cerebral pathology as Dr. Jackson must be received with much respect; and he had interested me in the subject by a conversation a short time before his letter appeared. I am, therefore, led to present the result of an examination of my case-books, as a contribution towards the inquiry which Dr. Jackson invites.

The cases from which the following abstracts are made have, of course, been reported entirely without regard to the question raised by Dr. Jackson; therefore, if the testimony they afford be sometimes defective, it has the advantage of being unprejudiced.

I have inserted every case of hemiplegia contained in my case-books, without regard to its character, save in one or two instances, in which the particulars are too imperfect to be of any pathological value; and I have also adhered, as far as possible, to the language originally employed.

Hemiplegia of the Right Side.

Case I. Male, aged 16; paralysis of right arm, not of leg, of three weeks' duration. It came on gradually. "Articulation imperfect—sometimes difficult to understand him"; speech soon became perfectly unintelligible, with increasing paralysis of arm and retention of urine. Tongue deviated slightly to the "left"(?); some paralysis of right side of face. Rapid death after two "fits" of general rigidity, in a state of perfect unconsciousness. Two effusions of blood, a recent and an older, in the left crus cerebri, and in the left side of the pons, strictly limited, in the latter situation, by the median line. Vessels at the base healthy. Valves of the heart healthy.

Case II. Female, aged 21; very dissipated; probably had had syphilis formerly, though no present evidence of the disease. Hemiplegic a week; history of attack perfectly unknown. Complete paralysis of the right limbs; partially of the face, with deviation of the tongue; sensibility of the paralysed limbs lessened. Articulation perfectly extinguished; swallowing unaffected; apprehension rather dull. Pulsation of the left radial artery could not be felt. Sounds of the heart quite clear. The patient soon recovered her mental faculties; perfect power of apprehension was manifested by the signs with which she responded to questions. She slowly regained power in the leg; the arm, however, remained powerless; the muscles of both limbs wasted to some degree. Speech consisted merely in laryngeal sounds; no excitement could produce more than a monosyllable, "aye," "no." She had been heard to say "jaw," "a great deal," and once, under strong excitement, to say "fool." She replied to every question by a perfectly inarticulate laryngeal sound; the movements of the arytenoid cartilages were perfect. Pulsation returned to the left radial artery in six weeks. The patient remained in the condition first described four months after her seizure; the tongue, at the last, was not protruded quite directly. She was unable to write, so that we could not test her power of connecting ideas with words.

Case III. Male, aged 35. Repeated attacks of syphilis. Three days before admission, sudden loss of speech, with impaired muscular power in the right arm; consciousness entire; pain in the right side of the forehead, and in the occipital region. When seen, he presented some feebleness of grasp in the right hand, and imperfect contraction in the muscles of the right side of the face. Tongue protruded normally. Sensation perfect. Articulation so much impaired, that it was only by exercise of great patience that what he said could be interpreted. Articulation improved gradually, and was nearly restored at the end of three weeks; the arm recovered more rapidly; but evidence of failure of memory was now afforded, with great tendency to drowsiness. At this stage, he passed from our observation. Two months before his attack, he had experienced temporarily slight difficulty in talking.

Case IV. Male, middle age. During six weeks preceding admission, three or four epileptiform fits affecting mainly, if not entirely, the right side. Three weeks afterwards, gradual paralysis of the right arm, becoming complete; then of the leg; with impairment of sensation and of mental power. Tongue protruded direct. Apprehension remained perfect. Articulation was distinct; but he was unable to find his words, so that he came to a stan almost immediately after having commenced a ser tence; there was also reason to disbelieve the co rectness of the signs which he made. In two days however, articulation began to suffer; he coul only pronounce the first word of a sentence and mumbled quite inarticulately. Then the tongu deviated slightly to the right, and the right side o the face manifested weakness. He ate with diffi culty; became unable to swallow; passed his evacu ations involuntarily; and died sixteen days after ad mission. Two fibrinous tumours, a part of a genera formation of similar tumours in other organs, existe in the white matter of the left hemisphere, involvin one convolution, but leaving the corpus striatum an thalamus intact; one was seated about the middle o the hemisphere, near the surface, and was as large a a walnut; the other, the size of a pea in the unde portion of the posterior lobe. A third, of the size of hazel-nut, attached to the dura mater, was embedde in the brain, in the immediate neighbourhood of th one last mentioned.

Dr. Anderson was kind enough to call my attentio to the following two cases among the out-patients o the hospital.

Case V. Female, aged 31. Six months ago wa taken suddenly with hemiplegia of the right side without loss of consciousness; the paralysis was s complete that she could not be moved, but remained on the sofa for two days; she kept her bed for nin days. Power of articulation was at once extinguished The right side of the face was somewhat paralysed control over her evacuations was not impaired. She had now recovered some power over her arm, and coul walk half a mile; but she had never uttered any wor but "aye," "no." Her mental faculties were believed to be perfectly retained.

We found her very intelligent; some rigidity in the flexors of the right wrist, and diminished girth of th arm. Sensation perfect. Tongue protruded direct She only complained of heat on the top of her head The sounds of her heart were clear and pure. He only words were "aye," and "nay." These seemed t be pronounced indifferently; at least, she was easily confused in the use of them when at all hurried, an used the words at random, or apparently with no clea idea of their force. Thus, we desired to learn whether a miscarriage from which she had suffered preceded or followed the birth of the last child; she said, "no," "aye," "no," in rapid succession, and be came greatly confused. Shewn a *book*, she could no pronounce the word, but wrote "book" on paper immediately afterwards shewn a *shell*, looked at it doubtfully, and intimated she could not tell; then shewn a *cup*, nodded her head, and wrote "shell" on the paper; then shook her head, intimated she did not know, and could not be induced to continue the experiment; yet she had all the character of possessing perfect intelligence and quickness of apprehension. The cause of the attack was not apparent.

Case VI. Female, aged 6. Suddenly attacked with right hemiplegia three days ago, accompanied with perfect loss of speech. She had fever twenty-one weeks ago, and had remained sickly ever since She has now recovered the power of walking; but her arm is powerless. She is able to articulate "yes," but no other word, though she tries to do so Her face deviates to the left; her tongue is protruded direct. Power of swallowing is entire. Her mother believes her perfectly intelligent, and she certainly appears so. She can neither read nor write, so that I cannot apply the test I used in the preceding case her mother says that she points out at once what she wants. The sounds of her heart and lungs are perfectly healthy.

Case vii. Male, aged 55; very intemperate. During a week, gradual loss of sensation and motion in right arm; at the end of that period, he became suddenly "deranged" and speechless; when his wife brought him his breakfast, "he laughed at her, and has not spoken since." On the day following the one just specified, he sat crying, "wanting to speak, but being unable." Two days afterwards, I found complete paralysis of the arm; incomplete of the leg; the tongue deviated to the right; "he does not attempt to speak. The sounds of his heart were clear and pure. During my attendance, it is noted that he repeatedly made efforts to speak, which merely resulted in inarticulate noise. Eighteen months afterwards, he was little changed. He died four years after his attack. I was informed that he could walk a little; but the arm continued powerless, with rigidity of the flexors; he never regained speech, but to the last could only articulate a few words intelligibly. Intellect was believed to be unimpaired. He died by asthenia. On *post mortem* examination, the head alone was examined. There was increase in the subarachnoid fluid; and the substance of the brain, especially of the left hemisphere, was very œdematous, fluid issuing from it as from a sponge. There were two small apoplectic cysts in the left hemisphere—one in the anterior lobe near the upper surface; the other, in the middle lobe. The primary vessels at the base were healthy, excepting that each internal carotid was very narrow just at its entrance within the skull. The description is very obscure, and only enables me to state that the anterior cerebral artery of one side was much obstructed by thickening of its walls.

Case viii. Female, aged 31. She had suffered a long time from much debility. Two days before I saw her, she suddenly reeled, and would have fallen, had she not been caught; she was insensible; her mouth was drawn to the left side, and the right limbs were powerless. "She has lain without speaking or giving any intimation that she was sensible of outward occurrences;" she swallowed with some difficulty. She died six days afterwards; she did not regain power in her right limbs; "she seemed quite insensible, but endeavoured to draw up the bedclothes when they had been drawn off her"; "she often moved her hand to her head." "She shook her head this morning when an attempt was made to pour wine into her mouth." "She plainly has a choice as to what is put into her mouth, as she indicates preference for beef-tea by a motion of her hand." "Has taken her medicine and fully eight ounces of wine, opening her mouth for it." The preceding statements are extracted from different portions of the report; but not an intimation is given of her having uttered an articulate sound; and it is noticed that, in a threatening of an attack, which she had had previously, she did not lose her speech. She gradually sank without any other important symptoms.

Sectio Cadaveris. The left corpus striatum was perfectly softened; no trace of its normal tissue remaining. The thalamus was unaffected, quite firm, and its grey and white substance beautifully distinct. The process of softening had extended into the central white matter of the hemisphere, involving nearly two-thirds of its substance, but lying more to the front than posteriorly. The grey matter of two deep central convolutions was also softened, so that one of them fell from the white tissue around, leaving a cavity in which the finger would have lain. The opposite hemisphere, and the organs at the base of the brain, were healthy. The edges of the mitral valve of the heart were thickened, and the orifice was narrowed.

Case ix. Male, aged 44; a very intemperate subject; affected with chronic desquamative disease of kidneys. He was attacked with sanguineous apoplexy, which ended in death in seven days. The right limbs were paralysed. At my second visit, I record, he is "apparently conscious, but cannot speak nor protrude his tongue."

Case x. Male, aged 56. A week ago, attacked with "right hemiplegia, temporary loss of consciousness, and interference with speech." "Loss of consciousness lasted half an hour; but two days elapsed before his articulation was sufficiently distinct to allow of his giving some necessary instructions." I found him rational, but very excitable, and he became very delirious after my visit, the delirium lasting through the day. His mind was easily confused. His speech had become clear, but a little confusion about words remained. The paralysis had lessened in the arm to a greater extent than in the leg, but sensation remained much impaired in the whole right side.

Case xi. Male, aged 39. Was attacked during sleep, with complete right hemiplegia, eleven months ago. On waking, besides being paralysed, he was speechless; and he did not articulate, sufficiently to be intelligible for eight weeks. The paralysis improved very gradually, but was never removed altogether; "it fluctuated." On admission, speech is described both as nasal and as guttural, as though he had a sore-throat. The tongue deviated to the right. The hemiplegia remained to a certain extent, with marked impairment of sensibility in the entire right side. There was also partial paralysis of the right fifth cerebral nerve and of the portia dura of the seventh; vision in the right eye was impaired, and smell in the right nostril; the patient had also lost taste in the right side of the tongue and of the soft palate; the soft palate was symmetrical; hearing was less acute in the right than in the left ear. Control over the sphincters was enfeebled. The cause of the disease did not appear. The sounds of the heart were healthy. During his residence in hospital, he was attacked suddenly with opisthotonos, attended with delirium; the delirium was brief in duration, but his articulation was much impaired, and he soon became unable to speak at all. Apprehension was perfect; he replied by signs; he swallowed well; the paralysis of the arm was increased. On the following day, power of articulation was regained, and some power was restored to the arm, but the paralysis was permanently increased. He left the hospital soon afterwards.

Case xii. Female, aged 40. Suddenly attacked with right hemiplegia a year and a half ago; this occurred early in the morning; she called to her husband, who "did not notice any difference in her speech till he got upstairs." Articulation is not again referred to in the report. She applied for feebleness in the limbs of the right side, the remains of her attack; it was then observed that objects became invisible to either eye when moved across the field of vision to the right of the middle line. She was an out-patient, and only presented herself once, so that we had no opportunity of examining her case.

Case xiii. Male, aged 65. Attacked with hemiplegia on the right side; it commenced with imperfect paralysis of the arm; articulation then became indistinct, with increase in the paralysis; then the leg failed, speech became inarticulate, and he was restless and childish. These various stages occupied about an hour. It was found that he could not protrude his tongue. On the following day, some power was recovered in the paralysed limb, "a good deal of what, he says, is intelligible;" but mental power remained much enfeebled; the tongue deviated slightly. In six days he had considerably recovered, speech was

quite intelligible, though he "slurred words in rapid talking, and occasionally misplaced them." Tongue still deviated slightly. Little change had occurred at the end of a month.

Two months afterwards, he suddenly fell apparently in a faint; he rattled in his throat; the right side was convulsed"; and he was thought to be dying, but in no long time recovered. I saw him on the next day; "the power of the right arm was not impaired, but his command over words, and his power of arranging sentences were greatly lessened."

The patient's intellect remained permanently weakened, and a year and a half after the preceding occurrence, steady decline set in. About a year subsequently, speech became first rather indistinct, and in six or eight months was perfectly unintelligible. Control over the sphincter was weakened, and he became childish. No mention is made of paralysis, but the patient is spoken of as making his escape from his watchers. He lived for a year longer in a state of perfect imbecility.

Case xiv. Female, aged 5. Right hemiplegia three months ago, preceded by sudden "loss of hearing and speech," and followed by twitchings of the muscles of the right side. Loss of hearing discovered accidentally a few days before the loss of speech; the hemiplegia occurred on the same day with the loss of speech, and occupied a day in becoming complete. Considerable paralysis remains, with flabbiness of the muscles, though the girth of each limb is the same. Previously to the attack, the child had suffered considerable pain in the head, and was very disinclined to play. No further allusion to articulation occurs in the report.

Case xv. Male, aged 17. "Had a stroke" in very early infancy, the paralysis being discovered accidentally when the child was put down to support himself on the ground; the right leg and arm were partially paralysed, and until two years of age, he advanced by his left leg and hand; has since suffered from habitual headache. The last two years he has been subject to fits of epilepsia mitior, in which there is clear proof that he is not insensible; but he loses speech, and has some convulsive movement in his left limbs—none on the right side. The right limbs are imperfectly developed, as regards girth and length of the bones, and his power of directing the action of these muscles is imperfect. He is ready and very intelligent in his replies.

Case xvi. Male, aged 12. Seven years ago, during the measles, he had a sudden fit of convulsion, which left the right side hemiplegic; on the cessation of the convulsion he became conscious, but unable to speak. Articulation gradually mended during the following three months, but, even yet, he has marked thickness of utterance. Paralysis to a certain extent remains on the right side, with rigidity, atrophy of the muscles, and lowered temperature. He now suffers from attacks of epilepsia mitior. Speech is described as being thick and nasal; intelligence unimpaired.

Case xvii. Male, aged 57. Had suffered from pulmonary symptoms, with anasarca; no bellows sound. Found in the morning speechless, with paralysis of the right limbs; when desired to put out his tongue, he was unable to obey; but he opened his mouth with his hand, and pulled down the lip. Face was drawn to the left side. His intellect was somewhat impaired, but he answered by signs. He had great difficulty in swallowing. In three days considerable power had returned to the leg; he partially protruded his tongue; it deviated to the right. In seventeen days he articulated, though indistinctly; and six days afterwards it is reported that he cannot speak, but can articulate the monosyllable "yes." He was childish in intellect; was regaining power over th arm. Twelve days afterwards his state was un changed.

Case xviii. Male, aged 26. A year ago he awok with right hemiplegia—not complete—from which h has not yet perfectly recovered. At present, tongu is protruded direct; speech thick and sluggish. H kept his bed on occasion of the attack for nine days No other report.

Case xix. Male, aged 56. A sudden attack o partial paralysis of the right leg and arm without un consciousness. A fortnight afterwards, the paralysi was very slight, but "articulation was slightly indis tinct." He had been exposed to much anxiety, an to the influence of many depressing circumstances Sounds of his heart faint, but pure.

Dr. Anderson also sent me the following two pa tients, who were in attendance at the out-patient de partment.

Case xx. Female, aged 9. Five years ago fell striking the *back* of her head on a stone; was picke up insensible, and did not become perfectly sensibl for six weeks; she was in a succession of fits from th moment of the fall (2 p.m.) till 2 a.m. next morning she was then discovered to be paralysed on the righ side and speechless; she never spoke through the suc ceeding six weeks. In the fit immediately produced b by the fall, the right side was alone affected with spasm ever since she has been subject to epileptic fits, th longest period of immunity having been three weeks In these, as in the inaugural fits, the convulsiv movements—tonic and clonic—are limited to the righ side; as the fits pass off, she cannot speak for ter minutes or a quarter of an hour, and her right sid is weakened for about the same length of time. She has headache after the fits, putting her hand to th right temple, but she presented no evidence of perma nent injury having been inflicted by the fall. She looks remarkably healthy and intelligent. Muscula development of the right limbs perfect; tongue pro truded direct. He is stated to have no difficulty i talking except on the occasions referred to above The sounds of her heart are healthy,

Case xxi. Female, aged 4¾. About nine month ago she was attacked with pain in her head (her mo ther cannot say in what part) with feverishness; she was not sick. When she was taken out of bed, tw or three days afterwards, she was discovered to b paralysed in the right arm and leg, so that she coul not stand. It was three or four days before she wa able to stand, and she has never walked well since At the time of the right hemiplegia being discovered the child talked quite naturally; the mother does no volunteer any statement as to imperfection of speech in the preceding three days, but seems not to contra dict the possibility of some imperfection in articulat ing, though certainly the child could always be wel understood. There is unmistakeable paralysis of th right arm, which is wasted; and to a much les extent of the right leg also. Tongue is protruded direct. The child looks healthy. Sounds of heart healthy.

Case xxii. I was summoned the other day to se an old gentleman, aged 71, suffering from a second attack of hemiplegia. The former attack, in which also saw him, occurred two years ago; the paralysis was complete in the arm; the side affected was th left. My notes, which are brief, make no allusion t articulation; but his family assure me, most readily and most positively, that speech was never affected a any period of the attack. The present attack ha affected the right side; it is very incomplete, as tw days afterwards, when I saw the patient, he could mov the arm freely, though its temperature was much de pressed. His family state that at the time of th

eizure, he became perfectly speechless, though he oon recovered power of articulating.

Case xxiii. Dr. Jackson refers to chorea, in the same connection. I have not looked over my cases of this disease; but I have at present in the hospital a case of complete extinction of speech from chorea, the suspension of articulating power having continued an extraordinarily long time. The boy was admitted on April 13th; he was represented as having had his disease very severely since March 27th; more lightly for a longer period. On May 3rd, he articulated "no," but it was not until the 19th, that he pronounced a few words; nor could he stand at all until the 24th. In this case the choreic movements affected each side of the body equally (and therefore the right side); the disease fell with especial force upon the muscles of the tongue and face.

[*To be continued.*]

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

A HANDFUL OF SCRAPS.

By W. W. Morris, Esq., Clun.

Under this head it is proposed to offer a few very brief notices on a variety of minor matters. "Brevity is the soul of wit," and "Time is money." Acting on these trite axioms, I hope I may not be charged with abruptness in avoiding verbosity as much as possible.

I. The Treatment of Epilepsy. In the *Medical Times and Gazette* for January 26th and February 9th, 1856, will be found some very excellent remarks on the Etiology and Treatment of Epilepsy, by Dr. Henry Hunt. Amongst the symptoms are, torpid liver, excess of alkali in the blood, and acid urine, with phosphatic deposits, as the result of decomposition of nerve-tissue. The alkaline state of the blood is there said to prevent the formation of urea, and thus to cause the retention of the cyanogen. As the treatment by acids is theoretically indicated, so it is found practically successful; and, although I have nothing original to bring forward, it may be permitted for me to add my testimony to the almost miraculous curative powers of the nitro-muriatic acid in these cases—that is, when the convulsions appear to depend on the above hæmatic conditions, and not on some other temporary cause. Although I have kept no notes of such, I might have given some very marked cases which have yielded to this treatment in my own practice during the last seven years.

II. Minor Conservative Surgery. In general practice, especially in mining and manufacturing districts, we are often called on to treat various lacerated and contused wounds of the hands, especially the thumbs and fingers. Not long ago, I read in a medical journal a very contemptuous notice of the plan of treatment with the compound tincture of benzoin; and having for the last fourteen years used scarcely anything else, I was rather surprised that the treatment should be so disparagingly spoken of, since its effects with me have invariably proved exceedingly beneficial, far more expeditious, cleanly, and comfortable, and much less troublesome, than the adhesive plaster strapping. I have probably thus treated several hundred cases; and do not hesitate in stating that a very considerable number of compound and comminuted fractures of the phalanges, and of opened joints, would have been cases of amputation twenty years ago, which, under this plan of treatment, have been perfectly restored in two or three weeks, even when the finger has been hanging by a small piece of integument only. The Friar's balsam fulfils several indications; it excludes air, stimulates the wound, removes offensive odours, and acts as a firm splint. The injured parts should be cleaned, and nicely replaced; a piece of lint neatly wound round the finger, and saturated with the tincture. In a short time it becomes firm, entirely excluding the air, and acting as a support. Recently, I read an article in the Paris *Journal of Practical Medicine and Surgery*, strongly recommending a simple tincture of benzoin.

III. An Extemporaneous Mode of preparing Emplastrum Lyttæ. This merely consists in mixing with the palette-knife, on a slab, equal parts of the resin cerate and powdered cantharides; remembering that it must be spread thinly on the adhesive plaster, as it is more readily melted, and would run, if too thickly put on. It may often happen that a country practitioner wants a blister in a hurry, and suddenly finds himself without the *Pharmacopœia* preparation. This is a very ready substitute, and equally effective.

IV. Liquor Potassæ as a Solvent for the Gum-Resins. Alkaline preparations of the gum-resins, and other substances closely allied to them, are no novelty. Thus we have spiritus ammoniæ fœtidus in the *London Pharmacopœia*, and in *Beasley's Formulary*, a tincture of gamboge with ammonia, and another with carbonate of potash. But I wish to bring before your notice the solutions in liquor potassæ, which recommend themselves for their elegance and economy; while, as far as my experience goes, they are generally very effective, and perhaps equally so with other preparations of the same drugs. I will exhibit the preparations and their dilutions to you. (Mr. Morris here mixed the several solutions with water, in each instance producing a clear and thoroughly combined mixture.) And you will observe that even the dilution of liquor potassæ and ammoniacum is clear, whereas a tincture produces an opaque mixture with water. The solutions of aloes, catechu, and kino are very cheap and elegant colouring matters, a few drops giving a deep tint to half a pint of water.

The quantity of liquor potassæ best adapted for each gum-resin will be found to be as follows.

Aloes—1 part to 15 liquor potassæ.
Ammoniacum—1 part to 4 liquor potassæ.
Assafœtida—1 part to 10 liquor potassæ.
Catechu—1 part to 10 liquor potassæ.
Guaiacum—1 part to 7 liquor potassæ.
Myrrh—1 part to 5 liquor potassæ.
Opium—1 part to 10 liquor potassæ.

V. Camphor-Water as a Solvent of the Salts. Most of us are aware how much more convenient it is to measure a liquid than to weigh a solid; hence many keep the saline medicines, or some of them, in solution. Now, many of these solutions are very bad keepers. I recently discovered a very simple mode of keeping them well. It is merely to substitute aqua camphorata—*id est*, a saturated solution of camphor in water; and, although such a minute quantity is held in solution by water, yet in some cases the greater part appears to be displaced by the saline. Probably the mere placing a piece of camphor in the solution, which has been previously made with pure water, would be equally good.*

VI. Tincture of Myrrh as a Vehicle for Creasote. I have found a drachm of tincture of myrrh to hold in permanent solution eight or ten minims of creasote in a half-pint of water; and this answers

* Since reading this paper, I have proved such to be the case.

better than anything else which I have tried. The addition of myrrh is generally no drawback; as, when administered internally, it increases the tonic effect of the creasote, and when externally, the antiseptic.

VII. THE NUMBER 60 USED AS A LEAST COMMON MULTIPLE. I now wish to direct your attention to the fact of the great proportion of lesser numbers, and therefore of corresponding fractions, contained in the number 60. For instance: 1 or 1-60th; 2 or 1-30th; 3 or 1-20th; 4 or 1-15th; 5 or 1-12th; 6 or 1-10th; 10 or 1-6th; 12 or 1-5th; 15 or ¼; 20 or ⅓; 30 or ½. The practical application of this circumstance, which I wish to suggest, is the solution or maceration of a drug in sixty times as much of the menstrum, whereby we can easily apportion a dose, as indicated by the foregoing fractions; and as, in pharmacy, sixty grains constitute a drachm, sixty minims a fluid-drachm, sixty drachms equal seven ounces and a half, and sixty fluidounces are three imperial pints, or sixty ounces are five troy pounds, the calculation is easily made.

VIII. ON THE MORE PERFECT REGISTRATION OF THE CAUSES OF DEATH. It is hardly necessary to insist upon the fact, which is so notorious, that this registration is at present very imperfect. I would suggest: 1. That the medical attendant should always receive a small fee for the certificate; 2. That, in all cases not attended during life by a regular practitioner, an inquest be held and a *post mortem* examination made, if by the usual attendant it be considered necessary; 3. That no opinion as to the cause of death, given by any but a registered medical man, be deemed sufficient.

BENGAL BRANCH.

ADDRESS IN MEDICINE: THE PRESENT STATE OF THE MEDICAL PROFESSION IN BENGAL.

By S. GOODEVE CHUCKERBUTTY, M.D.

[*Delivered February 2nd*, 1864.]

MR. PRESIDENT AND GENTLEMEN,—I rise, with a full conviction of my own inability, to perform a task of vast magnitude. I feel that, in offering to address a body of gentlemen so highly educated as those before me, I have promised an undertaking far beyond my power, especially as the subject I have selected is *the Present State of the Medical Profession in Bengal*. I must, therefore, crave your indulgence while I speak, and beseech you to overlook my many deficiencies.

In considering the question before us, I think it best to state at once that I shall, in the first instance, give a slight sketch of the condition of the profession prior to the foundation of the Calcutta Medical College; next, its actual state now; and thirdly, the measures required for its improvement and reformation.

Those who remember the state of Medicine in Bengal some thirty years ago, will easily recognise the great changes which have taken place since that epoch in the science and practice of physic. The medical education of those days scarcely deserved that name; as a general rule, the profession being claimed as a birthright by certain castes, who handed it down from father to son as a matter of inheritance. Every *Boydo* was a born *Koberaj*, who required only to feel the pulse and to administer drugs, to proclaim himself a physician, without the ceremony of an examination. To be born in the caste was considered a divine warrant that he needed no diploma to establish his claim. Right or wrong, ignorant or learned, he was a *Koberaj* because he pleased to be one. And who could dispute his title, when the custom of ages had secured it to him? To suppose that a *Boydo* could not be a physician, unless he passe an examination, was to question the ruling of Menu and the anger of God was sure to be aroused by suc a gross act of impiety. The *Boydos*, however, wer not the only people who practised medicine. A lo caste of Brahmins also arrogated to themselves th same right, and, besides, plied the art of *Ticcadar* (inoculators), as the inoculation for the small-pox wa attended with religious solemnity. It was the com monest thing, in the days I am speaking of, to se these *Koberajes* going about the villages, each with brass case in his armpit, well furnished with reed phials filled with drugs of different kinds; and, a they went from house to house, they dealt out thes drugs to their patients, giving particular direction as to whether they were to be taken with the juice o the *Toolosi*-leaves, *Bael*-leaves, rhizomes of grass, o long pepper. Drastics and tonics were the most i request; next, *Patchuns* (compound vegetable infu sions); thirdly, powders, pills, and oils, some of whic were the most expensive and difficult to prepare fourthly, ointments, fumigations, and cauteries fifthly, pastes and cataplasms; and lastly, poisons i hopeless cases of all kinds, especially fevers wit cerebral congestion. But the grand reliance of th *Koberaj* was placed on the regulation of the diet an clothing, and the entire prohibition of baths, exer cise, and free air. Fasting, as a general rule, wa rigidly enforced during the first days of all acute dis eases; nay, it was often prescribed even in the last stag of prostration and in chronic cases. The water wa always ordered to be boiled before being drunk, excep when it was employed as a diuretic or refrigerant i combination with sugar or milk. The chief food of th patient commonly consisted of *Batasha* (sugar-puffs and water, *Khoe* (rice fried in the paddy), conjee, conje mixed with the gravy of some vegetable or fish curry and lastly, rice and dall. As to stimulating food o drink, nothing of the kind was allowed. Even mil was ordinarily excluded from the dietary of the sick except after taking certain poisons. The person o the patient was always to be carefully clothed, so a to prevent all contact with fresh air; but when ther were heat and burning, it was to be stripped nake and strongly fanned. Change of scene and climat was seldom resorted to, and sea-voyages never.

But, while the mass of the *Koberajes* were ignoran men and little respected, in fairness I am bound to con fess that there were some among them well instructe in the *Shastras*, and highly popular. Such names a Ramdullub Sein and Nillumber Sein were widel known, and they were reported to have effected extra ordinary cures. The latter of these gentlemen, I re member, attended a patient now more than thirty year ago, and it was curious to see how the villagers flocke around to have a sight of him all along the road The case was then in the last stage of dysentery and so, finding that he could do nothing in the wa of cure, he boldly foretold the day and hour of death which proved to be correct.

But, though the *Koberajes* were mostly *Boydos*, o low caste *Brahmins*, the surgeons were nearly al barbers (*Napits* or *Hajams*). The *Koberajes* wer ready enough with their nostrums whenever thes were required; but with the lancet they durst no trust themselves. On the contrary, the barbers wer in the constant habit of handling sharp instruments and so thought no more of cutting a boil than shavin the head. Of human anatomy they were utterl ignorant; consequently, their surgery was of th rudest kind, and went no further than the treatmen of boils, wounds, bruises, and ulcers. Fractures an dislocations were left to the tender mercies of ol women, who tried to reduce them by persevering friction of the parts. In midwifery, again, it wa

the women of the lowest grade who were called upon to help; for the business was looked upon as unfit and degrading for men. The knowledge of these crones was on a par with their social rank; for, beyond tying the navel-string and carrying off the soiled linen, their practice generally did more harm than good.

The barber-surgeons, however, knew the use of some ointments, and firmly impressed on their patients the necessity of thorough and frequent ablution. Although most of them confined themselves to the practice of surgery, some few did at the same time prescribe physic, to the no small annoyance of the orthodox *Koberajes*. Hence, though the brass case in the armpit was the sign of a *Koberaj*, it by no means always followed that the bearer of it was a *Boydo* or a *Brahmin*. Indeed, practically, in most cases, there was no perfect line of demarcation between surgeons and physicians; the fact being, that each man professed, according to his taste or convenience, what we would now call a medical or a surgical branch, or one or more of each. Thus, besides the *Koberajes*, barber-surgeons, *Ticcadars*, and midwives, there were a host of specialists. There were itinerant eye-doctors, who went about to perform the operation of extraction for the cataract; itinerant phlebotomists, who bled for all sorts of pains and aches; itinerant lithotomists, who cut for stone in the bladder; itinerant cuppers; itinerant leech-men; itinerant devotees, who sold all manner of charms and amulets for the prevention and cure of diseases; itinerant exorcisers, who pretended to cure hysteria, mania, and epilepsy, by expelling evil spirits; *Ojhas*, who professed to extract the venom from poisoned wounds by charms, incantations, and religious mummeries; priests of Hindoo temples, who advised penance and money-gifts to particular idols, who, they said, had the power of effecting miraculous cures; cauterisers, who used the *gool* (burning coal) and red-hot iron for chronic disorders; acupuncture-men, who would puncture the enlarged spleen and liver; issue-men, who would make large issues on the legs and arms for all diseases of plethora; women-doctors, for complaints connected with the generative functions; travelling aurists; tooth-extractors; and so on. All these men, ignorant and narrow-minded as they were, had a certain amount of dexterity in their different callings, which, no doubt, was the result of repeated practice. It does not appear that they ever attempted to tie a bleeding vessel, or to use internal injections; though, in cases of obstinate constipation, they often introduced into the lower bowel a *Pawn*-stalk or oiled *brinjal*, to procure alvine evacuations. Cholera, small-pox, and other diseases of the epidemic class, which they could not manage, they ascribed to the anger of some god, which they tried to propitiate by vowing sacrifices, by presents and gifts to the *Brahmins*, by growing the hair and finger-nails, and by *Poojahs* celebrated with feats and *Kobees* (singing-matches), and the noisy music of gongs, cymbals, shell-trumpets, and *tom-toms*. Infants afflicted with convulsions they exposed in wicker-baskets suspended from some lofty tree, and there left to perish of hunger and cold, under the mistaken idea that they were possessed, and that it was unsafe for the household to keep them any longer. It was a most revolting spectacle, to witness these wretched creatures screaming and writhing for want of food, and grown-up men and women coldly looking on without daring to approach them.

This was the case with the Hindoos. But the Mahomedans had their *Hakeems*, who administered physic and bled for all manner of complaints; and *Jurrahs*, who exercised the practice of surgery. Unlike the Hindoos, their *forte* was *to feed the patient well, and to practise frequent depletions*, with the view of renovating the blood, and purifying it at the same time from all kinds of corruptions. With them, periodical bleeding was the order of the day; and no sooner a man complained of a little backache, heaviness of the head, or inclination to itch, than it was thought high time to resort to the operation at once. These men, too, were sometimes good oculists, although their instruments were of the rudest manufacture.

As was to be expected from the great mass of ignorance and error which pervaded the ranks of the profession, the results of treatment were most unequal and unsatisfactory. Where one man was cured by the remedies employed, hundreds were hurried to the grave by utter inanition, by the exhibition of violent poisons, or by sheer ignorance, or crippled for life by excessive salivation or by the loss of some vital organ.

To use the words of Dr. H. H. Goodeve, in his introductory lecture to the students of the Calcutta Medical College, delivered in the year 1848: "Whatever may have been the degree of success with which the study of medicine was pursued in this country in the days of its ancient magnificence—and we have reason to believe that our art had then attained to very great eminence among the Hindoos—nearly all traces of this learning have long passed away. A very few years since, the native practitioners of medicine knew little more of the science they professed than a routine acquaintance with the properties of certain drugs, which they used empirically; or, if they pretended to give an account of their treatment, and assigned reasons for the exhibition of their nostrums, their pathology and their therapeutics alike were a farrago of unintelligible nonsense, compounded of ignorance and pedantry. Fortunate indeed was the patient whom they contented themselves with treating by simple and harmless medicines, commingled though these often were of fifty or even a hundred ingredients. They possessed, and very frequently employed at haphazard, most potent and deadly drugs, the baleful effects of which too often proclaimed their poisonous character, and the culpable ignorance which had dictated their administration.

"Of surgery, they were confessedly and most lamentably ignorant. The simplest wound, the most trifling accident, which the commonest knowledge of anatomy and the most ordinary principles of treatment would have sufficed to relieve in a few minutes, in their hands often became fatal to the sufferers, or terminated in a permanent and distressing deformity; whilst the diseased structures, now so rapidly removed by the skilful management of the educated surgeon, were to them hopeless maladies, which they dared not handle, or which became infinitely aggravated by their mischievous interference.

"Of the obstetric branch of the profession they were, if possible, still more fearfully uninformed. It is impossible to conceive anything more dangerous or ill adapted than their regulations of the lying-in room. Where the labour was most natural, their interference was beyond anything injurious and inhuman, aggravating the sufferings of the woman tenfold by their absurd and cruel directions, and often sacrificing the lives of the mother and her infant, where nothing more was needed than permission for Nature to work out her own arrangements without interruption from Art. On the other hand, in cases where human aid, properly directed, would be invaluable, they were paralysed, and incapable of affording the least assistance. Prayers and charms were their only resource, and the woman died undelivered; or if the child, alive or dead, were expelled, the mother was permitted to expire, without an effort being

made to save her, under the influence of some of those fearful accidents which not unfrequently attend upon parturition in all countries."

In such a state of things, was it to be wondered at that the practitioners of our art, as a class, commanded no respect, and but little confidence? Even the highest of them were treated with so much social contempt, that no orthodox Brahmin would eat or drink any article of food polluted by their touch. In favour of drugs alone, a dispensation was allowed by universal and time-honoured custom; for it was said these could never be so corrupted, nor did it matter if they consisted of substances of an usually forbidden nature.

European practice was then, as yet, but little known in the country. The Government, however, had not been altogether idle to improve matters in this respect, as will appear from the following extracts from Dr. W. C. B. Eatwell's introductory lecture in 1860. "It was not until the year 1822 that the English Government made any systematic attempt to impart medical instruction to the natives of this country, and it was then only to those who were destined for employment in subordinate positions in its service. Previous to that time, natives of the country had been trained in the different hospitals, under European superintendence, as native doctors (as they were termed), and in this matter had become acquainted with the general aspect of disease, and with the European modes of treatment; but they obtained no systematic education, and could not be regarded in any other light than as trained hospital assistants. In 1822, the Government established a medical school, called the Native Medical Institution for Training Native Doctors. The school was placed under the control of an European medical officer, who was aided by native assistants. Dissection of the human body was not, however, attempted; and the only practical information on this subject was obtained from the dissection of the lower animals, and from the *post mortem* examinations of persons dying in the General Hospital of Calcutta, which the students of the Native Medical Institution were permitted to witness. In the year 1826, a further effort was made by Government to extend medical education by the institution of a medical class at the Calcutta Sanscrit College, and by a similar class at the Calcutta Madrissa."

In these latter institutions, however, the ancient Hindoo and Mahomedan works were taught, along with certain elementary treatises on anatomy, surgery, and medicine, translated from the English language, or composed for the purpose in the vernacular.

All these efforts were, however, of little avail, and the result obtained was far from satisfactory. Nor did the influence of the English doctors count for much in those days. It was only in the Presidency and in the larger towns that they were to be found. Those were the days of free depletions, violent purgatives, and exhausting salivations, the dread of which, along with the absence of an appreciative native public, tended to circumscribe materially the benefits of European modes of treatment. But, granting all the praise and honour due to our hard-working and intelligent predecessors, the European medical officers were at best only birds of passage, and could not, therefore, permanently improve the position and prospects of the profession out of the service. Independent European medical settlers there were none; nor did there exist then in the country any proper means of instruction for the East Indian youth on the European model.

Such was the state of the medical profession in this country immediately before the foundation of the Calcutta Medical College. The native members of i were all unqualified men, totally ignorant of th modern sciences, and, if learned at all, it was only i the ancient lore of the Hindu and Mahomeda schools, which taught no practical anatomy, physic logy, nor chemistry, and were replete with errors an fanciful ideas of all kinds. The European member almost all belonged to the Government service, an wrote and spoke in a foreign tongue, which, from th number of technical terms they made use of, pre sented formidable difficulties to all uninstructed per sons. The opening of the classes of the Calcutt Medical College in February 1835, however, set o foot a mighty revolution, the fruits of which hav been ever since benefiting the land by making ever year scientific medical aid more and more accessibl to all classes of the population. At first, educatio was conveyed entirely in English, which in a shor time succeeded in breaking down the antiquate prejudices against human dissection and practica midwifery, and in preparing a class of native medica practitioners well grounded in the study of rationa medicine. In the year 1838, an additional class wa formed in Oordoo for the instruction of native doc tors; and in 1852 was effected the opening of a third class, to be taught in the Bengali language.

[*To be continued.*]

Reviews and Notices.

GLAUCOMA, AND ITS CURE BY IRIDECTOMY. Four Lectures. By J. SOELBERG WELLS, Ophthalmic Surgeon and Lecturer at the Middlesex Hospital. Pp. 86. London: 1864.

THESE lectures have been published by Mr. WELLS in order to give an account of the modern doctrine of glaucoma. "The great interest," he says, "which has been lately excited in the profession by the controversy which has appeared in the BRITISH MEDICAL JOURNAL, as to the beneficial effects of iridectomy in glaucoma, has led to the expression of a wish in several quarters, that a short and practical treatise should be written embodying an account of the modern doctrine of glaucoma." To meet this want, Mr. Wells gives us these short, pithy, and practical lectures.

Lecture I contains a short history of glaucoma; and the premonitory symptoms of acute glaucoma. In Lecture II, the symptoms of acute glaucoma are described; and so, also, those of chronic inflammatory glaucoma. In Lecture III, glaucoma supervening on cataract is treated of; the doctrines touching the nature of the disease; the ophthalmoscopic signs, etc. In Lecture IV, we have an account of the prognosis of glaucoma; the beneficial effects of iridectomy described, and the mode of performing the operation.

We can safely recommend a perusal of these lectures to any one who desires a good and condensed account of this very interesting subject. Mr. Wells, we need hardly add, regards the matter from the point of view of the school of Von Gräfe and Bowman.

Scientific Notes.

Growth of Plants in Darkness. M. Boussingault in a memoir, brings forward several experiments which prove that the growth of a plant in the dark is supported entirely at the expense of the seed. Under the influence of air and moisture, in a soil deprived of manure, a plant in the light assimilates carbon, and, at the same time, fixes hydrogen and oxygen in the proportions to form water. In the dark, on the contrary, carbon is eliminated, and so are hydrogen and oxygen also in the proportions to form water.

Conical Hailstones. M. Barral lately sent to the Academy of Sciences a note on a curious form of hailstone he observed in Paris on the afternoon of Easter Tuesday. The stones were of an absolutely conical form. The Editor of the *Chemical News* says that, in passing through St. Paul's Churchyard about four o'clock on the same afternoon, he picked up at least a dozen of perfect cones, some of them three-quarters of an inch high and half an inch broad at the base. This form of hailstone, M. Barral says, has never before been noticed by meteorologists. M. Barral observed traces of crystallisation in the structure of the stones he saw, and says they were very hard. Those we (Ed. *Chemical News*) picked up were quite soft, and looked like moulded snow, and we remarked no trace of crystallisation.

Artificial Production of Monsters. A series of experiments have been made by M. Barthelemy on monstrosities, both artificial and natural, among the lepidoptera. He performed his experiments chiefly on the chrysalis, and endeavoured to cause modifications similar to those obtained by covering the eggs of birds with varnish. On covering the chrysalis with oil, it was found that they died before completing the metamorphoses; but on covering either the thoracic or abdominal part with wax, a retardation of development was perceived, but this was much greater with the thoracic parts. The cephalic part of the nervous system was much retarded in development, but the other parts of the ganglionic chain appeared to be developed as usual. He succeeded also in suppressing the development of the generative organs.

Transformation of Coagulated Albumen and Casein into a Soluble Albumen Coagulable by Heat. M. Schutzenberger has obtained a curious result by dialysis. He dissolved pure coagulated albumen in as little potash as possible, and treated the albuminate of potash with an excess of acetic acid. The mixture was then dialysed, and as soon as the inner liquid showed no acid reaction it was examined. At first it was clear, but it soon became opalescent. Heat coagulated the albumen; so did mineral acids, and, strange to say, so did alkalies and neutral salts. This happened also with uncoagulated white of egg, which was acidulated with acetic acid and then dialysed. Solutions of casein in hydrochloric acid, after dialysation, gave similar results.

Conversion of Salt Meat into Fresh. Mr. A. A. Whitelaw thus describes the process. The salt meat is placed in a dialytic bag made of untanned skin, or other suitable material, and the bag filled nearly, but not quite, full of brine from the beef barrel. The dialyser is then placed in sea-water, and the process allowed to go on for several days, till the meat and brine are sufficiently fresh for use, or till the brine in the dialytic bag is within 1° or 2° of Twaddle's hydrometer of the same strength of sea-water. In this way, as the brine becomes freed from salt, the beef, which, by the action of salt, has been contracted, gives its salt to the brine in the bag, and so the process goes on, the beef expanding like a sponge, and gradually taking up a great part of the natural juice that it had previously lost in the salting process. In this way no loss of juice is sustained by steeping, and the brine left in the bags, after a nightly dialysis in fresh water, can be used for soup. Thoroughly salted beef, without bone, takes up nearly one-third its weight of juice, and this absorption takes place gradually as the strength of the brine in the dialyser becomes reduced. Meat thus treated—being, in fact, fresh meat—may be cooked in a variety of ways that are obviously not available for salt meat; and so the food of sailors, and, consequently, their health, may be improved. (*Chemical News.*)

Maturation of Fruits. According to MM. Frémy and Decaisne, there are three stages in the existence of a fruit. In the first stage, that of development, the fruit is green, decomposing carbonic acid in solar light and evolving oxygen. In the second stage, that of ripening, the green colour changes to yellow, brown, or red; the fruit then transforms the oxygen of the air into carbonic acid, which is produced in the cellules of the pericarp in consequence of a series of slow combustions, in which the immediate soluble principles disappear. Tannin goes first, then acids, and afterwards sugar. In the third stage, that of decomposition, the effect of which is the destruction of the pericarp and the liberation of the seed, air enters the cellules, sets up the alcoholic fermentation, and the acids of the fruit give birth to true others. Finally, it not only decomposes the cellules, but it oxidises certain immediate principles which have resisted the changes in ripening. (*Chemical News.*)

Fossil Mammalia in Ireland. At a meeting of the Dublin Geological Society, Mr. Scott brought forward a catalogue of the fossil mammalia hitherto discovered in Ireland. The animals were about sixteen in number. The mammoth was found in three places—Belturbet, Shandon, near Dungarvan, and also at Whitechurch, near the same town. A hippopotamus tusk was found by a Mr. Doran near Carrickfergus. The remains of the horse and pig did not differ materially from those of the present day. The pigs' skulls showed that the animals had been killed with a pole-axe. The subject of the races of oxen has been repeatedly brought forward by Sir W. Wilde. The largest species, *Bos primigenius*, had not yet been found in Ireland; but two other species, *B. frontosus and B. longifrons*, were abundant. A head of a bull of each of these two species was on the table, that of the former exhibiting the mark of the pole-axe or stone hammer in the forehead. The specimens of fallow deer Mr. Scott considered to be those of park animals, recently drowned in bog holes, etc. With regard to carnivora, the paper contained the history of seven skulls of *Ursus arctos*, the brown bear of Europe, and also a notice of two milk-teeth of a young animal of this species recently discovered at Coole Park, county Galway. A few bones of the cave bear, *U. spelæus*, were found at Shandon, with the mammoth; and some bones of the Polar bear, *U. maritimus*, were found in a collection of bones sent from Lough Gur. The remains of wolves and dogs are stated by the best authorities to be almost undistinguishable the one from the other; and, as the date of the extinction of wolves is so recent as 1710, it is difficult to decide whether the remains found at

Dunshaughlin and elsewhere are those of wolves or dogs. Mr. Scott mentioned some council orders of Cromwell's time, dated 1652 and 1653, forbidding the exportation of wolf dogs, and offering £6 for a she-wolf and £5 for a dog-wolf, in consequence of the number of children of vagrants killed by these animals. The cetacean remains discovered were detached bones of the smaller cetaceans, which might, perhaps, be very recent.

Alcoholic Fermentation. M. Béchamp remarks that two orders of ferments exist; one soluble, and therefore not organised, of which diastase may be taken as the type; the other organised, and therefore insoluble. The action of the former is invariable and specific; that of the latter, in a chemical point of view, is essentially variable, like that of all organised beings. The so-called fermentation of cane sugar set up by beer yeast is thus explained. The yeast plant first of all transforms cane sugar into glucose outside itself by means of a product which it contains ready formed in its organism, and which the author calls *zymase*; the plant then absorbs the glucose, digests and assimilates it, grows and multiplies, and finally throws off the used parts of its tissues in the form of the numerous compounds known as the products of fermentation, just as human beings throw out their waste in the form of urea, etc. According to this theory the alcohol, etc., must come from the yeast, and should be obtained from yeast perfectly free from glucose, which the author's experiments prove does in fact furnish alcohol. M. Béchamp found also that the *Mycoderma Aceti* in contact with cane sugar yielded alcohol, which it is thus seen may be formed without sugar by yeast, and with sugar by another organism similar to yeast. Hence it is clearly impossible at present to express the so-called fermentation changes by an equation. The author considers them as a series of transformations which take place simultaneously or consecutively, and which may some day be individually explained by an equation comparable to that which expresses the change in starch under the influence of diastase. (*Chemical News.*)

The Sun. According to Professor Helmholtz, the light of the sun has been shown to exceed that of the Drummond 146 times, and that of the electric lamp three or four times. In reference to heat, Pouillet had demonstrated that the quantity of heat emitted by one square foot of the surface of the sun during one hour is equal to the heat produced by burning 1500lbs of coal, equivalent to 7000-horse power. The cause of the solar heat could not be due to "chemical action," since a mass of oxygen and hydrogen, giving water by combustion equal to the mass of the sun, would be heated to 3777 deg. cent., a heat which would be exhausted in three thousand years. In regard to the sun having an original store of heat, it had been reckoned that it would cool 1¼ deg. cent. every year if of a capacity like water, a diminution that would not be much felt in four thousand years. Professor W. Thomson has proved that the heat could not be brought to the surface by conduction, but possibly by convection. Another theory is that new heat is produced by condensation. If a contraction of the sun took place, diminishing its diameter by a ten thousandth part, it would give heat sufficient for 2,289 years; and, if the same contraction were to go on till its density equalled that of the earth, the heat would be sufficient for 16,700,000 years. Another hypothesis ascribes the heat of the sun to the force of gravitation, through meteors falling into it. These bodies swarm in the interplanetary space, and, coming to the earth with great velocity, are heated in our atmosphere by friction, exploding, and sometimes setting fire to buildings. Calculation gives for the fall of 3000 ft. 1000 deg. cent.; for 14 to 20 miles 900,000 to 2,500,000 deg.

British Medical Journal.

SATURDAY, JULY 23rd, 1864.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The position in which the Royal College of Surgeons of England now stands in face of the profession is plain and transparent. It has been shown, in the most unanswerable manner, that its affairs are grievously managed—in a way which admits of no justification. We know, indeed, of no one, either in or out of the Council, who at this time of day has ventured to come forward and justify the College system.

It has been shown, that the reforms which were the chiefest intentions of the new Charters have been carefully eluded by those whose duty it was to carry them out; and that the very abuses which these Charters were meant to remove are still in active operation.

It has been shown, for example, that the office of Examiner, by a constant system of re-election, has been hitherto made a life-appointment; although the Charter of 1852 made the office quinquennial, and was obtained for the express purpose of preventing the office from being held for life.

It has been shown that the Council had powers given them for the express purpose of enabling them to elect Examiners from out of the general body of Fellows; and shown, also, that they have never in one single instance obeyed the injunction of the Charter.

It has been shown that the constitution of the Council is most faulty and anomalous, and such as has naturally led to the doing and to the perpetuating of the abuses complained of.

It has been shown that the Court of Examiners, who are nominally elected by the Council, virtually elect themselves into office; that they elect themselves to the highly lucrative office of Examiners; and, as we have said, despite the explicit intention of the Charter, have never permitted any one who is not of themselves or of the body—the Council—over which they rule supreme, to participate in the honours and emoluments of office.

It has been shown that the influence of the Court of Examiners, although itself is nominally elected by the Council, is supreme in Council; and that in consequence, as things are managed, no Councillor has any chance of obtaining the sweets and riches of an Examiner's office, who makes himself obnoxious to

the Court of Examiners—who does his duty as prescribed by the Charter.

It has been shown, again—is, indeed, a notorious and admitted fact—that Fellows seek to enter the Council, not for the sole purpose of performing the proper duties of a Councillor's office—viz., of directing and presiding over the affairs of the College—but mainly that they may thereby enter the portal which, under the misdirection of the Council, has been hitherto the only entrance to the Court of Examiners.

It has also been shown that, through the improper influence of the Court of Examiners within the Council, the voice of honest reform is stifled, and the most flagrant abuses of power are perpetuated. In so far, men enter the Council in order to become Examiners; they naturally, as Councillors, trim their sails to go in the direction which alone can lead to the haven of their hopes; and this direction is of necessity the path which is pointed out by the Court, and which, therefore, leads to the perpetuating of the present system. And, as the present system exists solely on the perpetuating of abuses, the Councillor soon learns that to destroy existing abuses would be to kill the goose which shall lay for him (he hopes) that golden egg, an Examiner's office.

All this most vicious circle of College doings we have again and again laid before the eyes of the profession. We have demonstrated the vice—the radical vice—of its constitution. We have shown the outrage on common sense and common justice involved in the condition which allows Examiners to be of the Council, and so virtually to elect themselves to office. We have shown the utter disregard to the plainest objects and intentions of the Charters of 1843 and 1852. We have shown that, by following out the traditional system, the grand purport of these Charters, the very objects for which they were obtained, have been completely evaded; and that all the evils, for the removal of which these Charters were expressly obtained, are at this moment in as vigorous operation as they were in those other days when the College was so mercilessly castigated by the pen of Mr. William Lawrence.

All this sounds like the tale of a great scandal. But, if we have told it, not ours is the fault. What hope presents of any change to better things, if the pressure of professional opinion be not brought to bear upon the Council from without? Those few men in Council who have ever attempted to break the spell of old and obsolete practices there have utterly failed. To throw the force of public opinion upon these things, therefore, becomes the duty of the honest journalist.

With this intent, we therefore now call upon those gentlemen who have been of late years elected into the Council to remember the terms upon which they were elected. They were sent to the Council, not for the purpose of working their way to an Examiner's seat, but to carry out the principles of the Charters of the College. They were sent to the Council, not to do themselves, but to do their College, service. We, therefore, publicly ask those gentlemen to redeem the pledges which they tacitly accepted when they entered office. Their path of duty is most clear. Nothing less than the sacrifice of duty to self-interest can lead them astray from it. They must see, and in their consciences acknowledge as strongly as we do, the evils of the system which they are now called upon to direct. Will they sit quiet there, and allow themselves to fall away and slide into the old groove?

Their duty and the work are plain enough. Let them strike at the very heart of the evil. A new Charter must be had. Country Fellows must vote by proxy. Examiners must not sit on the Council. No Examiner must hold office for more than five years. The Council shall rule the Court of Examiners, not the Court the Council.

To effect all these reforms, a new Charter is indispensable. Let the new members of Council insist on the procuring of another Charter, and in the meantime exercise the powers which they possess of striking at the root of the evils complained of. Let the new Councillors insist that the terms of the Charter, which indicate five years as the period of an Examiner's office, shall in future be complied with. Let them insist, in the interests of the College, "in the interests of science, and in the interests of the public, that the emoluments and honours of an Examiner's office shall be so distributed as to enlist and encourage the services of all the highest disposable surgical and anatomical skill of the Fellows, instead of allowing them to become partriarchal appanages"; and, in furtherance of this great reform, let them, at the very next and near-at-hand election of Examiners—*i.e.*, when the next quinquennial period of election arrives—instead of following on in the unpardonable path of constant re-election,—let them, we say, insist that those whose term of office then expires shall not be re-elected. Let them insist that for once, and for the first time, the terms of the Charter shall be complied with, and so elect, to use the words of Sir Benjamin Brodie, "those who, there is reason to believe, are the best qualified for the office, whether they are the younger members of the body, or the older ones." Let them have ringing in their ears the words of that man who showed himself so virtuous and so true when he held office in the College: "The mode of electing Examiners ought not to be that which it is at present. The Examiners are now appointed according to seniority, or nearly so." Let them remember that these words of Sir. B. Brodie were spoken thirty years ago, and yet that the very evils which he so condemned are still in as vigorous operation as they ever were. Let them remember

the words of Mr. Lawrence, spoken thirty years ago before the Committee of the House of Commons: "I think that many competent Examiners might be found between the age of 25 and 36; and, if men of sufficient eminence could be found younger than 36, I see no objection to their being Examiners."

In another number, we shall inquire into the results of this system; *i. e.*, we shall examine the present constitution of the Court of Examiners.

LORD DE GREY AND OUR DEPUTATIONS.

We regret to say that we have given Lord de Grey more credit than he deserves in the matter of the Army Medical Service. We now learn that the rumour to which we gave currency in a late number of the Journal, that Lord de Grey had appointed Sir James Clark, Dr. Sutherland, and Dr. Parkes, a committee to consider the present state of the army medical departments, is not correct. The opinions of these gentlemen, as of others, have been asked, it is true; but no committee has been formed for the purpose indicated.

All this only makes the matter still worse. It now appears that Lord de Grey had an interview with the three gentlemen above named before he received the deputation; and, consequently, his opinion was already formed before he saw the deputation. Assuredly he held out no hopes of better things for the army surgeon; and it is hoping beyond hope, therefore, to expect from him any assistance in the matter. We do not doubt for a moment that the three gentlemen whom he consulted pressed upon him the very things which were urged by the deputation. Lord de Grey, therefore, required no time for any deliberation in responding to the deputation; and we must again repeat that, as he promised nothing at the moment, nothing can be reasonably expected from him. More strongly than ever, consequently, must we urge upon the profession the advice which we gave last week, viz., that in ourselves, and through the aid of public opinion, must we seek for help. If the waggoner will not put his own shoulder to the wheel, there is little hope that the Olympians will come out of their way to give him a lift. The lesson which we have so often urged upon those who seek poor-law medical offices, is the very lesson which we would urge in this case. There is no aid to be expected for the army medical officers, except that which is obtained by the determination of the profession. It is now as clear to us as figures can make a sum, that, so long as the Horse Guards can get men to do the medical work of the army on its own terms, so long will it continue to do so. Lord de Grey will clearly put no pressure on the Horse Guards; and the Director-General is evidently precisely of the opinion of His Royal Highness the Commander in Chief, viz., that the third class Netley men, and men of the style of the three hundred who have so gallantly thrown themselves into the breach, are all that can be desired for the army. Dr. Gibson, indeed, himself told the deputation so.

What may be done through an application to Parliament, yet remains to be seen; but we have no great hopes from that quarter. Our voice, unfortunately, is very weak in Parliament; and sadly too weak to make any impression on the pachyderms of office. Through the press, public opinion, and Parliament, we must, however, still continue to urge the claims of the army medical officer. But we candidly confess that, if gentlemen can be found to come forward, three hundred at a time, ready and willing,—aye, and most eager, we regret to say,—to accept office on the degrading terms proposed in the Director-General's famous advertisement, we fear there is but small hope for better things to the army medical officer. What effect can we hope to produce on the minds of His Royal Highness and the Director-General (who have so unmistakably expressed their opinions on the subject), so long as they can go to Parliament, and come before the public, and say: "Really we have no difficulty whatever in carrying on the army medical service. We have hundreds of applicants, all good men, all duly qualified, and fitted with the double license to practise medicine and surgery, *hic et ubique*. Men with first-rate testimonials, too; hundreds of applicants,—in truth more than we can oblige."

We ask our brethren what hopes are there whilst members of our profession overwhelm the Director-General with applications on his own terms? We therefore urge the profession to combine, and themselves force from authority what it now refuses to our just claims. Let our lecturers continue to dissuade their students from entering the army. Let our medical students, as they have already done on another occasion, unite in a resolve never to enter the army on the present terms of office. Let the Director-General, then, use up his precious list of the three hundred misfits; and when he has come to the end of that same, he will find himself forced to offer the terms which he now refuses. *Aide toi* must be our motto, and then we can get our terms spite of the Horse Guards, spite of the War Office, and spite of the Director-General.

Mr. Paget's letter, published in our last number, is well worthy of the serious attention of the country Fellows of the College of Surgeons. Mr. Paget, himself a Councillor, admits that the "College management" requires improvement; and that the Examiners have hitherto been elected from too stinted a range. Mr. Paget looks to the country Fellows as the agents for carrying out the reforms required;

for, as he says, Councillors drawn from their body will not pretend to the office of Examiners, by reason of the fact that they live in the country. "But," adds Mr. Paget, "I cannot hope for reform until I see the country Fellows show a higher appreciation of their duties and their powers than they have hitherto done." Certainly, by their remissness and apathy at the late election, the country Fellows seemed to say that, as far as they cared, the London Fellows might manage the whole concern, and have it all to themselves. They forget the words of the poet,

"Who would be free themselves must strike the blow."

We do not, however, for a moment believe that such is either their wish or their intention; and we attribute the failure at the last election solely to want of due and proper organisation. We, therefore, earnestly recommend the country Fellows at once to decide—for example, at the approaching meeting of the British Medical Association—whom they shall select as their country representative at the next election. It is hard indeed if seven hundred country Fellows cannot elect their man, if they have the will to do so.

Mr. J. I. Ikin of Leeds has thrown out to the Committee of the Lancashire Relief Fund what seems to be a very excellent and humane suggestion. He proposes the maintaining of a ward in the Women's Hospital for the treatment of consumption amongst young females.

"Such cases," he says, "are not received into the Infirmary as in-patients; whilst we have at present at the Women's Hospital several capital wards, both large and small, unfurnished and unoccupied, merely because necessary funds to fill them are not forthcoming. £30 *per annum* would be sufficient to maintain and treat each consumptive case, exclusive of the fitting up of the wards."

We beg to call attention once more to the nature of the services performed by *non-combatant* officers of Her Majesty's Army. Scarcely does a despatch, containing an account of any of our war-proceedings, reach us without giving similar facts. We recommend them to the consideration of those superb gentlemen at the Horse Guards, who flatter themselves that the "doctor" of the regiment is not such as they are. Lieut.-General Sir D. A. Cameron, commanding the troops in New Zealand, says;

"I must particularly mention the valuable services of Deputy Inspector-General Mouat, Surgeon McKinnon, 57th Regiment, and Assistant-Surgeon Manley, Royal Artillery, who fearlessly exposed themselves to fire in attending to the wounded, the greater part of whom fell close to the enemy's work."

It is probable the medical service is short handed there, as elsewhere, or Dr. Mouat, who is the principal directing medical officer in the colony, would not have been led to expose himself under fire in surgical duty. Surgeon McKinnon served throughout the Crimean campaign with a Highland regiment, and through nearly the whole of the Indian mutiny campaign with Lord Clyde's head-quarters staff.

A new edition of the *British Pharmacopœia* must not be expected at present. If all the ill that has been said of it be true, it will take a long time to eliminate all the errors in the first edition, and fill up all the deficiencies in it. The work is, however, in hand. Mr. Warrington, Chemist to the Apothecaries' Society, is, and in fact has been for some time, engaged in the business; and will, of course, in due time (which, we hope, means some not very distant time) report to the Pharmacopœia Committee. The present Pharmacopœia Committee is a small body; and will, therefore, we trust, be able to discuss Mr. Warrington's report, when it gets the same, without any of that great delay which characterised the proceedings of the defunct Committee. As, however, the present Committee consists of gentlemen engaged in practice, we may be very sure that a long day will yet pass before the book sees the light, unless those gentlemen do what we should strongly recommend them; viz., throw the whole business and responsibility of the editing on the shoulders of some one capable pharmaceutical chemist. Economy would thus be consulted, and all the advantages which necessarily result from unity of design and concentration of purpose and individual responsibility be obtained. Never was a better illustration of the old fable of "too many cooks spoiling the broth," than in the case of the *British Pharmacopœia*. However, *nil nisi bonum de mortuis*.

At the late dinner of the Fellows of the College of Surgeons, the President of the Medical Council, Dr. Burrows, sincerely hoped that the Medical Council would stop all its idle talk, and would propound a plan of education worthy of the whole profession. Mr. Arnott, on the same occasion, proposed the health of the Medical Council. He apologised for the defects of the *British Pharmacopœia;* and we think he should have also apologised for the defects of the Medical Council. A scheme of education, he said, was under the consideration of the Council—a fact which we all only too well know; and, he might have added, has been so for any time these six years. When the scheme would be propounded he told us not. Mr. Arnott does not like the idea of the Council applying for more compulsory powers, in order that it may be enabled to force all corporations to adopt its scheme of education. And no wonder; for most assuredly the first body to be compulsorily operated upon would be that of the London College of Surgeons, which has distinctly set at nought the recommendations of the Council. Mr. Arnott also indignantly asked: Could it be doubted that medical corporations demanded less from their candidates

than competency to practise? We answer: Yes, it can very well be doubted; and, as regards the College of Surgeons itself, we beg to ask Mr. Arnott if he thinks the College sends forth men competent to practise medicine. Mr. Arnott knows as well as we do that there are many hundreds of men in London and the provinces, who are simply Members or Fellows of the College, the chief part of whose practice, in fact, is purely medical. Knowing this, can he say that an examination which contains no question on the practice of medicine is sufficient to make Members of the College competent to practise medicine? But, more than this, inasmuch as the Medical Council recommends more study than the College requires, it is certain that the College of Surgeons, in the opinion of the Medical Council, does demand less than what is wanted to make men competent practitioners. Such is the logical answer we give to Mr. Arnott's query.

The following are the terms of the Contagious Diseases Bill, just passed through the House of Commons. We will venture to say that a more iniquitous interference with the liberty of the subject has never been sanctioned by a British House of Parliament. The women whose liberty and citizenship are thus ignored belong to the degraded classes of society, and are, therefore, we suppose, treated in this Bill as persons who have no civil rights. Those only who uphold the doctrine, that it is right to do evil to obtain good, can give their sanction to such a piece of legislation as this. These unfortunate women have been treated as Indian princes treat their dancing girls—as beings who have no more rights than mere animals.

"The Bill, with amendments, has been reported to Parliament, and issued accordingly. The enactment, which is to continue in force for three years, is to have effect at Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershot, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown, and in the specified limits of parishes, villages, and places included in or contiguous to the towns and stations named. It will be the duty of an Inspector of Hospitals, chosen for the purpose, to supervise a system of Certified Hospitals. The authorities of any hospital, being desirous that such hospital should be certified, if, on examination and report by the Inspector of Hospitals, the hospital appears to the Admiralty and the Secretary of State for War to be useful and efficient for the purposes of the Act, it will be constituted a Certified Hospital, and will be from time to time visited by the Inspector. Power is given to withdraw this certificate, if the authorities think fit to do so, on the report of the Inspector. This system of hospitals will be utilised as follows. Any authorised superintendent or inspector of police, or any duly registered medical practitioner, can lay before a justice of the peace an information; the justice may, if he think fit, issue to the woman named a notice summoning her to appear personally, or by deputy. In the event of the person not appearing, or the matter of the information being substantiated on oath or affirmation, the justice may order the woman to be taken to a Certified Hospital for medical examination. The woman may be apprehended for this purpose. The medical authorities of the Certified Hospital will return to the justice, within twenty-four hours, a certificate of the examination made; and on this the justice may, if he think fit, order the authorities of the hospital to detain such woman for medical treatment until discharged by the authorities. In the case of the patient refusing to submit to the examination or to the medical treatment, or to the rules of the hospital, she may be summarily convicted, and be imprisoned for one or two months."

Dr. Markham, at the last *comitia*, brought under the notice of the College of Physicians the fact that the College had unknowingly been doing an act of injustice to a certain number of the members of the College. The College had in the famous, or, as some think, infamous year of grace 1859, under the impulse of a very natural indignation excited by the proceedings of another corporation or two, passed a resolution to the effect that its Registrar should not address any of its members with the title of Doctor, who did not possess a degree in medicine from some recognised University. The College had forgotten at the moment that, some twenty years previously, it had entered into an agreement to give the title of Doctor to its members, whether they possessed a degree in medicine or not. Upon these facts being brought under the notice of the College by Dr. Markham, the College at once, in the most honourable manner, admitted the error, and passed a resolution to the effect that all gentlemen who became members of the College before July 14, 1859, shall in future be addressed as doctors. We need hardly add that the College passed this resolution simply because it felt bound to carry out the engagements of its predecessors of twenty years ago. No gentleman, however, who has joined the College since July 1859, or who may in future join it, will receive such title unless he possesses a diploma from some recognised University. The College regrets the act of its predecessors, but considers itself bound to carry it out.

M. Decaisne asserts that, in less than three years, he had observed in his practice twenty-one instances of intermittent pulse in eighty-one cases of incorrigible smokers, who had no organic disease of the heart.

The Administration of Public Assistance in Paris have forwarded to the physicians of the different hospitals a series of questions requesting their opinions on the subject of the isolation of patients in hospitals affected with contagious diseases, and especially with small-pox. The question asked is this: "Is it necessary to treat in separate wards patients affected with acute, contagious diseases, such as eruptive fevers?"

M. Georges recommends, as a local anæsthetic, the ether of petroleum, being an excellent refrigerant and cheap.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

President—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

President-elect—GEORGE EDWARD PAGET, M.D., Cambridge.

All the General Meetings of the Members will be held in the Senate House.

WEDNESDAY, *August 3rd.*

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, *August 4th.*

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, *August 5th.*

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHRY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception Room, and will give information respecting lodging-houses.

The principal Hotels are the "Bull", the "Eagle", the "Red Lion", the "University Arms", and the "Hoop".

Return Tickets to Cambridge from London and such other stations on the Great Eastern, London and North Western, and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

Notices of Motion. Dr. STYRAP will move the following alteration in Law XV. To insert, after the words "One Guinea annually", "provided that such sum be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law XV, by inserting "the 1st of December", instead of "the 25th of December."

Papers have been promised by—

SPENCER WELLS, Esq. (London): Some of the Causes of Excessive Mortality after Surgical Operations.

SYDNEY JONES, M.B. (London):

JOHN BRIDGES, Esq. (Cottenham): Diphtheria, and some of the *Post Mortem* Appearances.

A. E. SANSOM, M.B. (London): The Action of Anæsthetics; and the Administration of Chloroform.

T. HERBERT BARKER, M.D. (Bedford): Herniotomy without Opening the Sac; with Cases.

J. V. SOLOMON, Esq. (Birmingham): The Radical Cure of extreme Divergent Strabismus.

EDWARD WOAKES, M.D. (Luton): Neuralgia.

B. W. RICHARDSON, M.D. (London): New Researches on the Pathology of the Blood.

SAMUEL MARTYN, M.D. (Clifton): The Physiological Meaning of Inframammary Pain.

GEORGE PHILIPSON, M.D. (Newcastle-on-Tyne): Intussusception.

GEORGE BUCHANAN, M.D. (Glasgow): Tracheotomy in Croup and Diphtheria.

ROBERT CHRISTISON, M.D. (Edinburgh): Medical Education.

C. H. F. ROUTH, M.D. (London): 1. The Use of the Hysterotome in Uterine Disease; 2. The Diagnosis of Early Pregnancy.

ERASMUS WILSON, Esq., F.R.S. (London): The Nature, Varieties, and Treatment of Eczema.

BALMANNO SQUIRE, M.B. (London): Occipital and Constitutional Impetigo of the Scalp.

THOMAS HILLIER, M.D. (London): Diphtheria.

HENRY DICK, M.D. (London): A New Instrument for the Treatment of Spinal Curvature.

FRANCIS E. ANSTIE, M.D. (London): Certain Points in the Treatment of Diabetes.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, July 1st, 1864.

NORTH WALES BRANCH: ANNUAL MEETING.

THE fifteenth annual meeting of the North Wales Branch was held at the Black Lion Hotel, Mold, on Tuesday the 5th inst., under the presidency of W. WILLIAMS, M.D., Mold. There were also present, Drs. J. C. Davies (Holywell); E. T. Hughes (Mold); J. R. Hughes (Denbigh); J. R. Jenkins (Ruthin); O. Roberts (St. Asaph); A. E. Turnour (Denbigh); E. Williams (Wrexham); and Messrs. E. G. Clarke

(Mold); T. T. Griffith (Wrexham); D. K. Jones (Beaumaris); G. T. Jones (Denbigh); T. E. Jones (Wrexham); R. Jones (Flint); Ll. Lodge (St. Asaph); R. Platt (Leeswood); R. C. Roberts (Ruabon); and J. Williams (Holywell.) The following gentlemen were visitors: E. B. Vise, Esq., Holbeach, Lincolnshire and James Nash, Esq., Australia. Letters were received from R. Jones, Esq., Carnarvon; H. Rees, Esq., Llanberis; T. H. Hughes, Esq., Pwllheli; and others, regretting their inability to attend the meeting.

Agreeably to an invitation kindly made by Dr. Hughes of Mold, the members assembled at his house at 12·30 P.M., and partook of a splendid champagne luncheon; after which they met at 1·30 P.M. at the hotel. The retiring President, LL. LODGE, Esq. (St. Asaph), in opening the general annual meeting, addressed a few words, expressing his thanks for the kindness and courtesy shown him, and the support he had received during his year of office. He then introduced the President-elect, W. WILLIAMS, M.D. (Mold.)

President's Address. The PRESIDENT delivered an eloquent address, which was much applauded, welcoming at its conclusion the members to Mold.

An unanimous vote of thanks, moved by Mr. GRIFFITH of Wrexham, and seconded by Mr. G. T. JONES of Denbigh, was accorded the President, with a request that he be good enough to publish it in the BRITISH MEDICAL JOURNAL.

Report of Council. At the request of Mr. KENT JONES, Honorary Secretary, Dr. WILLIAMS of Wrexham read the Report of Council.

"With the exception of one or two general subjects of professional interest, nothing particular has occurred since the last annual meeting of the North Wales Branch of the British Medical Association.

"During the fifteen years this Branch has been established, some familiar faces have passed away from us, and their places have been recruited by a goodly number of zealous and staunch supporters of the Association. The erroneous statements which, from time to time, find their way into the pages of the contemporary medical press have, hitherto, tended greatly to prevent medical men from joining our excellent institution.

"The intermediate meeting of this Branch, which was held at Holywell on March 22nd last, was well attended, and passed off with much professional interest to the members. An agreeable feature of that meeting consisted in the noble hospitality given to the members by the associates of that town, to whom your Council beg to tender their best thanks, a sentiment which, they feel sure, will be warmly reciprocated by every one connected with this Branch.

"Your Council regret to find that the General Medical Council have not succeeded in gaining the confidence and respect of the large majority of the profession. This is not to be wondered at, considering how much was expected of them, and how little of what may be said to be permanently beneficial has resulted from their six years deliberation.

"The case of the medical officers of the army is one that urgently calls for the sympathy and support of their medical brethren generally; and your Council recommend this meeting to memorialise the Government for a redress of the grievances under which they suffer, arising principally from the setting aside, or mutilating the 17th Clause in the Medical Warrant of 1858, which afforded them many advantages, and raised their social position in the service.

"The Financial Statement made up, as usual, to the end of the year 1863, embraces the following particulars:—

Receipts.	£	*s.*	*d*
Balance in hand at the end of the year 1862.	5	3	2
Amount of half-crown subscriptions received between January 1st, and December 31st, 1863, inclusive	4	0	0
	£9	3	2

Disbursements.	£	*s.*	*d*
The Secretary's official expenses, as per account made up to December 31st, 1863 ...	4	18	1

leaving a balance of £4:5:1, which with ten shillings received since January 1st, 1864, and up to the present time amount to £4:15:1 in the hands of the Treasurer towards defraying the expenses of the current year."

Dr. ROBERTS (St. Asaph) moved, and it was seconded by Mr. EYTON JONES (Wrexham), and carried unanimously—

"That the Report of Council now read be received, adopted, and entered on the minutes of the Branch."

Vote of Thanks to the Council of the Branch. It was moved by Dr. J. R. HUGHES (Denbigh), and cordially passed—

"That the best thanks of this meeting be recorded to the Council of this Branch for the past year, for their unremitting attention and valuable services."

President-Elect for 1865. It was moved by Dr. TURNOUR (Denbigh), and carried unanimously—

"That John Robert Hughes, M.D., Denbigh, be the President-elect for 1865."

Place of Annual Meeting for 1865. Denbigh and Rhyl were put forward as suitable places for holding the annual metting next year. After some animated discussion, Rhyl, by a majority of one, was selected.

Council of the Branch for Next Year. Dr. WILLIAMS (Wrexham), moved, and it was unanimously agreed to—

"That the following members constitute the Council of the Branch for next year, viz:—A. E. Turnour, M.D. (Denbigh); G. T. Jones, Esq. (Denbigh); T. F. Edwards, Esq. (Denbigh); O. Roberts, M.D. (St. Asaph); J. R. Jenkins, M.D. (Ruthin); and F. Theed, Esq. (Rhyl)."

Representatives in the General Council. Upon the proposition of Dr. JENKINS, confirmed by the unanimous voice of the meeting, O. Roberts, M.D., St. Asaph, and E. Williams, M.D., Wrexham, were elected representatives of this Branch in the General Council of the Association.

Election of Secretary and Treasurer. Dr. WILLIAMS (Wrexham), moved, and it was unanimously carried—

"That D. Kent Jones, Esq., Beaumaris, be the Secretary and Treasurer for the next year."

Intermediate Meeting. The kind invitation of Dr. Roberts of St. Asaph, to hold the intermediate meetting in March next at his house, and to dine with him on the occasion, was very cordially received and accepted.

New Members. The following gentlemen were duly proposed and seconded, and elected members of the British Medical Association and of this Branch, viz.: Frederick Luxmore Heaton, A,M., M.B., Wrexham; Robert Platt, Esq., Leeswood, Mold; Robert Griffith, Esq., Abergele; William Jones, Esq., Ruabon; and James Richards Walker, Esq., Corwen.

Papers and Cases. The following communications were made:—

1. Four Cases, illustrative of the efficacy of the Oil of Male-Fern in Tænia. By E. T. Hughes, M.D., Mold.

2. Invagination of the Intestines; with the morbid

reparation, exhibiting the Ileum invaginated into he Cæcum. By O. Roberts, M.D., St. Asaph.

3. Paper on Embolism and Apoplexy. By J. R. Iughes, M.D., Denbigh.

4. Remarks on a Case of Embolism. By T. Eyton ones, Esq., Wrexham.

5. Case of Renal Abscess. By J. C. Davies, M.D., Iolywell.

Want of time prevented the reading of an interest-ng paper on Vaccination by Dr. Hughes of Mold.

Dinner. All the members with their guests, amely, Rev. Jenkin Davies, vicar of Mold; Peter 'arry, Esq., Coroner for Flintshire; E. B. Vise, Esq., Iolbeach; and J. Nash, Esq., dined together at 4 .M. at the hotel, and before separation, accepted he President's invitation to partake of coffee, etc., t his house. A very pleasant and agreeable evening ras spent, and all expressed themselves delighted rith their reception and entertainment at Mold.

WEST SOMERSET BRANCH: ANNUAL MEETING.

THE annual meeting of the West Somerset Branch vas held at Clarke's Hotel, Taunton, on Wednesday, uly 6th. The chair was taken at half-past two by he President, J. HAMILTON KINGLAKE, M.D.; the ther members present were: Messrs. H. Alford, H. . Alford, S. Farrant, W. E. Gillett, W. M. Kelly, and V. Liddon (Taunton); J. Cornwall (Ashcott); R. Mar-hant and H. P. Olivey (North Curry); H. W. Ran-olph (Milverton); and W. L. Winterbotham (Bridg-vater).

The HONORARY SECRETARY (Dr. Kelly) stated that ie had received a number of letters from members vho regretted they were unable to attend.

The minutes of the last annual meeting having been read, the following Report of Council was pre-ented.

Report of Council. "1. On this anniversary, the West Somerset Branch of the British Medical Asso-iation will have accomplished a stage of existence, nd arrived at an epoch which is wont to be regarded vith more than ordinary interest in the lives of indi-iduals; your Council, therefore, think the fact hould not pass unnoticed that the Branch to-day ttains its majority, and has arrived at the mature ge of twenty-one years. A fine, promising off-shoot t birth, and manifesting, for the most part, much igour of constitution, its life has nevertheless been ometimes languishing and in danger. The Branch s now in a healthy condition; but it will not bear omparison as to size and extent with many younger Branches which have sprung up and are flourishing n other parts of the country. From its position, it annot, in the nature of things, be expected to attain o a large growth. Still, your Council would remark, hat much may be done by individual exertion; and nembers are, therefore, urged to keep in mind their esponsibilities to the Branch and to the Parent As-ociation; and if each, in his respective capacity and o the best of his ability, would strive 'to promote nedical science, to maintain the honour and interests f the profession', and last, though not least, by at-ending these periodical meetings, contribute to that ociability and good feeling which should subsist mong us, we shall do our best to sustain the body orporate, and to extend its growth in usefulness as vell as in size.

"2. Your Council have had no matters brought nder their notice during the past year calling for pecial remark. One new member has been elected, nd one will be proposed to-day. The Branch will umber thirty-two.

"3. It is with deep sorrow we have to report the death of two members of the Branch: C. P. Collyns, Esq., of Dulverton, who died on April 7th, at the age of 70; and R. A. Smith, Esq., of Taunton, who also died at the same advanced age, on June 1st. Our late worthy and much respected President, Mr. Collyns, will be specially missed on this day, as he should have opened the proceedings of this meeting. As a perfect specimen of the old school of country practitioner, he could now be rarely matched. Those who had the pleasure of listening to his address last year, will remember the instances he related of the earliest experiences in his pupilage, so strangely contrasting with modern professional usages. He was an attentive and careful observer, cultivating and entertaining sound views in the practice of his profession. He will long live in the memory and hearts of those who knew him. Mr. Smith, who was a member of Council, and always attentive to the duties of his office, was universally respected and esteemed.

"4. The Treasurer's Report shows the finances to be in a satisfactory state, and a balance of £3 : 19 : 8 in favour of the Branch.

"5. A letter from Mr. Cornish, suggesting the appointment of a court-medical to decide matters of medical etiquette, will be laid before you.

"6. The treatment which army medical men have suffered at the hands of Government, and which has aroused much indignation in the profession, is a subject which may properly receive consideration at this time; and, should it be deemed advisable, ministers might be memorialised, with a view to remedying the evils complained of.

"7. A *conversazione* meeting was held in January last, at which thirteen members were present. Several interesting communications were read, and a pleasant, instructive evening was passed. Your Council recommends that a similar meeting be held in January next; and members are invited to avail themselves of the opportunity these meetings afford for mutual improvement and social intercourse."

The late Mr. Collyns. It was proposed by Mr. ALFORD, seconded by Mr. RANDOLPH, and resolved unanimously—

"That this meeting expresses its deep sorrow at the loss it has sustained by the death of its late President, C. P. Collyns, Esq.; and that the Secretary be requested to send a copy of this resolution to the widow of the deceased."

Army Medical Service. It was proposed by Mr. MARCHANT, seconded by Mr. OLIVEY, and resolved unanimously—

"That a memorial on the subject of Army Medical Service, similar to that presented by the Metropolitan Counties Branch, be drawn up and signed by the President and members of this Branch, and sent to the Secretary of State for War."

Court-Medical. A letter from Mr. Cornish was read; but, as he was prevented from being present at the meeting, no resolution was come to on the subject.

Quarterly Meetings. It was proposed by Mr. ALFORD, seconded by Mr. LIDDON, and resolved unanimously—

"That quarterly meetings of the Branch (instead of an annual meeting and a *conversazione* meeting only as heretofore) be held during the ensuing year; the days and places of meeting to be fixed by the Council."

Balance-Sheet. The Treasurer's Balance-sheet, duly audited and found correct, was produced and approved of.

New Member. John Barrett Collyns, Esq., of Dulverton, was unanimously elected a member of the Branch.

Next Annual Meeting and President-Elect. A letter was read from Mr. Norris, of South Petherton, inviting the Branch to hold its next annual meeting at that place; but as there appeared to be difficulties in the way of acceding to this proposal, and Mr. Norris was not present, it was resolved—

"That the arranging for the next annual meeting, and the appointing of a President-elect, be postponed until the next quarterly meeting of the Branch, to be held about Michaelmas."

Council of the Branch. It was resolved—"That Dr. Gillett, Mr. Liddon, and Mr. Randolph be elected to fill the vacancies; and that the Council for the ensuing year do consist of: H. J. Alford, Esq.; G. Kidgell, Esq.; W. Reynolds, Esq.; W. E. Gillett, Esq.; W. Liddon, Esq.; H. W. Randolph, Esq.

Secretary and Treasurer. It was resolved unanimously—"That Dr. Kelly be re-elected as Honorary Secretary and Treasurer."

Votes of Thanks to the Council for their services during the past year, and to the Secretary and Treasurer, were unanimously passed.

President's Address. A learned and eloquent address was then read by the President, which was much applauded; and it was unanimously resolved—

"That the best thanks of the meeting be given to the President for his address; and that he be requested to allow the same to be published in the JOURNAL."

The Dinner. The members of the Branch then dined together; the enjoyment of the good fare provided by the hostess, Mrs. Clarke, being much enhanced by a liberal present of champagne given by the President. The party afterwards adjourned to Wilton House, the hospitable mansion of the President, where ample provision was made for their amusement and entertainment during the remainder of the evening.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

THE twelfth annual meeting of the Metropolitan Counties Branch was held at the Crystal Palace, Sydenham, on Tuesday, July 12th, at half-past 3 P.M. There were present: F. SIBSON, M.D., F.R.S., and afterward C. F. J. LORD, Esq., in the Chair; Drs. T. Ballard, A. Billing, F.R.S., G. C. Dale, A. Douglas, S. Gibbon, R. Greenhalgh, G. K. Hardie (Aldershot), A. Henry, Graily Hewitt, W. Lewis, W. O. Markham, P. Oates, J. H. Paul (Camberwell), W. F. Ramsay, C. H. F. Routh, J. Seaton (Sunbury), E. H. Sieveking, A. P. Stewart, E. H. Vinen, and G. Webster (Dulwich); and Messrs. S. S. Alford, G. Bottomley (Croydon), J. C. Burrows (Brighton), C. H. Rogers-Harrison, C. Holthouse, W. Martin (Hammersmith), J. Millar, and J. Propert.

New Members. James R. Traer, Esq., of Hans Place, Chelsea, was elected a member of the Association and of the Branch; and the following gentlemen, already members of the Association, were elected members of the Branch: A. Billing, M.D., F.R.S.; G. K. Hardie, M.D., 73rd Regiment; C. Holding, Esq.; and J. W. Ogle, M.D.

Report of Council. Dr. HENRY, one of the Honorary Secretaries, read the following report.

"The Council of the Metropolitan Counties Branch, in presenting their report to the twelfth annual meeting, have much pleasure in congratulating the Branch on the continued steady increase of its members. At the last annual meeting, the number of members on the list was 175. Since that time, two members—Mr. Ancell (one of the oldest members of the Branch, and a valued and active supporter of in its earlier years) and Dr. Abram Cox—have die seven have resigned or gone away; and thirty-fo new members have joined; making the total numb at present 200.*

"During the past year, your Council has sur moned two general meetings of the Branch, for t discussion of subjects of high professional interest.

"At the first of these meetings, held on Februa 16th, a Committee, consisting of your Council, wi power to add to their number, was formed for t purpose of watching such Bills introduced into Pa liament as might in any way affect the interests the medical profession. This Committee has met several occasions, and a special report from it will presented. Thanks are due to those members of t Branch who readily consented to cooperate with yo Council as members of the Committee; and also Dr. Gibbon, who has kindly undertaken the duty acting as Secretary to the Committee. Your Counc recommend that the Committee be reappointed, ar requested to continue their labours.

"Your Council, having judged it fitting that t Branch should take cognisance of the present serio position of the Army Medical Service, summoned general meeting to take the subject into consider tion. This meeting was held on June 13th, wh the resolutions, which have just now been read the minutes, were passed with unanimity. T Council, in pursuance of the directions given to ther have embodied these resolutions in memorials, whic have been presented by deputations of your Counc and other members of the Branch to the Right Ho the Earl De Grey and Ripon, the Secretary of Sta for War, to H.R.H. the Commander-in-Chief, and t the Director-General of the Army Medical Depar ment. An account of the deputation to the Secr tary for War appeared in the JOURNAL of last Satu day. It is, therefore, unnecessary to recapitula the proceedings; but your Council would sugge that thanks are especially due to J. Abel Smith, Esq M.P., who introduced the deputation, and to D Burrows, President of the Medical Council, and F. Skey, Esq., President of the Royal College of Su geons, who, in their official capacities, spoke earnestl in support of the memorial. Dr. Watson, the Pres dent of the Royal College of Physicians, also notifie to Dr. Stewart by letter his hearty concurrence i the memorials, although he was unavoidably pr vented from joining the deputations. The memoria to the Commander-in-Chief and to the Directo General of the Army Medical Department were sim lar to that presented to Earl De Grey and Ripon, bu with certain necessary modifications of expressio The memorial to the Commander-in-Chief was pr sented to His Royal Highness on Saturday last, th deputation being introduced by Mr. Skey; and tha to the Director-General was presented yesterda On each occasion, your President, Dr. Sibson, yo Secretary, Dr. Stewart, and other members, di cussed and explained to the authorities—by whom the deputations were courteously received—the ob jects of the memorials and the grounds on whic they were founded. On the two occasions last re ferred to, your Council found that the great argu ment used against granting to army medical office the precedence which was urged in the memorials was, that such a step would interfere with militar discipline. The deputations, however, saw no reaso for withdrawing their request, and endeavoured t urge on the authorities with whom they had inte

* Since the meeting was held, information has been received the death of Dr. James Bird; and an application for admission ha been received from Thomas Hewlett, Esq., of Harrow.

ows that, while they would not desire for the army edical officers the right of presiding at courts-artial, or in any way interfering with purely mili-ry matters, there were boards—such as those on nitary matters—at which medical men were not ly qualified to be members, but, if senior in rank other officers present, to preside. Your Council gret that they can hold out but very little hope of immediate improvement in the state of the Army edical Service; but they would recommend their ccessors and the members of the Branch not to ow the subject to drop, but to continue, with other dies and members of the profession, to endeavour obtain for the army medical officer, in permanency, at honourable position which is due to himself and the profession to which he belongs.

"In accordance with a resolution of your Branch, e Secretaries have requested the cooperation of the her Branches of the Association in the endeavour obtain an improvement in the Army Medical Ser-e. Several of the Branches have, at their annual eetings recently held, complied with this request; d the thanks of this Branch are due to them for e valuable moral aid which they have thereby af-ded.

"In conclusion, your Council have pleasure in call-g attention to the healthy state of the finances of e Branch, as will be shewn in the report of income d expenditure about to be presented."

Dr. ROUTH proposed, Mr. CORDY BURROWS se-nded, and it was resolved—

"That the Report now read be received, adopted, d entered on the minutes."

Report of Committee on Parliamentary Bills. Dr. IBBON read the following report.

"The following Bills, affecting the interests of the ofession, have been introduced into Parliament ring the present session.

"1. The Insane Prisoners Act Amendment Bill, by r George Grey, to make further provision for the nfinement and maintenance of insane prisoners.

"2. A Bill by Mr. Bruce, for the Prevention of In-ctious Diseases amongst Cattle.

"3. A Bill by the same gentleman, to Amend the aw relating to the Importation of Diseased Cattle d Unwholesome Meat.

"4. A Bill by the Chancellor of the Exchequer, to ant Additional Facilities for the Purchase of Small overnment Annuities, and for assuring Payments of oney on Death.

"5. A Bill by Mr. Peel, to enable Her Majesty to ant a Lease for Nine Hundred and Ninety-nine ears of the Building known as the College of Physi-ans, in Pall Mall East.

"6. A Bill by Lord Clarence Paget, for the Preven-on of Contagious (Venereal) Diseases at certain aval and Military Stations.

"7. The County Courts Acts Amendment Bill, by e Lord Chancellor, for the Limitation of Actions d Process for Small Debts, and to amend the Acts lating to the County Courts, and to confer on such ourts a limited Jurisdiction in Equity.

"To all these measures the attention of your Com-ittee has been directed.

"In the Insane Prisoners Act Amendment Bill, e Committee has endeavoured to get the words ny two legally qualified medical practitioners' sub-ituted for the words 'any two physicians or sur-eons, or one physician and one surgeon,' in order at gentlemen holding the diploma of the Apothe-aries' Society might not be disqualified for certifying nder the provisions of the Act. As, on inquiry, our Committee learned that it was not usual to give e medical officers of prisons any extra and special emuneration for this arduous and responsible work, they resolved to attempt to get the following clause added to the Bill.

"'The Treasurer of the county is, or the Commissioners of Her Majesty's Treasury are, hereby authorised to pay to duly qualified medical practitioners, for their assistance under this Act, such fee as to the visiting justices, or to the Secretary of State for the Home Department, shall seem proper.'

"In the Cattle Diseases Bill, and the Cattle Importation Bill, it was thought by the Committee that the officers termed 'cattle inspectors' in the former, and 'examiner of unwholesome meat' in the latter, ought to be either duly qualified medical practitioners or veterinary surgeons holding the diploma of some recognised veterinary institution; and steps were taken before the Committee on Cattle Diseases, but without success, to induce them to limit the appointment of cattle-inspector to men thus qualified. The Committee on the Cattle Importation has not at present reported.

"The Government Annuities Bill, like the Post Office Saving Banks Act, by rendering provident habits more practicable and of easier adoption amongst the poorer classes, is calculated indirectly to benefit medical practitioners. At first, your Committee were under the apprehension that the arduous work of examining the proposers of these small assurances would be devolved upon the ill-paid and overworked Poor-law medical officers, without any extra remuneration. They resolved, therefore, to endeavour to get either a uniform fee of 5*s.* allowed for each such examination, or one varying from 2*s.* 6*d.* to 10*s.* 6*d.*, according to the sum assured; but, on further inquiry, it appeared that all the working details of the measure, when it becomes law, will be entrusted to an eminent member of the profession; and that a fair rate of remuneration will be given for such medical examinations.

"The Contagious (or Venereal) Diseases Bill proposes to make the entrance of all prostitutes suspected or known to be diseased into civil hospitals, to be chartered for the purpose by the Government, compulsory under severe penalties. Although provision is made in the Bill for paying the hospitals for the maintenance and treatment of these 'unfortunates' out of the public money, nothing is said as to remunerating the profession for this important public service. Your Committee, fearing lest this should be used as a precedent for imposing other public gratuitous labour on the profession, have resolved to urge upon the promoters of the Bill the expediency as well as the justice of paying medical practitioners at a definite rate for attending such cases.

"The County Courts Acts Amendment Bill, inasmuch as it proposed to limit the recovery of debts under £20 to within twelve months from the time the last item was incurred, would have seriously affected the interests of the great bulk of the profession. The Committee took active steps, therefore, to oppose it, and congratulate the Branch that it has been withdrawn.

"A Bill for the Regulation of Pharmacy, prepared by the Pharmaceutical Society, although not at present introduced into Parliament, has received the attention of your Committee. Although there is a saving clause, which expressly secures to medical practitioners their rights and privileges, the Bill, if it become law, must have considerable influence on the profession. Your Committee, therefore, commend it to the careful consideration of the profession, and themselves propose to watch it closely in its passage through Parliament.

"SEPTIMUS GIBBON, *Hon. Sec. to the Committee.*"

Dr, WALLER LEWIS proposed—

"That the Report of the Committee on Parlia-

mentary Bills be received, adopted, and entered on the minutes.

"That the cordial thanks of the meeting be given to the Committee; that they be reappointed, and requested to continue their services; and that the special thanks of the meeting be given to Dr. Gibbon. the Honorary Secretary of the Committee."

Dr. LEWIS said the report showed that the Committee had not been idle since their appointment, but had even taken into consideration bills with which, at first sight, the medical profession would seem to have but little direct concern.

Dr. OATES seconded the motion.

The PRESIDENT referred to the valuable assistance which the Committee had received from Dr. Gibbon.

Mr. CORDY BURROWS said that, as regarded work done, the report of the Committee was such that a better one could not be presented. The Metropolitan Counties Branch was peculiarly calculated, by its locality, for carrying on proceedings of the kind referred to in the report.

After a short discussion, the motion was unanimously carried.

Financial Statement. Dr. HENRY presented the financial statement of the Branch for the past year, from which it appeared that the receipts (including a balance of £4:18:0 from last year) amounted to £30:10:6; and the expenditure to £14:2:6; leaving a balance in hand of £16:8:0.

Mr. CORDY BURROWS proposed, Dr. VINEN seconded, and it was resolved—

"That the financial statement now read be received, adopted, and entered on the minutes."

Election of Officers and Council. The balloting lists having been examined, the following officers and Council were found to be unanimously elected for 1864-65: *President,* Chas. F. J. Lord, Esq. (Hampstead); *President-elect,* Ed. H. Sieveking, M.D.; *Vice-Presidents,* R. Dunn, Esq.; F. Sibson, M.D., F.R.S; *Treasurer,* E. Lankester, M.D., F.R.S.; *Secretaries,* A. P. Stewart, M.D., and A. Henry, M.D. *Other Members of Council—for the Metropolitan District,* W. Camps, M.D.; J. Rose Cormack, M.D.; S. Gibbon, M.B.; C. H. Rogers-Harrison, Esq.; W. O. Markham, M.D.; J. Millar, Esq.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; *For the Extra-Metropolitan District,* W. Martin, Esq. (Hammersmith); J. H. Paul, M.D. (Camberwell); H. Cooper Rose, M.D. (Hampstead); and G. Webster, M.D. (Dulwich).

The President's Valedictory Address. Dr. SIBSON said that he now had the painful pleasure of resigning his office of president. When he was elected last year, he had some doubt of being able to perform his duties; but he hoped that he had done them tolerably well. The Branch had done a little work during the year. A Committee on bills in Parliament affecting the medical profession had been formed, and had presented a report; and he believed the continuance of that Committee likely to be of very great service. The last great movement which the Branch had undertaken, that of endeavouring to obtain an improvement of the position of the army medical officers, was initiated by Dr. Stewart at a meeting of the Branch held in Soho Square. At that meeting, resolutions were passed, in consequence of which deputations waited on the Right Honourable the Secretary for War, H. R. H. the Commander-in-Chief, and the Director-General of the Army Medical Department. Lord De Grey and Ripon received the deputation, which was presented by Mr. Abel Smith, M.P., most readily and courteously. Dr. Burrows, the worthy President of the Medical Council, and Mr. Skey, the President of the Royal College of Surgeons, attended the deputation, and expressed their opinions with much force, thereby rendering mo valuable aid. Lord De Grey and Ripon entered once into the objects of the memorial, and display a knowledge of the subject for which the deputati was certainly not quite prepared. After a few r marks had been made by himself (Dr. Sibson), D Stewart, Dr. Burrows, and Mr. Skey, his lordsh immediately began in a most business-like way discuss the memorial piece by piece. He listen attentively to all the deputation had to say, and a peared to give a partial assent to the idea that certain boards the medical officer should occupy h right place. Dr. Sibson, in reference to this poir reminded his lordship of the excellent working of t mixed boards instituted by Napoleon at the sugge tion of Larrey. There was one objection made h his lordship, that was not thoroughly met at t time—the recent decrease in the numbers of the m dical profession. In reply to this, however, it mu be remembered that the medical service of the nav although less popular than that of the army, was fill up. And not only was this the case, but the medic appointments in Green's ships, in the Peninsul and Oriental Company's service, etc., were all eager sought for, in spite of the diminished numbers medical men—which diminution he (Dr. Sibso looked on as a healthy position of the professio Even poor-law appointments were all filled; and, these were compared with the medical commissio in cavalry regiments, which at first would seem f preferable, it was surprising that there should h such a vacuum in the latter. Altogether, he thoug the deputation had reason to be satisfied with the interview with Earl De Grey and Ripon. He wish he could say that the deputation to H.R.H. t Commander-in-Chief had been equally successfu His Royal Highness received them in a mann which left nothing to be desired as to the recepti itself; but he seemed to be thoroughly imbued wit the idea of discipline. He endeavoured to make th deputation understand that the medical officer wa deprived of his position at boards, etc., for the sak of discipline; while other matters were regarded b him as questions of finance. In the memorial to th Director-General, all expressions of blame again him had been excluded; for the question was o affecting the military executive. The Director-Gen ral, however, spent an hour in proving that the lo of precedence by the army medical officers was n due to him; because, in less than three months aft it was issued, the precedence clause of the Warra of 1858 was silently repealed by a minute from th executive. The Director-General was clearly acqui ted of any concern in this; but he (Dr. Sibso wished that there was any shadow of hope that h would aid in improving the position of the army su geons. The Director-General, however, was not t be blamed. He was placed in his position by disc pline; and he had no idea of doing any thing beyon his place, as strictly defined by discipline. Tha was his nature; and he ought not to be blame unless he acted untruthfully. The Director-Gener intimated to the deputation that he had no desir to secure first-class men for the army medical se vice; that third-class men would do equally wel He informed the deputation that he had three hun dred candidates for the office of acting-assistant su geon, who possessed certificates of the most laudator kind; and that members of parliament had actuall applied to him on behalf of some of these candidate In reply to a question put by Dr. Richardson, h said that he was prepared to continue to use thes men for the public service. With regard to confide tial reports he (Dr. Sibson) thought there would b no objection if the assistant-surgeon signed them, t

ew that he had seen them; and, with regard to arking deserters, the Director-General seemed inned to concede that the orderly officer of the day ould also be present. He (Dr. Sibson) could not nclude his remarks without referring to the fact at the subject of the army surgeons had been orinally brought forward by Dr. Stewart, who had ewn a deep interest in the matter.

Before concluding, Dr. Sibson wished to make a w remarks on the manner in which lecturers in the edical schools had been spoken of in the JOURNAL. e would pay every tribute to the spirit which aniated the editor; and, in the very articles to portions which he objected, there was a whole field of great ggestions, worthy of being carefully considered and duced to practice. But he objected strongly to the atement that, with two or three exceptions, the rimary object of the lecturers was to gain private actice. He had himself for many years lectured on edicine; and could say, that gentlemen in preparig their lectures considered only how they might inruct students, whereas, if practice were their object, here were other ways in which their time could be uch more profitably spent. He concluded by introucing his successor, Mr. Lord.

President's Address. Mr. LORD then took the chair, nd delivered an address.

Dr. MARKHAM moved—

"That the cordial thanks of the Branch be given the President for his excellent address; and that e be requested to publish it in the JOURNAL."

Dr. SIBSON seconded the motion, which was carried nanimously.

The Late Mr. Peter Martin. Dr. SIBSON proposed, r. STEWART seconded, and it was unanimously reolved—

"That this Branch desires to express its sincere ympathy with the members of the South-Eastern Branch upon the loss which they have sustained in he death of their highly respected and valuable Setary, Mr. Peter Martin.

"That, as a tribute of respect for the memory of Mr. Martin, a donation of five pounds be contributed rom the funds of this Branch, towards the memorial nstituted in remembrance of him by the South-Eastern Branch."

Representatives in the General Council. The following members were chosen to represent the Branch in he General Council of the Association:—G. Burrows, M.D., F.R.S.; S. Gibbon, M.B.; A. Henry, M.D.; C. F. J. Lord, Esq.; W. O. Markham, M.D.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; F. Sibson, M.D., F.R.S.; E. H. Sieveking, M.D.; G. Webster, M.D.; with A. P. Stewart, M.D., *Secretary.*

Vote of Thanks to the Retiring President. Mr. W. MARTIN proposed, and Dr. WEBSTER seconded—

"That the cordial thanks of the Branch be given o the retiring President, Dr. Sibson, for his able and courteous conduct in the chair on all occasions, and for he active interest he has taken in the welfare of the Branch and in all subjects brought under its notice."

The motion was carried by acclamation.

Dinner. The members, to the number of twenty-hree, afterwards dined together; C. F. J. Lord, Esq., in the chair.

DEATH OF MEISSNER. On July 9th, died Paul Trangott Meissner, Professor of Chemistry in the Polytechnic School of Vienna, in his 87th year. "Meissner was one of the most learned naturalists of Austria; he has left a European name, an honour to science and his fatherland."

Correspondence.

THE COLLEGE OF SURGEONS AND REFORMERS.

SIR,—After reading the letter of Mr. Paget of Leicester in your last number, and the speech of Mr. Turner of Manchester at the Fellows' dinner, I am led to give up all hopes of either of those gentlemen as reformers. I feel satisfied that there are many more *thorough* reformers in the Council already. As to election of country Fellows into the Council, I think we may as well give that *idea* up, considering that, out of six or seven hundred country Fellows, only sixty-eight could be induced to attend the election. The notion of country Fellows voting by proxy is attended by difficulties. The analogy supposed to exist between the Universities of Oxford and Cambridge is fallacious. There the voting is open, and there is no difficulty in attesting the proxy; but at the College it is secret, by ballot. But, in fact, the Fellows have in their own hands the power of carrying out the reforms you have so well advocated; viz., when an Examiner offers himself for re-election into the Council, on no account to re-elect him. Very shortly, by this means, all the Examiners will be out of the Council. I am, etc., A REAL REFORMER.

[Our esteemed correspondent is, it seems to us, too hasty and too severe on Mr. Paget and Mr. Turner. Mr. Paget is, we think, wrong in waiting for pressure from behind. Great reformers are not driven on by the multitude; they lead, and drag the multitude with them. They stand on truth and reason: so might Mr. Paget. With such a cause as he has to fight for, and with the whole press to back him, victory and its rewards are certain to the man of courage and resolve. The difficulty raised by our correspondent about the voting by proxy of country Fellows is purely imaginary. There are half a dozen ways in which it might be most simply managed. To show how facile it is, we might mention a fact which is, we believe, not generally known even to the members of Council; viz., that, at the time when the Charter of 1852 was obtained, Mr. Green strained every nerve to get a clause inserted in it to give country Fellows the power of voting by proxy. We recommend this fact to the consideration of those gentlemen who at this present time support voting by proxy. If the Council, let it be remembered, had not opposed Mr. Green on that occasion, the country Fellows would at this present time be possessed of the power of voting by proxy. The Council, therefore, are responsible to the Fellows, and bound in honour to procure a new Charter. EDITOR.]

GRIFFIN TESTIMONIAL FUND.

LETTER FROM J. MOORHEAD, M.D.

SIR,—Acting on behalf of the gentlemen whose names are subjoined, I have had much pleasure in forwarding Dr. Fowler a cheque for £13:13, as a contribution to the above fund.

Resident, as we are, in Weymouth and its vicinity, and, therefore, the better able to appreciate, not only the incalculable amount of labour entailed upon our *confrère* Mr. Griffin by the collecting of facts and working of figures in support of the cause of Poor-law medical reform, but also the pure unselfish motives which have inspired him throughout the arduous struggle in which he has so long been engaged, we

gladly avail ourselves of this opportunity to unite with the profession in paying him a well merited tribute of respect for the ability, energy, and zeal, with which he has invariably advocated this important question. And, though it is to be regretted his efforts have not, as yet, met with that success they so eminently deserved, still it must be admitted that the concessions recommended in the Report of the Select Committee are mainly due to the persevering advocacy of our indefatigable townsman.

Impressed by these feelings, and convinced that Mr. Griffin, by his disinterested, self-sacrificing labours, extended over a period of nearly ten years, has done honour to our calling, we trust that, not only the Poor-law medical officers, but our brethren generally, will display such *esprit de corps* on this occasion as to demonstrate that, as a profession, we are capable of appreciating such noble Herculean efforts made on behalf of suffering humanity.

In the name of the following contributors to the fund,

I am, etc.,

J. Moorhead, M.D.

Weymouth, July 18th, 1864.

A. Brown, M.D. (Weymouth), £1 : 1; M. Coucher, M.D. (Weymouth), £1 : 1; W. Fowler, Esq. (Weymouth), £1 : 1; Messrs. Fox and Rhodes (Weymouth), £1 : 1; J. Lithgow, M.D. (Weymouth), £1 : 1; J. Moorhead, M.D. (Weymouth), £1 : 1; H. Nathan, Esq. (Weymouth), £1 : 1; W. Smith, M.D. (Weymouth), £1 : 1; H. Tizard, M.D. (Weymouth), £1 : 1; T. Parker, M.D. (Abbotsbury), £1 : 1; J. W. Pridham, Esq. (Broadway), £1 : 1; H. P. Brodribb, M.D. (Portland), £1 : 1; T. N. Nicolas, M.D. (Portland), £1 : 1.

TARTARISED ANTIMONY IN STRUMOUS OPHTHALMIA.

Letter from Robert B. Carter, Esq.

Sir,—Your correspondents, Mr. Chesshire, Dr. Price, and Mr. Garnham, who have lately written upon the use of tartarised antimony in strumous ophthalmia, would confer a benefit upon the public if they would describe with precision the meaning they attach to the words.

Prior to the recent researches of Mr. Hutchinson, nearly the whole of the ocular disease arising from inherited syphilis was described as "strumous ophthalmia."

Putting inherited syphilis on one side, there are at least three distinct forms of pustular conjunctivitis, and at least two forms of corneal disease, requiring differences in treatment, and all frequently called "strumous ophthalmia."

Moreover, these several affections are of common occurrence in patients who are apparently free from struma, as well as in those who are the subjects of that diathesis; and extended observation casts much doubt upon the propriety of retaining the word "strumous" to describe any form of ophthalmia whatever. "Une statistique bien faite" (writes Professor Wecker) "ne ferait certes pas ressortir cette prépondérance des enfants scrofuleux parmi le nombre des personnes atteintes de conjunctivite pustuleuse." The symptom of intolerance of light, upon which stress is laid by many writers, is extremely uncertain in its appearance, and is of little value as an aid to diagnosis.

It would, therefore, be highly interesting to know whether your correspondents mean, by "strumous ophthalmia", some definite pathological condition, in whatever person it may occur, or any form of ophthalmia, occurring in a strumous patient. Dr. Price says that the treatment was beneficial "save in a few instances." What were those instances?

If your correspondents will favour us with mo explicit information, I think we shall probably fi that the antimony exerts, in the ophthalmiæ ger rally its well known sedative action; that it th diminishes nervous irritability, pain, and photoph bia, and places the eye in a condition favourable repair. If this be so, the antimony will be indicate not because the case is "strumous", but in propo tion to the degree of nervous irritation.

In the great majority of the cases commonly call "strumous ophthalmia", the struma requires co stitutional, and the ophthalmia requires local, trea ment. In pustular cases, the insufflation of dry cal mel, or, where this produces irritation, the use atropine and a compressive bandage, will usually cu the ophthalmia in a few days; and the use of t setons in the temples, so much employed by M Critchett, will usually prevent a recurrence of t local mischief. Still, there are some very rare cas of great obstinacy, which resist for months, or ev years, all the resources of our art; and, for these, might be encouraged to administer antimony, if knew a little more about the character of its actio and about the conditions in which it has been fou to be useful.

I cannot lay my hand upon Mr. Chesshire's pape but Dr. Price and Mr. Garnham convey to me t impression that they exaggerate the ordinary dif culty of relieving "strumous ophthalmia"; and th this exaggeration arises from want of attention local treatment. As far as the ophthalmia alone concerned, proper local treatment is the great secr of success.

I am, etc.,

Robert B. Carter, F.R.C.S.(Exam.)

Stroud, Gloucestershire, June 25th, 1864.

A Medical Coroner in Bombay. The *Bombo Times* informs us that Dr. Diver has been appointe coroner for Bombay, and succeeds a man of law i the office. "The post is rightly filled by a gentlema of the medical profession."

Middlesex Lunatic Asylum, Colney Hatch. summer entertainment was given to the patients o the 15th inst. A very efficient band attended, an tents were provided for supplying refreshment t the patients, and a confectioner supplied the requir ments of the visitors and general public. The pa tients, who were considered by the medical superi tendent of the department fit to take part in th entertainment, were assembled at four o'clock in th front corridors of the respective departments. At quarter past four the female patients (numberin about 400), headed by the band, left the asylum b the principal entrance, followed by the male patient about 300); and walked in regular procession to th fields in which the entertainment was to take plac The chief attraction to the vast majority was dancing The amusements were under the superintendence c certain of the attendants and nurses, who rigidly fol lowed out the special instructions which they ha received—exercising great temper and preserving th strictest order and decorum. Cake and lemonad were distributed in the wards to such of the patient as could not join in the out-door amusements. A half-past seven o'clock the patients left the field, pre ceded by the band, in the same order in which the arrived, and were conducted to their respective de partments by the same route by which they had lef the asylum. The weather was singularly fine, an the joyous manner of the larger portion of the unfo tunate lunatics indicated that the event had reall occupied their imagination for some days pre viously.

Medical News.

POTHECARIES' HALL. On July 14th, the follow- Licentiates were admitted :—
Foster, John Frederick, Old Court, Guernsey
Freeman, Henry William, Bideford, Devon
Hope, Henry, St. Bartholomew's Hospital
Meade, Albert Comberbach, St. Bartholomew's Hospital
Sinclair, Duncan Francis, Halstead, Essex

t the same Court, the following passed the first nination :—
Eaton, John Chamberlin, St. Bartholomew's Hospital
Hickman, Richard Murhall, King's College Hospital
Major, Napoleon Bisdee, St. Mary's Hospital
Müller, August, St. Mary's Hospital
Sims, Francis Manley Bolders, St. George's Hospital
Swindale, John, Middlesex Hospital

an Assistant :— .
Marsh, Walter Alfred, 23, New Kent Road

APPOINTMENTS.

MY.
TELL, Assistant-Surgeon W., 5th Dragoon Guards, to be Staff-ssistant-Surgeon, *vice* J. H. Bews.
HEEHY, Staff-Assistant-Surgeon E. L., M.D., to be Assistant-rgeon 5th Dragoon Guards, *vice* W. Cattell.
ONNOR, P., Esq., to be Staff-Assistant-Surgeon.

YAL NAVY.
REWS, John, M.D., Surgeon, to the *Frederick William*.
BES, Charles, M.D., Surgeon, to the *Cambridge*.
RY, James, Esq., Surgeon, to the *Aboukir*.
L, William, Esq., Surgeon, to the *Clio*.
RIEN, William E., Esq., Surgeon, to the *Wasp*.
RCEY, Frederick, Esq., Assistant-Surg., to the *Royal Sovereign*.

LUNTEERS, (A.V.=Artillery Volunteers; R.V.= Rifle Volunteers) :—
INETT, H., Esq., to be Surgeon 1st Administrative Battalion Dor-tshire R.V.
KINSON, T., Esq., to be Assistant-Surgeon 1st Middlesex Engi-eer Volunteers.
QUHARSON, J., Esq., to be Surgeon 4th Durham R.V.
HERGILL, J. R., Esq., to be Assistant-Surgeon 4th Durham R.V.
ES, R. E., Esq., to be Hon. Assistant-Surgeon 11th Suffolk R.V.
VE, C. R., Esq., to be Assistant-Surgeon 1st Administrative Bat-alion Dorsetshire R.V.
OMSON, G. W., Esq., to be Assist.-Surg. 4th Roxburghshire R.V.
ARD, H., M.D., to be Assistant-Surgeon 1st Administrative Bat-alion Dorsetshire R.V.

DEATHS.

RAHAM, Thomas, M.D., at Marsden Villa, Haverstock Hill, aged 6, on July 16.
NES, John, M.D., at 3, Rupert Road, Upper Holloway, aged 63, n July 18.
LL, William, Esq., Surgeon, at Ambleside, aged 62, on July 18.
RRESTER, William, Esq., Surgeon H.M. Madras Army, on board he *Nubia*, in the Red Sea, aged 45, on June 30.
RRISON, Arthur A., M.B., on board the *Macgregor Laird*, off Accra, ged 33, on June 12.
E. On July 18, at Fulham, aged 7, Arthur, youngest child of H. '. Ree, M.D.

CATTLE DISEASES PREVENTION BILL. This Bill has en withdrawn for the present session.

COLLEGE OF PHYSICIANS BILL. This bill was read a cond time in the House of Lords on July 15th.

SIR R. WILDE. The honorary degree of Doctor in edicine has been bestowed on Sir William Wilde by e University of Dublin.

UNIVERSITY OF VIENNA. Herr Hofrath, Professor yrtl, has been appointed *Rector Magnificus* of the niversity of Vienna for the session of 1864-5.

ROYAL COLLEGE OF PHYSICIANS. Dr. Pollock, Dr. ood, Dr. Priestly, and Dr. Harley, were on the 20th st., admitted Fellows of the College of Physicians.

BEQUEST. By will, Colonel Astell leaves to the Mid-esex and Westminster Hospitals, the Bedford Infirm-y, and the Royal Free Hospital, Gray's Inn Road, ch £100.

UNION MEDICAL OFFICERS IN IRELAND. Mr. McEvoy has given notice that he will, early next session, call the attention of the House of Commons to the claims of medical offiers of unions in Ireland.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. The annual meeting was held on Friday, June 3rd, the president, Dr. Barclay, in the chair. The following members were elected as officers for the session of 1864-65. *President*, G. D. Pollock, Esq.; *Vice-Presidents*, M. Baines, M.D.; P. Hewett, Esq.; J. Lane, Esq.; W. Marcett, M.D. *Council*, B. E. Brodhurst, Esq.; D. Davies, M.D.; H. W. Fuller, M.D.; A. Godwin, M.D.; T. Keen, Esq.; — Knight, Esq.; W. Martyn, M.D.; — Richardson, Esq.; J. Rouse, Esq.; J. R. Traer, Esq.; C. Vasey, Esq.; and J. Way, M.D. *Treasurer*, M. Baines, M.D. *Honorary Librarian*, T. Dickinson, Esq. *Honorary Secretaries*, W. Milner, Esq.; C. Hunter, Esq. *Auditors*, H. P. Bannister, Esq.; J. Way, M.D.

SALARY OF THE REGISTRAR OF THE UNIVERSITY OF LONDON. In the House of Commons, on Monday week, Sir H. Willoughby asked why the salary of the Registrar had been increased from £800 to £1,000 a year. Mr. F. Peel said that, when the University was first founded, it was proposed that the salary of the Registrar should be £1,000 a year; but it was thought better in the first instance that a smaller salary should be given. The salary was accordingly fixed at £500, and was raised from time to time till it reached £800 last year. It had now been raised to the *maximum* £1,000. Dr. Carpenter had held the office for a considerable time; and, its duties having very greatly increased, it was thought he had a fair claim to the full salary originally intended to be given.

INDIAN MEDICAL SERVICE BILL. On Tuesday, the House of Commons went into committee on this Bill, when a discussion arose on the subject of competitive examination for the medical service, from which it appeared that it was proposed to abolish that system with regard to the Indian medical service, according to the discretion of the Secretary of State for India. Mr. Hennessy contended that further time for consideration should be given. Sir C. Wood said he was willing to insert a provision that the regulations under the bill should be laid before parliament within fourteen days of their being made, if parliament be sitting, or within fourteen days after the assembling of parliament, and he moved the insertion of words to that effect. This proposition was carried.

CONTAGIOUS DISEASES BILL. On Tuesday, on the motion for going into committee on this Bill, Mr. Ayrton contended at very considerable length that the proceedings that were to be taken against the females to whom the bill was intended to apply were of an anamolous character, and contrary to the rules of legislation which ordinarily guided the house. Certain powers of a very stringent character were proposed to be given to certain police authorities and others, in the places to which the bill applied, for taking proceedings against females and having them committed to an hospital, and there kept until they were free from disease. He thought the house ought not to pass such an exceptional bill at this period of the session, when there was not sufficient time for its proper consideration. Such a bill as this was a bill for the promotion of immorality and vice, as it was to enable soldiers and sailors to minister to their passions and vices with impunity. Sir M. Peto considered that the government were deserving of great credit for having introduced this bill. He believed that the working of the measure would be most salutary and beneficial. The house then went into committee on the bill.

Lord C. Paget said it was the intention of the government to institute an inquiry into the general subject of the particular disease to which this bill referred. Colonel North said this was a matter that did not apply to the army and navy exclusively. There could be no doubt that it would be most advisable to introduce some such general system as that which existed on the Continent.

Medical Journalism in America. The war of the rebellion has well-nigh obliterated medical journalism in this country. Where we once counted our exchanges by scores, we can now count them on our fingers' ends. In the Southern States, once so prolific in medical periodicals that each considerable town had one or more representatives, the whole serial medical literature has long since disappeared. A nondescript journal, entitled the *Confederate Medical and Surgical Journal*, has lately appeared; but, as it has not favoured us with an exchange, we have only heard of its existence through a sympathising foreign journal. At the North, the effect of the war has not been less disastrous. The list of periodicals has undergone thorough revision, the names of many having been permanently erased, and the size and appearance of others materially changed. (*American Medical Times.*)

The Army Medical Service. The following petition has been presented to the House of Commons by the Faculty of Physicians and Surgeons of Glasgow. "To the honourable the Commons, etc. The petition of the President and Fellows of the Faculty of Physicians and Surgeons of Glasgow,—humbly sheweth, that your petitioners have exercised the functions of a chartered College of Physicians and Surgeons since 1599; and, besides examining and licensing medical practitioners, have always taken an interest in whatever has affected the profession of medicine. That the inadequate remuneration of the medical officers of Her Majesty's army, and their deficient authority in purely medical questions, involving as this latter has done, alike the safety, in a sanitary point of view, of the troops, and the well-being and comfort of the soldier, were long matters of regret to your petitioners. That in 1857 your petitioners had great satisfaction in finding the pay of army assistant-surgeons somewhat raised at the recommendation of a Committee of your Honourable House, and that in the following year the relative status of medical, as compared with military officers, was placed by a Royal Warrant on an honourable and satisfactory footing. That your petitioners regret to learn, however, that the advantages of the said Warrant were speedily much modified, either by not being acted on, or by authoritative alterations. That the desirableness of the army as a field for the efforts of young medical men has become in consequence lowered, and the number of candidates for admission to the service lessened; and that from these causes, as well as from numerous others originating with the army medical executive, the number of vacancies in the medical department of the army has become alarmingly great, and the safety of the army, especially in the event of war, has become much compromised. May it therefore please your Honourable House to grant a committee of inquiry into all the circumstances connected with the existing state of the medical department of Her Majesty's army, as they relate particularly to the relative rank and privileges, and the authority in purely medical or sanitary matters of the medical officers of the service, and also to other subjects of complaint arising out of what your petitioners respectfully think the mistaken views of the medical executive. And your petitioners will ever pray. Signed, etc., Charles Ritchie, M.D., *President.*"

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fist and other Diseases of the Rectum, 1.30 P.M. -Sar ritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal Lond Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—Univers College, 2 P.M.—London, 2 P.M.—Royal London O thalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalr 1 P.M.—Great Northern, 2 P.M.—London Surgi Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Ro London Ophthalmic, 11 A.M.

Friday.....Westminster Ophthalmic, 1.30 P.M.—Royal Lond Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M King's College, 1·30 P.M.—Charing Cross, 2 P.M Lock, Clinical Demonstration and Operations. 1 P.M Royal Free, 1.30 P.M.—Royal London Ophthaln 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addres to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communi tions, should authenticate them with their names—of course necessarily for publication.

A Member ab Initio.—The announcement of the name of the su cessful Hastings essayist for this year will take place, we belie at Cambridge.

F. A.—The three deaths from chloroform alluded to in last week Journal, occurred in the Middlesex, King's College, and St. Mar Hospitals.

The Hospital for Stone.—A correspondent asks us questio which we cannot answer; viz., "What are the names of the medic officers of the Hospital for Stone? and where can be procured t statistics of the hospital in question?"

F. T.—Our correspondent need be under no fear. It was quite u derstood that the Memorial of the Brighton Licentiates of Ap thecaries' Hall was sent to the Council by the Fellows, simply f the sake of shelving it, without hurting the feelings of those ge tlemen. If we understand aright the feelings of the College, the is not the very smallest chance of its accepting the proposal giving *ad eundem* degrees to Licentiates of the Society of Apoth caries.

The Proposed Alteration in Law XV.—Sir: Allow me to ca the attention of the members to the proposed alteration of Law X viz., "that members whose subscriptions are not paid before 30 June, be charged 25*s*." It is very customary for members to p at the annual meetings of the various Branches; and I feel su that such an alteration, if carried, would be exceedingly offensi to the members, and injurious to the welfare of our Associatio The intention is, no doubt, to avoid arrears: the result would resistance on the part of those fined, and withdrawal, if the ad tional 4*s*. be enforced.

I think the general meeting will probably take this view of t proposition, and it will be wise to let well alone.

I am, etc., Samuel Wood,
Secretary of the Shropshire Scientific Branch.
Shrewsbury, July 15th, 1864.

Sir: I think the alteration of Law XV of the Association, proposed on the motion of Dr. Styrap for the annual meeting Cambridge, "that members whose subscriptions are not paid the 30th of June, be charged 25*s*", is likely to act prejudicially the best interests of the Association. I trust, for the welfare the British Medical Association, it will be rejected.

I am, etc., Wm. Eddowes.
Pontesbury, July 14th, 1864.

A Hint for the Economists.—A correspondent writes: "I a sure the officers of the Medical Department of the Army will fe grateful to the Branch in London for all their efforts to impro their status and position. I only wish I could see more prospe of success attending them. As you say in your leading article, t notion that third-class men are good enough for the army, totally opposed to the principles on which the Army Medic School was established. Indeed, if such a notion is to prevail, t school becomes little else than a farcical piece of extravagan and the sooner it is shut up the better."

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

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PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

LECTURE III. (*Continued.*)

THE TREATMENT OF FIBROUS TUMOURS.

Secondly, we have to consider the cases of fibrous tumour of the uterus for which gastrotomy was performed; and the whole uterus, tumour, or part of either, were removed. (See Table III.)

The cases to which I shall refer are thirty-three in number. The particulars of another, which I have heard of, I have not been able to obtain.

These cases consist of four of Dr. W. L. Atlee, one of Dr. T. L. Atlee, one of Mr. Heath of Manchester, one of Dr. Sloane, two of Mr. I. Baker Brown, one of Dr. Boyd, three of Dr. Clay, one of Dr. Granville, one of Dr. Parkman, one of Mr. Lane of London, two of Dr. Peaslee, three of Dr. Kimball, one of Dr. Burnham, one of Dr. Nelson, one of Dr. A. F. Sawyer, three of Mr. Spencer Wells, one of Mr. Fletcher, one of Dr. Hakes, one of Mr. Cadge, and three of Dr. Kœberle. For notices and references to several of these, I am indebted to Mr. Clay's translation of Kiwisch on the *Ovaries*. To the same gentleman I am indebted for correcting some errors in some of his cases published by others. To Mr. I. B. Brown, to Mr. Wells, and to Mr. Cadge, I am indebted for the report of three other cases; to the distinguished physician of Strasburg, Dr. Kœberle, for notices of his three cases; as well as for the reference to Dr. Kimball's cases, which he kindly gave me.

A *resumé* of these cases establishes the following conclusions.

Where these particulars are noted, nine were married, and only four single.

Where the age is given, in two it was between 20 and 25; in one, between 25 and 30; in four, between 30 and 35; in two, between 35 and 40; in seven, between 40 and 45; in three, between 45 and 50; in two, between 50 and 55. One recovered between 20 and 25; one between 35 and 40; and two between 40 and 45. All the rest whose ages are given died.

The gross mortality of the entire thirty-three cases was twenty-three; the recoveries, ten.

As to the causes of death, nine died of hæmorrhage. In four of these cases, it was found that the hæmorrhage was due to the ligature having slipped *after* the operation, or being insufficiently tightened. In two other of the cases of death, the cause was probably excessive hæmorrhage *during* the operation. In most of these cases, it is also remarkable that it is not stated whether the pedicle left was transfixed, or the clamp used—a fact which may in some measure explain the loss of blood, the ligatures being insecure. Four patients are said to have died of peritonitis; two of gangrene of the intestines; one of pleuritis; one of poisoning; one of pus in the veins; one of phlegmonous erysipelas of leg; one of inflammation brought on by a fall; and the rest of shock, between four to thirty-six hours after the operation.

The study of these cases, however, admits of a more practical application when divided into three classes: 1. Extrauterine cases; 2. Parietal or intrauterine; 3. Cases where the uterus and ovaries were removed.

1. There were fifteen cases of extrauterine tumours extirpated. Five of these cases recovered, although one died three years afterwards of some obscure abdominal disease; three died of hæmorrhage; in two, owing to the slipping of the ligature—an accident which in our days could scarcely occur, with our improved means of securing cut surfaces; one died of shock; the remainder, of inflammatory complications. This gives an average mortality of 66 per cent.; or, if we exclude the two hæmorrhage cases, where death arose because the ligatures employed were insufficient, of 61.4 per cent. But, in three more of the fatal cases, enucleation was performed—a proceeding which I believe is unwise, when made by gastrotomy from the outer surface. It is precisely on the surface that we have the large vessels; and although, after a time, the uterus may contract till the enucleation is completed, they continue to bleed very freely. Again, as in contraction after pregnancy, the uterus partially relaxes again; secondary hæmorrhage may occur, and death follow. And here I may refer, as an argument against enucleation, to the effect produced by wounding a fibrous tumour through its uterine envelope by gastrotomy. Looking to some of the cases before given, it will be seen that, in two of these, the uterus was punctured externally in making the incision. In three others, it was purposely punctured by the trocar. In all but one—Mr. Hakes's fibrocystic case—the hæmorrhage was excessive from such openings. In the case I saw, the blood gushed out as from a pump. In two other cases, in one of which I saw a puncture made through the vaginal wall by a small exploratory needle, and in another which I myself punctured by a very small trocar, the hæmorrhage was also excessive, and could only be controlled by the actual cautery. This point is of practical importance in making exploratory punctures through the abdomen, and pointing out the great risk of enucleation or puncturing a solid tumour through the external coating of the uterus.

2. In the next class of cases, where the tumours were *parietal*, or partially *intrauterine*, involving the uterus itself, in some cases fibrocystic, the result is much more deplorable; and, out of nine extirpations of this kind, there were eight deaths, and only one recovery. Of the deaths, five were due to hæmorrhage. Here, again, however, the cut surfaces were not well secured. In one, there was oozing from the cut surface; in two others, the ligature slipped. In four examples, again, only *portions* of the diseased mass were removed. This, for the reasons before said, would be a dangerous course. The low vitality of the cut tumour would necessarily lead to its gangrene, and, as a consequence, to the death of the patient. In one of these, we had death from pus in the veins at the *post mortem* examination; in another, erysipelatous inflammation of the leg; in the two others, death from hæmorrhage. In these last, enucleation was again practised after gastrotomy. Hence the death from hæmorrhage and shock. And it is remarkable, that the only case in this category that

TABLE III.—*Cases of Fibrous Tumours of the Uterus for which Gastrotomy was performed, and the Tumour or Uterus removed.*

No.	Operator and Reference.	Age	Previous and General History.	Steps of Operation.	After Progress.	Final Result.
1	Dr. W. L. Atlee, of Philadelphia. *Am. Journ. of Med. Sci.* 1845.	24	Tumour occupied hypogastr. & r. iliac region; uneven, tender, only moveable superiorly. *Vaginal exam.* Extended below convex arch of pubis. Occupied pelvic cavity and pressing agst. perineum. Cld. be moved independently of uterus, when this was raised in pelvis. In the centre was a ridge, about as thick as finger, occupying central position, and running in an antero-postr. direction. In its anterior end was the os. Backache. Tumour after extraction was in various diameters, 1 ft. 7 in., 1 ft. 6½ in., and 11½ in. *Extrauterine.*	Operated Aug. 28, 1843. Free incision 8 in. from umbilicus to pubes, w. peritoneum. This last taken up and cut open. Intestines forced out, with difficulty returned. Four oz. of serum exuded. Tumour found occupying right side, and dipping deeply in pelvis; and upon passing the index finger of each hand, it was elevated. Immense pedicle from the tumour to the r. side of uterus, thick, vascular, 1 to 2 in. broad. Transfixed by a needle, tied & cut. No bleeding. Wound closed by 15 hare-lip sutures.	Immediate effects, vomiting & tenesmus. Peritonitis followed, which was subdued. Pedicle of ligature came away on 8th, all the rest on 18th. Convales. Sept. 18, 21 days after operation.	Returned home Sept. 25. Cured 25 days after operation.
2	Dr. T. L. Atlee. *Ibid.*, vol. 35. 1845. p. 335. *Atlee's Table.*	42	Disease of uterus fibrous. *Extrauterine.*	Operated 1843. Long incision. Several adhesions · 4 uterine tubercles with thick vascular pedicle.	..	Died from hæmorrhage 5th day, from *slipping of ligature.*
3	Dr. W. L. Atlee, *Am. Med. Jour.* 1855.	39	Married. Menses present at time of oper. & cont. without interrupt. Found to weigh 6lbs. *Extrauterine.*	Operated August 28, 1844. Incision from 1 inch above umbilicus to pubes.	..	Recovered, but died 39 days aft. oper. of cholera.
4	Ditto. *Ibid.*	45	Married. Found to weigh 6 lbs. *Extrauterine.*	Operated May 29, 1851. Incision fr. 2 in. above umbilicus to pubis. Omentum and sm. intestines forced out, with diff. replaced.	..	Died 3rd day from hæmorrh.
5	Ditto. *Ibid.*	40	Married. Three fibrous tumours, weighing 4 lbs. *Extrauterine.*	Operated Mar. 3, 1853. Incision fr. 2 in. above umbilicus to pubes. Tumour, found imbedded in substance of uterus, was *enucleated.* Small intestines forced out, with difficulty replaced.	..	Death from peritonitis 3rd day.
6	Mr. Heath, of Manchester. *Lond. Med. Gaz.* vol. 33, 1843, p. 309.	46	Single; never pregnant; anæmic. Suffered fr. menorr. 4 yrs. 12 mos. ago noticed tumour in abdomen, size of large orange, & occupying l. hypochond. On palpation, felt like uterus of woman 7 mos. gone. Diagn. ovarian disease. Tumour found to weigh 6 lbs. *Intrauterine.*	Operated Nov. 21, 1843. Incision from ensiform cartilage to half inch above pubes. Tumour came into view recognised to be uterus filled with solid matter. Removed *en masse.* Transfixed, 2 ligatures being placed on cervix and broad ligaments.	Immediate effects, sickness. Collapse 14 hrs. after operation.	Death 18 hours after operation. *P.M.* Internal hæmorr. oozing from cut surface of uterus.
7	Dr. J. Sloane. *Braithwaite*, vol. 37, p. 201.	..	Tumour began 3 years ago, mistaken for an ovarian by Mr. Eddison of Nottingham, and believed to be so by two surgeons of the hospital. *Extrauterine.*	Operated. Incision in median line; bleeding profuse. Old firm adhesions between uterus and abdominal wall. Several cysts cut through. Pedicle, nearly circular, tied.	Syncope at first, rallied subsequently a little, but	Died five hours after operation.
8	Mr. I. B. Brown. *Braithwaite*, 45, p. 210. *Lond. Med. Rev.* 1862, 320. L. S. Home.	34	Had been very weakly; got better under tonics. The tumour perfectly mobile, and was supposed to be ovarian. It had grown rapidly. After removal, weighed 7 lbs. A hysteroma. *Parietal and intrauterine.*	Operated. Explorat. incis. Some hæmorr. from portion of tumour slightly wounded. Found to grow fr. within walls of uterus. Tumour firmly tied by two double ligatures passed through it. All portion above ligam. cut off. Stump of uter. kept outside.	Progressed at first favourably, but subsequently died.	Died. *P.M.* Pus in iliac veins. Peritonitis. Intestines glued together.
9	Dr. J. M. Boyd. *Am. Journ. of Sci.* 1856. vol. 33, 572.	..	Previous history not given: a negress. Uterine tumour; not otherwise defined. Weight after operation found to be 45 lbs. *Involving entire uterus.*	Operated June 13. Incis fr. umbil. to pubes. Tumour found to extend beyond umbilic. Incision, therefore, extended 1½ in. higher. Tumour found attach. to sacral & lumbar verteb. involv. uterus & adher. to ovaries. Adhesions torn, ligamts. severed, leaving only vagina attached. Cervix now transfixed, 2 ligatures, lateral halves tied. Pedicle secured at lower part of incision. Spermatic artery of right side only required ligature.	Hæmorr. about 10 ounces from various sources. The ligatures of the pedicle came away 16th day. In March, patient resumed her avocations.	Cured.
10	Dr. Clay. *Med. Times*, No. 164, and Lee, p. 208. R. Lee, *Med. Ch. Tr.* 34, p. 21.	45	Tumour size of gravid uterus at 8th month. Hard, unyielding, tubulated, moveable, not fluctuating. Tumour after removal weigh'd 12 lbs. and included part of os and cervix. Supposed ovarian. *All uterus and ovaries.*	Operated in 1842. Incision 13 inches Tumour exposed; had a broad attachment, the greater part of uterus forming tumour; great difficulty in securing exposed vessels. *Both ovaries, which were diseased, and entire uterus removed.*	Attacks of Syncope.	Died 1½ hour after operation, of shock. Ligature found aft. insuff. to compress thickened neck of uterus.
11	Dr. Clay. R. Lee's paper, *Med. Chir. Tr.* 34, p. 21.	52	Enormous enlargement of abdomen of 16 years' duration. Uterus after operation found to be enlarged to 12 lbs. Ovaries and uterus diseased. *All uterus and ovaries.*	Operated in 1844. Incision 12 inches. Both ovaries and uterus removed, converting vagina into a cul-de-sac.	The wnd. healed, ligatures thrown off & progressed rapidly to recov. when she accid. fell heavily when the bed was making to the gr'd.	Died 15th, of secondary inflammation induced by the fall.
12	Dr. Clay. *Lancet*, 1863, 418.	..	Fibroid uterus, 75 lbs wt. Ovaries fnd. unhealthy, filling up so entirely cavity of pelvis as to render defæcation very difficult. *Involving all uterus and ovaries.*	Operated in 1863. Entire tumour and ovaries removed, leaving only a small piece of cervix.	..	Recovery complete.
13	Dr. Granville, Dr. R. Lee. *Med. Ch. Tr.* 34, p. 11.	30	Tumour supposed to be ovarian, but examined by Dr. R. Lee, and found to be fibrous tumour adherent to fundus by a small thick pedicle. Wgt. 8 lbs. *Extrauterine.*	Operated March 21, 1827. Incision nine inches long.	..	Died. A portion of small intest. came in contact with pedicle wh. incised, and became infiltrated & gangrenous.

TABLE III—*continued.*

No.	Operator and Reference.	Age	Previous and General History.	Steps of Operation.	After Progress.	Final Result.
14	Dr. S. Parkman. America. *Lyman's Report* Bost. 1856.	27	Single. Tumour of one year's duration. Regular. Tapped, but no fluid followed. Fibrous Tumour of uterus, weight 8 lbs. 13 oz. *Parietal, involving entire Fundus.*	Operated Jan. 8, 1848. Incision from ensiform cartilage to pubes. Ascitic fluid escaped on making incision. Tumour tapped; no fluid followed. On being raised, found to be a fibrous growth, involving entire fundus. Ligature applied through and around lower part of organ, tied with great force. Tumour excised. Both ovaries healthy.	..	Died of hæmorrhage, 12 hours after.
15	Mr. Lane. London. *Clay's Table, Kiwisch Trans.*	43	Twice married. No children. Disease of 8 or 9 years' duration. Cyst spontaneously disappeared 5 successive times, at intervals of about 12 to 18 months. For the last 2 years before the operation, the cyst did not give way, and she was 3 times tapped. Health good. *Extrauterine. Fibrocystic.*	Operated Feb. 15, 1844. Incision 7 in. A pedicle was formed of that part which sprang fr. uterus. Temp. ligat. were first applied, the cyst was then severed close to temp. ligat.; afterwards 6 perm. ligat. were applied each including about 1 inch of the cut edge of the portion of the cyst left attached to the uterus. The pedicle was left within the abdom. cavity. Wound united by 7 sutures. Not within the peritoneum.	Pulse rose from 80 to 120 the 1st day. On the 2nd was 130, on the 3rd it had fallen to 100.	Patient recovrd. in three weeks. Married three years after operation, and again in a year. Died 1½ year after, of disease of bladder.
16	Dr. E. R. Peaslee. America. *Am. Journ. of Med Sci.* 1855, p. 393.	35	Widow with 4 children. Tumour in right iliac region noticed 18 months previously. Leucorrhœa. Dysuria. Numbness of the extrem. Had pelvic inflammation after her last child, 17 months back. Tum'r moveable, falling into lower pelvis when she is erect. Catheter necessary for several weeks. Sound penetrated 3½ in. Uterus moveable while the tumour is fixed. *Extrauterine.*	Operated Sept. 1853. Incis. 6 in. Trocar thrust in what appeared a dense sac filled with fluid. *Nothing but blood followed.* Incision enlarged; tumour then found to proceed from uterus. *Trocar puncture was bleeding freely.* Operat. c'ld not be suspen. Attempts to vomit, & intestines protruded. Incision extended, & ligature placed ar'nd uterus as soon as pos. & excised. Hæmor. did not exceed 6 oz. Ligatures brought out at lower angle of wound, by side of wh. a gum elastic tube was left introduced. Wound united by 6 needles carried thro' the peritoneum.	..	Died, Peritonitis 5th day.
17	Dr. Kimball. *Bost. Med. and Surg. Journal,* 1855.	..	Anæmic. Unable to lay on her back. Hæmorrhage at the periods fearful, likely to prove fatal. Tum'r occupied centre of abdomen. Form globular, large; diameter probably 7 inches. *Vaginal examination:* Cervix normal. Sound penetrated 4 to 5 inches. *Diseased mass was so high up in abdomen that could not be felt per vaginam. Involving all uterus.*	Operated Sept. 1. Incis. 4 in. thro' median line upon projecting tumour. Attempt made to *enucleate* first, so as to remove diseased mass, and thus make smaller openings. This was done with difficulty. Uterus then drawn out. Transfixed with double ligature at suppos. union w. cervix. Superior part then amputated. Wound brought together by 4 sutures. 4 oz. of blood lost.	Recovery somewhat retarded by nausea and vomiting, retention of urine, etc. Convalesct. quite in Jan. Ligatures rem. very long, not away till July.	Recovery complete.
18	Dr. Kimball *Ibid.* p. 254.	..	Supposed ovarian. Enormous irregular and lobulated tumour, involving uterus only.	Whole diseased mass and organ removed.	Favourable for six days, 7th got ill.	Died 10th day.
19	Dr. Kimball. *Ibid.* p. 254.	..	Particulars not given. Fibrous within walls of uterus. *Parietal.*	Uterus extirpated.	Favourable for two days.	Died 3rd day, from slipping of ligature.
20	Dr. Walter Burnham, of Lowell. *Nelson's Amer. Lancet,* Jan. 1854.	..	Also copied in *Worcester Medical Journal,* February 1854.	Uterus and both ovaries extirpated.	..	Recovered in two months.
21	Dr. Nelson. America. *Amer. Medical Monthly,* 1859-60. *Bost. Med. and Surg. Journ.* 1859-60, 507.	..	Of 5 months standg., and consisted of 3 lobes, of which largest filled whole of left iliac region, and ext. to the ribs and to the right of linea alba, causing much distress by compressing chest and stomach. Diagnosed to be ovarian cyst. *Extrauterine.*	Two largest lobes removed by the knife, leaving a stump three inches in diameter.	Ligature came away a few mos. aft. without patient's knowl'ge. *Ibid. Journal,* 1858, 297.	Recovered without a bad sympt. Died 3 years aft. of obscure abd. disease, w. fistulous opening in intestine.
22	Dr. A. F. Sawyer, of San Francisco. *Am. Journ. of Med. Sciences,* 1860, 46.	43	Married, 4 children. Tumour first noticed 1849. In 1855 was of size of two fists in centre of abdomen, sinking when erect in pelvis. In Oct. 1856, confined of a healthy child. After this, uterus could no longer be felt, and tum'r resumed its position in pelvis, which was moveable. *Parietal.*	Operated under ether. Incision from a above umbil. to pubes. Was a large solid growth imbedded in parietes like an enormously hypertrophied uterus. Ovaries rested on either side of tumour, left healthy, right hypertrophied. Transfixed by a ligat. below cervix, all above removed. Ligatures left hanging out of wound. Tum'r was calcareous, mixed up with fibroplastic ingredient, and muscular and cerebriform matter.	Favourable up to 4th day, when rigors occurred, nausea, vomiting. Pulse 140.	Died 6th day. *PM.* Peritonitis. Sanguin'us fluid and clots, 10 oz. Ligat. on stump of wound somewhat loosened. Death from secondary hæmorr.
23	Mr. T. S. Wells, of London. Communicated and Operation seen.	..	Interstitial fibroid of uterus in right uterine wall, of months' duration. Severe menorrhagia. Obscure fluctuation. Tumour extdng. above umbilicus. Weight found to be 17 lbs. *Parietal.*	Gastrotomy. Tumour wounded accidendentally with knife. Fearful hæmorrhage. Large vessels on surface. Tumour enucleated, uterus contracting afterwards. Edges of wound tied. Portion right side of uterus hypertrophied or fibroid.	Collapse. Exhaustion.	Death four hours after from shock and hæmorrhage
24	Ditto. Communicated	..	Solid fibrous tumour of uterus, weighing 28 lbs.	All the uterus excepting the cervix and both ovaries removed.	Went on well for three days. Shock.	Died fourth day from poisoning.
25	Ditto. *Path. Trans.* xiv, 204.	53	Single. A case of fibrocystic pedunculated outgrowth. Right side of fundus. Weight, 16 lbs. 1 oz.; and a large cyst which had held 26 pints of fluid, and 4 lbs. of lumpy masses of decomposed fibrine. *Fibrocystic.*	Operated upon as for ovariotomy. No important adhesions. Right ovary attached to tumour and removed. Left connected to uterus.		Died four hours after operation.

TABLE III—*continued.*

No.	Operator and Reference.	Age	Previous and General History.	Steps of the Operation.	After Progress.	Final Result.
26	Mr. Brown. Communicated Lond. Surg. Home.	45	Single. Admitted May 6, 1860. Health good up to last 3 or 4 yrs., when she had faintness and epistaxis. Regular up to Oct. last. Nine years ago disc. small tum'r r. side of abd.; this did not inc. till 3 or 4 years ago. Had grown rapidly last 6 months. Had pneumonia 10 yrs. back. Last March had erysipelas. *Examination*: Small ovarian tum. also a solid mass above pubis like an enlarged uterus. Sound only gets within the os. Hymen perfect. Lungs sound. Heart healthy, but weak. *Fibrocystic.*	Operated May 15. In dissecting as far as peritoneum, the cyst found to be so adherent that, in endeavouring to break it down it was ruptured and three or four pints of fluid escaped. A firm fibrous mass was then discovered bound down by such firm adhesions that it could not be moved. Therefore *a piece of cyst* on each side was cut off, and the wound closed as usual.	Went on pretty well till the 26th, when fluctuation became distinct over abdomen, w. erysipelatous redness. Pulse quick. Tongue dry and foul. 31st, began to sink.	Died June 8, of phlegmonous erysipelas of left leg. The same epidemic prevailed in the hospital.
27	Mr. Fletcher. Communicated by Dr. Grimsdale.	40	Widow with 5 children. Three miscarriages. Ceased to menstruate 6 months ago. Tum'r first noticed 13 months ago on right side. Circumference of abdomen, 37½ in. Tum'r moveable, containing large masses of solid matter. After operation, tumour found to weigh 14½ lbs. Struct. identical with uterine fibroid tum'rs, studded with cysts of various sizes. *Extrauterine. Fibrocystic disease.*	Operated May 14, 1862. Incision, 5 in., from 2 in. below umbil Anter. surface of tumour closely adherent, & 3 in. of edge of omentum to tumour on right side. Trocar passed into tumour, scarcely any fluid came. Incision extended to 2 in. above umbilicus. Many cysts ruptured or punct. Tumour found to spring from back of uterus below the fundus and to left of median line. Its base (it could hardly be called a pedicle) was about 1½ in. diameter. This *was cut with écraseur* in about 20 minutes. *Two* ligatures of iron wire put on vessels which bled on the cut uterine surface. Ligat. cut short and left. Wound closed by pins and fig.-of-8 sutures, and superficial sutures. Abdomen not sponged out.	Vomited once or twice the night and day after operation; complained of pains like afterpains in the uterus. These relieved by gruel, 1½ oz. tinct. opii, 20 minims. Had very little stimulant.	Recovered well. Readmitted into hospital a few months since, with eczema; otherwise well and fat.
28	Mr. Hakes. *Brit. Med. Journal*, Feb. 28, 1863.	42	Married. Had 2 children, youngest 15. Enlargement first noticed 18 months ago. Then appear'd to have abd. full of ascitic fluid, & a harder tumour below. Tapped; several pts. of amber fluid liberated, when an irreg. nodulated tumour was felt. Uterus moveable, but less so than usual. 9 months ago, tapped again, and when about 1 pt. of fluid had come away, cannula came agst. a hard tumour. Ten days aft. again tapped high up above umbilicus, and a large quantity of fluid came away. Cysts and solid tum'r rem. behind. *Diagnosis* made *ovarian* dropsy. *Extrauterine, fibrocystic.*	Operated Jan. 29, 1863. Incision usual length, to an in. above umbilicus. Tumour found adherent to omentum & intestines. Connected by a small band, with scarcely a pedicle. This was transfixed by double ligature, and both sides tied, a third wire encircling the whole. Tumour was found to be made up of cysts of narrow sizes with thin walls. One or two, however, with solid bloody matter. Right ovary was felt to be somewhat enlarged. Some fluid escaped in abdomen, which was sponged out.	For several hrs. appeared to be doing well. Still never rallied.	Died 33 hours after operation, from shock. *P.M.* No inflammatory action: wnd. firmly hld. Both ovaries dis. each cont. 2 or 3 small tumours. Small polypus found on cervix uteri, and 1 or 2 fibroids imbed'd in uterine wall.
29	Mr. Cadge, of Norwich. Communicated 1863.	30	Single. Health good. Five years' growth. Generally regular, at one time there was slight sanguineous drain, never hæmorrhage Tumour was in abdomen, size of 8 months pregnancy. Diagnosed at Norwich and in London to be ovarian. *Parietal.*	When abdomen was opened, tumour rolled out. Tapped; found solid. Uterine wall now peeled off and tumour *enucleated.* 3 or 4 large vessels tied, and then redund. uterine flaps.wh.had cov.the growth,r'mov. As the bleeding was, however, very free, to check this, & also remove any smaller tumours, wh. might & probably did exist, a strong double ligature was passed thro' cervix, and lateral halves tied, and whole uterus and ovaries removed. There was no more bleeding.	..	Died of shock apparently, 36 hours after operation.
30	Dr. E. R. Peaslee. America. *Am Journ. of Med. Sci.* 1855, p. 393.	35	No account of duration. Tumour was found to be a uterine fibroid, 5½ in. long, 4 broad, and 3 thick. *Extrauterine.*	Operated Sept. 21, 1833. Incision 6 in. Tumour taken for fluctuating one; *punctured with trocar.* Great hæmorr. A ligat. was then applied round neck of tumour & whole body above the ligature excised.	..	Death on 4th day, from peritonitis and gangrene of intest.
31	Dr. Kœberle. *Med. Gaz. of Strasbourg*, No. 10, 1863. *Presse Médicale Belge*, Nov. 1863.	30	Married 6 years. Nervous. Began to menstruate at 18. No children. Miscarriage 5 yrs. ago at 3 months. Then noticed hard tumour left side of pelvic region. This was made out to be a uterine fibroid. It grew without disurbance of gen. system. 3 years ago, believed to be a mixed tum'r. Arsenical pills and iodized iron prod. no effect. Micturition difficult. Menorrhagia w. sickness at the epochs. In present state, tumour believed to be ovarian or fibroid of uterus.	Operat. April 20, 1863. Incision 3½ centim. above umbilicus to 3 above pubes. Little bleeding. Tumour free from adhesions superiorly, but connected w. epiploon by 3 arteries as large as radial. Ligat. & cut. Tumour found to be solid. Incis.enlarged. Pedunculated tumour came out, and was secured by the chain of an écraseur. Intestines were now moved aside. Uterus found large, contain'g a fibroid size of nut. Right ovary healthy; left large, w. Graafian vesicle on it ready to burst. Cervix transfixed, double iron ligature applied including broad ligaments and ovaries. The whole part above the ligatures cut. Cavity of abdomen cleaned out. Ends of cut portion touched with perchloride of iron. Other vessels tied.	Very fair pulse, never rose above 105. Suff'd from cough. Ligature came away on 13th or 14th day.	Recovery complete 30th day.
32	Kœberle. 2nd case.	..	Ascitic for a long time, obliging punct. by the trocar every 5 days, to remove 12 or 13 pints of serum. Operation one of urgency. *Pediculated Extrauterine.*	Operated December 5, 1863. Adhesions very extensive and highly vascular. Twenty ligatures applied both to arteries and veins.	..	Died of peritonitis as a result of the recurrence of ascites.

TABLE III—*continued.*

No.	Operator and Locality.	Age	Previous and General History.	Steps of the Operation.	After Progress.	Final Result.
33	Kœberle. Communicated	24	Tumour weighing 33 kilog. 5 yrs. ago, observed abd. was enlarging. First came a suspicion of pregn'cy, then of an ovarian tumour, fluct. being very evid. Tapped 7 times without effct. In 1863, belly enorm. swelling ext. to scaphoid cartilage. Dyspnœa urgent, face cyanosed, decubitus lateral. Fluctuation was so evident, she was again tapped, blood only exuding. Walls of abd. slightly œdematous. *Extrauterine, Pedunculated.*	Operated March 4, 1863. Incis. 55 centim. Large fibroid exposed, which at the least succussion shook like jelly, adherent to epiploon by large tortuous vessels. These tied and cut on both sides. Ovaries healthy. Metallic ligature put around pedicle, wh. was about size of a fist when cut. At least 2 litres of blood came away from cut end. Parts now sponged. Large bleeding veins tied. A small superficial part of adherent liver having been removed, exuded bile and blood. This was arrested by the perchloride of iron. Operation lasted 2½ hrs. A small portion of air retained in abdomen. Wound closed.	For two first days did pretty well; 3rd, violent sickness, and death from exhaustion and dyspnœa.	Died March 8. *P.M.* Air absorbed. Wound two-thirds heal'd Some serum inferiorly from œdematous walls Tumour entirely disappeared. No phlebitis or false membrane. Two litres of seropurulent fluid in right pleura. Death thus due to pleurisy.

recovered was one in which it was stated that all the uterus except the cervix was removed. All in and about the diseased organ was removed.

3. The last category of cases, however, appears to be most interesting. In all, they amount to nine, with four recoveries. One death here appears to have resulted from hæmorrhage, the ligature not having been sufficiently secured; and one death was purely accidental.

This last, one of Dr. Clay's, had all but recovered; the wound had healed; the ligatures had come away; and she was progressing rapidly towards convalescence, when she fell heavily to the ground when the bed was making. The shock to her system appears to have determined inflammatory complications, of which she died.

These last two cases should, therefore, fairly be excluded. This would give seven cases, and four recoveries—more than half. In all these, the ovaries (with the exception of one case, one of Mr. Wells, in which *one* ovary only was removed) were extirpated, as well as the entire uterus. And, in order that this should be done, the uterus must have been high up and well without the true pelvis.

It is obvious, however, on more closely reviewing these cases in which gastrotomy has been performed successfully, that it is precisely in those cases where the tumour was high up in the false pelvis, that the success has been greatest. Secondly, in those where the ovaries were removed, it is this same contingency which contributed to their ready extirpation also; and, thirdly, it was also in those cases where the whole diseased mass was capable of removal.

The first contingency is the reverse of what we observed in cases of enucleation *per vaginam*. If such tumours are to be removed by gastrotomy at all, it is a favourable position. Secondly, a very little reflection will shew that it would be impossible, except in a case where the uterus and ovaries were high up in the false pelvis, to remove them *en masse*. For, if we look for a moment to the large vessels in immediate contiguity, the broad ligaments which have to be cut through, the position of the bladder, ureters, spermatic artery, the objections to the operation appear very great, almost insurmountable, if there be any extensive adhesions; and yet the only four cases on record, if we exclude extrauterine tumours, in which recovery has followed, have been the cases in which Drs. Clay, Burnham, Kœberle, and Boyd removed both uterus and ovaries. And this could not have been effected, unless, as before urged, the uterus and ovaries had been well drawn up outside of the true pelvis, where they could be easily got at and removed.

At *post mortem* examinations, with the abdominal walls opened low down, even to the front of the bladder, and when all the intestines are moved out of the way, even when the rectum is included, anybody who has tried it must have experienced how great is the difficulty to separate away the contents of the true pelvis. But, admitting it were possible, how could the arteries cut across be secured? and would it be possible to remove such a mass without wounding the large veins in this cavity?

[*To be continued.*]

Transactions of Branches.

BENGAL BRANCH.

ADDRESS IN MEDICINE: THE PRESENT STATE OF THE MEDICAL PROFESSION IN BENGAL.

By S. GOODEVE CHUCKERBUTTY, M.D.

[*Concluded from page* 88.]

THERE are now in the Calcutta Medical College three classes of students: the first created, or the English class; the next created, or the military class; and the third created, or the Bengali class. Into each of these, young men of all castes, creeds, and colours, of all nations and countries, are freely admissible; and from them have annually gone forth into the world large numbers of physicians and surgeons. Connected with this College, there is now a magnificent hospital, in the wards and dispensaries of which relief is afforded to a vast number of patients, in every department of the profession; an extensive museum of anatomical, pathological, zoological, mineralogical, and pharmaceutical specimens; a fine chemical laboratory; a good library; and vast dissecting accommodation. Following the example of Calcutta, similar medical schools have been formed also at Bombay, Madras, Hyderabad, Agra, and Lahore. Thus there are now six well-founded medical colleges in the country, three of which belong to our own Presidency; and numbers of good hospitals. In all these, a vast number of students are learning together, in honourable rivalry, every branch of medical knowledge imported from the best schools of Europe. We have side by side English medical schools and vernacular medical schools, English medical teachers and vernacular medical teachers, English medical practitioners and vernacular medical practitioners. Year after year, a fresh crowd of medical students are

passing our colleges and universities, and spreading themselves far and wide over the whole face of the country. They are to be found in the army, in all civil stations, in charge of jails and dispensaries, on board passenger-ships, in the service of the railway companies, in lucrative private practice, and in the employ of rich zemindars and planters. Not only towns, but even the villages, have commenced to reap the benefit of their advice. In Calcutta, they may be counted by scores; and the demand for their services is so great, that the humblest of them easily obtains a livelihood. Indeed, it is often difficult to get an unpassed second or third year's student, even of the Bengali class, to accept an appointment worth forty-five to seventy rupees (about £4 : 4 to £6 : 10) a month.

As was to be anticipated, the first difficulty of these youths was to contend with the *Koberajes, Hakeems*, and other irregular practitioners of the old stamp; for we may be quite sure these men regarded with no affection the alumni of the new school. But, while their own numbers have gained strength by annual additions, those of their enemies have grown proportionately thinner, partly from want of room, and in part also from the augmenting credit of rational medicine. It would be hard to tell the exact number of new medical men engaged in practice all over the country; but, if we may venture to guess, we may say they may be counted by thousands. Of the students of our own Medical College alone, according to Dr. W. C. B. Eatwell, there were employed in 1860, in the service of Government, 85 subassistant-surgeons, 62 Bengali class native doctors, and 330 Hindustani class native doctors, giving a grand total of 477 officers. These numbers have during the past three years greatly increased; and, besides, when we take into calculation the number employed by the railway companies, tea-companies, planters and zemindars, passenger-vessels, and as private practitioners, and the numbers which have issued forth from the other medical schools, it will not be surprising if we said that there are now in India thousands of reliable native physicians and surgeons; whereas none of these were to be met with any where only thirty years ago. All of these practitioners are well to do in the world, and many of them have grown opulent and respectable members of society. The aggregate amount of wealth represented by them is considerable, when we come to think of the recency of their existence and the terrible obstacles they have had to surmount. Of the benefits they confer on the public no tongue can speak, nor pen describe; they are engraved in the hearts of the suffering multitude; and their extent and value can only be judged of by the great demand which has sprung up within so short a period for scientific medical aid among all ranks of the community.

This, we will say, is the bright side of the picture; but, like all pictures, it has a reverse side as well, which we shall now proceed to contemplate. The phenomenon we have seen has been so amazingly rapid in its growth, that it has almost taken the breath out of its immediate beholders. The spectacle was too dazzling to admit of an early scrutiny. People at first were too much rejoiced at the suddenness and mightiness of the apparition to look beyond the surface. We shall show that that was precisely wherein the danger lay. It was a danger that was lurking within and without the pale of the profession. The first years of this wonderful regeneration of medicine, under the skilful management of Mr. M. E. Bramley and Dr. H. H. Goodeve (to the latter alone being due the credit of introducing for the first time human dissection and the study of practical midwifery into this country), were years full of confidence and hope. The pride of knowledge was the all-absorbing passion depicted on the faces of the youths who crowded the lecture-rooms of their infant institution. The progress and enterprise of the native medical students were the great topic of the day. All true friends of India were glad of their success. Lord William Bentinck, Lord Macaulay, Sir Charles E. Trevelyan, Sir Edward Ryan, Dr. John Grant, Mr. David Hare, Baboo Dwarikanath Tagore, were the great men who did everything in their power to foster and encourage them. The chemical experiments of Dr. W. B. O'Shaughnessy attracted admiring crowds of spectators, who, as well as the regular pupils, might have been seen fascinated to the benches on which they sat by the new truths that were every moment bursting to their observation. Truly, they might have exclaimed, "All this must make us wiser and better than our forefathers, and yield great pecuniary advantages!" Buoyed up with hope, petted by the great, and intoxicated with knowledge, the first band of students laboured with a zeal and determination which astonished even the Orientalists. A series of triumphs greeted them as the result of their first examination. A batch of diploma-men received their honours amid the admiration of a crowded assembly, and Dr. John Grant delivered a telling oration to signalise the event.

Now came to be tested the money-value of those diplomas; and the Government of the day was prevailed upon to offer to the successful candidates a salary of 100 rupees each *per mensem* in the public service. The young men, it was said, felt deeply mortified at this scale of remuneration; nevertheless, since they had then as yet no experience of the prospects of private practice, most of them accepted service on the terms proposed. The Government, with its usual liberality, at once proceeded to open dispensaries for the poor in the principal civil stations; and, by the recommendation of the Committee of Examiners, appointed to their charge the newly passed young men, as subassistant-surgeons, under the superintendence of the civil surgeons. Baboos Nobin Chunder Mitter, Uma Churn Sett, and Rajkisto Dey, were the first to be so employed, and then promoted to higher pay, as their merits became duly appreciated. Some of those gentlemen here named now number among the dead.

One of the most illustrious of that batch, Baboo Dwarikanath Goopto, an honoured member of our Branch, was, however, immediately taken by the hand by the late Baboo Dwarikanath Tagore, whose unstinted liberality and public munificence were felt in so many directions. Baboo Dwarikanath Goopto at once became the family medical adviser of that noble-hearted patriot, and was by him introduced to a circle of rich friends, who, by their united allowances, secured for him an early independence. Baboo Dwarikanath Goopto lives now to favour our meetings by his presence; and it would do good to our Branch, if the younger members of the profession were to imitate his example. In him meet the events of nearly thirty years; and the early promise of his career is well sustained by the wisdom and activity of his maturer age; affording thus a literal fulfilment of the good advice of Dr. John Grant, when delivering his diploma some twenty-five years ago. His success is an earnest of what all can do by adhering simply to private practice. But, while admitting his case as a type of many others I could name, there is no denying the fact that several have sunk under the evils which lay below the surface. Some, puffed up by vanity, have shrouded themselves in self-conceit, and will on no account believe in improvements, which they regard as mere idle novelties; some, spoilt by unforeseen prosperity, have abandoned themselves to

lethargy and vice; some, contending fiercely with the ignorant *Koberajes* and *Hakeems*, have insensibly descended to the low level of these, and adopted habits and practices disgraceful for the members of a learned profession like ours; some, not satisfied with legitimate gains, have imbibed a sordid mercantile spirit, and become dead to all refinement of sentiments; some, wanting in good feeling and candour, have betaken themselves to evil-speaking, so that they might raise themselves by running down their neighbours; some, tired of industry and study, have gone astray into the easier paths of homœopathy, hydropathy, Morrisonianism, and cholera-curers; and lastly, some, who have both talents and energy, have conceived too great an opinion of themselves, and learnt to despise their brother-practitioners, with whom they think it mean to hold any intercourse, even for their common good.

All this is a matter of profound regret; for the conduct of the few has brought unmerited ridicule and discredit upon the whole body of members of a noble and honourable calling. What can be a surer proof of this, than the facility with which all sorts of charlatanry meet with a ready public to welcome their professors? What else will explain the alacrity with which a noted homœopathic practitioner has been recently installed as the health officer of Calcutta? The medical profession is sick within, and assailed by enemies from without. There is a canker within it, which is eating into its very vitals; a sore spot—a slough—which must be promptly amputated, if it is to reassert its dignity in Bengal. To perform that operation, and to unite the integral members by a common bond, is what is wanted; and it is precisely that object which the formation of the Bengal Branch of the British Medical Association contemplates. Our desire is to hold up to contempt all that is contemptible, and to commend for imitation all that is good and commendable. Thus shall we separate ourselves from all disreputable and irregular practices, and win back to our ranks those who have been led into temporary error. Our periodical meetings for the discussion of all medical questions are a most useful tribunal, the verdicts of which will go far to secure the advancement of the profession. More than this: they supply a much needed stimulus to exertion, and afford a congenial field for employment to ardent and unoccupied minds. Of this there can be now no manner of doubt. The experience of the last six months is a sufficient guarantee of what can be done; and it gives me real pleasure to congratulate the members of our Association upon this auspicious commencement of a new and bright era, the mark of which will be certainly left on the pages of Indian history. During the short time that has elapsed since the foundation of this Association, it has already received valuable contributions from a variety of gentlemen, among whom I may particularly notice the names of Dr. Chevers, our learned President, and of Drs. Fayrer, Browne, Beatson, Juggobundo Bose, and Mohendro Lall Sircar; and of Baboos Unnoda Churn Kastogry, Nilmadub Haldar, and Calla Chand Haldar. Services such as theirs should be gratefully recorded, setting us, as they do, bright examples of public spirit, and adding very materially to our stock of information. But, while expressing our thankfulness to Providence for the glorious career which our Branch has already achieved, we have to deplore, in the untimely death of Dr. John Browne, the loss of an earnest and inestimable member. May it be long ere we meet with another such calamity! We are as yet a scanty band; for the roll of our members scarcely counts more than seventy. Nevertheless, I feel confident that a great future is now open before us, in which our profession will rise up before the world in newness of strength and well-earned glory. I am convinced that we are in the right path at last, and that every day henceforth will find us more and more united, and ready to defend our common interests.

Yet, I must confess, we are far from accomplishing our mission quite so easily. There yet remain many difficulties to be overcome, many enemies to subjugate, and many errors to dispel. Even the metropolis of India is infested by a host of impudent harpies, who prey upon the credulity of the unsuspecting. Every druggist and chemist, every apothecary and quack, every sluggard, fool, and rogue, enjoys as yet full liberty to style himself a doctor and prescribe for the sick. Can this be allowed to continue without detriment to the public interests? Most assuredly it cannot. This confusion of the educated and the uneducated, the ignorant and the learned, the legitimate and the illegitimate, and the honest and the dishonest, is a most heavy misfortune, under which the profession will continue to groan as long as legislative interference is withheld for its benefit. That any disappointed Sircar or worthless European may set himself up as a medical practitioner by buying a few doses of quinine, castor oil, opium, and tartar emetic, and giving these out to the sick under false and bombastic names, is a most grievous wrong to legitimate medicine.

To show the extent of the evil, the different classes of legitimate and illegitimate practitioners who exercise our profession here may be enumerated as follows:—1. Government medical officers; 2. Private European physicians and surgeons; 3. Doctors and Licentiates of Medicine of the Calcutta University; 4. Graduates of the Calcutta Medical College; 5. Bengali and Hindustani class native doctors; 6. Dental surgeons; 7. Apothecaries; 8. Hospital apprentices; 9. Unpassed medical students; 10. Vaccinators; 11. Midwives; 12. Homœopathists; 13. Hydropathists; 14. Hygieists; 15. Cholera-curers; 15. Amateur quacks; 17. Women doctors; 18. Koberajes; 19. Hakeems; 20. Barber-surgeons; 21. Boydos; 22. Fakeers; 23. Sunnyasis; 24. Mulls; 25. Priests of Hindoo temples; 26. Charmers; 27. Exorcisers; 28. Pathucks (readers of sacred writ); 29. Poison-extractors; etc.

Now, does not this afford ample evidence of the impunity with which anybody may turn doctor and play with the lives of his fellow-creatures? Does it not show the necessity of some kind of check? Does it not loudly call for the interference of the legislature, and extension of the English Medical Act to India? Surely the community is not safe when so many dangerous impostors are permitted to tamper with medicine, and prostitute it to the attainment of their selfish and wicked ends. Surely that social system is most unsound, which looks upon such things with complacency and unconcern. Let us hope, therefore, that the day is not far distant when these evils will be put down by the strong arm of the law, and none but men who have taken the trouble of duly qualifying themselves will be allowed to meddle with the health, honour, and lives of their fellow-creatures. Seconded by some such enactment, it is then, and then only, that we can hope for the full fruition of the noble end to which the efforts of this Association will be unremittingly directed, and which humanity and good policy alike demand at our hands. With the establishment of universities and good medical schools all over the country, there is now little excuse for inaction in this matter. The supply of regular medical men is increasing with every successive year, and no fear need any longer be entertained that there ever will be again a dearth of them. Mr. Robert Turnbull, Secretary to the Justices of the Peace, tells me that during the

past half-year the licence-tax was paid by thirty-two surgeons, three surgeon-dentists, thirty-nine licentiates of medicine, nine apothecaries, and one veterinary surgeon; giving a grand total of eighty-four men, exclusive of native doctors and others. Now, making due allowance for errors, on account of the great haste in which this tax had to be collected, and for the omission of native doctors (of whom, I am told, there are from sixty to seventy), we should not be far wrong if we put down the aggregate number at one hundred and fifty men practising European medicine in Calcutta. There are also, in this city, forty regular druggists' shops, seven charitable dispensaries, three large hospitals, and several smaller establishments of the same kind. So the Presidency, at all events, is already well stocked; and here the first trial might be made of affording protection to legitimate medicine. Then, as civilisation advanced into the interior, and people perceived their true interests, a general Act might be passed for the benefit of the whole country. That, I think, would be the wisest course to pursue at present; for, while I deeply lament the existing evils, I would equally deplore hasty legislation ere the public were sufficiently prepared to profit by it.

It might be considered foreign to the objects of this Association to speak upon the Government Medical Service; but an account of the present state of the profession in this country would be clearly incomplete without a word being said about that most important part of it. That service consists now of the following classes of officers: 1. Covenanted; 2. Uncovenanted; 3. Subordinate; 4. Native doctor. The covenanted medical officers belong all primarily to the military service, from which are supplied all the principal civil stations with surgeons. The European members of the uncovenanted branch have charge of the smaller civil stations; and the native are employed as subassistant-surgeons, in charge of jails and dispensaries. The members of the subordinate establishment are all military apothecaries; but some of them have of late been made honorary assistant-surgeons, and put in charge of civil medical duties. The Hindustani class native doctors are employed as trained medical assistants with native regiments, and the Bengali class in civil jails and dispensaries. A crisis has at length arrived when the interests of all these classes require to be seriously considered. The civil surgeon of the present day is no longer the only educated man in a Mofussil station; the subassistant-surgeon is very often as good, besides being his senior in years and experience; and in some places there are private practitioners and others in the employ of planters and zemindars, who are by no means willing to acknowledge his superiority. Under these altered circumstances, the future position of the covenanted medical service is a matter of great anxiety. Is the number of that service to be maintained at its former standard, so as not only to suffice for the army, but also for all the civil stations in the country? Is the Government to continue to provide medical officers at the public expense for its civil servants, when other practitioners are available at their private cost? Is the native army to have native or European medical officers? Are the subordinate medical officers to be mere apothecaries? Is the condition of the uncovenanted medical service to be improved? All these are questions difficult to solve; and their settlement involves more or less the interests of all classes of the profession. Then the highly educated Doctors of Medicine of the Indian universities are another growing element of disturbance. Will they be satisfied with the position of subassistant-surgeons? or are they to hold higher situations? Again, the increasing demand for practitioners of the vernacular class makes it incumbent on Government to give them a better and more substantial education than they now receive; for, as in many cases they are the sole medical advisers in whom to trust out of the service, the public have a right to claim that they shall be properly educated. And when the native doctors are taken out of the same class, will they not too expect more pay, and to be allowed to perform duties of a higher description?

Most of these questions are, I believe, already under consideration, or soon will be, in connexion with the remodeling of the Bengal Medical Service; and it is to be hoped that such measures will be adopted as will fully satisfy the exigencies of the times.

To recapitulate the several matters I have already discussed, I may state—1. That, previously to the foundation of the Calcutta Medical College, the medical profession in Bengal was represented on the one hand by a vast number of irregular, unqualified, ignorant, and incompetent native practitioners, and on the other by the covenanted surgeons of Government; 2. That in the present day it comprises, besides the above classes, a large body of well qualified native medical men, some independent European practitioners, some unqualified medical students, a new class of quacks who prescribe European medicines without any professional knowledge, and certain followers of false systems of therapeutics; 3. That, to prevent deterioration in the ranks of the profession, as well as to advance its interests, the action of the Bengal Branch of the British Medical Association will be highly useful; 4. That, to protect the rights of legitimate medicine, the English Medical Act should be extended to India, or a new law enacted here by Government; 5. That, owing to causes easily understood, the relations of the different branches of the Government Medical Service are materially changed; and that a corresponding change is needed in their respective positions, to adapt them to the altered circumstances of the times.

With these few remark, I beg to commend the interests of our profession to the most serious attention of Government; for, if the community at large suffer by our neglect, the Government itself has a still stronger reason to desire our welfare, if it be only to mark its enlightened appreciation of valuable services.

And now, apologising for its length, I will conclude this humble and ill-prepared address, thanking all my hearers for their patience and consideration in listening to it, and wishing the Bengal Branch of the British Medical Association a long and prosperous career.

EAST ANGLIAN BRANCH.

PRESIDENT'S ADDRESS.

By W. E. Image, Esq., Bury St. Edmunds.

[*Delivered at Bury St. Edmunds, June 17th, 1864.*]

Gentlemen,—It gives me much pleasure to welcome you this day to the old town of Bury St. Edmunds; and I beg to thank you for the high honour you have conferred upon me by electing me your President for the ensuing year. I need scarcely say that, should any occasion occur during the period I have the honour to be your representative of the East Anglian Branch of the British Medical Association, my humble services will always be at your disposal. Before I proceed to offer any remarks to this meeting, I beg to propose a vote of thanks to Dr. Copeman, who is now retiring, for the many very useful services he has rendered the Association from its earliest dawn

to the present time; and particularly for the very useful monograph on apoplexy he gave the profession many years ago, which was one of the earliest pioneers to a more rational and scientific treatment of that disease. I think the opinions he then ventured to advocate, and, if I mistake not, in this town, are now received by us all as sound in pathology and conducive to successful treatment.

Our time is so limited, that I shall not venture to trouble you with a long address; but I feel there are a few subjects which I cannot quite pass over in silence.

At the suggestion of my colleague, Dr. Goodwin, our meeting has taken place within the walls of our remodeled and almost entirely rebuilt hospital; and I hope it will not be considered superfluous or out of place if I commence by making a few remarks on the Modern Construction of Hospitals.

When we first entered upon our duties as members of the Building Committee, we looked around for a model plan for our guidance in our undertaking. We soon discovered that hospital architecture, with reference to sanitary construction, had not long or profitably occupied the attention of architects or of the medical profession. On carefully examining the plans of our best hospitals, both provincial and metropolitan, we were constantly disappointed in our search after a model plan, embodying both convenience and the requirements of modern sanitary science.

The first point to be considered is site and subsoil. The site in towns is frequently not a matter of choice; but, when it is, it should be selected on elevated ground, admitting of free ventilation; offering every capability of perfect drainage, away from the hospital itself; and not necessitating dead wells or other imperfect and dangerous systems of disposing of refuse matters. The drains themselves should be properly trapped, so as to prevent the reflux of noxious gases into the body of the hospital. Glazed terra cotta pipes, properly cemented, form the most secure drains. The drains, if possible, should not pass under the wards or any important part of the building. The soil should be sand, gravel, or chalk.

Next comes the construction of the hospital itself. The walls should be built of brick or stone, of sufficient thickness to prevent the alternation of heat and cold, and so placed as to allow free and perfect ventilation. The hospital should be divided into a male and a female side; the matron's apartments and female servants' being on the female side. The rooms appropriated for the medical staff, for the house-surgeon, the dispenser, the out-patients, etc., should be on the male side. The principal wards should stand well out from the body of the hospital, not approached through corridors, which become foul air flues. They should be each capable of holding sixteen or twenty patients; not too wide, but with space allowing fifteen hundred cubic feet of air to each patient. The ventilation should be, in my opinion, natural, obtained by opposite windows in the sides of the wards and open fireplaces. The floors should be constructed of oak, oiled and waxed to prevent absorption and the necessity of scrubbing. I must here remark, that the system or the necessity of scrubbing old deal floors, which have long been exposed to absorb noxious matters, is a plan fraught with great danger to the health of the patients, if allowed to remain in bed during the time when the floors are drying; for matters lying dormant are now set free by subsequent evaporation, and cause disease to the patients. We found erysipelas to be a very frequent consequence of washing the floors of our old hospital. The walls should be lined with Parian cement, which, when properly put on, offers a beautifully polished and hard surface, incapable of absorption. When necessary, they may be cleaned with soap and water. The windows should be protected by linen blinds. The bedsteads should be of iron; the beds of straw or cocoa-nut. No curtains should be allowed to the beds, except in exceptional cases. At the distal end of the wards should be placed the lavatories, the latrines, and the bath-room. At the proximal end of the ward should be placed the nurse's room, with small windows into the ward for observation; the patients' clothes-room; the scullery; etc. There should be male and female separation-wards on their respective sides, placed at the top of the building, entirely cut off from the rest of the hospital, and admitting of perfect ventilation. There should also be male and female eye-wards, having a north aspect. In our eye-wards will be seen an ingenious and very useful blind, contrived by my colleague Mr. Newham.

The kitchens should be so contrived that the effluvia of cooking may be prevented from entering the body of the hospital. A separate ventilating shaft should be placed in the chimneys.

The out-patients' entrance and waiting-room should be on the male side, easily communicating with the physicians' and surgeons' rooms, and with the dispensary, from which a window should open into the waiting-room, to avoid the necessity of the out-patients re-entering the hospital after having been prescribed for by the medical officers.

A room of easy access should be provided for the reception of accidents, before admitting them into their proper wards; and a litter on wheels should be at hand, so as to remove the patients without causing any inconvenience, as well as to convey them to the lift into the operating-room, when required. The operating-room should be spacious and well lighted.

Hot and cold water should be supplied to every part of the building.

The laundry and washhouses, with hot-air chambers for drying the linen in damp weather, should be quite apart from the hospital.

The dead-house, etc., should also be apart from the building, and so placed as to be unobserved by the patients.

A bath-room, of easy access to the out-patients, should be provided.

Airing-grounds should be provided for the convalescing patients, of easy approach, and under the eye of the matron.

I will not prolong these remarks, which admit of such easy extension, as I only wished to give a general outline of what we found to be cardinal points in the re-construction of our hospital.

At the termination of this meeting, my colleagues and myself will have very great pleasure in showing you over our hospital; and we hope you will not think that our labours have been in vain.

The next subject which I shall briefly notice is the advent of a *British Pharmacopœia*, long and anxiously looked for by the whole profession. I confess myself, that, with all its shortcomings, I hail its publication as an event of great importance to our profession, as a great and bold advance in the right direction. Any event which tends to unite our members into one firm phalanx, must of necessity strengthen the hands of each individual member. That so great an event should have been accomplished without error, and to the entire satisfaction of us all; that so many difficulties should have been smoothed down, and, if I dare say, so many prejudices quite removed, by one first effort,—was not to be expected, as it was contrary to experience in either literary or scientific labour. After the criticisms of the press and the remarks of the learned President of the College of Phy-

sicians in London, there can be little doubt that the full intention of the Council will be deferred until a second edition of the *British Pharmacopœia* be presented to the profession, and a volume probably of less cost and more value be substituted for the present volume. Let us, therefore, be grateful to the learned men who have so laboriously and honestly toiled at this first effort to produce a *British Pharmacopœia*.

I cannot quite pass over a subject which is now very gravely occupying the attention of those members of our profession who are specially connected with our universities; viz., the present state of Medical Education. Our time is so limited, that I can only sketch in outline the points under consideration. A very excellent monograph on the subject has very recently been published by Professor Syme of Edinburgh, which, bearing the stamp of his extended experience and logical conciseness, deserves the highest attention; and I shall not scruple to avail myself of his labours in the following very brief remarks.

The vast increase of positive knowledge on all subjects which enter into the curriculum of the medical student, and the consequent over-taxing his memory in his attempt to master all in so very restricted a period, have loudly called for relief to his mind; and we find that, at the last meeting of the Medical Council, there was forwarded from England, Scotland, and Ireland, a strong expression of desire that the attention of licensing bodies should be directed to the evils which result from the present system of over-cramming.

It is found that the multiplicity of classes, the frequency of examinations, leave little or no time for practical study. Mr. Syme remarks that the second and third year's students have seldom more than an hour available for the dissecting-room, and that they no sooner put on their aprons than they have to wash their hands.

It is evident that there are only two sources from which relief can be obtained. These are: 1stly, the regulation of licensing bodies for the curriculum and examinations; and 2ndly, the conduct of the courses by the teachers. As no one mind can embrace the whole circle of medical science, it is obviously proper, in regulating for professional study, to provide for the acquisition of what is more essential for the purpose in view, and more especially for that part of it which can only be obtained during the period of education. Of these, hospital practice and anatomy surpass all others in importance.

Mr. Syme further observes that, whatever may be the inconvenience resulting from a redundance of classes, it sinks into insignificance when compared with that which is caused by the present system of examinations. After thirty years' experience as an examiner he says: "I feel quite satisfied that these means of ascertaining the extent of qualification are productive of very little good and very great harm, since they afford no trustworthy criterion of real knowledge, and most seriously interfere with that concentration of mind requisite for obtaining a firm grasp of it. Nor has the system of giving prizes to students for special competence in any particular subject been attended with the success that was anticipated. In my student days it was almost unknown. Since that time it has been pushed to its fullest extent, and has certainly failed."

In the evidence given by Sir Benjamin Brodie before the Commissioners appointed to inquire into the regulations affecting the sanitary condition of the army, in answer to a question relative to giving prizes to medical students, he replied: "I have much doubt myself about giving competitive prizes in examinations. It may work well in schools and colleges; but when you come to professional examinations (I do not speak about the Civil Service), I do not think that competitive prizes will answer; for, after all, they will be obtained chiefly by those who are crammed; by the men of good memories, and not by those who work. It seems to me that the man who thinks will not have the advantage that he ought to have. I would limit the prizes to one class, founded upon cases. I believe that the ordinary prizes do very little good. For some time past the teachers in the medical schools have been in the habit of giving prizes to students; yet, notwithstanding this, they are found to be not so well qualified for examination at the College of Surgeons as they were twenty years ago; and hospital surgeons and teachers are now satisfied that these prizes do no good; nay, more than that, that the best men do not get them. These prizes operate in this manner. A man wants a prize; he gets books; reads up the subject; and this kind of work keeps him out of the dissecting room and the wards of the hospital. Yet these are the only places he can get any knowledge that he can apply to practice, and learn to observe and think."

To remedy these evils of over-teaching and cramming, it is proposed:

That a preliminary examination in classics and mathematics, at least, should be peremptorily demanded before commencing a strictly professional course.

That eighteen years should be the earliest age to commence the study of medicine and surgery.

That necessary lectures should be given, but curtailed of much redundant matter.

That three or four years should be passed in study in some school or schools possessing a large hospital, with ample means for practical anatomy.

That the students' knowledge should be tested by examination founded upon medical and surgical cases.

That dissection and hospital practice should extend over the entire course of the term of study.

The learned Head Master of the Grammar School of the town, the Rev. Mr. Wratislaw, who has paid much attention to the subject of education, has kindly favoured us with his opinion on the question of a preliminary examination. He says: "It seems to me that the plan of allowing any preliminary examination to be passed during the professional course, must be perfectly fatal to professional education. All such preliminary attainments should be secured before professional education is allowed to be commenced; and I fully admit that professional education ought not to commence before eighteen in any profession or in the army. The grand remedy for the present chaotic state of things appears to me to be this. It is clear that the preliminary requirements for any liberal profession or for the army are identical. Let, therefore, the Universities of the several countries hold annual examinations embodying such preliminary requirements; and let all candidates for entrance into the liberal professions be required to pass one such examination before they are allowed to commence their professional studies. It is clear that the machinery for such examinations already exists in the middle class or non-gremial examinations of Oxford, Cambridge, and Durham, which would merely require trifling modification to suit the purpose. Should passing in a particular branch, *e.g.*, Latin, be considered a *sine quâ non* in the medical profession, the rules of that profession ought to require Latin to be one of the subjects in which the candidate must pass."

I think I should not gracefully conclude these remarks, without thanking the learned and laborious Editor of the JOURNAL of our Association for the careful and clever hebdomadal he so punctually transmits

to our study tables. No one can now doubt the advantage of this publication to our profession. It gives an ample digest of all the current medical literature of the week, both foreign and British; and is of the greatest value to those of our brethren who are so fully engaged in their professional pursuits, as to lack the time requisite for obtaining so large an amount of professional information in any other way. The only request I have to make, is that he will avoid as much as possible breaking a lance so often with the other medical journals, as it does not redound to the honour of the Association.

British Medical Journal.

SATURDAY, JULY 30TH, 1864.

THE COURT OF EXAMINERS OF THE ROYAL COLLEGE OF SURGEONS.

OUR readers will have learnt by this time, that the essential evil in the management of the Royal College of Surgeons lies in the unconstitutional powers exercised by the Court of Examiners.

We have shown, that the Examiners virtually elect themselves into office—into an office of great honour, and of no inconsiderable value in a pecuniary point of view; and that, when they have attained office, they continue virtually to re-elect and keep themselves in office.

We shall now attempt to give our readers some kind of idea of what is the real value of an Examiner's office—the office which men strive so eagerly to obtain, and to which they cling so pertinaciously when they have obtained it—the office which has been hitherto, except in the one bright case of Sir Benjamin Brodie, invariably made a life-office, spite of the very express terms and intentions of the Charter.

We venture to affirm that, in the latter half of this nineteenth century, and under the force of modern reforming ideas, there is not to be found in this country, in operation at the present time, another instance of such management of affairs. We will not believe that any of what were the worst of our old corporate bodies can have brought home to them such a charge as that here brought against the Royal College of Surgeons. And let it be understood that, in the attempt which we now make to show the profession what is the value of an Examiner's office, we offer no opinion as to whether the office is under- or over-paid. Our only business, at the present time, is to show that the office, to obtain which men make such sacrifices, is really a post, not only of high honour, but also of considerable money value. And we wish to show this for the purpose of illustrating the position (which ought, in truth, to need no illustration), that no man ought to have the power of electing, or of assisting to elect, himself into an office of honour and of money value.

In putting, then, the Court of Examiners of the Royal College of Surgeons to the test of an examination, we must remark that, in some respects, our inquiry must of necessity be a partial one. The elements required for a complete investigation are not at the disposal of the profession. Sydney Smith said that, despite all commissioners' inquiries, only one man in the country knew what the income of the Bishop of London was, and that man was the Bishop himself. Just so, we must remark, respecting the salaries of the Examiners. The Examiners alone know what they receive in the money way. Mr. Guthrie, some thirty years ago, before a Committee of the House of Commons, put the figure at about £300 *per annum*. But the feast is, we conclude, a moveable one, varying from year to year in accordance with the number of the candidates; it is, in fact, a head- or poll-tax. Whether the fee per head has increased or diminished since Mr. Guthrie's day, we know not. All we do know is, that the subject is involved in much obscurity; and that the Court of Examiners, which receives the fees for examining, is all-powerful in the Council that fixes the fees which they shall receive for examining.

If, in their annual balance-sheet, the Council would give the sum received by the Court, we could ourselves easily divide that sum by ten, and so procure the at present unknown quantity—the x which represents an Examiner's salary; but this the Council—for reasons which to them may seem sufficient, but which to us look very obscure—have not hitherto done. Should any curious mind, like our own, seek information on this score from the College balance-sheet, he will have to work his conclusions out of the following proposition: If the "College Department, including Council, Court of Examiners, Dental Board, Midwifery Board, auditors, fellowship, diploma-stamps, list of members, salaries, wages, coals, law expenses, etc., cost £8831 : 15 *per annum*", what does one Examiner cost?

A senior wrangler would, we fancy, be puzzled to get much out of this; at all events, the question is quite beyond our powers to answer.

This fact, however, we can note, that (in the accounts of the year 1860 to 1861, which accidentally lie before us), out of a sum of about £12,000 taken in fees from candidates, £8831 : 15 are expended as above; and that of the whole receipts—viz., £13,894 : 10 : 4—there were expended £13,581 : 14 : 1.

Having, therefore, no facts by which to state correctly an Examiner's annual income, we can only make a guess at it; and from the best information we can obtain, we shall put it at an average of say £400 a year; and we believe that we are not overstepping the actual sum.

This, then, together with the honour attaching to the office of Examiner, is the prize to obtain which men seek to enter the Council; towards which, when

in Council, they so anxiously and persistently turn their eyes; and to which, as Examiners, they hold so adhesively and struggle for so unrelentingly. Of this, at all events, we may be very sure, the prize is not a small one, for the obtaining of which men set at nought the direct injunctions of their charters, and so boldly brave the criticisms of a righteous professional disapproval. But why should there be concealment? Why should the Examiners be, we will not say ashamed, but shy, to tell what fees they yearly take?

We have heard men who enjoy, and have long enjoyed, the sweets and honours of the office, indignantly exclaim, that the profession have no right to know or to ask anything about the matter. The members of the College, they say, have their diploma for their money paid; they have their *quid* for their *quo;* let them rest and be thankful, attend to their private business, and leave us to manage our own affairs—*i. e.*, the affairs of the College. But this sort of argument, which is clearly the reasoning of the old corporate days, is not one which will satisfy the profession at this time of day. The member is part of the College, and has as good a right to know whither his money goes, as the Council and Court of Examiners have to spend it.

Obscurity at present, then, rests over the College accounts; but no such great obscurity rests over the constitution of the Court of Examiners itself. Let us, therefore, examine this Court, and mark its composition, and see if it be what the Charter meant it should be. The present Examiners are, Mr. Lawrence, Mr. South, Mr. Arnott, Mr. Luke, Mr. Cæsar Hawkins, Mr. Skey, Mr. Hodgson, Mr. Wormald, Mr. Kiernan, and Mr. Partridge.

Mr. Lawrence holds office for life, and he holds this under the Charter of 1843; all men who were Examiners when that Charter was obtained being permitted to hold office for life.

When the Charter of 1852 was obtained, Mr. South, Mr. Arnott, Mr. Luke, and Mr. Cæsar Hawkins were in actual office; and to them, therefore, was given a bonus—that of holding office at the pleasure of the Council. One of the main objects of this Charter of 1852 was to prevent men holding office for life; and it was notoriously a great source of grief to Sir Benjamin Brodie that its plain meaning was nevertheless evaded by the Council; holding office at the pleasure of the Council having been up to the present time invariably interpreted by the Council as meaning for life. By this Charter of 1852, all Examiners elected subsequently to that year retire at the end of five years, but are eligible for re-election; and, in the teeth of the very sense and purport of the Charter, have been up to this time invariably re-elected.

There are, therefore, three classes of Examiners:

1. Those who hold office for life, having been in office before the Charter of 1843. Of this class, Mr. Lawrence is the sole remaining representative.

2. We have Examiners who hold office at the pleasure of the Council—those who were in office before the Charter of 1852; viz., Mr. South, Mr. Arnott, Mr. Cæsar Hawkins, and Mr. Luke.

3. We have Examiners who hold office under the Charter of 1852, and are elected quinquennially; viz., Mr. Skey, Mr. Hodgson, Mr. Wormald, Mr. Kiernan, and Mr. Partridge.

Now, let it be clearly understood, that the main end and object of these Charters and changes were to prevent men from holding office for life, either in the Council or in the Court of Examiners. And let it be further clearly understood, that the indictment we lay against the Council is, that up to the present moment they have done their very best to evade the meaning of the Charter; and that, in the case of the Court of Examiners, they have hitherto done it effectually. Living under the *regime* of reforming Charters, they have maintained, and clearly in their own favour, the abuses which those Charters were meant to remove. That they have the power to do their duty—*i. e.*, to obey the intentions of the Charter—is obvious. All the Examiners, with the exception of Mr. Lawrence, are in the hands of the Council. Four hold office at the pleasure of the Council; and the other five must be re-elected at the end of their fifth year of office, if they again enter the Court. The Council, then, have power enough, if they only have the will, to do their duty; and soon will come an occasion for them to exercise their power. One or two of these gentlemen—Mr. Skey and Mr. Hodgson—will in a short time have completed the second of their quinquennial periods of examinership; and, according to the routine of the Court, will present themselves for re-election—*i. e.*, for a third quinquennial period of office. Here, then, is an occasion to put to the test the principles of those gentlemen who have been of late years elected into the Council on reforming principles. Will those gentlemen perform their bounden, their plain and manifest duty? Will they boldly stand by the Charter? or, as others have yet ever done before them, will they be silent, and once again look on in peace while the Court of Examiners (through the Council) re-elect themselves to office, and so perpetuate the scandal of virtually making the examinership a life-office, and of laughing to scorn the Charter of 1852, which was obtained by Sir Benjamin Brodie for the express purpose of doing away with the life-system?

The next election of Examiners will put to the test the sincerity and power of the reforming spirit which is awakened within the College. Let the Fellows, therefore, carefully watch this election, and steadfastly adhere to the practice of re-electing no man to the Council until the principles of the Charters of the College are practically carried into action.

THE INDIAN MEDICAL SERVICE.

The defeat of Sir C. Wood's attempt to do away with the competitive examination in the Indian Army Medical Service is a great victory; for which the profession is chiefly indebted to the energy of Mr. Hennessy. Had the attempt succeeded, competitive examination in Her Majesty's Army Medical Service would have soon gone to the wall. Both the Commander-in-Chief and the Director-General plainly told the medical deputations which waited on them, that they did not like these examinations, because they stood in the way of their obtaining a due supply of medical men for the army. The Director-General distinctly said, that the third class men of Netley were quite good enough for the army; that he did not expect first class men would enter into the army,

We much regret that some member did not expose the fact of the practical swamping of the competitive examination now going on in the Queen's army. "All the assistant-surgeons entered the Queen's army by competition", said Sir C. Wood. Now, without accusing him of Jesuitry, the real facts, if they had been stated in the House, would have shown that the statement was virtually untrue. Sir C. Wood ought to have known that the Director-General has advertised for, and has actually obtained offers of service from, three hundred medical men of all ages, from whom no word of examination is required.

The Director-General cannot get men of ability to go into the army through competitive examination, simply and solely because of the unfair treatment to which they are subjected in the army. Instead of improving the condition of the army medical officer, an attempt is made to swamp the high class men altogether by advertising for the waifs and strays of the profession. Sir C. Wood ought, also, to have known that a number of these army surgeons by advertisement are actually now doing service in the army. These gentlemen do not, it is true, become assistant-surgeons, but they do all the work of assistant-surgeons, and occupy the places of assistant-surgeons; and, therefore, the health of the army is committed to the charge of gentlemen who have failed in obtaining employment elsewhere, and are above the age, or unable to face the competitive examination. Hence, it is a positive fact that, by the dodge of introducing these *acting assistant-surgeons* (as they are called) into the army, the benefits and safeguards of competitive examination have been actually done away with. To say, therefore, that the medical men who have charge of the health of the Queen's army, at this moment, are all men who have proved their competency by competitive examination, is to say what is absolutely untrue.

From the spirit with which this subject was treated in the House of Commons, we are satisfied that, if justice to the army medical officer be not voluntarily done by the Horse Guards and the War Office, those abodes of lasting red-tapeism will at the next session of Parliament be forced to do the justice they now refuse. The voice of Parliament is manifestly with the army medical officer, and as manifestly dead against the "system" of the Commander-in-Chief and the Director-General.

THE ROYAL COLLEGE OF PHYSICIANS AND THE *AD EUNDEM* DIPLOMA.

We have authority for stating that the Council of the Royal College of Physicians, to whom the several memorials on this question were referred, has resolved to advise the College not to grant the *ad eundem* diploma of Licentiate.

The reasons are obvious. Medical corporations have not the same standard of requirements, whether we regard the period to be passed in professional study, or the nature of the examinations to be undergone by candidates for their diplomas; and, as the College instituted the present order of Licentiates with a view to create a class of practitioners whose education, both general and professional, should be more in accordance with the position they were intended to take, it would detract from the value of the licence, and be an act of injustice to the present Licentiates, if the College admitted to the same status others whose sufficiency had not been tested by its own Examining Board. The Licentiates of the College, moreover, are legally physicians; and, as such, are entitled to practise surgery and midwifery, as well as medicine; the expression "*ad eundem*", as used by the memorialists, is, therefore, inapplicable. They have, however, no reason to complain. The College, when its present by-laws were passed, foresaw the probability that persons already in practice might desire to obtain the status of Licentiate; and, recognising the right of every one to obtain that status who could satisfy the College of his proficiency in the science and practice of medicine, surgery, and midwifery, it provided that such persons should have the licence granted to them, on passing a *vivâ voce* and purely practical examination on those subjects. We commend this view of the question to the consideration of the memorialists; for it is evidently the only way in which, in the opinion of the Council, the licence can be satisfactorily obtained by them and given by the College.

The Select Committee of Education of the General Council have sent to the different licensing bodies copies of a Report on Medical Education, and request opinions and comments thereon. This seems to us to be another part of the farce which the Medical Council has been playing for the last two years at least. The Select Committee of the Medical

Council and the Medical Council know the opinions of each licensing board on the subject of medical education, as well as the licensing boards know themselves. The Medical Council is, in fact, composed of representatives of the licensing boards. If the Medical Council—the selected quintessence of all the educatory medical knowledge of the country, the Council of Medical Education *par excellence*—is unable of its own wisdom to frame a system of education, it had better at once abdicate its office. The truth is, the Medical Council is radically defective—we may say constitutionally weak. It is wanting in moral courage and moral force; and its operations, like those of all bodies so constituted, as long as it exhibits these characteristics, will be necessarily failures. This last move of the Council looks very like another attempt to shelve the great question of medical education. How not to do it, is becoming the motto of the Council. Every Licensing Board will send them different opinions; and the Council will then seize upon the occasion to conclude that nothing can be done, because the different Boards are so strongly at variance. We hope we may prophecy wrongly.

We have been requested to publish the following letter, by the chairman of the Committee appointed at the Bristol Meeting to consider the desirability of establishing a Provident Fund in connection with the Association.

To the Members of the British Medical Association.

Fellow Associates,—I beg specially to call your attention to the fact, that the Report of the Medical Provident Fund Committee will be read at the Cambridge Meeting on Friday morning next.

The Report will, I hope, show demonstratively that a Provident Fund, capable of exercising the most useful influence in the profession, may be easily worked in connection with the Association; and it will further incidentally suggest the question, whether it would not be advisable to obtain for the Association a Royal Charter of Incorporation.

Under these circumstances, it may be fairly assumed that the discussion on the Report will be the leading feature of the meeting at Cambridge; and that, on the decision of the meeting, results of immense moment in our future will rest.

May I, therefore, urge on all members of the Association who may come to Cambridge, to let nothing hold them from their attendance on Friday morning; and may I also ask members who are in doubt about coming, to treat, for once, "their doubts as traitors," and to join their brethren.

I remain, fellow associates,
Your faithful friend,
B. W. Richardson.

12, Hinde Street, W., July 28th, 1864.

One subject of especial interest will be brought under the notice of the Association at the Cambridge meeting; viz., that of medical education, introduced by Professor Christison; and in that, so high a seat of learning and centre of education, it cannot fail to elicit a very interesting discussion. We venture, therefore, to remind the associates that the discussion will take place on Friday, after the reading of the Report on the Medical Provident Fund.

In accordance with a suggestion thrown out in our last number, we understand that it is the intention of some of the Fellows of the Royal College of Surgeons, at the meeting of the Association at Cambridge, to meet together for the purpose of discussing the question of country representatives in the Council of the College. We have no doubt that the Fellows of the College present will gladly avail themselves of the opportunity of conferring thereon.

M. Guyon has lately studied what has been called the bloody sweat. He concludes, as most modern pathologists have, that blood-sweat is nothing more than true hæmorrhage from broken surfaces.

M. Trousseau, speaking of the treatment of acute rheumatism, says: "There are two opposed parties in Paris; one may be called the bleeders, and the other the quininists. Those who use the lancet assert that the quinine produces the attacks of cerebral rheumatism; and those who give quinine accuse the bleeding of producing it. Few physicians, however, bleed now-a-days. Out of fifty hospital physicians in Paris, not more than four use the lancet in acute rheumatism, whilst the forty-six give quinine. M. Beau and M. Briquet, who give quinine, assert that bleeding is most dangerous; but they, of course, are contradicted by the bleeders. Out of more than sixty cases of cerebral rheumatism of which we have the history, we find seven or eight deaths in cases which have been bled in the orthodox manner; and in others also, which have only been bled two or three times, and cupped occasionally. Of those who died either with or in spite of the quinine, some took only a small quantity, some took a larger amount, and some large doses of it. The patient of whom we are now speaking was neither bled nor took quinine, and yet she recovered. The most rational treatment of cerebral rheumatism seems to be to try to reach the articular inflammation by blisters, etc. Three patients we cured with musk and opium. In other cases, these remedies did not succeed; and then we have had two cases which recovered without the employment of any active remedy."

"Had I been a diplomatised doctor," says Brillat-Savarin, "I should write a good monograph on obesity, and should have then confined myself to that line of practice. In this way I should have had the double advantage of gaining for my patients those who were in excellent health, and should have been besieged by the most beautiful half of humanity."

One Ménard, "doctor, oculist, dentist, etc.," has been fined in a French court 2,000 *francs*, costs, and fifteen months' imprisonment.

CAMBRIDGE: ITS UNIVERSITY AND ITS COLLEGES.

THE following sketch of the Town, University, and Colleges of Cambridge, is offered to the members of the Association, in the hope of imparting additional interest to the approaching Annual Meeting, as well as of diffusing information respecting the University and Colleges; which, though closely resembling the University and Colleges of Oxford, are unlike any other institutions in the world, and are really very little understood, except by those who have been educated in them.

Their history is so interwoven with much that is interesting in the history of our people and the habits of former times, that I have been led somewhat more into detail than I intended. Further information may be sought in the *New Cambridge Guide*, which visitors will do well to purchase, in the *Student's Guide to the University of Cambridge*, and the *Cambridge Year-Book*, in Fuller's *History of the University of Cambridge*, in Cooper's *Annals of Cambridge*, and his *Memorials of Cambridge*, from all of which I have derived much, and which I have not scrupled freely to quote.

Cambridge, July 1st, 1864. G. M. HUMPHRY.

The Town.

CAMBRIDGE, containing a population of between 26,000 and 27,000, is situated in a large plain which, towards the north-east—that is, in the direction of the river—is continued, with but little alteration of level, to the sea, the chief break being caused by the high ground of the Isle of Ely. In other directions, the plain is skirted by low ranges of hills. Two offsets, or spurs, from these—the Gog-Magog Hills on the south, and the Castle Hill on the north—approach the town. The latter, indeed, runs into the town, and is near the river. The Gog-Magogs are about three miles distant.

The *Mound* upon the Castle Hill, on the north of the town, is the "foundation-stone" of the place. Its base, composed of chalk, is natural. Its upper part is artificial, and is attributed to British hands. It was probably not for sepulchral purposes, but as a look-out or place of defence, like the great mound at Marlborough and, perhaps, also, Silbury Hill, near Marlborough, which is the largest of the kind, and which is said to be altogether artificial. Enduring "still in defiance of the teeth of time, as the most greedy glutton must leave those bones, not for manners, but necessity, which are too hard for him to devour", the Castle Mound gives a good view of the surrounding country, including the Isle and Cathedral of Ely; and from its base are seen running out, towards the north and east, two bastions, with a curtain between them, erected for the cannon of Cromwell.*

The high ground on the north of Cambridge, prolonged into the tongue upon which this mound stands, slopes agreeably to the river, facing the south and sheltered from the north, furnishing an attractive site, under the name of "Cair-Graunth", for the residence of the primitive architects of the mound; and on the opposite, or southern side of the river, a slightly raised ridge of gravel led, through the marshy valley, to the Gog-Magog slope. The river was, therefore, approachable here in both directions; whereas, for several miles, above and below, were marsh and morass on one or both sides of it. Here, accordingly, was a ford, and subsequently a bridge, as indicated by the successive names "Camboritum" (*Rhyd*, the Celtic for "a ford"), and the Saxon "Grantabrycge" or "Cantabrycge".

The same natural advantages attracted the ROMANS, who took possession of the ford, and occupied the mound and the sloping ground between it and the river. The boundary lines of their station are, at parts, still traceable; and many coins and other of their leavings have from time to time been found.* Two of their great highways crossed here. One—since called the "Akeman Street"—from the coast of Norfolk, near Lynn, ran through Ely to Cambridge, then, through Barton to Cirencester and Bath. The other—so called "Via Devana"—from Chester and Huntingdon, through Cambridge, over the Gog-Magog Hills, to Colchester. The Huntingdon Road, Bridge Street, and Sidney Street, are nearly on the line of the latter road; its course may be traced to the Gog-Magogs, and it forms a broadway running for some miles beyond them.

Rough handling followed the departure of the Romans; the great pillagers of the period having found their way here and, I suppose, established themselves at Denny (DANE'S Island), nearly half way to Ely. The rich pasture lands and well made arches built into the farm-house of "Denny Abbey" tell of the better habits, intelligence, and skill of their Norman successors. Still, in the time of the SAXONS, Grantabrycge must have been a place of some size and importance; for there was a royal mint here in the reign of Ethelred II, the coin being distinguished by the word "Grant."; and the town extended to a considerable distance on the south side of the river,

* Cambridge was for some time held by the parliamentary forces, who were very offensive to the members of the University, though the town favoured them, and elected Cromwell high steward. He was also made a freeman of the town, and represented it in both the parliaments of 1640. They committed their usual depredations in churches and chapels, turning King's College Chapel into a drilling-place, etc.

* The raised part leading up to, and turning the corner by, Storey's almshouses, is on the site of the Roman wall, and the hollow adjoining it was the ditch. The southern wall was close by St. Giles' Church, and forms the terrace in the grounds of Magdalene College. The remains of a wooden causeway on the south side of the river, under Bridge Street, were found in making the sewer some years ago. See paper by C. C. Babington, in *Publications of Cambridge Antiquarian Society*, No. iii.

judging from the situation of St. Benedict's Church, the tower of which is one of the best specimens of Saxon architecture in the country, and the wall of which at the east end of the nave is also Saxon.* Moreover, there existed, at this time, a fraternity, or "gild", the members of which were bound to assist one another to avenge, by fine or otherwise, the injury, insult, or murder of any of their body. This and other similar combinations, among our Saxon ancestors and other northern nations, for mutual protection and assistance in various ways, in those lawless times, were, to some extent, religious societies, being cemented by oaths and services observed in certain churches; and it is not improbable that St. Benedict's Church was built by, or by the aid of, this gild. At any rate, we find, in the reign of Edward III, "the Guild keeping their prayers in St. Benedict's Church", and the "Guild of the Blessed Virgin observing their offices in St. Mary's Church", uniting to found the College of Corpus Christi.†

The only other Saxon remnant in the place is, I believe, the chancel arch in St. Giles' Church, which is considered to be of earlier date than St. Benedict's tower, and is an example of a chancel arch alone remaining, while the nave and chancel have been rebuilt.

The NORMANS built a castle on and around the "mound", the keep being, probably, on the flat top of the mound; and the Conqueror conducted his military operations from it, against the Saxon prelates and nobles who, with Hereward and his army, long held their "camp of refuge" against the Norman, and would have continued to do so had not some discontented monks enabled him to surprise the garrison. The castle has altogether disappeared, less under the influence of war or time than under the rude hands of those who coveted its stone and timber for other purposes.‡

The value of stone here, and the consequent sparing use of it, are illustrated by the fact that the old building on the north of the river, near St. John's College, commonly called "Pythagoras School", is named in ancient records "the stone house", showing there to have been no other of that material. It was a Norman manor-house on the Merton estate, and, till lately, a good specimen of its kind, consisting of a ground floor, vaulted, for cattle (like the present farm-houses on many parts of the continent), and a first floor, with one large hall for meals, servants, etc., and two private chambers for the head of the house and his family. This house, with the surrounding Merton estate, was conveyed to Merton College, Oxford, by the founder, and still belongs to that society.§

In the reign of Henry I, Pain Peverell, standard-bearer in the Holy Land to Robert, Duke of Normandy, built the priory house at Barnwell, close to Cambridge, and removed to it the canons of St. Giles, increasing their endowments. The name "Barnwell" is from a small well, which was doubtless an object of superstitious reverence among the Britons or Saxons, who, at certain periods, met and celebrated games there. It meant either children's well, or the well of champions in the games.* Till recently, the water of this well continued to bubble up near two elm trees at the back of the present "Barnwell abbey house"; but a sewer, carried close by, has diverted the stream and left the ground dry and bare. The priory was surrendered to Henry VIII, and granted by him to Sir Anthony Browne. There remain a part of the chapter-house of the priory, a chapel (now a church; the chief church of the priory has been destroyed), a few walls and traces of the fish-ponds.

It is supposed that the same Peverell built the "round church of St. Sepulchre"; the form having been suggested by that of the Church of the Holy Sepulchre at Jerusalem, or of other Eastern churches. It is the oldest of the four round churches in this country. The three others are, that of St. Sepulchre at Northampton; the Temple Church in London; and that of St. John at Little Maplested in Essex. It was restored and added to about thirty years ago. Its stone altar, then erected, was the subject of a celebrated trial in the Court of Arches; and, in consequence of the judgment of Sir H. Jenner Fust, had to give way to a wooden table. In the neighbourhood of this church was the "Jewry", inhabited by Jews brought from Normandy by the Conqueror. "Here", says Fuller, "their carriage was very civil; not being complained of, as elsewhere, for crucifying children and other enormities." They quitted Cambridge about two hundred years afterwards.

About a quarter of a mile beyond Barnwell Abbey, at Sturbridge, close to the railway-bridge, is a small Norman structure, the chapel of a Leper Hospital, built, as such houses commonly were, outside the town and precincts of the monastery. It was dedicated to St. Mary Magdalene. King John granted to this hospital a fair, from which the celebrated Sturbridge Fair, formerly the most flourishing mart in the kingdom, in all probability, originated. He "also granted to the Prior and Canons of Barnwell a fair there, now called Midsummer Fair, which is said to have originated from the resort of children and young persons thither yearly on Midsummer-eve, to amuse themselves with wrestling matches." (Cooper.)

The proceeds of tolls, etc., from fairs were, in those days, a considerable source of revenueand we; find that King Stephen granted to the nuns of St. Rhadegund a fair, on the vigil and feast of the Assumption of the Virgin Mary, which continued to the present century. This nunnery was founded about 1133, and enlarged by Malcolm IV, King of Scotland and Earl of Cambridge; but was dissolved, in the time of Henry VII, in consequence of the incontinence of its inmates, when Jesus College was founded upon its site, and endowed with its possessions.†

There were various other religious houses in Cambridge; the number of them being probably related,

* It is a square tower, showing the peculiar Saxon quoining, with long and short projecting stone-work at the corners, and horizontal stone courses dividing it into tiers. The belfry windows have a double arch cut in one large block of stone, with a rude balustre, or stone column, dividing each into two, and situated nearer the inner than the outer side of the wall. The arch from the tower into the church, seen by ascending the gallery, is a large semicircular arch with certain curious rude animals in the place of drip supporters. This church is of great interest to the antiquarian, and will well repay a visit to the interior of the tower, as well as to the rest of the structure.

† The latter Gild is said to have had its hall opposite St. Mary's Church, where the Senate House now stands. (See account of these Gilds in Cooper's *Memorials of Cambridge*, i, 140.)

‡ Queen Mary is said to have given the stones to Sir John Huddlestone to build his house at Sawston, seven miles from Cambridge.

§ "This was the dwelling-house of Merton, founder of the College of that name in Oxford. Whence it had its name is uncertain; whether a society of gentlemen might not have met here or lived here in a Pythagorean manner, not unlike a college life; or whether the mathematics, morals, or other philosophy of Pythagoras might not have been held or taught here in opposition to the general philosophy of those times, is rather to be taken as probable conjecture than to be admitted as certain."

* *Bearn* is the Saxon for a child; *Beorn* for a champion, prince, or hero. *Wyl* is a well.

† "This Rhadegund, daughter to Berthram, Prince of Thuringia, was wife to Lotharius, King of France (son to Clodoveus the Great, the first Christian king of that country), who, sequestering herself from her husband's company, about the year 560, lived and died in a small monastery in Poictou, thereby gaining the reputation of a saint. But it seems the sisters living in Cambridge nunnery fell as far short in chastity as she overdid therein." (Fuller.)

either as cause or effect, to the existence of the University in this place; and, as in the case of the Rhadegund Nunnery, some of them were converted into Colleges; others were dissolved.*

A charter was granted to the town by Henry I, intended to secure to it a monopoly of the trade of the county and to provide domestic judicature. The charter was renewed by, or rather its renewal was purchased of, the succeeding sovereigns; and the burgesses had a common hall at an early period. A large room and other buildings, parts of an extensive new plan, have recently been erected; for which we are mainly indebted to the exertions of R. M. Fawcett, M.D.

Henry III seems to have taken much interest in the town as well as the University. He began to fortify it against the depredations of the surrounding barons, and made a ditch on the south and east sides, called the "King's ditch", which ran from the river, parallel with, but a little to the outside of, Bridge Street and Sidney Street, crossing the latter near Christ's College, where was a gate leading to Barnwell. It then ran in front of the new museums, along Pembroke Street, but seems not to have been completed to the river. There was, however, another gate in Trumpington Street, called "Trumpington Gate". The ditch has long been covered over and converted into a sewer.

Cambridge was never a very flourishing place, there not being much manufacture† or commerce, and, consequently, not many wealthy inhabitants or good houses. A few old houses, built of wood, remain in Bridge Street, Trinity Street, and the Petty Cury.‡ The Falcon, in the Petty Cury, was a considerable inn; in 1504, it was given to the Priory of Barnwell; it is now divided into small tenements, but retains the court and galleries of the old inn. The house next King's College, belonging to Mr. Cory, was the White Horse, where the Reformers met; hence it was nicknamed "Germany House"; and in one of its rooms (since pulled down to make the thoroughfare into King's Lane), Tindall and Coverdale used to work at their translation of the Bible.§ At the Three Crowns, in Silver Street, Queen Elizabeth is said to have rested, after riding on horseback from Haslingfield, where she slept at Mr. Worthington's house. Near this, in Foster's Lane, were the stables in which Hobson's|| choice was given.

Jeremy Taylor was a native of the place; and the learned, pious, and eloquent Robert Hall officiated, from 1790 to 1806, to a congregation of Protestant dissenters, previously to his removal to Bristol, where he died. A licence was granted to this congregation by Charles II.

Though not much above the level of the sea, and, therefore, deficient in the bracing influences which belong to the atmosphere at elevated parts, the town of Cambridge has not the disadvantage of being in a hollow or basin, but is on a nearly flat surface or plain; and though the atmosphere is rather moister, and perhaps more foggy, than at some other parts of the country, yet the rainfall is comparatively small (about twenty inches in the year), and the ground, of porous gravelly nature, permits the wet quickly to drain away, so that the surface is very dry. The drainage, artificial as well as natural, is good; and the place is by no means unhealthy. It has enjoyed a remarkable exemption from serious epidemics for many years. Neither cholera nor diphtheria ever established themselves here; fever is not common; and the visitations of scarlet fever, measles, etc., are less severe than in most other places. Diseases are not, for the most part, of an acute type; and ague has been almost exterminated by the drainage of the surrounding districts.

Addenbrooke's Hospital, founded, by the will of Dr. John Addenbrooke of St. Catherine's Hall, in 1719, was insufficient for its purpose and ill-constructed. It has lately, therefore, been almost pulled down, and is in process of re-erection. It will be an extensive, commodious building, with spacious wards having windows in both sides, convalescent-rooms, etc. The accommodation for out-patients, other offices, and one ward, will be on the ground floor; wards for medical patients will be on the first floor; and, above, will be the surgical wards and operating-room.

The University.

An "university", according to the original meaning of the term, is the combination of a number of persons into one body or whole; in the middle ages it was equivalent to the word "corporation", and was not restricted to scientific bodies; thus, there were universities of tailors.

The wish and, therefore, the attempt have not been wanting to connect the western universities with the schools of olden time, with those of Alexandria and Athens, and even with the "schools of the prophets". In the case of the University of Cambridge, accordingly, the legend runs, that it owes its origin to Cantaber, a Spanish prince, who is said to have built a town on the River Cante, about the commencement of the Christian era, and to have brought philosophers and astronomers from Athens, among whom were Anaximander and Anaxagoras; and, by a bold stretch of antiquarian imagination, the rabbit-skin hood of our Bachelors of Arts has been compared with, and deduced from, the camel-hair mantle of the Prophets. These and the like strainings into prehistoric gloom may serve to give range to fancy, and form a fabulous background for history.

History, however, tells us that there was little public teaching of any kind in the western part of Europe, till centuries after Christ. In the time of the great Emperor of the West and patron of the learned, Charlemagne, schools were attached to cathedral and ecclesiastical establishments for the education of such of the laity as chose to resort to them, as well as for the clergy; and, in the twelfth century, the impulse given to learning by the commingling of men consequent on the Crusades, and by the presence of Arabians in Europe, attracted greater numbers to these schools, and soon led to the formation of bodies of teachers and scholars, in some measure independent of ecclesiastical influence. For mutual aid and protection, these teachers and scholars formed them-

* Each of the four orders of Mendicant Friars had an establishment in Cambridge: the Carmelites (white friars), first at Chesterton, then at Newnham, afterwards between Queen's and King's Colleges; the Augustines (Austin friars), near the site of the new museums; the Dominicans (black friars), on the site of Emmanuel College; the Franciscans (grey friars), on the site of Sidney College. The White Canons are supposed to have had a house on the site occupied by Addenbrooke's Hospital.

† Gloves were made at Cambridge. Queen Elizabeth, on her visit to the University, was presented with a pair of Cambridge gloves; and the proctors used to present a pair of gloves to each of the disputants in the schools for degrees.

‡ "Petty cury", or the "little cookery", *cury* being an ancient term for cookery, from *curare*. It has been suggested that the "great cookery" was part of what is now the market-place. Petty Cury has also been supposed to be derived from *Petite Ecurie*.

§ The "Bull" Hotel, close by, is on the site of the "Black Bull", which was in existence in the reign of Edward IV.

|| Hobson was a carrier and horse-letter in the time of James I. The bringing the water from nine wells at Shelford, through the town, to the Conduit in the market-place, has been attributed to his liberality; but, apparently, not quite correctly. He is said to have been the first who undertook the business of horse-letting in England; and the scrupulous pertinacity with which he refused to allow any horse to be taken from his stable, except in its proper turn, gave rise to the well known proverb of "Hobson's choice".

selves, according to the custom of those times, into associations, or corporations, or "universities", electing a superior, who was called the rector or "chancellor"; and they sought and acquired certain privileges from the sovereigns, who were usually willing to extend their patronage to them. At first, any one might assume the office of teacher in these universities; but it was soon found necessary to restrict this power to those who showed themselves competent for the work, and who were, accordingly, admitted to the degree of "doctor" or "master".* Assistants were added, who were called "bachelors", probably from the "knight bachelor" (*chevalier bachelier*), or humbler species of knight, that term being used in contradistinction to the "knight banneret", who had a right to unfold his banner, and who brought followers to fight under it.

Thus, those seats of learning came to be regarded as universities in which degrees were given. They were not altogether removed from clerical influence. The chancellor of the church was sometimes the chancellor of the university, or the latter was appointed by, or derived the confirmation of his powers from, the bishop of the diocese; and though the authority of the monarch might be sufficient licence for the doctors to teach in his own dominions, the authority of a papal bull was necessary to enable them to teach in other parts.† The power of the church over the universities was, however, often a subject of contention.

It will be understood, therefore, that the universities were not founded by particular monarchs or other influential persons; but grew up spontaneously under the necessities of the times, like the guilds and other similar associations. As they grew up, they acquired the patronage and assistance of the respective sovereigns, and fell more or less under the influence of the church; but they did not owe their origin either to the sovereign or the church.

The subjects of study were arts or sciences, including logic, rhetoric, grammar, and mathematics; and these, after a time, were regarded as preparatory to the other subjects—viz., theology, law, and medicine. Each of these, as well as arts, was called a *faculty*;‡ and there were thus usually four faculties in an university — viz., "Arts", "Theology", "Law", and "Medicine"; though one or other may have predominated. Thus, the faculty of Arts was most conspicuous in Paris, that of Law in Bologna, that of Medicine in Salerno.

The constitution of all the earlier universities was very much alike; partly because similar social necessities led to similar organisations; partly because any advance in the manners, or innovation in the customs, of one place, seems to have spread to the neighbouring countries as quickly as it does now, or even more quickly, and to have been adopted with less alteration.

* The appellations "master" and "doctor" were at first used synonymously, corresponding with "professor"; and in process of time the name "master" came to be restricted to the teachers of the liberal arts, and the title of "doctor" to be assumed, as a distinction, by the teachers of theology, law, and medicine. "Master" was a general title; "doctor" a special. A degree was therefore originally a license to teach. Subsequently, the teaching by masters and doctors was supplanted by the establishment of public salaried professorships; and that has continued to be the case in most of the European universities. In Oxford and Cambridge, however, the teaching in arts has long been, almost exclusively, conducted, not by professors, but by Bachelors and Masters of Arts, appointed by the colleges or assuming the work of their own accord as private tutors.

† It has been supposed that this power of qualifying teachers for all parts constituted an university; others have attributed the term to the idea of the universality of the knowledge taught; but the real meaning of the word is what I have stated above.

‡ The term "faculty" was applied to any business or trade, as well as to the professions.

The University of Paris was the first formed, in the eleventh century; it was soon followed by that of Bologna; and these served as the pattern for that of Orleans and the others. The University of Paris was divided into four nations, the French, the Picardese, the Norman, and the English and German, proving how great was the concourse at this seat of learning, and how great was then the zeal for letters. Each nation had its procurator (the name derived from that of the governor of a Roman province), whence the proctors of Oxford and Cambridge. The Chancellor of the Church of St. Geneviève was the Chancellor of the University.

The date and mode of commencement of the University of Cambridge cannot, as already intimated, be determined with certainty. If it existed before the Norman Conquest, or if it were in sufficient repute for Henry I (Beauclerk) to have studied or taken the degree of Master of Arts here, as has been affirmed, it is, as Mr. Cooper remarks, rather strange that in the summary for Domesday Book there should be no mention of any university or academical society, or of anything which can induce a belief that such an institution existed here at that period. The first authentic account is to the effect that the Abbot of Croyland, in 1110, sent to his manor of Cotenham, near Cambridge, four monks, who had accompanied him from Orleans into England, and who were well instructed in philosophical problems and other primitive sciences; and that they, coming daily into Cambridge, openly taught their sciences in a hired barn, and, in a short time, collected a great number of scholars. From this "small fountain increased to a great river we behold all England made fruitful."

The friars and members of other religious houses assisted in the work; and the teachers and scholars formed themselves, after the continental model, into an association or university, electing their governing rector or chancellor, and acquiring the recognition and patronage of the sovereigns, who, especially Henry III, Edward I, Henry VI and VIII, and Elizabeth, showed them much favour, and granted them charters and many privileges. To royal patronage, indeed, the Universities of Oxford and Cambridge owe, if not their continued existence, yet very much of their prosperity; for the successive sovereigns showed an interest in them in many substantial ways, usually shielded them from their enemies, and required the several religious bodies in the country to maintain a certain number of students in them; and the attempts to establish universities elsewhere, as at Northampton in 1261 and Stamford in 1334, were forbidden, and the students were compelled to return to Oxford or Cambridge. Additional security and influence were obtained for this university by a papal bull, confirming all privileges and indulgences, and licensing the graduates to teach in any part of Christendom. This was granted, in 1318, by Pope John XXII, at the request of Edward II.

The teaching, at first open to any who chose to undertake it, was soon restricted to those who were judged to be qualified, and who were named professors of the several faculties. They were subsequently called Masters of Arts and Doctors of Theology, Law, or Medicine.* These also formed the Senate; and by them the Chancellor was elected, biennially, from their own number. He was a resident in the University till 1482, when Thomas

* The public teaching continued to be shared by all the doctors and masters, or as many as chose to take part in it (these being called *regents* in contradistinction to the *non-regents*, who did not take an active part), till the foundation of the five royal professorships by Henry VIII, when the public teaching was restricted to them, and the greater part of the more ordinary instruction devolved upon the colleges.

Rotherham, Archbishop of York, was elected Chancellor. The election was confirmed by the Bishop of Ely, from whom the Chancellor derived the power of excommunication and absolution, a power which proved one of the most effectual means of maintaining his authority. He was an ecclesiastic, so were most of the teachers; and most of the students were intended for the church. The papal bull superseded to some extent the authority of the bishop of the diocese; but sufficient was left to furnish subject for contention. Fisher, Bishop of Rochester, was, in 1505, appointed Chancellor for life; and from that time the duties of the office devolved upon the Vice-Chancellor, who was elected by the Senate. It is rather remarkable that Fisher and the three succeeding Chancellors—Cromwell, Earl of Essex; the Protector Somerset; and Dudley, Duke of Northumberland—laid down their office on the scaffold.

Most of the customs are traceable to the Universities of Paris and of Orleans. Some of those in the faculty of Law were derived from Bologna, and those in the faculty of Medicine were from Bologna, Salerno, and Montpellier. Many of the more peculiar of them have, however, of late, been discontinued.

Quarrels between scholars and burgesses commenced at an early period, and have continued, more or less, to the present; and these feuds between the University and the town have been not a little fomented and maintained by the privileges granted from time to time to the University. Many of these were vexing to the townspeople, such as the power of regulating the prices of provisions, of supervising the weights and measures, of citing the burgesses and other laymen to appear before the Vice-Chancellor to answer scholars in personal actions, etc. The ill feeling occasionally broke out in serious insurrections of the townspeople; and, in 1381, they declared war to the death, broke open the Colleges and the University chests, destroyed bulls, charters, and muniments, and compelled the University to execute deeds renouncing all their privileges, and submitting themselves to be governed, in future, by the law of the land and the ancient custom of the borough. "An old woman, named Margaret Starre, gathering the ashes of the burning documents, scattered them to the winds, and exclaimed, 'Away with the skill of the clerks; away with it.'" (Cooper.) It would have fared still worse with them, had not the Bishops of Norwich and Ely came to the rescue with lances and excommunications; and Richard II directed the punishment of the insurgents and the restoration of the privileges of the University. Most of these privileges and most of the ill feeling have, happily, disappeared under the softening influence of time; though remnants of the smouldering fire still, occasionally, blaze up in a town and gown row.

In early times, when books were scarce, teaching was conducted chiefly by lectures and readings of manuscripts in the public schools. The manuscripts were read by Bachelors and Masters of Arts, and so slowly as to permit the student to copy a good deal. Towards the beginning of the sixteenth century, printed books became so far common, that the readings were almost discontinued.* The writings of Aristotle, including his Physics, Problems, and works on Natural History, as well as his dialectical, rhetorical, and ethical writings, which were principally known through translations and commentaries derived from the Arabs,† formed the chief subject of these lectures and readings; and the authority of that philosopher held almost undisputed sway till the middle of the seventeenth century, when it rapidly declined under the combined influence of Newton and Bacon, Copernicus, Galileo, Kepler, and others, together with the increasing mental activity and inquiry consequent on the discovery of printing. Mathematics and natural philosophy acquired increasing importance as subjects of study and examination. In the middle of the eighteenth century, regular public examinations were instituted, which, in great measure, superseded the exercises in the schools; and those who most distinguished themselves were arranged in a "Tripos" list.* The work of teaching fell very much into the hands of the Colleges and the private tutors, the University continuing, by its Vice-Chancellor, proctors, and other officers, to maintain the discipline, as well as to regulate and conduct the examinations for degrees.

At the present time, the University, with its scholarships and its degrees, is open to all comers, from all parts, and of all religious persuasions. There are about 1600 undergraduates, of whom more than a third are members of Trinity College. A matriculation fee of £5 is the only requirement at admission; and to have resided nine terms (that is, the major part of each of three years) at one of the Colleges, and to have passed certain examinations, and paid certain, not very high, fees, are the requisites for a degree. The instruction in mathematics and classics is chiefly conducted in the Colleges and by private tutors; that in theology, law, and medicine, and the several branches of natural and moral science, chiefly by the University professors; and a new impulse has recently been given to the professorial teaching, by some increase of the stipends of the professors, by the building of museums and lecture-rooms for natural science, and by the establishment of honour triposes in natural and moral science. The desire to do more in the same direction is restrained by want of funds; for the University (considered apart from the Colleges) is not rich. Its income is not large; and is expended in the maintenance of its botanic garden and buildings, and in payments to officers and examiners, who are not particularly well paid after all.

The important feature in the education, apart from the social advantages of college life, is the "writing" that "maketh an exact man." The examinations are, for the most part, written; and the teaching, especially of mathematics, is chiefly by writing.

Undoubtedly, this practical, commercial, money-getting land is much indebted to Cambridge and her sister, for their influence in fostering the pure and abstract sciences, in maintaining a literary, philosophical, and critical spirit, and in encouraging those mental efforts which meet with little direct reward in the busy bustle of ordinary life. This influence is exerted, not simply through those who come within the pale of the Universities, but through the various schools which regulate their courses, more or less, in accordance with University requirements; and it has recently been greatly extended, in a new direction, by the happy idea of the "middle-class examinations". For how much of its philosophical spirit our own profession has been beholden to the Universities, is suffi-

* As showing how rapidly printing came into vogue, I may mention that, though the art of printing was not discovered till about the middle of the fifteenth century, and Caxton did not introduce it into England till 1475, yet, in a single collection lately bequeathed to the library of Trinity College, there are not less than a thousand books printed before the year 1500.

† The translations were replaced by the originals in the early part of the sixteenth century. The office of Public Orator was created in 1522, with extraordinary privileges, with a view to its being given to Richard Croke, who introduced the study of Greek into the University, or rather first gave lectures here on the Greek language. The first book containing Greek characters printed in England is supposed to have been Linacre's translation of *Galen de Temperamentis*. It was printed at Cambridge, in 1521, by John Tiberch, a German, who settled here.

* So called, from the stool or "tripos" on which the disputing bachelor was formerly seated when keeping an exercise.

ciently known to all who are acquainted with the history of medicine in England.

The degree of Doctor of Medicine was given, as I have shown, from a very early period, and was a qualification to practise medicine in any part of the kingdom, except in London, where the licence of the Royal College of Physicians was required. Under the Elizabethan statutes, which were in force till quite recently, there was a degree of Bachelor of Medicine, and also a "License to practise Medicine." The latter has been abolished lately; and the licence is now conferred by the Bachelor's degree. Under the same statutes there was also a "Licence to practise Surgery"; but it had been obsolete for many years. In the new statutes the surgical feature has been revived by the institution of the degree of Master in Surgery, which ranks with the degree of Master of Arts; and the two degrees—Bachelor of Medicine and Master in Surgery—give the right to practise every branch of the profession in any part of the kingdom.

The degree of Bachelor of Arts is obtained in three years; the degrees of Bachelor of Medicine and Master in Surgery in five years from first admission at the University. The fees for lectures are very moderate; and the expenses of living and education in Cambridge are not much more than those of a medical student in London; so that the additional cost of a Cambridge degree, as compared with that of of a London diploma, is to be estimated chiefly by the greater length of time required (five years instead of four). In the case of the intelligent and industrious student, however, coming well prepared from school, so much is commonly defrayed by scholarships or exhibitions, which are distributed in the Colleges with a liberal hand, that to him the University offers a comparatively inexpensive entrance to the profession. (For further particulars, see the *Student's Guide to the University of Cambridge.*)

Many students who intend to proceed to medical or surgical degrees first take a degree in Arts; some employ the whole of their first three years in preparing for the examinations for that degree, and, perhaps, distinguish themselves in the mathematical, or the classical, or the natural sciences tripos, so as to obtain a fellowship at their College. Nothing can be better, as a mental preparation for the profession, than the training necessary for such distinction; and the £200 or £300 a-year attendant on a fellowship is an advantage which it is not difficult to appreciate. It is not, however, necessary to take an Arts degree at all. The student must spend a year, or a year and a half, in the Arts studies—that is, classics and mathematics—and pass an examination in them; but the last one and a half, or two, of his three years in Cambridge may, if he please, be devoted to medical and surgical study, instead of to the study of Arts; and the regulations require him, in any case, to spend some time in medical study in the University.

The opportunities for commencing medical and surgical study in Cambridge are very good.

1. There is Addenbrooke's Hospital, containing above a hundred beds, where clinical lectures on medicine and surgery are regularly given, and a good deal of attention is paid to clinical instruction; the students having the opportunity of examining cases closely for themselves, digitally as well as with eye and ear, and being encouraged to avail themselves of it to an extent and in a manner that is impossible where the concourse of pupils is large.

2. There is a good anatomical, physiological, and pathological museum, with opportunities for dissection, which have of late been considerably increased.

3. There is a chemical laboratory in St. John's College, open to all students, with regular instruction in practical chemistry; and the University laboratory will soon be open; and a laboratory is being built in Downing College.

4. There are lectures on all the introductory branches of medical science (Anatomy and Physiology, Comparative Anatomy, Pathology, Chemistry, Botany, Materia Medica, and Principles of Surgery.)

It is by no means desired that medical education should be completed in Cambridge; merely, that it should be commenced. The initiatory work can be done here as well as elsewhere, or better; and the student then passes to another school, being at liberty to select London, Edinburgh, Dublin, or some other. By this plan, the advantages of pursuing his education in more than one place are assured to him; and he is saved from the narrowing influence which is likely to attend upon spending his whole time under one set of teachers.

The chief University Buildings are:

The Senate House, a handsome, well proportioned, Corinthian edifice, by Gibbs, built by subscription, and opened in 1730. Most of the University examinations are held here, and all the meetings of the Senate (except those for discussion of graces or rules proposed to be brought forward, which are held in the schools under the Library); also, elections, conferring of degrees, etc. The undergraduates occupy the gallery, the members of the Senate the body of the house. Previously to its erection, the meetings of the Senate were held in the schools; the more important meetings being held in St. Mary's Church, which was fitted up with a stage on grand occasions; and the University chest was kept there.

The University Library, with the schools beneath it, stands upon a "plot of ground which from time immemorial belonged to the University, upon which there had been erected certain schools for students in divinity and both the laws; also, a common library for the use of the students, especially poor scholars who were not able to procure books for themselves." It was augmented by Rotherham, Archbishop of York, and others; and in 1665, an Act was passed granting a copy of every printed book to each of the two Universities and his Majesty's library. It ranks next in this kingdom after that of the British Museum and the Bodleian at Oxford; and its regulations, allowing all members of the University and some others free access to it, and graduates to take out a certain number of volumes, are such as widely to extend its usefulness. It contains about 230,000 printed volumes, and a great number of manuscripts, of which the Beza MS. is one of the most ancient manuscripts of the Gospels extant. It is particularly rich in early English printed books.

The geological and mineralogical collections, both exceedingly good, are under the new part of the Library, erected 1837-40.

The Church of St. Mary the Great is the church of the University, and also a parish church. It is a fine specimen of late perpendicular Gothic, with a noble, well proportioned tower, containing an excellent peal of bells. The great bell, which tolls the "compline" or "curfew", from nine P.M. to a quarter past, is of remarkably rich tone. Immediately after the compline, the day of the month is struck upon another bell. The "matins" bell is tolled from a quarter to six A.M. to six. The chimes, at each quarter of an hour, are by Crotch from Handel. The building of the church was commenced in 1478, upon the site of a former church in which the services of St. Mary's Guild were held. The tower was not completed till 1608.

In 1556, this church and St. Michael's were inter-

dicted, by a commission appointed by Cardinal Pole, on account of the burial of Bucer and Fagius in them. The bodies were consequently exhumed and burnt, and the churches purified and reconciled.

The Pitt Press. Printing extended so quickly after its discovery that, in 1529, the University presented a petition to Cardinal Wolsey that, for the suppression of error, there should be three booksellers, or printers, allowed in Cambridge, who should not sell any book which had not been approved by the censors of books in the University. Letters patent to this effect were granted by Henry VIII in 1534. For nearly two hundred years, the Universities of Oxford and Cambridge and the Company of Stationers enjoyed the exclusive privilege of printing almanacks. This was lost in 1779, and a grant of £500 *per annum* was made as compensation for the loss, and is expended in the publication of new works or fresh editions of old works. The two Universities and the Queen's printer have still the exclusive privilege of printing Bibles and prayer-books.

The Fitzwilliam Museum, one of the finest of modern Grecian buildings, was designed by Basevi, and built with funds left for the purpose, with his collection of pictures, by Viscount Fitzwilliam. It was begun in 1837. It contains specimens of most of the great masters—one of the best specimens of Paul Veronese in the country, an early Raphael (doubted), good Rembrandt, G. Dow, Adrian Vanderveld, etc., a beautiful ivory model of a mausoleum, and other curiosities and works of art. On the ground floor, is a collection of antique marbles and plaster casts of some of the most celebrated works of antiquity; also, a library containing rare and valuable books and illuminated MSS. and missals. A most valuable cabinet of Greek coins has lately been purchased.

The Anatomical School does not prepossess by its exterior, but contains an excellent museum, the nucleus of which was formed by Sir Rusick Harwood and former Professors of Anatomy. The collection of Dr. Macartney of Dublin was added by purchase; and large additions have been made by the present Professor. Recently, the interesting physiological series of the late Professor Schrœder van der Kolk of Utrecht has been lodged here. Behind are dissecting- and lecture-rooms; also, botanical and chemical lecture-rooms and laboratories. A change in the disposition and arrangements will take place as soon as the new museums are completed, and additional space, which is much required, will be then obtained.

There is a new and well arranged Botanic Garden, on the Trumpington Road, near the town; and the Observatory, erected by subscription in 1822, is on the side of the Madingley Road.

The Colleges.

Originally, when the University consisted of a mere voluntary aggregation of teachers and students, all lived where they could. The major part were in lodgings in the houses of the townspeople; or they "chummed" two or three students together; or several resided together in a house under the superintendence of a teacher. Such houses were called "inns", "halls", or "hostels". These became, after a time, recognised institutions and important features in the University. Certain oaths were exacted of the principals; and a regular list of the houses, as well as of the scholars dwelling in them, was kept. The principals, who were usually graduates, assisted in the instruction of their pupils; but only in subservience to the public lectures and exercises in the University.

These hostels were, in their origin and nature, private establishments—private speculations—and were without endowments. The first collegiate foundation, with endowments for the maintenance of scholars, etc., was that of St. Peter's, by Hugh de Balsham, Bishop of Ely, in 1284 (University and Baliol and Merton* Colleges in Oxford were founded a few years previously). By the middle of the next century, five of the seventeen Colleges now existing—Clare, Caius, Pembroke, Trinity Hall, and Corpus—were added; besides others, as Michael House and King's Hall, which have been demolished. They were called "Halls" or "Houses"; though they have all, with the exception of Trinity Hall, assumed the title of "College". Their statutes were simple and without restrictions as to the localities from which the scholars might come. The buildings also were simple, without chapels, the prayers being kept in the neighbouring churches; and private passages still connect St. Peter's College with Little St. Mary's Church and Corpus Christi College with St. Benedict's Church. An interval of a century elapsed; and then followed seven other of the present foundations in quick succession—between 1430 and 1511—and chiefly by royal bounty. They are Magdalene, King's, Queen's, St. Catherine's, Jesus, Christ's, and St. John's. During the interval, severe animosities and contests, even to the shedding of blood, had arisen between northern and southern students, and students of different counties; so that the natives of a particular district, getting the ascendency in any College, would select exclusively their own local associates and connections, and thus converted the Colleges into clans. For the purpose of obviating this evil in the new foundations, statutes were introduced to regulate the elections, and to prevent more than two fellows from being chosen from the same county; and some of the older Colleges were remodeled upon this plan.† This restriction being, in course of time, found to operate prejudicially, has been removed in the recent revision of the statutes.

The next foundation was Trinity College, upon a grand scale, by Henry VIII, in 1546. At that time, the Colleges were more like modern schools, and students used to come to the University at a much earlier age than at present, about 14. Three or four scholars were assigned to one chamber, with, perhaps, a Master of Arts or a B.D.; separate beds being provided in most Colleges for scholars above 14. This practice of chumming three or four in a room, which seems to have been a great promoter of a certain contagious skin-malady, was discontinued early in the seventeenth century, in consequence of the increased age of the students. A doctor was usually allowed a chamber to himself. The students were closely watched, and confined to their respective Colleges, except during attendance on lectures at the public schools, or unless attended by a Master of Arts. They were expected to converse in Latin, Greek, or Hebrew; though, as may be supposed, this injunction was not very strictly obeyed. At five in the morning, they assembled in the College chapel; and at six, went to the hall to hear lectures and perform exercises. At nine A.M., they went to the lectures of the public professors; dined at eleven; at one, returned to declamations and exercises; from three to six, were at liberty to pursue their amusements and studies; at six, supped in the College hall;

* It is thought by some that Walter de Merton founded a house, called "Merton Hall", for scholars at Cambridge, at the same time or previously to the one at Oxford; and, subsequently, united the two under the one foundation at Oxford.

† The terms "Australes" and "Boreales" are frequently mentioned in the statutes, indicating a division something like the division of the University of Paris into "nations". The causes of the quarrels between them are not clear.

and immediately afterwards retired to their chambers. Neglect of lectures and other offences were punished, in the case of the younger students, by corporal punishment, in the College hall, at seven in the evening, in the presence of all the students.

In consequence of the increased accommodation afforded by Trinity and St. John's Colleges, the hostels were no longer required; and, from a period dating not long after that time, all students coming to the University have entered at one or other of the Colleges, and have kept their terms by residence within the College walls, or in lodgings under the surveillance of the College authorities, and by attending the lectures, chapels, and halls, in the Colleges.

Each College is presided over by a Master. There are a certain number of Fellows, Scholars, and Sizars,* also Fellow-Commoners; and the remainder are the ordinary students, or Pensioners. The number of the latter is unlimited; and from them and the sizars, the scholars and fellows are chosen by examination, chiefly in classics and mathematics, though some weight is in certain Colleges (Sydney and Downing) given to natural science. The revenues of the Colleges are large; and the scholarships and fellowships are very numerous. The scholarships range in value from £30 to £80 *per annum*; the fellowships from £200 to £400. Besides the scholarships and fellowships, there are a great number of exhibitions and prizes in money and books; so that the pecuniary attractions are really enormous, far surpassing the general estimate of them by those who are not well acquainted with the College funds and the mode of their distribution.

Originally, the Colleges, or most of them, were entirely charitable institutions, founded at a time when the majority of students had to undergo great privations in order to maintain themselves at the University, and when great difficulty was found in supplying the churches with incumbents of even moderate attainments. Latterly, the greater diffusion of wealth and education has led to an alteration in the application of the funds of the Colleges; and they are now employed, chiefly, to furnish rewards for industry and ability. The premia are given to the best, rather than to the poorest men, though a great deal is still done to help the latter class.

Of the Scholarships, some, called "Minor Scholarships", are open to competition for students who have not yet entered the University; that is to say, students from the various schools come up to the examinations at the several Colleges, of which notice is given some time beforehand in the *Times* and other papers. If they are successful, they come into residence. The greater number of scholarships, however, are given to those who stand highest in the College examinations at the end of the first or second year of residence.

The Fellowships are given usually to those who take the best degree; that is, who stand highest in the tripos examinations. In Trinity College, there is a separate examination for the fellowships. A fellowship is in most instances vacated by marriage; but this restriction has, in many colleges, been recently modified, and in some (Caius, Clare, Queen's, and Downing), nearly abolished. Some fellowships are tenable for ten or fifteen years; others for life.

There are seventeen Colleges.

St. Peter's College was founded by Hugh de Balsham, Bishop of Ely, in 1284. (See account of St. John's College.) None of the original building remains. It was partly, if not entirely, destroyed by fire in 1420. The College services were celebrated in the neighbouring church of St. Mary the Less, till the consecration of the present Italianised Gothic chapel in 1623. It has recently been embellished with stained glass windows from Munich.

There are fourteen fellowships and twenty-three scholarships: twelve of the latter of £60, six of £40, and five of £20 *per annum* each.

The poet Gray was a member of the College.

Clare College was founded as University Hall in 1326, and was re-endowed, and the name changed into Clare, by the Countess of Clare in 1338. The present handsome building was commenced about 1638; the chapel in 1763. Originally, service was performed in St. Edward's Church.*

There are seventeen fellowships and twenty-four scholarships: eight of the latter of £60, eight of £40, and eight of £20 *per annum*; besides one of £60 and one of £40, open to students who have not come into residence.

Pembroke College. Mary de St. Paul, widow of Aymer de Valence, Earl of Pembroke, "maid, wife, and widow, all in a day (her husband being unhappily slain at a tilting at her nuptials), sequestered herself, on that sad accident, from all worldly delights, bequeathed her soul to God, and her estate to pious uses, amongst which this a principal, that she founded, in Cambridge, the College of Mary de Valentia, commonly called Pembroke Hall, in 1347."†

A venerable and picturesque College—a considerable part of which has probably not undergone much change since the time of the foundress—with pleasant garden, where Ridley loved to stroll. The chapel was built by Sir Christopher Wren, at the cost of his uncle Dr. Matthew Wren.

Archbishops Grindal and Whitgift, Bishop Andrews, and William Pitt, were also members of this College; and Dr. Thomas Wharton (Wharton's duct), author of the *Adenographia*, who died 1673.

There are fourteen fellowships and twenty scholarships: eight of the latter of £60, six of £40, and six of £20 *per annum*.

Gonville and Caius College was founded in 1348 by Edmund Gonville in Freeschool Lane, where is now the old court of Corpus Christi College, but was soon moved to its present site, or rather to the site of the third court, which is still called "Gonville Court". It was re-founded by Dr. John Caius in 1557; and ever since his time it has had pre-eminence as the medical college. This eminent and learned man was a fellow of Gonville Hall, and first turned his attention to divinity, translating several prayers and theological works from Greek and Latin. He went to Padua, and was professor of Greek there in 1541. He there graduated as M.D., having studied medicine under John Baptist Montanus, and lived eight months in the house of Vesalius studying anatomy. He visited the Italian towns, and attended the medical lectures of Mattheus Curtius at Pisa. Returning to England, and admitted a fellow of the College of Physicians, he practised at Cambridge, then at Shrewsbury (where he wrote a tract on the sweating sickness), subsequently at Norwich, and ultimately in London. He was physician to Edward VI, Queen Mary, and Queen Elizabeth; also, president of the

* So called, probably, from their waiting in former times on the fellows, and servfng them with the "sizings" or food from the butteries.

* The "Soler Hall", mentioned by Chaucer in his Reve's Tale, is considered by Cooper not to have been this college, but Garret Hostel, near by; a soler or sun-chamber being equivalent to a garret. Neither does he think there is substantial foundation for the tradition that Chaucer was a member of this college.

† "The aforesaid Mary de Valentia founded also Denny Abbey, nigh Cambridge, richly endowed and filled with nuns, whom she removed from Waterbeach. She enjoined also her fellows of Pembroke Hall to visit those nuns, and give them ghostly counsel on just occasions; who may be presumed (having not only a fair invitation, but full injunction) that they were not wanting both in their courteous and conscientious addresses unto them." (Fuller.)

College of Physicians nine times. At the request of Henry VIII, he delivered lectures on anatomy for the instruction of the surgeons in London, and continued that for twenty years. Indeed, he may be said to have introduced the study of practical anatomy into England. He was regarded as the most learned man of his age, being eminent as a classical scholar, a physician, an anatomist, a naturalist, and an antiquary. The list of works which he wrote or edited amounts to thirty-four, a history of the University of Cambridge being one of them. He did not escape charges of Romanism on the one hand, and atheism on the other; "having a perverse stomach to the professors of the Gospel."

He largely endowed this College, and built the middle court, as well as the three peculiar gates, respectively inscribed to "humility", to "virtue and wisdom", and to "honour"; was master of the College; and was buried in the chapel, where is his tomb and epitaph,

"Vivit post funera virtus.
Fui Caius.
Ætatis suæ lxiii. Obiit xxix Julii, A.D. 1573."

A portrait of him hangs in the hall, and another in the combination-room.

The present dining-hall was built in 1854, from designs by Salvin; and the excellence of the repasts served in it has acquired for the College the not unenviable title of "Culinary Caius."

The discoverer of the circulation of the blood was a member of this College; a portrait of him is in the hall, and another, by Rembrandt, in the master's lodge. Sir Thomas Graham (founder of the Royal Exchange), Jeremy Taylor, and Dr. Wollaston, were also students here; besides a long array of eminent physicians, as shown by the Roll of the College of Physicians and the list of its present fellows.

There are thirty fellowships; and thirty-six scholarships, ranging in value from £20 to £60. One of the latter is given annually for anatomy and physiology, and one for chemistry. Besides these, there are four Tancred studentships for medical students, of the annual value of £100 each. Two of the scholarships (£60 each), one for classics and one for mathematics, are generally given at Easter, after open competition, to students who have not entered.

Trinity Hall was founded by William Bateman, Bishop of Norwich, in 1350, as a college for scholars of canon and civil law; and it continues to be peculiarly the legal college. The small gate near Clare is probably part of the original structure. It and a larger gate close to it, forming a double gateway, were the only entrance to the College.

Stephen Gardiner, Bishop of Winchester, was master of the College till his death. He would never give up this post; but said, "if all his palaces were blown down by iniquity, he would creep honestly into that shell." Glisson, the anatomist, was a member of the College.

There are thirteen fellowships, chiefly for persons intending to pursue the legal profession; and sixteen scholarships, from £50 to £60 *per annum*, besides two for students who have not commenced residence.

Corpus Christi College was founded by the Guilds of Corpus Christi and of St. Mary in 1352, upon the site occupied by Gonville Hall, the services being held in St. Benedict's Church. These two guilds were incorporated together, and "being thus happily married, were not long childless, but a small college was erected by their united efforts." The great alehorn belonging to the Guild of Corpus Christi, finely ornamented with silver gilt, is still in possession of the College.

The old court was erected in the middle of the sixteenth century; the handsome new court facing the street in 1823—Wilkins, the architect. The library contains one of the most valuable collections of MSS. in the kingdom. It was collected by Archbishop Parker soon after the dissolution of the monasteries, and left by him to the College.

Sir Nicholas Bacon was a member of the College and a benefactor; Archbishop Tenison, Drs. Stukely and Pitcairn, were also members of the College.

There are twelve fellowships; twenty-five scholarships, from £20 to £60 annually, tenable for three years; and six sizarships (about £30 a year each); also, a fund from which gratuities are given to deserving students.

King's College was founded by Henry VI in connection with Eton in 1440, on the site of several hostels. This King, during his foreign wars, seized various estates belonging to continental monasteries, and with this alien property richly endowed the College. Its members were exempted from the power and jurisdiction of the University, except in scholastic matters. It has undergone great alteration. Of the original court, the elegant entrance gateway opposite Clare College only remains. The first stone of the splendid chapel was laid by the founder himself about 1446. The building was not completed till 1534. (For particulars of it, see the *New Cambridge Guide*.) The "Fellows' Building", by Gibbs, was erected in 1724; the remainder, including the screen, by Wilkins, in 1824.

There are forty-six fellowships and forty-eight scholarships; value of the latter £80 *per annum*. All at present are elected from Eton.

Queen's College boasts of two royal foundresses. Margaret of Anjou, Henry the Sixth's Queen, "beholding her husband's bounty in building King's College, was restless in herself with holy emulation until she had produced something of like nature"; and the good work begun by her in 1448 was perfected by her professed enemy, Elizabeth Woodville, Queen of Edward IV.

"Erasmus (who, no doubt, might have picked and chose what house he pleased) preferred this for his place of study some years in Cambridge." Nevertheless, he does not seem to have been quite content; for "he often complained of the College ale as raw, small, and windy." His rooms are shown, and a walk in the grounds goes by his name.

This College is a good example of the plan upon which colleges (and, indeed, houses; for it corresponds closely with Haddon Hall and some others) were built. A massive handsome gateway (such gateways are peculiar to Cambridge) leads into a square court, with entrances to staircases and rooms on two sides. On a third side, is the chapel and library. On the fourth, opposite the gateway, are the dining-hall, butteries, and kitchens, with the passage-way to the second court, by no means conveniently placed between the hall and the butteries. At the north end of the hall, is the combination-room; and over it, approached by a staircase from the second court, was the master's room; that is, the room in which the master dwelt, the rule of celibacy, then, applying to the masters as well as to the other members of the Colleges. From this room runs westward, a long gallery, with windows on both sides but not opposite one another. It forms the north side of the second, or cloister, court, and is a curious feature; it is not very clear what purpose it served. The same general plan, of court with entrance gateway, rooms, chapel, library, hall, butteries, combination- and master's rooms, and gallery, may be traced in other Colleges, especially Pembroke and St. John's.

There are fourteen fellowships; and seventeen scholarships, from £30 to £50 *per annum*; of these, two (£40) are open to competition before entrance.

There are also other prizes and exhibitions, amounting to £250 annually.

St. Catherine's College was founded by Dr. Woodlark, in 1475. It was rebuilt about 1680.

Dr. John Addenbrooke, the founder of Addenbrooke's Hospital, was a member of this College; also, John Ray, the naturalist.

There are nine fellowships; and twenty-one scholarships, from £25 to £50 *per annum* or more; of these, on an average, three annually are open to competition before entrance. There are besides, sizarships and other rewards. The sum total given, exclusive of fellowships, is about £1000 a year.

Jesus College. The nunnery of St. Rhadegund was dissolved in consequence of the negligence, improvidence, and dissoluteness, of its inmates; and this College was founded in its place by Alcock, Bishop of Ely, under license from Henry VII, in 1497. The scholars were to be instructed in grammar, and pray for the King and his family and the Bishop, during their lives, and for their souls after their death. The chief part of the church of the nunnery remains, forming the beautiful College chapel, the ante-chapel, and the master's lodge. The style is transition Norman and early English. The chapel has recently been restored.

There are sixteen fellowships and thirty scholarships.

There are portraits of Harvey, Cranmer, Henry VIII, and Mary Queen of Scots, in the combination-room. Cranmer,* Pearson, and S. T. Coleridge, were at this College.

Christ's College. Margaret, Countess of Richmond and Derby, mother of Henry VII, in 1505, refounded God's House, which had been moved from the site of King's College to near St. Andrew's Church, and named it Christ's College. The members of the College were to study grammatical and other sciences, and to celebrate divine services and obsequies for the healthful state of the Countess, the King and his children, during their lives, and for their souls after their death.

The first court was re-cased with stone in the eighteenth century.

There are some curious books and MSS. in the library; and in the garden, which is pleasantly laid out, is the mulberry tree planted, according to tradition, by Milton, when he was a student at the College. Latimer, Bancroft, Porteus, Cudworth, and Paley, were students here.

There are fifteen fellowships; thirty scholarships, from £30 to £70; four sizarships, £50 each *per annum*; besides exhibitions, and four Tancred studentships in divinity, £100 each *per annum*. Of the above thirty scholarships, five, on the average, are open annually to competition before residence.

St. John's College. About 1135 a hospital was founded on the site of this college, dedicated to St. John the Evangelist, for a master and brethren of the rule of St. Augustine. One wall of what is supposed to have been the chapel, or the infirmary chapel, of the original hospital, has been uncovered in the recent alterations, and is still exposed to view, with its Early English arches and its double piscina. It had been built into the college, according to the practice in former times of not sacrificing any piece of an old building that could be made available in a new one. It is supposed that scholars were added in the early part of the next century, so forming the earliest endowed educational or collegiate institution. The evidence of that, however, is not very clear. In 1280, Hugh de Balsham obtained permission from Edward I to place secular scholars here; but, as they and the regulars did not agree very well, he removed them to two hostels near St. Peter's Church; so founding St. Peter's College, or Peterhouse. The brethren, who did not amount to above five or six, then enjoyed their hospital in peace till it was dissolved on account of their ill conduct and prodigality, and in compliance with the intention and bequest of the Lady Margaret, Countess of Richmond, in 1509, by her grandson, Henry VIII; and the College of St. John was founded in its place. The dissolution of the hospital and the institution of the college were confirmed by a bull by Pope Julius II. Over the entrance gateway are the arms, etc., of the foundress, interspersed with representations of the daisy, which was her rebus or name-device, being in French called *Marguérite*.*

Of the four courts, the first was built at the beginning, the second at the end of the sixteenth century; the third somewhat later; and the fourth, which is delightfully situated, in 1827 (Rickman and Hutchinson the architects). The Library, a handsome room with fine windows (Jacobean Gothic), built in 1620, contains many valuable books and MSS.; among others a copy of Cranmer's Bible, which belonged to Cromwell, Earl of Essex, and is one of the finest of vellum books. Roger Ascham; the great treasurer Cecil; Ben Jonson, Stillingfleet, Bentley, Kirke White, Henry Martyn, Dr. Heberden, Rowland Hill, Wilberforce, Wordsworth, and Lord Palmerston, were members of the college.

A Gothic chapel, promising to be second only to King's chapel in the two Universities, and a Master's Lodge, (by Scott), are in process of erection; and other improvements are to follow.

There are fifty-six fellowships; sixty foundation scholarships, £50 *per annum*—not less than twelve given annually; besides eight (four annually), of the same or greater value, which are open to students before they have entered; nine sizarships, £35 annually, and several exhibitions and prizes.

Magdalene College. There was formerly on this spot a house or College, established in 1428 by the Abbot of Croyland, for monks of the Benedictine order, or "black monks," who studied canon law and theology in the University. It was called "Monks Hostel", afterwards Buckingham College, in honour either of Edward Stafford, the last duke of that family, who was beheaded, or of his father. On the suppression of the monasteries, it passed to the Crown, but was soon afterwards refounded as Magdalene College† by Thomas Lord Audley, Chancellor of England. Samuel Pepys gave his library, containing his diary‡ and other curious MSS. and books, including

* Cranmer was a scholar and fellow of the college, but vacated his fellowship by marrying the niece of the landlady of the Dolphin, a tavern of good repute at the Bridge Street end of All Saints' passage. He then lived at the Dolphin, and became a common reader in Buckingham (Magdalene) College. His wife died in childbed within a year of his marriage; and he was immediately afterwards re-elected a fellow of Jesus College. (*Athenæ Cantabr.*)

* "Some of the provisions are curious. Two fellows or four scholars were to sleep in each chamber. None but a doctor was to have a chamber to himself. The gates were to be locked at 8 P.M. in winter and 9 in summer. Scholars were to be fined for speaking English within the College. Some of the students were to learn Greek and Hebrew. A fourth part of the fellows were to be engaged in preaching to the people in English. No one was to keep hawks or dogs, or to play at cards or dice, except at Christmas, and then only in the hall. The fellows were to have a livery of one colour, to be bought at Sturbridge fair." (Cooper in *Memorials of Cambridge.*)

† O *Maudlin*, it is said, as containing his surname between the initial and the final letters—M'Audley'n. He came in for his share of monastery lands, including the site and precincts of the Abbey of Walden, and was created Lord Audley of Walden. The Audley End House, thirteen miles from Cambridge, was built by his grandson Thomas Howard, Earl of Suffolk (1603 to 1616), on the site of the Abbey of Walden, and was the most splendid mansion of the time. It was sold to Charles II, and was for a time the residence of William III. The greater part of it has been pulled down. It now belongs to Lord Braybrooke.

‡ It was in cypher, and attracted the attention of the late Master of the College, whose uncle, Lord Grenville, furnished the key.

Henry the Eighth's love-letters to Anne Bullen. They begin, "Sweet darling," and end generally, "Signed with the hand that I would were yours." It is in the building in the second court, with the inscription,

"Mens cujusque is est quisque."

There are eight fellowships, and twenty-five scholarships, besides other rewards.

TRINITY COLLEGE is the noblest institution of the kind in the kingdom, if not in the world, and the one which has done more than any other to advance knowledge, to quicken intellect, and to raise the standard of education in the country. Here, in an observatory over Henry the Eighth's gateway, since removed, Newton, *qui genus humanum ingenio superavit*, contemplated the heavens, and, in a laboratory near the chapel, in front of the College, also removed, worked at chemistry. Here were Fabius and Bucer; here Bacon and Byron, Porson and Macaulay, and a long list of philosophers and poets, of peers, prelates, and statesmen, worked and played, at the time of life when work and play can best be done. Here Whewell and Sedgwick now enjoy, enlarge, and diffuse their rich inheritance of learning and of name. There are above 550 undergraduates on the boards of the College, nearly all in residence.

It was founded by Henry VIII in 1546, as some compensation to conscience and to Cranmer, to the church and to learning, on the sites and with the revenues of King's Hall* and Michael House,† and other hotels and inns, which he seized, adding thereto, and "compounding thereout one fair College, the stateliest and most uniform in Christendom."

The College was begun in style fitting the views of the Grand Monarque, who, whatever were his faults, was a learned and accomplished man and a patron of literature; and the Great Court, built soon after his death, is said to be the most spacious quadrangle in the world.‡ The Hall, built in 1604, is a noble, well-proportioned structure, but insufficient to dine all the members of the College at once. The hospitality which has ever been shown here is almost as celebrated as the learning and character of those who dispense it. The stone fountain, in the middle of the quadrangle, was built by Dr. Neville, twelfth master, by whose munificence the second, or cloister, or Neville Court, was in great part erected. The Library at the end of this Court, by Sir Christopher Wren, commenced in 1676, is a magnificent building, containing a handsome, spacious room, in which Thorwaldsen's statue of Byron, and the MS. of *Paradise Lost*, when it was sketched out as a tragedy, are among the numerous objects of interest. There are above 50,000 printed volumes, and numerous and valuable manuscripts; also a valuable collection of books relating to Shakespeare, from which is derived much of the information for the Cambridge edition of Shakespeare, now being edited by two members of the College. The "New" or "King's" Court was commenced in 1823. The elegant "Master's" Court, opposite the great gateway of the College, was erected by the present master in 1860—*paci sacrum*. The organ in the chapel is one of the best in England; and there is the noble statue of Newton, by Roubiliac, here.

Sir Everard Home was a member of Trinity College.

There are sixty fellowships; seventy-two scholarships, £80 a year in value; six minor scholarships, £50, open every year to all persons, under twenty, who have not yet commenced residence, or are in their first term; sixteen sizarships, £60 a year at least.

A prize of £25 is given to each sizar in the first class in the general examination; £15 to each in the second class; and £10 to each in the third class. Thus a sizar, who also obtains a minor scholarship, may receive £130 a year, at least, from the College.

There are also several other exhibitions and prizes.

EMMANUEL COLLEGE was founded on the site of the house of the Dominican or preaching friars, in 1584, by Sir Walter Mildmay, Chancellor of the Exchequer to Queen Elizabeth. It soon attracted great numbers of students. The Hall is on the site of the Friars' Church. The Library was the refectory; it at one time served as the College Chapel. The present Chapel was built, in 1760, from Sir Christopher Wren's designs.

There are twelve fellowships; twenty-two scholarships, two open to competition before entrance; four sizarships; besides other exhibitions and prizes.

SIDNEY SUSSEX COLLEGE was founded by the bequest of Frances Sidney, relict of the third Earl of Sussex, in 1596, on the site of the house of the Franciscan friars. Oliver Cromwell was a student here, but took no degree; and there is a valuable and celebrated drawing in crayon of him, by Samuel Cooper, in the Master's Lodge. The College has been refaced and altered in this century. There is a scientific library, and also a chemical laboratory.

There are nine fellowships; twenty-seven scholarships; and twelve junior scholarships, open to students who have not entered. Some of these are given for proficiency in natural science. Besides these, there are exhibitions and prizes.

DOWNING COLLEGE, the most recent foundation in either University, was founded by the will of Sir George Downing, and opened in 1821, and intended much for the encouragement of law and medicine. Besides the Master, there are two Professors—one of the Laws of England, and one of Medicine.

There are eight fellowships (six restricted to Law and Medicine); ten scholarships, £50 annually, with rooms and commons. Two or three minor scholarships (£40) are open to competition annually before entrance. In the election to all the scholarships, considerable importance is attached to proficiency in natural or moral science.

If the number of Fellowships in all the Colleges be added together, it will be found that they amount to 353; the average value of each of which is, probably, about £250 *per annum*. It is computed that about £25000, annually, are given in scholarships, exhibitions, and prizes in the Colleges, besides the University scholarships. There are, moreover, seventeen masterships of Colleges; and more than three hundred livings in the gift of the Colleges. These vary much in value. Many are very good; and, as each that becomes vacant is offered, according to seniority, to those fellows of the respective Colleges who are in holy orders, they form, it need scarcely be said, a very important item in the attractions of Cambridge. To all these must be added the Professorships and other University offices; the emoluments of which are, in some instances, high, though, for the most part, that is not the case. Of the prodigious forcing

* KING'S HALL was founded by Edward III, in 1337, carrying out the intentions of Edward II, who maintained certain scholars in hired houses. It was the largest College in the University. Two of its gateways remain as parts of the great court of Trinity: viz., the King's, or entrance gateway, which has been raised, and a statue of Henry VIII has been added; and Edward III's gateway, which stands at the west end of the chapel, its place having been altered and a story added.

† MICHAEL HOUSE was founded by Hervey De Stanton, in 1324; and connected with St. Michael's Church. Queen Elizabeth's gateway at the south side of the great court, was the entrance gateway of this house.

‡ It occupies an area of two acres and six perches. The architect was Ralph Simons. He was also the architect of the second court of St. John's, of Sidney, and Emmanuel Colleges.

power thus represented (and there is about an equal amount in Oxford), sufficient, surely, may be spared, without real detriment, from Arts, Theology, and Law, to produce a decided and beneficial influence upon Natural and Medical Science.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

President—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

President-elect—GEORGE EDWARD PAGET, M.D., Cambridge.

All the General Meetings of the Members will be held in the Senate House.

WEDNESDAY, *August 3rd.*

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, *August 4th.*

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. The first presentation of the Hastings Gold Medal will be made, for a Prize Essay in Physiology. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, *August 5th.*

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHRY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception Room, and will give information respecting lodging-houses.

The principal Hotels are the "Bull", the "Eagle" the "Red Lion", the "University Arms", and the "Hoop".

Return Tickets to Cambridge from London and such other stations on the Great Eastern, London and North Western, and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

Notices of Motion. Dr. STYRAP will move the following alteration in Law XV. To insert, after the words "One Guinea annually", "provided that such sum be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law XV, by inserting "the 1st of December", instead of "the 25th of December."

Papers have been promised by—

SPENCER WELLS, Esq. (London): Some of the Causes of Excessive Mortality after Surgical Operations.

SYDNEY JONES, M.B. (London): Injuries of the Head.

JOHN BRIDGER, Esq. (Cottenham): Diphtheria, and some of the *Post Mortem* Appearances.

A. E. SANSOM, M.B. (London): The Action of Anæsthetics; and the Administration of Chloroform.

T. HERBERT BARKER, M.D. (Bedford): Herniotomy without Opening the Sac; with Cases.

J. V. SOLOMON, Esq. (Birmingham): The Radical Cure of extreme Divergent Strabismus.

EDWARD WOAKES, M.D. (Luton): Neuralgia.

B. W. RICHARDSON, M.D. (London): 1. New Researches on the Pathology of the Blood; 2. New Instrument for the Inhalation of Oxygen.

SAMUEL MARTYN, M.D. (Clifton): The Physiological Meaning of Inframammary Pain.

GEORGE PHILIPSON, M.D. (Newcastle-on-Tyne): Intussusception.

GEORGE BUCHANAN, M.D. (Glasgow): Tracheotomy in Croup and Diphtheria.

ROBERT CHRISTISON, M.D. (Edinburgh): Medical Education.

C. H. F. ROUTH, M.D. (London): 1. The Use of the Hysterotome in Uterine Disease; 2. The Diagnosis of Early Pregnancy.

ERASMUS WILSON, Esq., F.R.S. (London): The Nature, Varieties, and Treatment of Eczema.

BALMANNO SQUIRE, M.B. (London): Occipital and Constitutional Impetigo of the Scalp.

THOMAS HILLIER, M.D. (London): 1. Diphtheria; 2. An Outbreak of Tinea decalvans or Alopecia areata in a Public School.

HENRY DICK, M.D. (London): A New Instrument for the Treatment of Spinal Curvature.

FRANCIS E. ANSTIE, M.D. (London): Certain Points in the Treatment of Diabetes.

WILLIAM BUDD, M.D. (Bristol): A few Verbal Remarks on the *Rinderpest* or Cattle Plague, illustrated by Drawings of the Characteristic Alterations of the Intestinal Follicles.

C. B. RADCLIFFE, M.D. (London): A few words concerning Bantingism.

DWARD SMITH, M.D., F.R.S. (London): Some Questions in reference to the Nourishment of the Working Classes.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, July 28th, 1864.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

HE annual meeting of this Branch was held at the ineral Water Hospital, Bath, on Thursday, July h, at 4.30 P.M. The chair was taken by F. K. Fox, .D., President. There were also present: Drs. rittan (Clifton), Coates (Bath), Davey (Northwoods), alconer (Bath), C. H. Fox (Brislington), E. L. Fox lifton), Herapath (Bristol), Marshall (Clifton), Tunall (Bath); and Messrs. Bartrum (Bath), Bush ath), Collins (Chew Magna), Fowler (Bath), Harper atheaston), Leonard (Bristol), Mason (Bath), Mayor ristol), Prichard (Clifton), Spender (Bath), Stone ath), and Walker (Shepton Mallett); together with r. Boyd of Wells and Mr. Hudson of Shepton Malt as visitors.

The minutes of the last meeting were read and aproved.

New Member. Walter Harris, M.D., was proposed d elected a member of the Association and Branch. Dr. F. K. Fox, after making a few remarks, regned the chair, and introduced his successor, R. ILBRAHAM FALCONER, M.D., who read an address, hich has been received for publication.

Report of Council. The Bath Secretary (Mr. FowR) read the following report:

"The Council has much pleasure in being able to ngratulate the members on the still increasing osperity of this Branch of the British Medical Asciation.

"Twenty-three new members have joined the anch during the past year; whereby, after deducting the losses by removal and other causes, there is total increase of thirteen members; thus raising e numbers of the Branch to 143, and entitling it to additional representative at the General Council the Association.

"The Council much regret that there have been veral losses by default in paying up arrears of subriptions; and would here urge upon all members e great importance of paying their subscriptions at early period of the year. By this means, the cretaries' work is much lightened, and any applican from the General Secretary avoided.

"In consequence of the resolution passed at the t annual meeting, the number of ordinary meetgs during the past season was increased from four six; and your Council are happy to report that the endance has maintained its average as to numrs, and on every occasion there has been a larger mber of papers offered than could be read in the otted time. The best thanks of the Branch are e to those gentlemen who have given so much time the preparation of the twenty-five papers which ve been read during the season. The following are subjects of the papers.

"1, 2, 3. Spasmodic Affections of Children. 1. Persis; 2. Laryngismus Stridulus; 3. Chorea. By L. Fox, M.D.

"4. Nature and Treatment of Non-Syphilitic oriasis. By J. K. Spender, Esq.

"5. Case of Congenital Deformity of Foot. By A. chard, Esq.

"6. Case of well marked Wasting Palsy; Patient wn. By R. W. Falconer, M.D.

"7. Case of Obscure Brain-Affection. By F. Brit, M.D.

"8. Case of Malformation of Temporal Bone. By C. Leonard, Esq.

"9. Operation for Artificial Anus. By G. Corbould, Esq.

"10. Instances of Recovery from Leucocythæmia. By S. Martyn, M.D.

"11 and 12. Hospital Dietaries. By J. Beddoe, M.D.

"13. Case of Tetanus. By R. W. Falconer, M.D.

"14. Case of Ovariotomy. By W. Mitchell Clarke, Esq.

"15. Criminal Responsibility in Relation to Insanity. By J. A. Symonds, M.D.

"16. The Plea of Insanity. By J. G. Davey, M.D.

"17. The Presence of Indigo in Purulent Discharges. By W. B. Herapath, M.D.

"18. Notes of a Case of Entire Avulsion of the Scalp; with Recovery. By J. W. Teale, Esq.

"19. Case of Separation of Epiphysis of Tibia, simulating Dislocation of Knee. By J. W. Teale, Esq.

"20. Discussion on Scarlatina, led by R. W. Falconer, M.D.

"21. Hour of Death in Different Diseases. By A. Haviland, Esq.

"22. Note of a Case of Tapeworm. By G. Burder, M.D.

"23. Case of Ovariotomy. By H. Marshall, M.D.

"24. Case of Diseased Humerus. By C. Steele, Esq.

"25. Cases illustrating the Effect of Suppurative Inflammation of the Dental Periosteum. By C. Gaine, Esq.

"Your Council can refer with great satisfaction to the General Meeting of the Association at Bristol in August 1863; the success of which was in great measure to be attributed to the admirable arrangement and hospitable reception of the valued President, Dr. Symonds, who was so ably assisted and supported by his Bristol colleagues.

"Your Council regret that, during the past year, more attention has not been paid to the claims of the medical officers of the Army and Navy, and that the grievances of which they have so long complained are still unredressed; and they will gladly avail themselves of any opportunity of bringing before the proper authorities their present anomalous condition; in futherance of which, your Council recommend the adoption of a memorial to the Secretary of State for War, similar to that presented by the Metropolitan Counties Branch.

"The Council desire to recommend to the members of the Branch a more liberal support of the Medical Benevolent Fund and the Royal Medical Benevolent College, which valued institutions extend their benefits to any suffering members of their profession; and there are, at this moment, several former members of the Branch, or their children, recipients of, or candidates for, their bounty.

"The financial statement shows a very small balance in hand.

RECEIPTS.

	£	s.	d.
Bath Branch:			
Balance in hand, Jan. 1, 1863	2	0	5
Subscriptions, 1863	6	10	0
Bristol Branch:			
Balance in hand, 1863	5	15	9
Subscriptions	9	10	0
	23	16	2

EXPENSES.

	£	s.	d.
Bath Branch:			
Hire of Rooms	2	10	0
Secretary's Travelling Expenses to Birmingham (three journeys)	4	17	6
Printing and Stationery	2	7	6
Stamps	1	6	6
Bristol Branch:			
Hire of Rooms	3	1	0
Stamps	2	19	4
Stationery	1	1	6
Printing	4	17	0
Gratuities	0	5	0
Balance in hand	0	10	10
	23	16	2

"The following gentlemen have been elected to fill the vacancies in the local Councils: *For Bath*—Messrs.

Bartrum, Stockwell, Church, and Dr. Tunstall; *For Bristol*—Mr. Smerdon, Dr. Davey, Mr. Leonard, and Dr. Brittan."

Dr. Herapath moved, and Dr. F. K. Fox seconded, the adoption of the Report and Financial Statement, which was carried unanimously.

Representatives in the General Council. The members were called upon to elect by ballot seven representatives to the General Council of the Association. The following gentlemen were elected: J. S. Bartrum, Esq. (Bath); W. Budd, M.D. (Clifton); J. G. Davey, M.D. (Northwoods); R. W. Falconer, M.D. (Bath); F. K. Fox, M.D. (Brislington); A. Prichard, Esq. (Clifton); and R. N. Stone, Esq. (Bath).

The Army Medical Service. Dr. Tunstall moved, and Mr. Prichard seconded—

"That it is advisable to adopt the memorial to the Secretary of State for War, as prepared by the Council of the Metropolitan Counties Branch."

The motion was unanimously carried; and the memorial sent round for signature.

Resolutions. Dr. Fox proposed, and Mr. Prichard seconded, the nomination of Dr. F. Brittan as President-elect; which was carried unanimously.

Dr. Brittan proposed, and Mr. Bartrum seconded, a vote of thanks to Dr. F. K. Fox, the retiring President, for his able conduct in the chair, and for his generous hospitality during the past year.

Dr. Herapath proposed, and Dr. E. L. Fox seconded, a vote of thanks to the Council.

Mr. J. S. Bartrum moved, and Dr. Tunstall seconded, a cordial vote of thanks to the Secretaries.

Dr. Davey proposed, and Mr. Spender seconded—

"That the Secretaries be requested to continue their services for the ensuing year."

Dr. Herapath proposed a vote of thanks to Dr. Falconer, the President, for his able address; which was carried by acclamation; as was also a vote of thanks to the President of the Mineral Water Hospital, for the use of the board-room.

Dinner. The members then adjourned, and twenty-seven sat down to an excellent dinner.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

The twenty-eighth annual meeting of the Lancashire and Cheshire Branch took place in the Town Hall at Lancaster, at twelve o'clock at noon, on Wednesday, June 29th, 1864; E. D. De Vitré, M.D., President in the chair. There were also present: Drs. Dighton (Clapham); W. Hall (Lancaster); McNicoll (Southport); W. Roberts (Manchester); H. Simpson (Lymm); A. Stookes (Liverpool); A. T. H. Waters (Liverpool); M. A. E. Wilkinson (Manchester); and Messrs. Broadhurst (Lancaster); G. Daglish (Wigan); O. Dickin (Middleton); T. Howitt (Lancaster); C. Johnson, jun. (Lancaster); J. P. Langshaw (Lancaster); E. Lund (Manchester); G. Mallett (Bolton); T. Mather (Ashton-in-Makerfield); T. Mellor (Manchester); G. Southam (Salford); T. Turner (Manchester).

A luncheon was provided for the members in the Town Hall.

In the absence of the retiring President, Dr. Vose, G. Southam, Esq., took the chair and introduced the President, Dr. De Vitré, who delivered an address, which will be published in the Journal.

Report of Council. Dr. W. Roberts, Honorary Secretary, read the following Report:—

"In presenting their Annual Report, the Council have to congratulate the Branch on its continued prosperity. The number of members is 217, which is a slight increase in the number for last year. Several members have been lost during the past year fro death and other causes; but these have been mo than counterbalanced by an accession of new me bers.

"With regard to the proceedings of the Branc during their year of office, the Council have to repo that the principal feature has been the delivery the first course of lectures instituted in the previou year. The course consisted of three lectures whic were delivered by Dr. A. T. H. Waters, at the Medic Institution, Liverpool. The average attendance the lectures was large; and in every respect the may be regarded as having been eminently successfu

"The Council regret to say that they have not su ceeded in providing a lecturer for the present yea but they hope to be able, in due time, to announc a second course to be delivered in Manchester 1865.

"A communication has been received from the Secr tary of the Metropolitan Counties Branch, enclosin a memorial to be presented to the two Houses of Pa liament, to the Prime Minister, the Secretary a Under-Secretary for War, the Commander-in-Chi and the Director-General of the Army Medical D partment, calling attention to the disadvantageou position at present occupied by the Surgeons a Assistant-Surgeons in the Army. The memori calls attention especially to the practical nullificatio of the Warrant of 1858, which materially ameliorate the position of these officers; and the deleterio effects of the Warrant of 1863, which placed th Army Medical Officers in a position of inferiority their military brethren of equal grade. In cons quence of this injustice an injury had been inflict on the medical service of the country. So loth we members of the medical profession to enter the se vice, that there were few candidates although the were about two hundred vacancies to be filled u And, as was lately shown by Dr. Parkes, a considera proportion of the few candidates who applied for a mission, were men of such inferior attainments, th it was impossible to admit them. The memori prays for a redress of the various grievances of t army medical officers; and the Metropolitan Counti Branch, at their last meeting, passed a resolution i viting the co-operation of the other branches of t Association with a view of bringing about this d sirable object.

"A resolution will be submitted to the meeting, e powering the President, on behalf of the Branch, sign a memorial of a like character to be presented the same quarters.

"In accordance with the new law passed at the A nual Meeting two years ago, five members of t Council retire annually in rotation. The names of t gentlemen who retire this year are:—Dr. Turner Stockport), Mr. Halkyard, Dr. McIntyre, Mr. Mall and Mr. Mellor. All these gentlemen are eligi for re-election.

"*Financial Statement.* From the financial sta ment it appears that the balance in hand at the d of the Annual Meeting last year was £20:4:9; su scriptions received since £25:7:6; making a total £45:12:3. The ordinary expenses of the Bran during the past year have been £21:18:9; leavin balance in the hands of the Secretary of £23:13:6

Resolutions. The following resolutions were passe

1. Moved by Dr. McNicoll (Southport), and conded by Mr. O. Dickin (Middleton)—

"That the Report of the Council now read adopted and printed, together with the Proceedi of this Meeting."

2. Moved by Dr. Eason Wilkinson (Manchest and seconded by Dr. Simpson (Lymm)—

"That the best thanks of the meeting be given

Vose, the late President; to Dr. Turner, the late e-President; to the Honorary Secretaries; and to other members of the Council; for their services ing the past year."

Moved by Mr. LUND (Manchester), and seconded Dr. E. WATERS (Chester)—

That the next meeting of the Branch be held in nchester; and that T. Turner, Esq. (Manchester), appointed President-elect; and T. Mellor, Esq. anchester), and A. Stookes, M.D. (Liverpool), be ointed Vice-Presidents elect."

. Moved by Mr. T. HOWITT (Lancaster), and seded by Mr. MELLOR—

That the following gentlemen be appointed Local retaries for the ensuing year: W. H. Manifold, . (Liverpool); J. Sharp, Esq. (Warrington); and Johnson, jun., Esq. (Lancaster)."

. Moved by Mr. LANGSHAW (Lancaster), and seded by Dr. W. HALL (Lancaster)—

That the following gentlemen be appointed resentatives of the Branch on the General Council he Association: T. Howitt, Esq. (Lancaster); W. Manifold, Esq. (Liverpool); T. Mellor, Esq. (Manster); H. Simpson, M.D. (Lymm); G. Southam, . (Manchester); A. Stookes, M.D. (Liverpool); J. se, M.D. (Liverpool); E. Waters, M.D. (Chester); T. H. Waters, M.D. (Liverpool); Eason Wilkin-, M.D. (Manchester); and the Honorary Secrey, W. Roberts, M.D. (Manchester)."

. Moved by Dr. ROBERTS, and seconded by Mr. C. HNSON, jun.—

That the following twenty gentlemen be elected mbers of the Council of the Branch for the ensuing r: W. T. Callon, M.D. (Liverpool); T. Davies, D. (Chester); L. E. Desmond, M.D. (Liverpool); J. kinson, M.D., (Liverpool); R. Flint, Esq. (Stockt); John Harrison, Esq. (Chester); C. Johnson, ., Esq. (Lancaster); E. Jones, Esq. (Liverpool); F. Lallemand, Esq. (Macclesfield); J. P. Langw, Esq. (Lancaster); E. Lund, Esq. (Manchester); Mallett, Esq. (Bolton); P. McIntyre, M.D. (Liverol); D. H. McNicoll, M.D. (Southport); D. Noble, D. (Manchester); A. Ransome, M.B. (Bowdon); J. arp, Esq. (Warrington); Lawrence Spencer, M.D. reston); A. B. Steele, Esq. (Liverpool); and T. rner, Esq. (Manchester)."

7. Moved by Mr. SOUTHAM, and seconded by Mr. ND—

That this meeting is of opinion that the diminun in the number of applicants for the medical apintments in the army has arisen from the unsatistory nature of the existing regulations respecting e duties, status, promotion, and remuneration of e army medical officers, and from a want of conence in the good faith of the military authorities consequence of the practical departure by the ecutive from the Warrant of 1858.

"That this resolution be embodied in a memorial, d signed by the President of this Branch on behalf the meeting, to be presented (as a petition) to the ouses of Legislature, to the Commander-in-Chief, d the Director-General of the Army Medical Dertment."

8. Mr. MALLETT and Dr. E. WATERS called attenn to the grievances of the Assistant-Surgeons in e Navy; especially with reference to the neglect of e authorities in providing them with cabins. On eir motion, and after considerable discussion, the lowing resolution was unanimously agreed to:

"That the President of the Branch in co-operation th the Council be empowered, if on consideration emed desirable, to memorialise the legislature and e authorities for a redress of the grievances of the val assistant-surgeons, more particularly in regard the neglect of the orders of the Admiralty as to providing naval assistant-surgeons with separate cabins."

Communications. The following communications were made:

1. On a remarkable Case of Cancer. By E. Waters, M.D., read on behalf of Dr. A. Ransome.
2. Prostatic Calculi passed spontaneously by the Urethra. Exhibited by W. Roberts, M.D.
3. Observations on the styptic powers of Ergot of Rye. By T. Turner, Esq.
4. Case of Double Dislocation of the Shoulder-joint. By C. Deighton, M.D.

Votes of thanks were passed to the contributors of papers and communications; and to the Mayor for the use of the Town Hall on the occasion.

Dinner. The members, to the number of thirty, dined at half-past five, at the North Western Hotel, Morecambe. The President, Dr. DeVitré, presided, supported by the Rev. Canon Turner, Rev. Dr. Hathornthwaite, and other principal guests. T. Howitt, Esq., the Vice-President, occupied the vice-chair. After the usual loyal and patriotic toasts had been appropriately put from the chair, Mr. Turner proposed "Prosperity to the Lancashire and Cheshire Branch of the British Medical Association." Mr. Southam responded. Dr. Hathornthwaite, in an eloquent speech, proposed "Prosperity to the British Medical Association" coupled with the name of Sir Charles Hastings. Other toasts followed; and the company broke up at nine o'clock.

READING BRANCH: ANNUAL MEETING.

THE annual meeting of the Reading Branch was held at the George Hotel, Reading, on Wednesday, July 20th; I. HARRINSON, Esq., President, in the chair.

President's Address. The PRESIDENT delivered an address, reviewing the more recent improvements in medical science; and was requested to publish it in the JOURNAL.

Officers. The following officers were elected: *President-elect,* N. Crisp, Esq. (Swallowfield); *Representative in the General Council,* R. T. Woodhouse, M.D. (Reading).

Consultation with Homœopaths. Mr. G. MAY, jun., proposed, and Dr. COWAN seconded, the following resolution, which was carried unanimously.

"That the members of this Branch pledge themselves, neither to meet in consultation, nor to attend patients in conjunction with, homœopathic practitioners.

"That no member of this Branch will meet in consultation any member of the profession who knowingly violates this resolution."

In introducing this resolution, Mr. MAY observed that, in 1858, the medical practitioners of Reading signed a resolution, pledging themselves not to meet a homœopath in consultation; that one of the subscribers to this resolution had recently broken his pledge; and that it had, therefore, become expedient to enable the Branch to deal with any future similar offence.

Retrospective Address. Mr. FRANK WORKMAN of Reading then read an abstract of the cases presented to the Reading Pathological Society during the past twelve months, ably commenting on the many facts of interest presented during that period. The address will be published in the JOURNAL.

Dinner. The members afterwards dined together at the George Hotel, and spent a most agreeable evening, under the presidency of I. Harrinson, Esq.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 14TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

SEBACEOUS TUMOURS IN THE EXTERNAL AUDITORY MEATUS. BY JOSEPH TOYNBEE, F.R.S.

AFTER reference to the eighteen cases (published in the forty-fourth volume of the Society's *Transactions*, in which sebaceous tumours developed in the external auditory meatus had caused disease of the petrous bone, the author detailed two additional cases of the disease in which death resulted from irritation of the brain produced by the presence of sebaceous tumours. In one case—a girl aged 16—there was no history of any previous affection of the ear; nevertheless, there was caries of the petrous bone, and death ensued from inflammation and softening of the brain. In the eighteenth case—that of a boy also 16 years of age—acute symptoms suddenly came on without any warning, and death followed eight days after his admission into hospital from inflammation of the brain.

PROGRESSIVE ATROPHY OF THE TONGUE AND MUSCLES OF SPEECH; SUBSEQUENT LOSS OF POWER; GREAT GENERAL ATROPHY; POSTMORTEM APPEARANCES. BY EDGAR BARKER, JUN., M.R.C.S.

Since the publication in the *Medico-Chirurgical Transactions* in 1851, by Dr. E. Meryon, no other case of this description had been brought before the notice of the Society. The subject was a gentleman, aged 51, who had enjoyed excellent health till May 1859, when a slight difficulty of speech, accompanied by general failure of health and strength, induced him to seek medical advice. These symptoms, without any apparent cause, with the addition of impairment of deglutition, continued to increase; and on the following September, after some months' residence at the sea-side, the tongue had assumed the following appearance; small and shrunken, it lay low in the floor of the mouth, and over its whole surface was noticed an unceasing tremulation of the fibrils of its muscular structure; it had lost its bright healthy hue, and was of a pale-yellow colour. His face had also lost its ordinary expression; the cheeks and lips were flaccid, and hung down. Saliva frequently dribbled from the mouth. No symptom whatever of irritation of brain or spinal cord was ever present, but the muscular tissue in different parts continued to waste and degenerate with unrelenting pertinacity. Gradually articulation became unintelligible, and deglutition impossible. The fibrillary tremors, so noticeable during the wasting of the muscles, ceased with their destruction. From the tongue to the muscles of deglutition, thence to those of the upper and from these to the lower extremities, the disease extended. At length the intercostals were affected; and the breathing consequently at times became much laboured, as each morning brought increasing difficulty in the necessary expulsion of mucus collected in the bronchial tubes during the previous night. Great exhaustion followed these attacks, and on the morning of October 15th, 1861, he gradually sank.

Various remedies had been for many weeks together tried, but none seemed in any way to arrest the steady onward progress of the disease. Cod-liver oil, quinine, iron in various forms, zinc, strychnia, and the constant use of galvanism, were the principal agents employed.

The tongue in its entire extent had been converted into a soft, pale-yellow mass of fatty tissue. T papillæ were shrunken, and most of its muscular fibr were replaced by oil-globules, amidst which granul and fat-laden fibres were scattered; and of the mu cles attached to the tongue, only the genio-hyo-glos and stylo-hyo-glossi retained any manifest traces their form and structure. The nerves of the tongu so far as traceable, were natural; the muscular fibr in the arches of the palate and in the uvula we chiefly natural. The same granular appearance w noticed in the pectoralis major, in a portion of the le ventricle of the heart, and in the left side of the di phragm. In all, the muscular fibre was in great pa natural, though each specimen in an equal degree co tained stray fibres, which were losing the clearne of their transverse markings, and becoming granul with fatty deposit. The examination, worked o with the greatest care and by accurate observer failed to bring satisfactory evidence of any change the nervous tissue supplying the affected muscle either in their centre or peripheric extremities; bu on the contrary, the examination tended to strengthe the present prevailing opinion that the disease essentially in the muscular tissue itself, and must y be looked upon as akin to that condition frequent met with in the left ventricle of the heart, and know as fatty degeneration.

ON THE TREATMENT OF STRICTURE OF THE URETHR BY SUBCUTANEOUS DIVISION. BY HENRY DICK, M.D

[*Communicated by* WILLIAM ADAMS, Esq.]

In the year 1853, Dr. DICK published his first ca in the *Medical Times and Gazette*, and in 1855 he se a memoir to the Académie de Médecine de Franc in which two other successful cases are related. Sin that time, Mr. W. Adams and Dr. Dick's colleague the National Orthopædic Hospital—Mr. Allingham had operated after the same method with the be result. Dr. Dick divided strictures into two classe after their physical properties—dilatable and no dilatable. Stricture might occur at any spot of t urethra; but most frequently at the bulb. Th were less frequent at the fossa navicularis and t membranous portion. Stricture was the result of i flammation, a new tissue of fibrous nature bei formed at the strictured spot. The greatest numb of strictures were atrophic; but a few had the hype trophic form. Dr. Dick pointed out that every porti of the stricture must be divided, because if only t narrowest part were divided symptums of strictu would return. He further believed that the ba opening of the stricture did not correspond with t front opening; and that these pathological chang were the result of post-inflammatory retraction. D Dick believed dilatation by the graduated metal bougies to be the safest method; but there were cas where dilatation would not give much relief to t patient, or sometimes social exigencies urged the p tient to get radically cured. The different metho employed he divides into three: 1, cauterisation; splitting or tearing; 3, cutting strictures. The cu ting he subdivided into three kinds—the internal, t external, and the subcutaneous methods. He thoug cauterisation the most objectionable, having rega to the pathological anatomy of strictures. Splitti he only admitted in a few exceptional cases—whe division by the knife could not be practised with safet where a number of strictures were closely followi each other, or where a large part of the urethra w strictured; but even in these there was no certain if the stricture had been really torn or only forcil dilated. He cited two cases of sudden death occuri after splitting. His other objection to splitting w that the pain was so violent that recourse must had to chloroform. Besides it was a principle in s

never to tear parts when they could be cut with
ty. Dr. Dick thought the internal incision the
t logical, having regard to the pathological ana-
y of strictures; but its execution had great draw-
ks; he alluded to the difficulty of making the cut
he right spot with the instruments. Incisions
ı those cutting machines were very difficult to
ute, as very often the knife acted as a dilator in-
d of a cutting instrument when the part was not
sely dilated. He objected to the external incision
eing almost as hazardous an operation as cutting
stone. The suppuration afterwards was so long,
sequently pyæmia was much to be apprehended;
des, the long suppuration was very likely to occa-
ı great retraction, some cases of which had come
er his own observation. The subcutaneous divi-
he believed to fulfil the indications of the patho-
l anatomy. The surgeon could attack directly
ı the knife the contracted spots. He was at liberty
nake his subcutaneous cut as long and as deep as
hought most suitable for the occasion. The ex-
ıal puncture healed in the first twenty-four hours.
operation had further the advantage that chloro-
ı was not required, the pain being very trifling;
hæmorrhage, too, was insignificant. The subcu-
eous method was indicated not only in severe
ctures where dilatation could not be practised,
also, in his opinion, in elastic strictures which
urned after dilatation. Dilatation must first be
ctised to a small extent, to enable the operator to
s a small-grooved conductor through the stricture.
chloroform was used; and the patient's regimen
not changed. In winter Dr. Dick confined his
ient to his room for eight days; in summer only
three days. For the operation the patient was
ed in the position for lithotomy. The instruments
d were a grooved conductor, which was shown to
Society; an ordinary tendon-knife, which for
ctures in the membranous portion should have
ıer a long neck, and be a *tenotome caché*; a good
d catheter in proportion to the orifice of the ure-
ı; a T-shaped bandage, an ordinary bandage,
king-plaster, and lint. No bandages were re-
red for strictures in the membranous portion; in
se cases a large metallic bougie was left in the
thra after the operation. The patient being placed
position, the conducting catheter was introduced
il the two knobs stopped before the stricture;
n the surgeon, by skilful manipulation, slid out
small grooved conductor (which was concealed in
conducting catheter) through the stricture. The
ducting instrument being then in position, the
geon delivered it into the hand of his assistant,
ing him to keep it gently but steadily against the
cture. He then felt outside the urethra for the
small knobs, grasped with his left hand the penis
h the instrument, and placed his thumb just before
knobs, having his index and middle fingers at the
k of the penis; he then took the tenotome in his
ıt hand, and thrust it between the two knobs,
hing it resolutely through the stricture, and di-
ed it in that *sawing* manner in which usually ten-
ıs and fibrous tissues are divided. Dr. Dick thought
cut should always be from three-quarters of an
h to an inch long; also that the knife should not
withdrawn until the surgeon was quite convinced
t the stricture is completely divided. The conduct-
catheter was then withdrawn, and lint and stick-
plaster placed on the external wound, and the
ole kept in position by a T-shaped bandage, a
mon roller, and a few pins. The patient was
n put to bed, and his urine drawn off twice or
ice a day when required with a large catheter.
Dick strongly objected to leaving a catheter in
urethra after the operation. He quoted four cases of his own and two of Mr. Allingham's, all of which were attended with the most successful results. In them shivering always took place, but no bad results followed. The only case in which shivering did not occur, was after incision in the fossa navicularis. Another point of importance on which he dwelt was that dilatation with a large metallic bougie should be practised once a week for six months after the operation.

CASE OF TRAUMATIC STRICTURE IN THE ANTERIOR PORTION OF THE URETHRA, CURED BY SUBCUTANEOUS DIVISION. BY W. ADAMS, F.R.C.S.

As a note appended to the above paper by Dr. H. Dick, Mr. ADAMS gave the particulars of a case of traumatic stricture in the anterior portion of the urethra, which he had cured by dividing the stricture subcutaneously in the manner proposed by Dr. Dick; the operation very much resembling subcutaneous tenotomy.

In June 1862, C. W., aged 26, an officer in the army, first consulted Mr. Adams on account of a very severe stricture, of the annular or ring-like form and gristly substance, situated in the anterior portion of the urethra, two inches and a quarter from the external orifice. The stricture, which could easily be felt by external examination, had been caused by the bite of a horse in India a year and a half previously, and the inconvenience now suffered by the patient incapacitated him for military duty. At the time of the accident both the scrotum and penis were much injured; profuse hæmorrhage from the urethra occurred, and a portion of the mucous membrane is said to have protruded from the external orifice. Abscess formed and opened externally close to the frenum, where a fistulous opening communicating with the urethra remained at the date of Mr. Adams's operation. Ever since his recovery from the immediate effects of the injury, the patient had been obliged to wear, night and day, a short catheter of small calibre (about No. 2); the disposition to contraction being so great that if this were discontinued more than a few hours, he had the greatest difficulty in passing a tube even of less diameter than a No. 1 catheter. Mr. Adams considered that an operation offered the only means of permanent cure; but at the patient's request this was postponed, and gradual dilatation tried by a graduated series of short silver catheters. The patient left town, and persevered in this treatment for eight months, wearing a catheter day and night. Dilatation could not be carried further than to admit a No. 4 catheter, which was habitually worn, when Mr. Adams was again consulted in February 1863. The disposition to contraction was so great that when the No. 4 catheter was left out during the night, only a No. 1 or No. 2 catheter could be passed in the morning. Mr. Adams now urged an operation; and, thinking that any attempts at forcible dilatation, such as Mr. Holt had recommended, would probably fail in consequence of the large size and unusual gristly induration of the stricture, determined to adopt the subcutaneous division of Dr. Dick, more especially as he had assisted Dr. Dick in two operations of this kind in severe cases, in both of which the operation had been eminently successful.

On March 16th, 1863, Mr. Adams performed the operation, with the assistance of Dr. Dick. The instruments used were the tenotomy-knife, and Dr. Dick's grooved staff with a bulbous extremity, having within it a smaller grooved staff, which can be passed through the stricture, and form a director, along which the knife can be passed in dividing the stricture, when the bulb of the larger staff has been passed down to the stricture as a guide for the introduction of the knife. In performing the operation, the teno-

tomy-knife was passed through the skin externally, directly into the groove in the bulb of the larger staff, and thence onwards along the groove in the smaller staff through the stricture; then, leaving the groove, the knife was directed outwards towards the skin, dividing freely the stricture and some of the corpus spongiosum a little above and below it. In the present case no difficulty occurred in the operation; but, as a complication, two other strictures were discovered by the bulb of the larger staff—one an inch and a half from the external orifice (*i.e.*, nearly an inch anterior to the main stricture), and the other more than an inch behind the main stricture; so that in order to divide these, it was necessary to introduce the tenotomy knife in two different places. When the main stricture was divided, the tissue gave way very much like a tightly-stretched tendon, and could be both heard and felt.

Immediately after the operation, in which very little hæmorrhage occurred, a No. 12 (English) catheter was passed into the bladder without any difficulty, and left in for a short time, slight pressure on the penis being kept up. The catheter was not left in during the night. The next day a No. 12 catheter was introduced twice, and the urine drawn off. This was continued day after day two or three times, and on the fourth day the patient was indiscreet enough to walk down to his club and dine with some friends. Not feeling so well afterwards, he remained two days in-doors. On the eighth day he went out of town. He was able to pass a No. 10 catheter for himself without any difficulty, and this he was directed to do at first twice and then once a day. The number 12 catheter seemed to meet with a little obstruction at the seat of the deepest stricture, or a little beyond this, but passed readily through the situation of the main stricture. On April 15th, the patient was carefully examined by Mr. Adams, and no disposition to recontraction existed. He was improved in every respect. On June 8th, less than three months from the date of the operation, Mr. Adams reported this gentleman as fit for active military duties. He was now directed to continue passing the No. 10 catheter twice a week, and then once a week, which was to be gradually discontinued.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 4TH, 1864.

H. OLDHAM, M.D., President, in the Chair.

FOUR gentlemen were elected Fellows of the Society.

Specimens. Dr. BARNES exhibited a small Fibroid Tumour of the Uterus spontaneously expelled from a patient who had suffered from metrorrhagia.

Dr. GREENHALGH communicated the result of the case of Amputation of the Cervix Uteri mentioned at the last meeting. The patient died some days after the operation, of peritonitis.

Dr. BARNES observed that Dr. Marion Sims's method of removing the cervix uteri was superior to the operation by the *écraseur*, the surface left denuded being smaller, and the risk of peritonitis probably less.

Dr. FUSSELL, of Brighton, exhibited the Uterus of a patient who had died five days after removal of a Cancerous Tumour from the Cervix Uteri. The interior of the uterus was found diseased, and there were also fibroid tumours in the uterine parietes.

Dr. ROUTH stated, in the course of a discussion which arose on the merits of different *écraseurs*, that he had found by experiment that the wire-rope *écraseur* cut through the tissue of the cow's uterus more readily than the chain *écraseur*.

Dr. GRAILY HEWITT exhibited an entire Ovum of Seven Months' Development, which had been f warded to him by Dr. Whitmarsh, of Hounslow. T ovum had been expelled ten days after symptoms labour had set in.

ON THE APPLICATION OF EXTREME COLD AS AN ANODY IN THE PAIN ATTENDANT ON PARTURITION.

BY J. MORTIMER GRANVILLE, L.R.C.P, LOND., BRISTO

An examination of the phenomena of labour, m especially in relation to the nature, duration, and i tensity of the pain accompanying it, led the auth to the following conclusions:—1. The actual pain (distinguished from the sensation of forcing) expe enced by the parturient woman bears no definite p portion to the force and efficiency of what (for want a better name) we term "the pains" of her labo 2. The sensation of pain is not invariably synchro ous with the occurrence of uterine contraction, t effects of the latter being perceptible to the accou eur not unfrequently, during examination, before patient experiences the former.

From these circumstances, taken in connecti with others well known to careful observers, it mig be inferred, that the pain attendant on labour more directly related to the effects of uterine co traction (perhaps mechanical force operating on n vous tissue) than to the specific muscular act itself

The reference of the pain to some region more less remote from the contracting uterus or the dil ing external passages (in which the seat of p might have been supposed to be located) appears support the last inference; whilst it clearly points the conclusion, that the pain attendant on labour neuralgic in its character.

Acting on this theory, the author had tried t effect of extreme cold as a topical anodyne, and t result had been very constant. The method was a plicable in all cases, independently of the condition the patient; cold being already in use as a power means of exciting the uterus to contraction in ca of extreme exhaustion. It was perfectly free fr the dangers so inseparable from the most cautic use of anæsthetics. It was perfectly manageable, a might be safely confided to a nurse; and its *ration* was in strict conformity with the well known pr ciples of physiology. It was not intended to remo but to alleviate, the pain attendant on parturiti The power of the uterine efforts was generally creased, without any corresponding increase in t attendant suffering; the patient being not unf quently under the impression that the pain l ceased when the presentation continued to shew t continuance of the expulsive force. This had b very remarkable in some of the cases—the pains a pearing to be shortened, when examination pro them to be prolonged. The actual pain was sensi diminished, the patients expressing themselves va ously, but to the general effect that they were relie of half their suffering. The method of the appli tion was of the greatest importance. The cold m be extreme, or it is of little if any service, and it m be persistent.

An apparatus was exhibited, consisting of a flat box, which was filled with a freezing mixture and plied to the seat of the pain.

Dr. OLDHAM believed some difficulty would be fou in determining what was the seat of pain. Mada Boivin referred the pain during her own labours the neck of the uterus.

ON A NEW MODE OF TREATING CASES OF VESICO-VAGINAL FISTULA.

BY ALFRED MEADOWS, M.D.

It was contended in this paper, that the us practice of keeping the patient in bed for two three weeks after the operation for the cure of vesi

al fistula is unnecessary, and that, on the con-, she may be allowed with perfect safety to go t as usual immediately after the operation. The or showed that the reason given for the former ice—viz., that the parts should be kept quiet, is lly attended to in the plan suggested as in that lly followed, because the movements of the body ot interfere with the quietude of that particular on of the floor of the bladder where the fistula ed, there being no muscles in this region which by their attachments prejudicially affect the part uestion. With regard to the second considera-—that the urine should be kept from the surface ie fistula, either by the constant employment of catheter or by its frequent use,—the author briefly wed the circumstances which exist after every ation of this kind. At first the bladder is quite y, but, as urine gradually flows into it, the or-becomes slowly distended; and the very fact of distension taking place by the uniform pressure ie urine, proves that contact of that fluid with part of the bladder-wall cannot be avoided; no ion of the patient can prevent it, and conse-tly the recumbent posture is not needed on account, nor is the use of the catheter of any ce. Two cases were detailed in which the plan suggested by the author had been carried out perfect success. In one, where chloroform was administered, the patient went about immedi-after the operation, and followed her usual avo-ns. In the other case, the patient had chloroform, on this account chiefly she kept in bed that day; the next day she was allowed to go out, and her was equally complete. In both cases the open-vas large enough to admit the finger easily; and e of them it was situate far in the vagina. The or recommended the use of many sutures, merely ing them, and without either clamp or shot; he advised that they should be allowed to remain time to secure firm union, their presence occa-ng no inconvenience. One of the cases cited was er remarkable inasmuch as by the process of hing which had previously taken place no trace e uterus could anywhere be discovered, and the nt has continued for some time past to menstru-hrough the bladder.

. Oldham thought it a great point to save pa-s from the irksomeness of wearing apparatus; by showing that the confinement hitherto con-ed necessary was not required, Dr. Meadows had good service.

CASE OF HYDRO-ENCEPHALOCELE.

BY A. HARRIS, M.D., CAMBORNE.

e subject of this case was the thirteenth child. mour hung from the back of the head at the r part of the occipital bone; it measured nine s round, and was four inches and a half long; it ined fluid. The day after birth, four ounces half of highly albuminous fluid were removed cannula and trocar. Two days later it was again ured. Nine days later a spontaneous evacuation red. The child wasted gradually, and died when months old.

SUPPURATIVE INFLAMMATION OF THE HIP-JOINT IN A PUERPERAL WOMAN.

BY THOMAS W. NUNN, ESQ.

e patient was admitted into the Middlesex Hos-twenty-seven days after delivery of her second complaining of pain, swelling, etc., of the right She had a patchy tongue, glazed fauces, and a of 130. No inflammatory or other disease of elvic viscera. According to the patient's ac-, she suffered some *post partum* hæmorrhage, or three weeks had offensive discharges. The pain in the hip commenced nine days after delivery. The infant was suckled no longer than fourteen days. On the thirty-sixth day Mr. Nunn passed in deeply a narrow bistoury at the back of the trochanter, and gave exit to twelve ounces of pus. On the forty-fourth day rigors came on, and on the forty-eighth day death took place. The *post mortem* examination revealed most extensive denudation of the head of the femur, the cotyloid cavity, and neighbouring osseous structures; no invasion of the pelvis by matter through the thyroid foramen; the uterus and other pelvic viscera not visibly affected; in the lower lobe of the left lung a small solidified patch the size of a bean, with a yellowish softened centre. Joint disease the author believed was generally accepted to be one of the consequences of puerperal fever, and under such circumstance to be the result of pyæmia. The question was —Is there a liability to joint inflammation peculiar to the puerperal state independent of ordinary purulent infection characterised by an absence of acute constitutional symptoms? The author related a case by Dr. Fenwick, bearing on this point. He expressed a conviction that many analogous cases lay scattered over, and so to speak fossilised in, the experience of accoucheurs; and that it would be well, if his conviction should be justified by facts, that something more definite than is to be at present found in surgical text-books were made available to the student by these cases being brought to light. The obvious practical point was regarding the moment when an incision into the joint might justifiably be made, so as to relieve the system of the grave complication of pent-up matter.

Dr. Martyn gave the particulars of an interesting case somewhat similar to Mr. Nunn's; the patient recovered, however, after an illness of many months' duration. The abscess should not, he believed, be opened. Rest was very important.

Mr. Nunn, in reply, said that it was curious to observe, in consulting various works, that the surgeons had apparently left the question of puerperal joint disease to the obstetricians, and that the obstetricians had tacitly relinquished it to the surgeons. A very important and highly interesting matter had thus, between the two, not received that elaboration which it required.

Salicin in the Urine. Dr. Landerer has found that when salicin is administered in considerable doses it passes away in the urine unchanged, and can be easily separated from the evaporated urine by means of alcohol. (*Archiv. der. Pharm.*)

War Incidents. We see it stated that Dr. Winchell was murdered recently by guerrillas, on the Mississipi, in the vicinity of Vicksburg. He leaves a wife, who, we believe, was riding with him at the time of his murder.—Died on Monday, May 16th, 1864, from a shot wound in the breast, received on the battle-field near Spottsylvania Court House, Dr. Thomas Jones, Surgeon of the Eighth Pennsylania Reserves, in the thirty-second year of his age. When the first call was made for volunteers, he in the capacity of lieutenant started to defend the menaced capitol of his adopted country. In the unfortunate riot in Baltimore he was severely wounded. He was in many of the most hotly contested battles of the war. When duty called he knew no fear. His time of service expired the day after he was wounded. For three long years he had endured exposure to the burning sun, the drenching rain, cold and heat, ever at his post ready to raise the fallen, and to succour the faint. Not only the bodies, but the souls of those committed to his charge received his anxious thought and attention.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Wednesday, July 20th, the following gentlemen, previously members of the College, were admitted Fellows of the same:—

Harley, George, M.D., 77, Harley Street
Pollock, James Edward, M.D., 52, Upper Brook Street
Priestley, William Overend, M.D., 17, Hertford Street, May Fair
Wood, William, M.D., 54, Upper Harley Street

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Jones, John Lewis, Carnarvon
Jones, John Wickliffe, Assistant-Surgeon Royal Navy
Silva, Leo Charles da, Burntwood, Wandsworth
Skinner, William, Sheffield
Smith, Thomas Haywood, Alcester

The following gentlemen were reported by the examiners to have passed the first part of the professional examination for the licence:—

Bateman, Francis, St. Bartholomew's Hospital
Bushell, Stephen W., Guy's Hospital
Clothier, Henry, University College
Cole, Thomas, St. Bartholomew's Hospital
Cribb, Henry, Bishops Stortford
Denne, Henry, Guy's Hospital
Eccles, William S., St. Bartholomew's Hospital
Ferris, John S., King's College
Gill, John, Guy's Hospital
Malin, George W., Sydenham College, Birmingham
Robinson, Robert, St. Bartholomew's Hospital
Rogers, George A., 14, Commercial Place, Commercial Road
Rundle, Henry, St. Bartholomew's Hospital
Simpson, Reginald P., 82, Gower Street
Sims, Francis M. B., 8, Sackville Street
Skinner, William, 8, Ampton Place, Gray's Inn Road
Stuart, William A. P., University College
Stuckey, John, University College
Taylor, Theodore T., St. Mary's Hospital
Welch, John B., King's College
White, James A., Salford
Willoughby, Edward F., University College

APOTHECARIES' HALL. On July 21st, the following Licentiates were admitted:—

Henderson, Roderick William, Lower Halliford, Middlesex
Jackson, Richard, Birmingham
Knipe, William Melville, Guy's Hospital
Lucey, William Cubitt, Bermondsey
Mason, Philip Brookes, Burton-on-Trent
Ruttledge, William Frederick, London Hospital
Yates, William, 20, Richmond Green

At the same Court, the following passed the first examination:—

Denziloe, William Le Gros, St. Mary's Hospital
Jones, William Griffith, Middlesex Hospital
Land, William John, St. Mary's Hospital
Murphy, Thomas Charles, University College Hospital
Worthington, James Copland, Middlesex Hospital

DEATH.

*JONES, Charles, Esq., at Alton, aged 60, on July 25.

THE FRENCH SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS goes further than the English institution. by not only endeavouring to prevent its *protegés* from being cruelly treated, but by rewarding inventions tending to increase their comfort and well-being. At the last meeting of the Paris society, medals were given for a new form of horse-shoe for use in slippery weather, a saddle which is stated to be more comfortable than the ordinary form, a horse-collar having similar merits, a sieve for cleaning grain from dust and grit, trusses for the cure of hernia in young horses, and an apparatus for the more effectual aëration of the water in fish tanks during transport. (*Chemical News.*)

INDIAN MEDICAL SERVICE BILL. In the Hous Commons, on Monday last, on the order for read the Indian Medical Service Bill a third time, Hennessy moved that the order be discharged, on ground that the bill would give the Secretary of St for India the power of returning to the old systen nomination, and substituting it for the competit system, which Parliament and the country gener approved. Sir C. Wood explained that his objec introducing the measure was to obtain a better scription of medical officers for the Indian servi and the bill would enable the Secretary for Indi avail himself, for the benefit of the native forces such assistant surgeons as had entered the Quee army upon public competition, and might sub quently volunteer for the Indian army. The bill also opposed by Colonel North, Mr. Monsell, Mr. I ley, Colonel Sykes, and Sir E. Colebrooke; and u a division the motion of Mr. Hennessy was car against the Government by 46 to 44. The bill therefore lost.

SIR CHARLES LYELL. Her Majesty has been plea to confer the dignity of baronet upon Sir Cha Lyell, by the title of Sir Charles Lyell, Barone Kinordy, in the county of Forfar. Sir Charles L was educated at Exeter College, Oxford, where graduated in 1821, and was subsequently calle the bar. Devoting his attention to scientific stu in connection with geology, he was chosen presi of the Geological Society in 1836, and again in 1 having been knighted in 1848. His first impor work, entitled *The Principles of Geology*, was publis in 1833, and has reached a ninth edition. He published *The Elements of Geology* in 1838, of w also several editions have appeared. In 1841, u the title of *Travels in North America*, he gave a teresting narrative of a visit paid to North Ame for the purpose of examining the geological struc of that continent; and in 1845 he published the re of a *Second Visit to America*, in which the s aspects, as well as geological formation of the cou were fully discussed.

ST. THOMAS'S HOSPITAL. The Governors of Thomas's Hospital on Wednesday held a Ge Court. Mr. Adams noticed the very great dispro tion of the medical and surgical staff to the nu of patients, as compared with other hospitals. example, Guy's Hospital contained 600 beds, their annual surgical and medical expenses amou to £2,000; while their own, for only 200 beds, no less than £3,000. He also pointed out the e vagant allowances furnished to their apothecary, Whitfield, who during the year had 942 gallo Barclay and Perkins' porter and 36 tons of All these quantities were far beyond the req ments of any private gentleman. Their stewa present had a salary of £400, and £35 for coals beer. He regarded Mr. Whitfield as the best official in Europe. He was in the receipt of £6 year salary, besides £50 from the Nightingale F and 8 per cent. on the receipts from pupils. In tion to all this, he had a house. During the year, the patients had been supplied with no than 1,336 dozen of soda-water and lemonade; du the past year, 600 patients at Guy's only consu 260 dozen. These beverages were only used by patients; and he considered it impossible for t to consume 16,000 bottles of soda-water in tw months. In the wine, brandy, and gin acco there were serious deficiencies. In wine, 95 ga in 686 gallons; in brandy, 17 in 147; and in gin, 72. He did not think that, after laying these fi before them, they would say that this gentlema looked after their interests. A motion, to the

t the grand committee should investigate the ter at once, was put and carried. Dr. Leeson ged to say a few words in defence of Mr. Whitl. His family was twelve in number; and, if they ided the quantity of beer supplied among them, y would find it only amounted to about two pints day per head. Mr. Deputy Elliott feared the lic would blame the grand committee loudly for ing things run on so long. It really seemed as if inquiry was being made only at the last possible ment, when a Government Commission had been ointed to inquire into the affairs of the hospital. . Baggallay, the Treasurer, here rose, and anced his intention of resigning.

PERATION DAYS AT THE HOSPITALS.

IDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

SDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

ONESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

RSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.— Great Northern, 2 P.M.— London Surgical Home, 2 P.M. — Royal Orthopædic, 2 P.M.— Royal London Ophthalmic, 11 A.M.

DAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

URDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.— King's College, 1·30 P.M.—Charing Cross, 2 P.M.— Lock, Clinical Demonstration and Operations, 1 P.M.— Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

EETINGS OF SOCIETIES DURING THE NEXT WEEK.

IDAY. Entomological Society.

TO CORRESPONDENTS.

All letters and communications for the JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

RESPONDENTS, who wish notice to be taken of their communicaons, should authenticate them with their names—of course, not ecessarily for publication.

OCIATION OF EDINBURGH GRADUATES.—We have been requested state that the inaugural dinner of the Association of Edinburgh raduates will take place at the Freemasons' Tavern, on Aug. 1st, a quarter past Six o'clock. A large number of graduates have ready signified their intention of being present. Any graduate ho intends to be present on the occasion, should signify his ntention, as early as possible, to Dr. Murchison, Honorary Secrery, of 79, Wimpole Street. This Association promises to become powerful body. We heartily wish a good development to an ssociation of so excellent an *Alma Mater*.

FFIN TESTIMONIAL FUND.—SIR: The following subscriptions ave been further received on behalf of the above Fund:—James air, Esq. (Bures St. Mary), 10s. 6d.; C. F. J. Lord, Esq. (Hampead), 10s. 6d.; Dr. R. Martin (Warrington), £1:1; Dr. Bisset awkins (Dorchester), £1:1; Dr. Wm. Sankey (Hollingbourne), 1:1.

Amount previously announced, £39:7:6. Received at the *Lancet* ffice, £2:18.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, July 27th, 1864.

MMUNICATIONS have been received from:—Dr. EDWARD . DE VITRÉ; Dr. W. E. IMAGE; Dr. G. M. HUMPHRY; Dr. JAMES USSELL; Mr. HOLMES; Dr. PAGET; Mr. HORNBY; Dr. WILLIAM NDERSON; Dr. J. G. PARSONS; Dr. DRYSDALE; Dr. NANKIVELL; r. FOWLER; Dr. LONERGAN; Dr. E. GOODEVE; Mr. THOMAS AGET; Mr. WILSON; Mr. I. HARRINSON; Mr. C. F. J. LORD; Dr. RMEROD; Mr. T. P. TEALE, JUN.; Mr. G. MAY, JUN.; Mr. STONE; r. MURCHISON; Mr. C. F. HODSON; and Dr. RICHARDSON.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary.*

Birmingham, July 1864.

ADVERTISEMENTS.

Mr. J. Baxter Langley, M.R.C.S. (King's Coll., London), 50, LINCOLN'S-INN-FIELDS, W.C., respectfully solicits the attention of Medical gentlemen with means of investment at their command to the practices and partnerships which are placed in his hands for negociation, many of which he is not authorised to advertise. No charge made to purchasers.

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Will shortly appear, the Jacksonian Prize Essay for 1863.

On Diseases of the Larynx. By MORELL MACKENZIE, M.D., M.R.C.P.

The Queen's College, Birmingham.—The CHAIR OF MEDICINE, and the CHAIR OF ANATOMY, are now vacant. Candidates are invited to send in their applications, with Diplomas and Testimonials, to MR. LAUNDY, Secretary, Paradise Street, on or before August 13th, 1864.

Extract from Charter.—"Whenever a vacancy shall occur in any Professorship, the names of the Candidates shall in the first instance be referred by the Council to the Professors, who shall make a special report to the Council of the names of the Candidates, as in their judgment shall be qualified and eligible, professionally and otherwise, to fill the vacant Professorship; and the Council shall then recommend to the Governors from the Candidates included in such report, one whom they think best qualified to fill the vacant Professorship."

Council Room, July 26th, 1864.

Leicester Infirmary.—There will shortly be VACANCIES for TWO RESIDENT PUPILS in this Institution. Particulars may be obtained on application to the House Surgeon, at the Infirmary.

By order of the Board,

Board Room, July 19th, 1864. T. A. WYKES, Secretary.

To the Surgical and Medical Professions.—W. F. Durroch, Manu

FACTURER of SURGICAL INSTRUMENTS to the Royal Navy. Greenwich Hospital, Guy's Hospital, &c. &c., begs to inform t Profession that he continues to manufacture SURGICAL INSTRUMENTS of every description, and that he has attained the high reputation by the approval and patronage of the most eminent Practitioners and Lecturers for the improvements made in various articl Gentlemen favouring him with their orders may rely on having their Instruments finished in the best and most modern style. Surgi Instruments made to Drawings and kept in repair. Established 1798.

NOTICE OF REMOVAL.—W. F. Durroch has removed from No. 28, St. Thomas's Street East, to No. 3, St. Thomas's Street, ne the Hospitals in Southwark. Late Manufacturer to the leading Houses in the Trade.

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"Sackville Street, Piccadilly, London. April 1862." "Chas. Kidd, M.D. and Surgeon."

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Chesh Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirma and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculia serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospita have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendat to the Profession."

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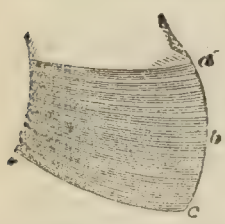
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Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

THE

PRESIDENT'S ADDRESS.

BY

GEORGE E. PAGET, M.D., F.R.C.P.,

PHYSICIAN TO ADDENBROOKE'S HOSPITAL, AND LINACRE LECTURER ON PHYSIC, CAMBRIDGE; MEMBER OF THE GENERAL MEDICAL COUNCIL; FORMERLY FELLOW OF CAIUS COLLEGE.

Gentlemen of the British Medical Association,—My first duty is to thank you, which I do most heartily, for the distinguished honour you have been pleased to confer upon me in electing me your President. My second duty, and my privilege, is to speak in the name of your associates here, and bid you welcome to Cambridge.

We are met within the precincts of an ancient and famous University; so ancient, that its origin is lost in the mists of ages, and one which claims as her sons not a few of those whom educated men have delighted to honour as their noblest representatives in literature and science.

You will excuse a Cambridge man if he feel some pride in welcoming you to the University of Spenser and Milton—of Wordsworth and Tennyson; in pointing out to you the spots where Jeremy Taylor and Isaac Barrow became so learned and so eloquent; where Bacon first perceived the right road to scientific truth, and where Newton discovered the laws of gravitation; where Ray saw, and made others see, the wisdom of God manifested in the works of the creation; and where Harvey acquired at least that correctness in reasoning which qualified him to interpret aright the facts of anatomy, and demonstrate the circulation of the blood. And, before such an audience, I am reminded that Caius and Glisson, Heberden and Woollaston, have a place among our Cambridge worthies; and that, were I to speak of living physicians, I might mention other names as familiar in your ears and not less honoured.

Yet I must tell the plain truth, even though it may disparage in your esteem the University I love so well, and which, let me add, no man can fail to love and honour, who knows, as I know, its great and varied excellencies.

In addressing this great Medical Association on its first visit to Cambridge, I cannot avoid—so, at least, I have been told—I cannot avoid speaking of the University in reference to medicine; and, in so speaking, I must admit at once that its medical school is but a small one; and if it is to be assumed that the office of an university is to make physicians, and the reputation of an university is to be measured by the number it makes, I should have to confess that Cambridge has fallen short of its duty, and has no claim to a high reputation. But if the office of an university be rather to educate men into the capacity for pursuing any profession, and, as regards its medical students, to train them in all that which "quamvis non faciat medicum, aptiorem tamen medicinæ reddit"; to take care that their medical knowledge be well founded, and that they do not obtain a medical degree until they have given the fullest proofs that their knowledge, wheresoever acquired, is real and at a high standard,—if these be the duties of the University of Cambridge, then I have no fear of criticism.

It is true that the courses of medical lectures delivered here, both have been and are less numerous and extended than those given elsewhere in the great schools of medicine; but it may be questioned how far this is a fault. Few persons doubt now that, in those great schools of medicine, where talent and industry and zeal have striven to give instruction in its utmost completeness, the students have been passing too much of their time in listening and too little in reflecting; that there has been too much teaching and too little time for study. The medical lectures delivered here have, at least, served well as an *introduction* to medicine; and the University has always encouraged its medical students to complete their professional education elsewhere, at the chief schools of medicine in large cities, where the extent of population and other circumstances afford to the advanced student certain advantages for practical instruction beyond those possessed by Cambridge.

So much for the medical teaching. With regard to another academical function—that of granting medical degrees—I need not say much. The University has been always more solicitous about the character than the number of those on whom it confers its titles and privileges. The standard of requirements for its medical degrees has always been high: the period of study for the degree of M.D. was formerly ten years, and is now eight; all students are required to reside within the University for three academical years, during which they are subjected to discipline and moral training, and receive their *social* education; they have to devote a considerable part of this time to general studies, which have always been insisted on here, and are now everywhere acknowledged to be an essential preparation for that of medicine. The examinations have been efficient. The system of paper-examination, which is now so generally adopted, had, I believe, its origin in Cambridge, and certainly was for years in use here for medical degrees, while elsewhere, in places which we should all name with respect, medical examinations were still conducted after the antique fashion—orally in Latin. The clinical examination, also—the most efficient test of practical knowledge—was first introduced here. I have the satisfaction of remembering that it was introduced by myself three and twenty years ago, and it has never since been discontinued.

The granting licences to practise medicine involves a responsibility which can be measured only by human sufferings and human lives. The plain duty of the University is, to take care that its medical graduates are skilled in their profession; and this first duty has not been neglected. But the University has aimed at something more than this. Its desire has been, and I trust ever will be, that its medical graduates should be men of liberal educa-

tion in the best sense of the words; that they should have a position in society fully equal to that of the other two learned professions; that they should be qualified, as far as education can prepare them, for advancing those sciences which are to be the study of their lives. And Cambridge has recently shown its belief, in opposition to what has seemed generally accepted, that there is the same value in general scientific or learned training for surgery as for medicine; the University now confers on surgery the distinction of an academical degree, and has fixed the requirements for its mastership in that art almost exactly on a par with those for its Bachelorship in medicine.

So much for Cambridge in matters strictly medical: and I think it may be fairly held, that the University has in these things not been negligent of its special duty. From this Association I believe that the University may fairly claim honour, for having done its share in upholding the dignity of the profession of medicine.

But the University has been charged with backwardness in other sciences in which we are interested—the sciences collateral to medicine—the group which makes up the subject of natural history.

Now, if I were asked whether this charge be well-founded, I might answer, by pointing to the teachers and the taught, to Sedgwick, Miller, and Babington, to Berkeley, Darwin, Ansted, Jukes, and others. But I would not so evade the question. I would rather say, that Cambridge has not done enough in natural history. This is, indeed, what I have maintained and acted on within the University for many years on all suitable occasions. Nevertheless, as I cannot shut my eyes to the shortcomings in other places, I feel inclined, not indeed to exonerate my own Alma Mater, but to distribute the reproach impartially amongst *all* the defaulters. And, moreover, if Cambridge is to be blamed, it would be unjust not to discriminate between the general academical body and the individual colleges. For it cannot be admitted, that the University as a body is indifferent to the natural history sciences. Visit its museums, and judge for yourselves. You will see what the University possesses in Comparative Anatomy, and (in justice I must add) how much it owes to the zeal, the labours, and liberality of Professor Clark; you will see museums of geology and mineralogy, of which any university might be proud; you will, I regret to say, *not* see, or not see to advantage, the botanical and zoological collections (the former a *very* rich one), but you may see the buildings, recently erected at great cost, in which those and the other collections will ere long be better displayed and made more available for study. And when you have also taken a stroll in the Botanical Garden, you will, I think, admit that, altogether, you have seen substantial proofs that the University does take an interest in the natural history sciences.

Again, nearly all of these sciences have been long taught, and well taught, in this place; and willingly studied too.

Three and thirty years ago, when I was attending the botanical lectures of the late Professor Henslow, his class numbered upwards of sixty, whose attendance was perfectly spontaneous. And who does not know our eloquent Professor of Geology? He has been lecturing here for nearly half a century, and the number of his hearers has generally been limited only by the size of his lecture-room, and that is not a small one. Moreover, the University now invites the great mass of its students, *i. e.*, all who are candidates for the ordinary degree of B.A., to select for study some one of these sciences, as part of their academical course; and it has established the Natural Sciences *Tripos*, which is an *honour*-examination in the entire group of these sciences, and has been recently so improved and extended as to be now of equal scope with the examinations for mathematical and classical honours.

But, notwithstanding all this, the fact still remains, that Cambridge, so well known for classical scholarship and mathematics, and which supplies professors in these subjects to other universities, is but little thought of as a school of Natural History or Medicine.

What are the causes of this seeming anomaly?

Well, a glimpse of them may, I think, be seen in the *general* fact, that *no* university is, or ever was, equally distinguished in *all* branches of learning:—that one university is most famous for one kind of learning and another for another kind. Such was the case in olden times, and such is the case now. For a long period, the University of Paris was, on the whole, the most renowned University in Europe, yet its *medical* school was surpassed in turns by those of Salerno, Montpellier, Padua, and Leyden. And modern times present abundant instances of like kind—instances of universities eminent for their schools of theology or law or medicine, or mathematical science or classical learning, but eminent in one or two only of these subjects, and inferior in the rest.

Indeed, a special eminence in one or two subjects is apt to become an actual *cause* of inferiority in the rest; for it quickly becomes absorbing and exclusive. It attracts to the University those who have shown in early life a natural aptitude for the special branch of study, and who seek the spot where their peculiar talents will be best cultivated and most appreciated and fostered; and in course of time these students add the lustre of their own reputation to that of their Alma Mater, and so enhance her special eminence; and some of them become her leading spirits, and their tastes and predilections influence academical opinion, and tend to exalt still higher the prestige of their own favourite science. And the influence of this prestige is felt by *all* the students; even those who have come to the University with a different purpose are liable to be diverted from it by the attractions of studies holding a higher place in academical estimation. The late Lord Langdale came to Cambridge as a student of medicine; he renounced physic for mathematics, and was rewarded with the highest honours of his year. Isaac Barrow came hither to study medicine. He exchanged it for divinity, and became the greatest theologian of his time.

For a very long period the special eminence of Cambridge has been in the mathematical sciences and classical scholarship. These have been, and still are, the favourite and favoured studies. And can we wonder it should be so in the school of Bentley and Porson; or can we blame a preference for mathematics in the University that has produced a Newton?

When we consider how unready both individuals and institutions commonly are, to change the systems in which they have prospered and gained just

known, it seems less strange that Cambridge has done so little, than that she has done so much, towards admitting to terms of equality with mathematics and classics any sciences or studies whatever.

But the prestige of the favourite studies has been enhanced beyond measure, and is constantly maintained, by that which is not in the power of the *University* to alter; namely, by the exclusive encouragement they have received from the *Colleges*, which, in regard to the disposal of their own funds, are wholly independent of the general academical body. The numerous scholarships and fellowships which are in the gift of the several colleges, are intrinsically very valuable, and have been awarded for a long series of years with the most scrupulous impartiality; so that they have become the crowning honours of successful talent, and its highest incentive to industry and emulation. Now these rewards have been given by the colleges almost exclusively for proficiency in mathematics or classics. The natural result has been, a virtual discouragement of other departments of science: for all students who are ambitious of distinction, or in need of emolument—all who have talents and desire to use them—have been stimulated to devote themselves to mathematics and classics, and seek the rewards of their labour in the only paths by which they could be reached. But brighter days are dawning: already in some of the colleges a proficiency in the natural history sciences has gained scholarships, and in a few cases helped candidates for fellowships; and there is good reason to hope, that before long these sciences will receive from the colleges generally their due share of encouragement.

In fairly considering the whole matter, we must not forget that the *chief* function of the University of Cambridge and of its Colleges is *general* education, and that to fulfil this function they must choose for the principal subjects of study those which are best suited for developing and strengthening the more important faculties of the mind. Now it may well be maintained, and is implicitly believed here, that the study of mathematics and of language (as exemplified in the classical writers of Greece and Rome), are, above all other studies, those which best fulfil the purpose of a liberal education. This is a question which might be discussed and debated at far greater length than would be agreeable either for you to hear, or me to speak: but at least thus much is certain, that there are no faculties to be educated more important than reason and language; and that mathematics and classics have been recommended for this purpose by many of the most thoughtful and discerning men in all ages, including our own.

And it must not be overlooked, that mathematics, as studied at Cambridge, are not merely an exercise of rigorous reasoning, but include the whole range of physical sciences to which mathematical processes have been applied—all that is comprehended under mechanics, hydrostatics, optics, and astronomy, and which, by the way, cannot be thoroughly followed or understood without a knowledge of such processes. And that the mathematical training has not been barren of results, there are abundant living proofs—Herschell, Airy, and Whewell, Stokes and Adams, William Thomson of Glasgow, and a host of others.

In short, the mistake of the colleges has not been in their encouraging mathematics and classics, but in encouraging them too exclusively, and in not recognising the fact that natural history includes subjects, of which no man pretending to culture should be wholly ignorant, and that it furnishes the best supplementary means of educating certain faculties—particularly those of observation—which are not adequately cultivated in the two more favoured studies.

I regret that a desire for precision in what relates to Cambridge has led me into wearisome details. But the *general* question, whether the study of natural science should become an established part of the education of the higher classes, is a subject of such interest, as to need no apology for its introduction before any audience, and, least of all, before you. It is not only one of the great educational questions of the day, but a question, in the right solution of which no class is more interested than is our profession. I confess that, to me, it seems high time to consider whether natural science might not be useful as part of a liberal education, when an author of great distinction and undoubted learning—one, whose writings have been rewarded with the applause of the educated world and with some of the highest dignities in the gift of the Crown—states as a "well-attested fact, that a man's body is lighter when he is awake than sleeping; a fact" (he says) "which every nurse who has carried a child would be able to attest"; and concludes from these *well-attested facts*, that "the human consciousness, as an inner centre, works as an opposing force to the attraction of the earth". I quote from a *seventh* edition, *revised*.

To my mind, the *necessity* for more general instruction in natural science needs no further proof, when ladies and gentlemen appear in a court of law to vouch their belief in the supernatural powers of a crystal globe; when those who are called highly educated throng the necromancer's consulting room to hear disembodied spirits rap on his table: when they daily become the dupes of barefaced quackeries; and, while avowing their belief in what is absurd or even impossible, plume themselves on their superiority to prejudice, regard themselves with complacency as walking in the spirit of the age—as being *au courant* with its progress, and indignantly remind us of the persecutors of Galileo, if we question the accuracy of their facts or the logic of their conclusions.

Whatever may be thought of the enlightenment of the present age, there can be no doubt of the readiness and boldness with which it forms or avows its opinions. Far be it from me to question the birthright of an Englishman, to judge of all matters, whether he understand them or not. The right of private judgment is the most precious of civil rights; but it *may* occasionally make fools of us, when exercised upon questions in which we are uninstructed. Even freedom of thought is not an unmixed good. It stirs a community in *all* directions—not always in the direction of progress. For the unwise and presumptuous it is often the parent of mischievous errors, that find ready acceptance among the ignorant and indolent, and cost for their removal much time and trouble of wiser men. It is easier to refute errors than to remove them. Ignorance must be instructed, self-sufficiency must become modest, before it can be convinced.

I have sometimes fancied that the rapid succession

of brilliant discoveries and inventions which has characterised the present age, and should have enlightened it, has actually enhanced its credulity for the pretensions of quackery and imposture; that the unexpected and unimagined achievements of true science have so dazzled the minds of people, as to render them more accessible to other marvels, whether true or false, and more ready to yield unquestioning belief in *whatever* is new and wonderful: as, in times of old, the heroic deeds of a Hercules or King Arthur led their admiring countrymen to ascribe to them other achievements, not only unreal, but impossible: or as, in the sixteenth century, when men's minds had been roused and agitated by the spiritual preaching of the Protestant Reformers, a readier credence was given, not to spiritual *truths* only, but also to spiritual and mystical *errors*. Then was the time, when enthusiasts abounded, whose imagination called up before their eyes every object they desired to see; then it was that astrology was the most widely spread and most generally studied as an useful science; then it was that demons were classified, and that witches were burnt in thousands. *Then*, even self-reliant intellects that had thrown off the yoke of ancient beliefs, yielded a ready credence to almost anything which had a spiritual semblance. Melancthon was one of the chief defenders of astrology. Luther attributed diseases to the immediate agency of the devil, and was indignant with the physicians who referred them to natural causes. Paracelsus and Cardan, while shaking the popular faith in ancient physic, rested their own on cabalism and astrology.

In the old city of Aberdeen sorcery had lain undiscovered, though the holy clerks of King's College had been there for a hundred years, ready at any time to have exorcised it with bell, book, and candle; but in the fourth year after the founding of Marischal College and the spiritual teaching of its Protestant professors, twenty four witches were burnt alive for dancing with the devil around the market cross.

As the minds of men in those days, when awakened to new and deep spiritual convictions, were opened also to mystical *errors;*—so in the present day, when startled with scientific wonders beyond their comprehension, do they gape at and swallow indiscriminately everything new that is presented to them under the outward guise of science:—and this, while they are disposed rather to scepticism than credulity in matters of ancient belief.

Truth, it has often been said, is stranger than fiction. They that use the proverb have, commonly, in view only the events of history or of social life. But it is equally true, if we compare the established facts of science with the pretended facts of fraud or quackery. If you tell an uninstructed person that you can talk easily and fluently with a friend a thousand miles off, can write to him at that distance in letter or in cypher, whichever he prefers, and that all the help you need is in some pieces of zinc and copper and some acid and a long piece of wire, and a thing somewhat like the face and hands of a clock: and then tell him, that by merely resting your fingers on a table, you can make it turn round and stand on one leg, and then move of itself about the room: both things may seem to him very strange, very wonder-moving; but surely the truth here must seem stranger than the fiction: to an uninstructed person table-turning must seem at least as credible as electric telegraphy. Or, again, if you were to tell him, that there are rays of light which give no light: that, when separated from other rays and admitted into a darkened room, they cannot be seen; they give no light, and the room remains dark as before; and yet, that Professor G. G. Stokes has made them visible, has made these dark rays shine and give light in the room, merely by intercepting them with a solution of a salt of quinine contained in an ordinary glass:—and if, then, an advocate of homœopathy were to expound to the same hearer his views of the action of medicines:—surely the dogmas of Hahnemann (unproved and unsound as we know them to be) may seem to the uninstructed person no more strange or incredible than what you had told him about the rays of light, though the latter be well-assured facts, that can be verified at any moment, and are in harmony with the whole body of optical science.

It is plain that by no instinct, no common sense, no natural power, can any man discern between truth and untruth in these matters: to the uninstructed in sciences of observation the truth must seem stranger, less credible than the fiction. It is to this want of special scientific instruction that we must ascribe the popularity of error. For it must be admitted, that they who believe the fictions are not all, in a general sense, fools: there are among them prudent statesmen, astute lawyers, faithful ministers, discreet housewives, such as in their several callings we might be content to take as our guides. And yet, because of their want of scientific training, their want of that knowledge which would tell them what it takes to establish a real fact in science, they are unable to distinguish truth from its counterfeit, or to gainsay the pretensions of quackery and imposture.

How, then, can people be guided to a better judgment in these things? Chiefly by being themselves in some measure instructed in some of the sciences of observation, and then by being taught that, in such things as I have put in contrast, the one set of statements are, and the other are not, founded on careful, repeated, various inquiries by men of special training; that the one set are, and the other set are not, provable by every test to the satisfaction of all who will look on and who are too acute to be deceived; and, finally, that the truths are, and the fictions are not, parts of a system or whole body of sciences.

It is this—the value and weight of a body of science—that uneducated people cannot understand. They may perhaps form some judgment whether the reasons advanced for any new view be in themselves good or bad, but they cannot estimate the kind or amount of evidence necessary to establish its truth; nor can they appreciate the objections to it. They know not the multitude of well-assured facts which make up the body of true science, and each of which must be a standing argument against the admission of any new view that is at variance with them. To persons versed in science, this objection in its aggregate is well-nigh conclusive. We may, in short, safely assert, that whatever cannot bear the test of other scientific inquiry, whatever cannot be incorporated with other knowledge, is probably not true.

These, unfortunately, are tests which they who are uninstructed in science cannot apply for them-

selves; and, as this class must always remain a large one, we may be sure that quackery and credulity, fraud and folly, will never cease while the world lasts. They are evils that can never be wholly removed, yet, assuredly they may be mitigated.

If some portion of the natural sciences, and in particular those which treat of the laws of life, should become an established part of the higher general education—of the education, not of medical students only, but of every English gentleman, we may expect that society will, in course of time, become more conversant with the kind of knowledge required for distinguishing between true science and its counterfeit. We may reasonably look forward to this improvement, if the universities of Oxford and Cambridge go onwards in the course they have taken of late years, and do not rest until no one shall be called well educated who has not been trained in the knowledge of some natural science. I say, expressly, *some* natural science; for he that has studied even one, and has learned with what temper it must be pursued, with what labour it has been set up, with what evidence every new doctrine in it must be supported, and how that evidence must be able to bear a jealous cross-examination,—he, I say, that has learned this in any one natural science, will not lightly adopt spurious imitations of facts in any other.

And this wider diffusion of a knowledge of natural science—how much it would add to social and national happiness! Very few men pass through life without repeated occasions for the exercise of scientific knowledge in questions of their own or others' health, or property, or social relations; and according as a man guides himself, or submits to guidance, wisely or unwisely, so is the result for his life, his health, or a great portion of his happiness.

But if we would see to what a height of importance the correct appreciation of science may rise, let us look at its bearings on matters of vital interest to the whole nation. We have an instance in what Sidney Herbert accomplished for the health of the British army. Till 1857 the mortality in the infantry serving at home was nearly *double* that of the civil population of the corresponding ages. *Now* it is actually *less* than in civil life. It is *less than half* of what it was. This represents the saving of the lives of British soldiers in time of peace. The contrast is even more striking in war, if we compare the mortality from sickness in the two wars in China—the one before, the other after the introduction of the new regulations;* and yet these were little more than well-known sanitary rules, applied intelligently by an able and earnest minister.

Then, if we turn from what has been done, to what has *not* yet been done—to the report of the sanitary state of our army in India, to the facts which it discloses, and the sad reflections it suggests—we may see, in matters in which the highest political interests of the empire are concerned, how much *might have been* effected by men of station if they had been instructed in sanitary science, or had guided themselves by the advice of others who were.

The recent address of the late President of our Bengal branch proves, if proof be wanted, that a comprehensive knowledge of sanitary science does exist in India, and that those who possess it are not only willing, but earnestly desirous to employ it in the public service.

But it is a *general* diffusion of such knowledge, or at least of respect for such knowledge, which is needed in a country like England; where the government is so much under the immediate influence of popular opinion, that scarcely a step can be taken for which the general public is not prepared. An autocrat, or his minister, if he be alive to the advances of science, may apply them at once to the exigencies of the state. But with us, there can be little progress without a progress of the whole nation.

After all, it is not to be maintained that the study of natural science has the peculiar merit of making men in all respects wiser, than the study of any physical science, or of literature, might make them. I fear it must be admitted that the body medical, instructed though all of us have been in natural science, has furnished its share of victims to the quackeries of religious profession, of politics, and of speculative finance. But this only strengthens the argument for the necessity of general education in natural science. Just as scientific men err, when they engage in matters that they have not studied; so do the unscientific, when they essay to judge in scientific questions, without even knowledge enough to choose their guides.

And if some acquaintance with the natural sciences be so needful for men in general, what should be expected of *us*, the medical profession, who practise daily an art which has its only sound basis in these very sciences?

I am well aware of the difficulty of maintaining a high standard of scientific acquirements for all, without exception, that seek to enter our profession; but surely this is what should be unceasingly aimed at. Without scientific knowledge, the practice of medicine becomes mere empiricism; without scientific and general acquirements, our profession may strive in vain to uphold its social status and its influence.

Every ignorant man admitted into our profession has an injurious influence on the estimation in which the entire body is held. His demerits have a tendency to lower us throughout the circle in which he is known. The want of confidence in him—the want of respect for him—begets distrust and disrespect for the profession in general.

Contrast with this, the influence on our social status of such men as Mead, Freind, and Arbuthnot, Thomas Young, Abercrombie, and Brodie, and of the many others, whose acquirements or achievements in literature or science have raised them to eminence in the eyes of the world. Have they not elevated in some degree the whole body medical; nay, are there not some of our own associates, now living, who have made us all their debtors by the lustre they have thus reflected on our common calling?

And so, likewise, must our scientific character be the measure of our social *influence;* and especially of our power of maintaining truth against error in questions that are daily exciting the attention of society, and of which we ought to be the accepted exponents.

When we consider that the sciences, with which we are, or ought to be, conversant, include subjects of which people in general are so ignorant, and in which nevertheless they take so lively and curious an interest, and which concern their well-being in al-

* See *Army Sanitary Administration and its Reform.* By Florence Nightingale.

most all they do or suffer; surely it is in our power, as it certainly comes within our duty, to exercise a wide influence for good; surely it is our duty, and may be our privilege, to be in these matters the scientific "salt of the earth."

Our profession has never been backward in such work. The learned and ingenious Author of *Inquiries into Vulgar Errors* was a provincial physician. It was a physician also who, in the sixteenth century, strove single-handed with the arms of reason against the barbarous hosts of witch-burners, and bore the glorious reproach of folly and presumption for putting the judgment of an insignificant physician in opposition to the dicta and decrees of emperors and kings, legislators and judges, divines and philosophers of all ages and all countries.* And something has been done in our own time—and well done—for the direct refutation of error. The most fashionable of modern quackeries has been ably and thoroughly exposed by Dr. Simpson.

Few have the ability for works of this kind; but there are many of us, who might do *something* to prevent the spread of mischievous errors. We might do much, if we were to aid in such instruction as would be some *safeguard* against them. We know what was effected by the late Professor Henslow; how in a few years he brought about a complete revolution, intellectual as well as moral, in a grossly ignorant village community; how even such people as those were instructed in some knowledge of science, and filled with a rational and elevating respect for it. And really the means employed were little more than might be in the power of any medical practioner who has his home in the country. It was not the depth of Professor Henslow's knowledge, but the simplicity with which he imparted it, that gave to it so powerful an influence. Our country members are quite capable of giving short, easy lectures, as Professor Henslow did, and many of them are capable of doing it well. I am not unaware of the objections that may be urged against medical men lecturing, and of the fatally easy transition from lectures for the benefit of others to lectures for the benefit of one's self; but I think such objections are not applicable to the case of a man instructing the poor of his own village, where he is officially charged with the care of them in sickness—in fact, though not in name, the true guardian of the poor,—and where some little instruction in such simple matters as the air they breathe and the food they eat may save his poor neighbours from suffering or even death, and himself from some portion of his ill-requited labours.

I am disposed even to think, that our patients of the upper classes would have more confidence in orthodox medicine, if we were to vouchsafe more frequently to gratify their natural curiosity as to the nature of their diseases and the processes of cure. I am well aware of the opinion of shrewd "practical men", that no doctors acquire a reputation for skill, like those that hold their tongues; and, doubtless, silence is the most prudent for those, that aim to be counted wise, though they be not so; but, I think, nevertheless, that an explanation of the case is as much due from the physician to his patient, as it is from the lawyer to his client; and that the confidence of the public in rational medicine would be strengthened by such explanations. I do not mean that the doctor should put on an air of profundity, and look, like Lord Thurlow, more wise than it is possible for any man to be; nor that he should impress on his patient that

> "these are diseases he must know the whole on,
> For he talks of the peritoneum and colon";

but I mean that he should be willing to give a plain explanation in words as free as may be from technicalities.

We do injustice to medicine, if we treat it as a mystery. It is a science, and entitled to rank as such; and we at least should be ready to show that its maxims are founded in truth and reason.

Let us hope that the educational changes now in progress will aid us in maintaining the dignity which is its due;—that, when people are better instructed as to the sciences on which medicine rests, when they themselves have examined into some part of its broad and firm foundations, they will have a juster appreciation of medicine itself. Let us hope, that medicine will then receive the respect that is due to it, as the only one of the learned professions which holds its doctrines open to all inquiries, and never condescends to uphold itself on any dogma either of authority or tradition. Let us hope—as we have a right to hope—that medicine will then be honoured as the profession in which all discoveries and inventions are offered freely for the benefit of mankind, and in which their concealment for selfish purposes, or their appropriation by patent right, is held to be disgraceful.

And till then, if the world deny to our profession the full honour which we feel and know is due to it, we may be well content with the ordinary round of duties, which are at once our lot and our privilege: we may be content with the internal satisfaction that our time is spent to the best of our ability in doing good to our fellow-men; that we do not rest supinely satisfied with what is imperfect in our science, but are ever earnestly and laboriously seeking for fresh light; and, when God vouchsafes it to our inquiries, we use it gladly in such works as he would have us do—in the relief of human sufferings, in healing the sick, in striving to make the lame walk and and the blind see—in earnest endeavours to follow our Divine Exemplar, though it be with the limited powers and faltering steps of human infirmity.

* Bodin, near the conclusion of his *Refutation des Opinions de Jean Wier.*

Quack Doctors and Jews. Will you endeavour to expose one of the very obnoxious forms of quackery adopted by an advertising firm in London, called Messrs. Harvey and Co? A cornet in H.M. Regiment, son of a F.R.C.S.Eng., received by post a smart little book professing to dilate upon the virtues of the only successful remedy for local, general, and nervous debility, etc., also strongly recommending the preparation sold by them under the name of Sir Astley Cooper's Vital Restorative in 11*s.*, 33*s.*, and £5 cases. He received by the same post notices of the very easy terms on which certain members of the Jewish persuasion would be willing to accommodate with ready cash. This Harvey and Co. is no other than a person who has been removed from the *Medical Register*, and from the lists of members of the Royal College of Surgeons in London and the College of Physicians in Edinburgh. Thus, it appears, quack doctors and Jew money-lenders go hand in hand in this metropolis. *(Dublin Medical Press.)*

THE

ADDRESS IN MEDICINE.

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REVIEW OF THE PRESENT STATE OF CARDIAC PATHOLOGY.

I FEEL that there is a certain fitness in taking as the subject of the Medical Address on this occasion, the present State of Cardiac Pathology, however imperfectly I may be able to follow out this idea under the circumstances.

It would be a pleasure to trace, under the full influence of Cambridge associations, the successive steps by which our knowledge of the physiology and pathology of the heart has risen to its present height; to recall the history of the growth of the first germs of truth, through doubt and contradiction, into acknowledged principles. For here was—nay, is—the home of Caius, who, with all his quaintness and garrulity, wise beyond his generation, made provision for the study of pathology on the only sure basis, the study of human anatomy. Here, in Caius' own College, the first fruits, as it might be, of the seed thus sown were reaped; and in the long list of names which can never die while knowledge lasts, we claim Harvey peculiarly as our own.

But I fear that such a narrative would scarcely satisfy the purpose with which we are here gathered together; and to bring the subject within the practical limits of an address, I must abbreviate, as Bacon has it, by cutting off rather than by contracting. For time would fail us to treat the subject thus at all adequately; and, curtailed of its due proportions, the history would lose all its interest in such a sketchy narrative. We shall find more than enough to occupy our time while keeping within the strictest limits of the proposed subject; and even so, it will be necessary to omit altogether the consideration of many points, that we may be more free to concentrate our attention on others which still present open questions, and are still, to many of us, the subjects of clinical investigation.

Diseases of the heart may be arranged, for our present purpose, most conveniently under three heads, according as the investing membrane, or the lining membrane, including the valves, or the muscular substance, be affected. With regard to each of these classes there is something to observe. I cannot expect universal, unqualified assent to all that I shall have occasion to say on this subject; and, indeed, I may seem on many points rather to invite controversy. But cardiac pathologists have much on which they can agree; much, indeed, on which I assume they do agree, and which I shall accordingly pass over without comment. Our common ground is so wide and so certain, that, if we differ with regard to some of the details, some novel propositions, at least here we may disagree very amicably.

I.—Pericardial Affections.

Pericarditis, according to this plan, might at first sight seem to be a part of the subject to be summarily passed over; for there are really few diseases about whose signs and symptoms we are more perfectly agreed, or with whose clinical history we are more familiar. Yet there are questions as to the ultimate consequences of pericarditis still unsolved, and inviting further research; and even in its familiar clinical history there is something more to be made out.

The pericarditis which we see in daily practice, and which is generally referred to by writers on the subject, is almost exclusively the result of rheumatic fever. Our information concerning it is very explicit. We know that it is to be looked for as an early complication in cases of rheumatic fever of intense severity; but that in ordinary cases it occurs later, about the tenth day on an average; and that the frequency of its occurrence bears no close relation to the severity of the rheumatic affection; that, once begun, the pathognomonic to-and-fro sound continues, for the most part, without intermission until the two opposed surfaces are agglutinated together; and that the specific symptoms are generally severe enough to call our attention to the local disease, even though we may not be particularly looking out for its occurrence.

So familiar are all these details, that it is with a feeling of shame we stumble, in dissection, on pericarditis which has been overlooked during life; and we wonder that a disease which usually quite obtrudes itself on our observation, should have so entirely escaped us. But the fact is, that these latent cases of pericarditis constitute a class by themselves. The disease is a secondary complication of Bright's disease of the kidneys, a contingency of dying rather than a cause of death; and, as such, it has no overt symptoms, any more than the other inflammations of serous membranes have which occur under similar circumstances.

The cause, however, of the frequent coincidence of albuminuria and pericarditis is not clear; and we are merely expressing, not explaining, the fact, when we say that certain morbid conditions of the blood are singularly prone to induce inflammation of the pericardium. Such a tendency to involve the investing and also the lining membrane of the heart is found in the exanthemata of childhood, particularly in scarlatina. But here we have to do, not with an indication of coming death, but with a disease which is to produce its fruits in after years.

Tubercular pericarditis belongs to another category. In comparison with the other serous membranes, the pericardium suffers less frequently from tubercle, and the symptoms are less severe; but tubercular pericarditis has characters of its own, which may claim a passing remark while discussing the less usual forms of pericardial inflammation. Slow, for the most part painless, with long persistence of the auscultatory signs, and having always, as far as I have seen, a fatal issue, it stands in the strongest contrast to the rheumatic form of the disease.

When cases of pericarditis die, the fatal issue turns generally less on the condition of the pericardium than on the contingent inflammation of the lungs and pleuræ; but most cases of pericarditis (still

speaking in reference to the rheumatic, the familiar form of the disease) get well; the inflammation subsides, the opposite surfaces are united together into one membrane, and the fibro-cellular tissue outside the pericardium becomes loosened, to allow of the movement which should have taken place on the two free surfaces. We find adhesions of all degrees of firmness, and over whatever extent of surface. There may be a white patch only of thickened membrane, or a flock floating loose at one end, or a band connecting the two opposite surfaces, or anything, indeed, up to universal close adhesion of the pericardium. And the connecting medium may be filmy, or fibrous, or earthy resembling bone; the extent of the adhesions and the density of the connecting medium depending respectively on the extent and duration of the original inflammation: if, at least, the same rule holds good for the pericardium as for the pleura.

These are anatomical changes. What is their pathological value? Do they represent an abiding condition, which has persisted for years, since the subsidence of the inflammation in which they originated? And if so, what is the effect of this obliteration of the pericardium on the action of the heart? Or do pericardial adhesions naturally tend to obsolescence and absorption?

First, with regard to the anatomical changes. My own experience inclines me strongly to believe that adhesion of the pericardium is, in the majority of cases, the natural termination of pericarditis. When general adhesion has once been effected, and the two opposing surfaces are firmly agglutinated, I believe that these are very rarely separated by subsequent inflammatory exudation, or set free by absorption of the connecting fibro-cellular tissue. Cases have, indeed, been recorded in which, after general pericarditis had pursued its usual course, the pericardium has been found free from adhesion or any trace of the previous inflammation. But these seem to be exceptional cases, and they scarcely justify our claiming for the pericardium a power of repair greater than that of the other serous membranes; for I find, on analysis of a large number of cases, that observations of adherent pericardium after death bear the same ratio to observations of pericarditis during life as any other anatomical lesion does to its observed symptoms. As far as I have seen directly, or can infer indirectly, the pericardium becomes adherent after inflammation, and once adherent nearly always remains adherent.

Next, as to the effect of general adhesion of the pericardium on the action of the heart. The mere fact that there are no certain symptoms by which the existence of general adhesion of the pericardium can be ascertained during life, is of itself almost a conclusive argument against attaching any pathological importance to this condition. Where there is no accompanying valvular disease, no thickening of the investments of the heart by earthy or so-called cartilaginous deposit, the heart does not become enlarged in consequence of general adhesion of the pericardium. The requisite freedom of movement is gained by loosening of the fibro-cellular tissue outside the pericardium; and, tested by its effects on the heart itself, the alternative of moving on a polished serous surface, or in a loose bed of cellular tissue, seems indifferent. But where the connecting medium is an unyielding tissue, earthy or fibrous, it constitutes a most serious impediment to the heart's action, and the effect is most disastrous.

Our accurate knowledge of diseases of the heart is of such recent growth that many of us may probably have watched the first gradual development of the truths now universally received and embodied in the systems of cardiac pathology of the present day; and many of the recorded cases of disease of the heart, the cases which have become classical, may have been personally under the observation of some of those whom I am now addressing. None would doubt the correctness of the characters in which, under our own eyes as it were, pericarditis has been drawn; yet I doubt if any one would now describe pericarditis in the same terms as we used to know it. True, there are still cases of pericarditis, happily rare, where human suffering might seem to find its extremest limits compatible with life; and chorea, in connection with cardiac inflammation, is as dreadful as ever. But, whatever the cause may be, pericarditis as we see it now is shorn of more than half its distresses and dangers. It is of less frequent occurrence, and the contingent pulmonary affection is less severe; and I am free to confess my belief that the cause of this difference is to be found in the general substitution of an alkaline for a mercurial and antiphlogistic plan of treatment in cases of acute rheumatism.

II.—Endocardial Affections.

Not many years ago there were few subjects more perplexed than the interpretation of valvular murmurs. While the auscultation of the lungs was, with perhaps the single exception of the meaning of long expiration, as well understood as it is now, the auscultation of the heart seemed a mass of confusion. But now all this is changed. Not that the practice of auscultation of the heart is absolutely perfect, or that pathologists are unanimous in their interpretation of all the physical signs. But at least we are agreed as to the principles. And not only are the points on which we are not all unanimous very few; but these are also, for the most part, unimportant, or in their nature incapable of satisfactory demonstration. And now, instead of regretting our shortcomings in the physical diagnosis of valvular disease, we rather complain that our exceeding accuracy has so little practical application.

The received canons of cardiac auscultation assume that the first sound coincides, in point of time, with the contraction of the ventricles; the second with the closure of the sigmoid valves and the recoil of the blood. There is a very general agreement as to the cause of the second sound; but no theory of the first sound has met with universal acceptance.

I almost fear to venture on a subject round which there still clings a little of the polemic spirit which formerly characterised all discussions relative to the auscultation of the heart; but, without proposing any new theory, I may be allowed to offer some remarks on the general bearings of the question, on the separate elements of this somewhat complex problem. This is a case in which the very simplicity of an explanation is an argument against its soundness; for surely no theory can be correct which refers the first sound of the heart to one agency alone, disregarding the others which, silently or not, concur in

the systole. And the sounds of muscular contraction, of valvular and muscular tension, and of the motion of the blood, must all severally be accounted for before we can accept any theory of the first sound as altogether perfect and satisfactory.

The motion of the blood in the heart probably produces no appreciable sound in the healthy state. In certain cases of anæmia, indeed, we recognise murmurs due to this cause in the heart itself, as well as in the large vessels; but such murmurs are very different from the physiological sound of the systole. In some cases of acute rheumatism, however, and in certain other cases, a murmur of another kind is occasionally audible. It is soft, but not blowing, somewhat resembling the so-called muscular sound. It continues equally through all the period of the first sound, being perceptible all over the cardiac region, but not beyond. It does not follow the rules of any specific valvular murmur, nor does it change into one: indeed, valvular murmurs are less apt to occur in cases where this murmur is found than in others. It does not occur as an early sign in rheumatism, and it passes gradually away. I believe this murmur, on these grounds, to be an exaggeration of the normal blood-element of the first sound; but, even assuming the correctness of this description and interpretation, still the statement remains substantially true, that in a condition of health the sound of the motion of the blood in the heart is inappreciable.

On physiological grounds alone, muscular action would claim consideration in any theory of the first sound; but pathology seems to furnish experimental evidence, which proves beyond a doubt that a certain portion of the first sound of the heart is produced by muscular contraction. Thus, where the hypertrophied ventricles constitute a large mass of muscle, the first sound is altered; conformably to this change in the heart's structure, it becomes dull and heavy. Conversely, where dilatation predominates over hypertrophy, and the muscular element is deficient, the first sound is sharp and ringing. Again, where the muscular force fails, as in some cases of fever or of fatty degeneration of the heart, the first sound is almost inaudible.

The other element of the first sound of the heart is the result of muscular and valvular tension, that is to say, of the recoil on the auriculo-ventricular valves. This is found in the greatest perfection where the contraction is vigorous, but the walls of the ventricles are not so much hypertrophied as to deaden the sound. Where the dilatation is excessive, the first sound is represented almost entirely by this recoil, by the ringing click of the closure of the large auriculo-ventricular valves; but where the muscular force fails, the recoil fails also.

It is difficult, even in theory, to separate these elements thus mutually dependent on each other, and in practice they are inseparable. It is the valvular and the muscular tension, indeed, which mainly give the time and character of the first sound in the physiological state; and it is in them that the effects of any valvular imperfection are most perceptible. But these are only a part of the normal first sound. The practised ear, apart from all theoretical considerations, seems to require that something else should concur with, and bear a certain proportion to, these elements; and the deviations from the normal first sound, which hypertrophy, or softening, or dilatation of the heart involve, are only explicable on the assumption that this something else is the sound of muscular contraction.

A received principle of interpretation of valvular murmurs is, that murmurs referable to certain valves are heard loudest at certain points corresponding respectively to those valves. Murmurs, for instance, heard loudest at or near the apex of the heart, are referable to the auriculo-ventricular valves, and commonly to the mitral; murmurs loudest at the base, to the sigmoid valves, and commonly to the aortic. So far, we are all agreed. But a further analysis raises questions on which there is room for great difference of opinion.

Thus, to take a common instance: a murmur audible at or near the apex only, accompanying the first sound, rising in intensity with the continuance of the first sound, and ending suddenly with a snap at its closure, admits of more than one interpretation. Its seat is unquestioned—the mitral or the tricuspid orifice. But is it due to obstruction to the flow of blood from the auricle to the ventricle during the auricular systole, or to imperfection of the auriculo-ventricular valve, allowing regurgitation during the contraction of the ventricle? To the first explanation we may object that a direct mitral murmur, such as is generally admitted to be of this nature, is quite unlike the murmur under consideration. It is soft, and closely resembles the murmur of sigmoid regurgitation. Such a murmur is very rare, while the murmur under consideration is not at all uncommon. It may be questioned, too, whether the contraction of the auricle, slight and momentary as experimentalists report it to be, is capable of producing so loud a sound. To the second explanation, I do not see that there is any insuperable objection. It assumes that the coaptation of all the portions of the valves is not simultaneous; but that when, at a certain point of contraction, the valve is closed, the regurgitant stream is cut off, and the cessation of the murmur coincides with the sudden jerk of valvular tension. In favour of this view, it may further be urged that this peculiar murmur is not always a sign of organic disease. It is often a murmur of palpitation, where such disturbance of the rhythm of the heart's contraction is singularly liable to occur.

I have selected this as an illustration of the points in the interpretation of valvular murmurs, which still remain open and doubtful questions. They are doubtful, not from any want of agreement as to the principles, but from the practical difficulty of applying them; and though, in this instance, I have adopted the interpretation which seems to be most in accordance with observed facts, I feel that it is scarcely possible to determine absolutely which is the correct one, whether this murmur is direct or regurgitant.

The subject of tricuspid murmurs and tricuspid regurgitation is another disputed point, incapable of solution by direct experiment. Experiments have, indeed, been tried bearing on this point, by distending the ventricles with water; but the play of the valves of a dead heart is so very different from what must take place during the contraction of a living heart, where each columna carnea has its special duty to perform, that the physiological inferences from such experiments are worth very little. After frequently repeating the experiment, however, I must say that I never felt satisfied that the retaining power of the tricuspid valve was really less than that

of the mitral, nor have I seen anything to countenance the theory of its so-called safety-valve function.

On the question of tricuspid regurgitation, indeed, which these experiments are meant to elucidate, observers are probably not so much at variance as they might seem to be. Derangement of the circulation on the left side of the heart is followed in due course by derangement on the right side; and as the right ventricle cannot clear itself fast enough through the obstructed lungs, the effects are further transmitted backwards into the veins of the systemic circulation. But a moment's consideration will shew that the obstruction is not necessarily transmitted specifically by tricuspid regurgitation. The obstruction in the veins is the same, whether the blood is prevented from entering the ventricle, or whether it is regurgitated through the tricuspid valve after it has gained admission into the ventricle. Sometimes we seem to find evidence of tricuspid regurgitation in the condition of the jugular veins during life; but these cases are rare, and it is only on theoretical grounds that the frequency of tricuspid regurgitation can be maintained. Notwithstanding the high authority which is quoted in favour of the safety-valve function of the tricuspid valve, that is to say, the occurrence of tricuspid regurgitation from very slight causes in the healthy state, its advantages appear to be very problematical. It would be only, at best, transferring to the brain and other organs the mechanical pressure which would be sustained equally well by the lungs, and certainly very much better by the mechanical arrangements of the heart itself.

If these views be correct, any long inquiry into the grounds of the commonly received opinion, that tricuspid regurgitation is not usually accompanied by valvular murmur, would be superfluous; and the habitual absence of any murmur in cases of obstruction of the right side of the heart, so far from proving that tricuspid regurgitation is unaccompanied by murmur, must, in such case, be added to the other arguments intended to disprove the opinion of the occurrence of actual tricuspid regurgitation. There do not seem, indeed, to be any sufficient grounds for exempting the tricuspid from the same physical laws as the mitral valve. And certainly tricuspid murmurs are occasionally distinctly to be recognised. Only, they are rarely audible for two reasons: first, because when they do occur they are singularly liable to be drowned in the sounds of pulmonary obstruction with which they habitually coincide; and secondly, because, occurring as transmitted tricuspid obstruction does towards the end of heart-disease, murmurs on this side of the heart would be even more likely than mitral murmurs to become inaudible through feebleness of the current of blood.

One seems to breathe more freely on passing from the doubts and difficulties of affections of the auriculo-ventricular valves to the comparative certainty of the interpretation of sigmoid murmurs. The only point, indeed, which need delay us here, is the differential diagnosis of pulmonary and aortic murmurs. The diagnosis itself is easy enough with a little practice. A murmur loudest over the sigmoid valves, audible in the second left intercostal space for two or three inches, but inaudible along the aorta or in the carotids, has its seat in the pulmonary artery; due care being taken not to be misled by a systolic pericardial friction-sound confined to the base of the heart, or by a murmur in the innominatæ veins. Nor should there be much difficulty about the practical application of this knowledge when the opportunity arises. Thus, while murmurs in the pulmonary artery are common enough, disease of the pulmonary valves is so very rare that few physicians probably have met with more than one or two cases in the course of their experience. A murmur in the pulmonary artery is, therefore, almost certainly functional. If we can do no more, then, in a doubtful case, where our opportunities of observation are limited, than assure ourselves of the presence of a pulmonary murmur, we have grounds for hoping that the coincident aortic murmur may be functional likewise. But this analysis of a murmur at the base of the heart may lead to more positive conclusions under favourable circumstances; for if, by patient observation, a murmur at the base of the heart be found one day in the pulmonary artery only, and another in the aorta only, though the murmur may persist for weeks, still expressed, on less attentive examination, as a murmur at the base, the conclusion that the affection of the sigmoid valves is altogether functional is quite irrefragable. On such analysis may turn the power of distinguishing between a passing ailment and disorganisation of the heart—the alternative of life or death.

I have spoken of received canons of cardiac auscultation, and, passing over many portions of the subject as settled and certain, have dwelt rather, as our time allowed, on those portions which demand further inquiry. But the present condition of our knowledge of cardiac pathology would not be truly represented, unless some practical considerations, which detract very largely from our seeming power of accuracy of diagnosis, were put in the strongest light; for, settled and certain as these canons may be, accurately as they may often apply, yet it is no exaggeration to say that there is not a single murmur, endocardial or pericardial, which may not, under certain conditions, be produced by some other cause than that to which we habitually refer it.

But what does this amount to, admitting it to the fullest extent? That the whole practice of cardiac auscultation is a mass of confusion and error, resting on signs of equivocal interpretation? Nothing of the kind. Only we must not attempt to deduce from these auscultatory signs more or less than they fairly convey. We cannot attach an unequivocal meaning to each sound, regardless of circumstances; but we must examine the auscultatory evidence from other points of view, eliminating, by the aid of these circumstances, the various surd answers till we arrive at the one which alone is compatible with the results obtained in other ways. The precision with which a simple, slight case of heart-disease may be made out, is often quite wonderful; but the slightness and the simplicity are generally necessary to this precision. It is the want of simplicity that baffles us in many cases of aneurism, where, with all our care, we cannot eliminate all the possible erroneous answers. Even in the case of a single well-marked sign there may be a twofold interpretation. Permanent patency of the aortic valves and dilatation of the left auricle, for instance, are not the only solutions of which a diastolic, purring tremor at the base, and a systolic purring tremor at the apex of the heart, are respectively capable. And, not to lengthen this list of doubts and difficulties needlessly, while the most intensely

loud murmurs may be independent of organic disease, the most extreme disorganisation of the valves is frequently declared by no murmur at all at the seat of disease. Yet there is no confusion or perplexity, if only we do not strain the auscultatory evidence beyond its legitimate sphere; if we learn not only what it can, but what it cannot tell us.

We owe our exact understanding of the various signs of valvular disease to the zealous pursuit of morbid anatomy in combination with close clinical observation. Only a small part, however, of the labours of the morbid anatomist are thus directly available for practice. The exact shape of the mass which obstructs the current, or of the fissure which allows the blood to regurgitate, the structure of the growth, or the nature of the walls of the chink, these have little or no bearing on the auscultatory signs, however great their pathological value may be in other ways.

The anatomical changes with which we are most familiar, are simple thickening and fibrinous deposit, both which we have learned to associate with acute rheumatism. The connexion between these two morbid appearances, between the recent formation which we doubt whether it be due to exudation or accretion, and the thickening to which this leads in the course of years, may readily be traced in a series of cases. A careful study of such a series, however, leaves no doubt that the changes induced by rheumatism on the valves of the heart do not always tend to contraction and disorganisation of these valves; but, in what proportion of cases no one can say, are capable of the most perfect repair.

It is in rheumatism, for the most part, that the changes in the valves, which we are now considering, originate; but the specific influence of rheumatism probably does not extend beyond the earliest stages. There is nothing, under ordinary circumstances, in the after progress of the original warty growth, but what we may see in any other part as a result of simple inflammation; and the modifications which do occur are not due so much to general as to local influence, such as accretion from the blood and mutual attrition of the valves. Under ordinary circumstances the products of inflammation undergo the same changes on the valves as elsewhere; the adventitious matter contracts, coalesces with the subjacent membrane, and finally is removed by absorption. I believe this to be the rule, though in a certain number of cases this perfect repair fails, and inflammation results in permanent injury by induration of the valve.

But where the constitution of the blood is so altered as to favour accretion from the passing stream, valvular disease assumes certain specific anatomical characters. The coagulable lymph deposited under these circumstances has a singular want of cohesion, with a tendency to soften and degenerate into earthy or fatty matter; and so the effects of mutual attrition of the thickened valves become very manifest. As the seat of the disease may determine, the long, leathery tails which hang in the stream, or the round, globular vegetations which nestle among the columnæ carneæ, or in the tips of the auricles, put on various shapes, and undergo further changes peculiar to themselves. These have all names of their own, unnecessary perhaps, for they are only severally illustrations of processes which may be observed in other parts of the body; but a form of disease constantly occurring in any organ has a special interest to those who make the diseases of that organ their study, and with this interest a special nomenclature commonly associates itself.

This change of form and disintegration of the growths on the valves of the heart, has a further connexion with disease in other organs, resulting apparently from the impaction in their vessels of fragments separated from the growths. These results divide themselves naturally into two classes, according as they arise from the impaction of smaller or larger fragments. With regard to the effects of the smaller *detritus:* For a long time anatomists have been familiar with large, yellow masses occurring in the kidneys, spleen, liver, and more rarely in the lungs. In the first stage they appear as hard, yellow nodules, taking their form, angular or round, from the structural arrangement of the organ in which they are seated; and circumscribed by a line of deep red injection, contrasting strongly with their own bright yellow colour. As time goes on, this line fades; the mass turns to a pale, dull yellow, and shrinks away from the surrounding healthy tissue; and we cease to recognise its structural identity with the organ in which it is embedded. Finally it is replaced by earthy matter, or suppurates, or is quietly absorbed, leaving a deep scar as an indication of its former existence. These masses are now generally supposed to be due to capillary phlebitis induced by the impaction in the capillaries of fragments detached from the growths on the valves. And in favour of this view I call to mind a case where, in connexion with extreme disease of the pulmonary orifice, they were found scattered through the lungs. However, they occur sometimes independently of valvular disease.

It seems strange that our experience of the effects of the impaction of larger fragments detached from the valves of the heart, should refer almost exclusively to obstruction of the vessels at the base of the brain. This, however, is mainly due to attention having been called to the part by the cerebral symptoms during life, and a change being thus looked for and detected which might otherwise have readily eluded observation. In this recent addition to our knowledge, we seem to have found the explanation of a form of hemiplegia differing from that dependent on cerebral apoplexy, no less in its requirements of treatment than in its pathology.

There remains to be noticed a form of obstruction peculiar to the right side of the heart, or nearly so, which is of even more vital importance than occlusion of the arteries at the base of the brain. The conditions predisposing to such an occurrence, are, inflammation of some portion of the venous system; and, as I think, a fixed position on the back: at least, such are the circumstances under which this obstruction commonly occurs. Cases of sudden death from this cause are frequent enough to make us familiar with the very characteristic symptoms. One sudden, violent attack of dyspnœa, and all is over in a few minutes. Almost before we knew that there was anything to apprehend, a mere choking, as it were, grew into a struggle for life. Not always a hopeless struggle; for by the side of the clot—the embolus, as it is called—which, by shifting its position, has caused sudden death, may sometimes be seen the shrunken remains of another clot which has been launched at an earlier period. Adherent to the walls of the pulmonary artery, or caught in the threads of

the tricuspid valve, we may find the explanation of another similar attack, from which some fortuitous mechanical disposition alone averted a fatal issue. Regarded from this point of view, a sudden attack of dyspnœa is always an alarming occurrence in a bed-ridden patient, even though the present distress and danger may have passed quite away; for dissection, which shews that the danger may be got over, shews at the same time that it is very likely to recur.

III—Affections of the Muscular Substance of the Heart.

Whatever importance we may attach to the exact diagnosis of the lesions of each valve, a little observation shews that no particular series of symptoms are connected severally with each of these. It is not the specific valvular lesion which determines the course of the disease, and gives it its characters, so much as the power of the various organs and of the constitution to counteract the injurious effects of the mechanical imperfection of the valve. Sooner or later, the organs and the constitution give way. The organs cannot act properly under the constant oppression of venous congestion. The blood, which leaves its watery part at the places where the circulation is most impeded, to take it up again where and how it best may, is unfitted for its various offices. And so the system breaks down at all points, the secretions are interrupted, nutrition fails, the dropsical tissues slough under pressure, and life fails at last under the protracted distress. Here are symptoms which a mechanical remedy seems ill adapted to contend with; and, indeed, these symptoms are themselves mainly due to the action of the only remedy which nature can apply to the mechanical disease. Yet, so long as the other organs remain sound, and able to bear the additional load, it is surprising to what an extent nature's simple mechanical expedient of strengthening the heart to meet its difficulties does succeed. Our remedial measures are, for the most part, limited to encouraging this or that secretion, and to tempering the physical condition of the blood, as best we can; but the measure of our success or failure, the index hand which points on the declining scale the progress of the disease, is the condition of the muscular structure of the heart.

Two words familiar by constant use, "hypertrophy" and "dilatation," denote respectively whether the heart is rising to meet its burden by increased growth and strength, or whether it is failing under the pressure. Both of these conditions are, to a certain extent, combined in almost all cases, certainly in all advanced cases, of valvular disease; but the one or the other predominates, according to the mode in which the heart feels the obstruction. So long as the different organs will bear the uneven pressure of an hypertrophied heart throbbing to drive the blood through a strictured orifice, life may continue; or so long as the heart can enlarge to receive the blood which would otherwise oppress the venous system at each moment of the least disturbance of the circulation, the end may be deferred. And it is wonderful to what an extent the organs of a child or of a healthy adult will bear this oppression. It is often the heart which is the first to break down; and, when the limits of nature's remedies have been reached, the first sign that the fatal downward progress has commenced is often found in the irregular rhythm of the oppressed and overburdened heart.

These processes of hypertrophy and dilatation have been correctly designated as reparatory; for though, after a certain period, they become diseases in themselves, still, but for their timely aid, life would have failed long before this period. We may do something to prevent or delay these conditions ensuing; but, once established, we must regard them as necessities, were it even in our power, which it is not, to remove them. But the muscular tissue of the heart has certain diseases of its own, not absolutely peculiar to it, but affecting it with great frequency; and, in connexion with its functions, having a peculiar importance. I allude more particularly to fibrous and fatty degeneration, of which our recent more perfect knowledge is to be counted among the most valuable contributions of the microscrope to pathological science.

Fibrous degeneration occurs chiefly, but not exclusively, in connexion with mixed hypertrophy and dilatation, affecting by preference the thinner portions of the heart's walls. The muscular tissue, under these circumstances, becomes hard and elastic; the cavity retains its shape when cut open; the muscle creaks under the knife; and the cut surface looks paler than natural, but of a white rather than a yellow hue. And under the microscope the explanation of these changes appears in the substitution or the addition of an unusually large amount of fibrous or fibro-cellular tissue.

Now the word "degeneration" does not fairly apply to all the conditions under which this change is found to occur. The youth and strength of the patients in whom it is most commonly found, and its habitual connexion with hypertrophy, would make one rather refer it to active nutrition. In accordance with this view, in such cases the struggle for life, the resistance to death, is generally strong, and the suffering severe and protracted.

Its occasional connexion with the results of previous inflammation, ensuing in obliteration of the pericardial cavity by thick, unyielding adhesions, is an equivocal instance, not to be claimed absolutely as either an active or a passive pathological process. Under all other circumstances it generally contrasts strongly with fatty degeneration, and must be clearly distinguished from the simple atrophy of enfeebled muscle. For the design of this fibrous transformation is palpable: it is the substitution of a mechanical for a vital resistance to dilatation. Such a change I have found in the neck of the uterus ruptured during labour. Here, under the pressure of the uterine muscular tissue, the adventitious fibrous tissue, which could not dilate, was torn across. The pressure of the heart's contraction is probably not so great as, and its function is widely different from, that of the pregnant uterus; so the results are not as terrible. Hearts which have undergone fibrous transformation are not liable to rupture. But, while this change resists dilatation most efficiently, at the same time it limits the contraction of the chamber of the heart thus involved, and reduces it so far to the condition of a mere containing vessel.

Fatty degeneration, I have said, stands in the strongest contrast to the change last described. It is more frequent and more familiarly known. It comes more prominently under notice, not merely as a supplementary observation after death, but as the cause of symptoms which we watch during life; and it is not unfrequently the apparent cause of sudden

death. It has, besides, a more lively present interest, from the fact that its pathology has been—indeed, I may say is still being—worked out in our own days; for its very frequency and familiarity suggest questions as to its pathology and clinical history which have been as yet imperfectly resolved. And if, in this brief summary of heart-disease, so large a space has been allotted to this single subject, I feel that this is in but due proportion to the amount of study still devoted to the elucidation of the pathology of fatty degeneration.

Fatty degeneration of the heart, in the sense in which this term is strictly employed, is essentially atrophy of the muscular structure of this organ, and quite distinct from fatty accumulation in and about the heart; but it differs from ordinary atrophy most characteristically, in the fact that the muscular tissue is not removed, as usually happens under such circumstances, but is replaced by fatty matter, fibre for fibre. It is easy to follow, step by step, this gradual disintegration of the higher tissue, and its replacement by a more degraded animal substance. The little yellow, zigzag specks which just catch the eye; the soft, tawny, muscular walls which a practised hand feels to be diseased, are at once resolved, under the microscope, into infallible signs of one of the most subtile and dangerous diseases of the human frame. We may trace, in different portions of the same heart, all the successive stages, from the first change in the appearance of the muscular fibre to its complete disorganisation. First, the transverse striæ, always less distinct in the heart than in striped voluntary muscle, lose something of their clearness, and the fibres often become short and brittle. Next, the transverse striæ are replaced by longitudinal dotted lines; and lastly, all traces of organic arrangement are lost; nothing remains but the sarcolemma, irregularly filled with an amorphous fatty matter, or with distinct oil-globules, or shrunk after the discharge of the free oil-globules which crowd the field of the microscope.

So far the microscope, and so far with certainty. But, as to the pathology of the affection, as to the intimate nature of the process by which muscular fibre is replaced by oil-globules, and the exact period when this change commences, there is no such certainty.

It has been said that the decomposition of muscular tissue may be so regulated that the ultimate result shall be fatty matter; and it has been suggested that the transformation which takes place in the living body is the same as that which we can induce artificially by these means: in fact, that fatty degeneration is a physical, and not a physiological or pathological process.

The experiments conducted for me by Mr. J. Peel with all conceivable exactness, have not justified this view. I subjoin an account of these experiments in detail; for the present I will merely recapitulate the results at which we have arrived, and which seem incompatible with any purely chemical theory of fatty degeneration.

We found the excess of fatty matter in a fatty heart to consist of oleine, not of margarine, which is the normal fatty constituent of the human heart. Adipocere was proved to be by no means chemically identical with animal substance which had undergone fatty degeneration. It was merely a soap of lime combined with the fatty acids preexisting in the tissue. There was no new fatty acid made—as is the case in fatty degeneration—during the change into adipocere, no substitution of oleates for margarates; and, indeed, it seemed that we could prevent the formation of adipocere altogether by carefully excluding lime during the process. We submitted weighed portions of muscle, in which the quantity of fatty matter had been previously determined, to more than one process for making adipocere, and carefully analysed the results. In no instance was the fatty matter found to have been increased during the operation. On these grounds I cannot doubt that adipocerous transformation is a saponification, not a degeneration; and that fatty degeneration of the heart is a pathological result not attainable by any of these chemical processes.

Commencing decomposition simulates very closely that change in the heart's muscular structure, which is known as the first or granular stage of fatty degeneration. I have been deceived by it myself; and such a mistake is all the more likely to occur, because granular degeneration, like decomposition, may involve the heart uniformly over a very wide extent; much more widely than distinct fatty degeneration ever does, probably because the destruction of the muscular fibres is less complete. This same uniform appearance of granular degeneration is also highly characteristic of the effects of maceration in dilute spirit, on the muscular structure of the heart; but it is not really fatty degeneration. Ether only clears these fibres of some of the granular dottings, it does not entirely remove this appearance, still less does it empty the sarcolemma. Further, chemical analysis of a portion of heart which has undergone this granular degeneration during life, shews but a slight increase in the normal quantity of fatty matter. This change is the first step, both in the chemical transformation into adipocere, and in the pathological replacement of the muscular fibre by oily matter; but it is not itself fatty degeneration. These dots are not oil-globules, but the signs either of an integral change, on which fatty degeneration is subsequently engrafted; or, if so it should be, of commencing decomposition.

The general conditions with which fatty degeneration of the heart is found to coincide, are, for the most part, those with which we connect muscular atrophy and fatty degeneration of other organs. Such are phthisis, hæmorrhage, debility from long mental or bodily suffering, and the effects of indolence or intemperance. The cases, however, with which we are here chiefly concerned are those where the heart does not so much share in the general decay, as the decay begins at the heart, where the wheel is broken at the very cistern, as it were. Sometimes, while all the functions are regularly performed, the heart alone of all the organs is undergoing this fatal change; and the first intimation that anything has been going wrong is the sudden death of a seemingly healthy man. A gradually accumulating experience has, indeed, given us some general grounds for conjecturing the existence of fatty degeneration of the heart during life; and sudden death from this cause rarely comes altogether without warning. Still the fact remains, that in this decay the heart will often outstrip all the other organs, and will fail from a form of disease against which one would have thought that its own functions, its own constant activity, were the best preservatives.

We are not in a position to say precisely what is the cause of this peculiar change originating in the heart's structure. We know, indeed, that the heart is liable to undergo fatty degeneration in consequence of inflammation extending inwards from the pericardium; but such an occurrence is rare. Indeed, the habitual absence of all traces of inflammation of the lining membrane of the heart, in cases of fatty degeneration,—recollecting that this disease, as a rule, extends from within outwards,—negatives the idea of inflammation, in the common acceptation of the word, being its habitual cause.

Yet we cannot entirely dismiss the idea of inflammation as a cause of fatty degeneration of the heart, though the process which leads to this result has little in common with that which we familiarly know as tending to the exudation of coagulable lymph or pus. The aneurismal pouches which we find in the ventricles seem to originate in such a process. We see only the ultimate results over the prominent part of the sac; but at the edges, where it adjoins the healthy muscular tissue, we gain some insight into the nature of the process by which these results are reached. And here the zone of intense congestion points to excessive vascular action, to give it no more exact name, as the cause of this change of structure. One such case occurred in a girl, fifteen years of age, who had been ill only one month, and had suffered from heart-symptoms during only a fortnight. And here the congestion was most intense at the line of union of the diseased and healthy tissues. Whatever share, however, this excessive vascular action may have in the process, the real analogies of acute fatty degeneration of the heart are to be found, not in inflammation of any organ, but in yellow atrophy of the brain and yellow atrophy of the liver; both essentially acute fatty degenerations.

Perhaps few pathological principles have met with more prompt and general acceptance than fatty degeneration of the heart in all its bearings; for, while it offered a sufficient explanation of much that had before seemed perplexing, it contradicted no known and established doctrines. Subsequent clinical experience has confirmed and extended the earlier deductions, and extends them still; and if yet there is a feeling of disappointment because angina pectoris has not received a full explanation from our present knowledge of fatty degeneration of the heart, is not this partly because cases of angina pectoris have seemingly become more rare, from the greater precision which the knowledge of this anatomical change has introduced into the nomenclature of cardiac disease?

Only one word more in conclusion. I have dwelt, in this very brief summary, chiefly on such parts of the subject as seem at present to be engaging attention or demanding inquiry; rather on the outskirts of the growing field of our knowledge, as it were, than on what has been reclaimed as a permanent acquisition to science. When, as years go by, perhaps some one shall return to this subject on such an occasion as the present, though some of the opinions which for the while seem reasonable may have been shewn to be wrong, yet I cannot doubt that much of the labours of the present generation will be permanently embodied in that still larger and better knowledge of cardiac pathology which I venture to anticipate.

APPENDIX.

A CHEMICAL INVESTIGATION OF THE PATHOLOGY OF FATTY DEGENERATION.

In the preceding address, I have expressed my opinion that the process of fatty degeneration, by which the muscular structure of the heart is changed into fat during life, is essentially a pathological, a vital, not merely a chemical process. I propose, in the following remarks, to examine at greater length than the nature of a general address would allow, the evidence on which this opinion has been based. The chemical analyses on which I rely have been performed for me with the greatest care by Mr. James Peel, Dispenser to the Sussex County Hospital; and my best thanks are due to him for the zeal and accuracy with which he has carried out the inquiry, and conducted all the experiments which I had devised, or he had himself suggested.

There are three questions to be solved: I. What are the chemical results of fatty degeneration of the muscular substance of the heart? II. Can these results be obtained by acting chemically on the healthy muscular substance of the heart, by any of the methods employed to form adipocere? III. What is the nature of adipocere, and what relation does this so-called result of chemical fatty degeneration bear to the result of pathological fatty degeneration? If the answers which I have obtained to these three questions are to be trusted, the inference seems certain, that fatty degeneration and adipocerous transformation are two different processes, dissimilar both in their results and in the steps by which these ultimate results are arrived at.

The muscular tissue for experiment was cut into small pieces, picked as free from adipose tissue as possible, and dried by pressure in a clean cloth. Five hundred grains were then taken for immediate analysis; an equal quantity was placed in one of the decomposing solutions; and the rest was placed in a corresponding solution, for the purpose of trial during the progress of the experiment. For analysis, the muscular fibre, whether recent, or after the chemical decomposition, was finely divided by trituration in a mortar with clean sharp sand, and exhausted repeatedly with ether. The ethereal solution was filtered, evaporated to dryness, and the nature and weight of the extract determined.

I. What are the chemical results of fatty degeneration?

The amount of fatty matter present in seemingly healthy hearts varied from 0·22 to 2·14 per cent., the mean of seven observations being 0·916. Excluding two observations which contrasted strongly with the rest, the extremes were, 0·22 and 0·54; the mean of these five observations being 0·455. I must observe that these two hearts were not especially chosen as healthy hearts, but as the first two specimens available for the chemical operations which had been determined on. Probably they were fat hearts.

In two hearts marked as granular, the fatty matter constituted 0·48 and 2·0 per cent. of the mass experimented on, the mean being 1·24 per cent. One marked as distinctly fatty contained 2·74 per cent. I remember that the greatest care was taken in this case to pick out any portions of adipose tissue from the substance to be analysed; so that the amount of fatty matter found on analysis is rather below than above the truth.

Now, though the percentage of fatty matter in a

heart not marked as unhealthy differed very little from that in the fatty heart,—as little, indeed, as 2·14 from 2·74,—yet the nature of the fatty matter was very different in the two cases respectively. In the healthy heart it was hard, dry margarine, while in the fatty heart the crystals of margarine swam in the oily part of the extract. One of the granular hearts displayed in a less degree this same excess of oleine. The fair inference seems to be, that in fatty degeneration of the heart the fatty matter is increased; and that this is mainly due to an increase of the oleine, which enters only to a small amount into the composition of the fat of a healthy human heart.

II. Can these results be obtained by acting chemically on healthy muscular substance of the heart, by any of the methods employed to form adipocere?

Three methods were followed; namely, the long-continued action of slowly running water, soaking in dilute nitric acid, and soaking in dilute alcohol.

1. All our attempts to convert a definite quantity of muscular fibre into adipocere by a slow stream of water failed. When the meshes of the net containing the weighed muscle were fine, they became clogged, and prevented the free access of water, and the muscle putrefied. Coarser meshes allowed fragments of the softened tissue to escape. After varying the form of the apparatus several times to no purpose, we gave up this part of the inquiry. Incidentally a curious result was obtained. Some loose fragments of muscle, laid in a dish with common water from the tap, containing lime in solution, were converted into adipocere. Some other similar fragments, laid in distilled water, underwent no such change until pieces of bone were laid in the distilled water, when the formation of adipocere immediately began. However, notwithstanding all our care, none of the experiments with weighed portions of muscle, of which the fatty constituents had been previously determined by analysis, succeeded.

2. A portion of the muscular substance of a heart which had previously been found to contain 2·14 per cent. of fatty matter, chiefly margarine, was left to soak for twenty months in dilute nitric acid, sp. grav. 1·42 (1 to 16) in a stoppered bottle. At the end of this time the fatty matters were found to amount to no more than 1·1 per cent. of the five hundred grains operated on. The mass had been changed into a substance having the smell and appearance of ointment of nitrate of mercury. The elements of the fat originally existing in the mass had been newly arranged under the influence of the nitric acid, part having assumed the form of an aromatic ether. Much of the fat had been destroyed; but never at any time during the process was there any evidence of the fat having been increased in quantity.

The muscular fibres generally retained their form, clearly recognisable under the microscope. The fibrils were broken off short into minute fragments; but each of these displayed distinctly either the transverse striæ, or that longitudinal dotting which characterises the stage of granular degeneration already spoken of.

Again, two hundred and fifty grains of pure fibrine from bullock's blood, freed from all fatty matter by ether, were treated in the same way and for the same period. Not a trace of fat, of any of the oily acids, or of the results of their decomposition, could be found on analysis.

3. A portion of the muscular substance of a heart, which had been previously determined to contain 2 per cent. of fatty matter, was left to soak for eight months in dilute alcohol (1 to 7) in a stoppered bottle. As with the dilute nitric acid, this bottle was nearly filled with the solution, occasionally shaken, but rarely, if ever, opened; and all observations were made on a similar trial solution. At the end of this time the mass was found to contain 1·92 per cent. of fat and fatty salts of whatever kind. The fat seemed to have been destroyed, to this extent, by the process to which the muscular fibre had been submitted.

To the naked eye, the muscle thus acted on appeared as a reddish, flocculent mass, in which the division of the fibres into bundles was indistinctly perceived. Under the microscope, however, all was obscure. A few granular fibrils could be picked out here and there; but the rest was an indistinct, flocculent mass, with something of a linear arrangement. It contained a few white, opaque grains with a radiating structure, apparently composed of a soap of lime. No loose fat appeared anywhere, and ether had very little effect in clearing the field.

The inference from these observations seems to be, that fatty degeneration cannot be artificially imitated by these methods. One step, indeed, adipocerous transformation and fatty degeneration seem to have in common, that which we recognise as the stage of granular degeneration; but, as chemical analysis shews that this appearance is not necessarily accompanied by any increase of the fatty constituents, we must regard it here as an optical change only.

III. What is the nature of adipocere, and what relation does this so-called result of chemical fatty degeneration bear to the result of pathological fatty degeneration?

To answer this question, adipocere was obtained from the different sources which the macerating jars of the Sussex County Hospital Museum supplied, and from a large specimen in the Museum of the Royal College of Surgeons. For the liberality with which my wishes were met, and a portion of this specimen placed in my hands for analysis, I beg to express my sincere thanks to the Committee of the College Museum, and to their zealous Curator, Mr. Flower, whose kindness on this, as on other occasions, I have much pleasure in acknowledging.

1. Adipocere obtained from the neighbourhood of the bones of the head of a sword-fish, was found to be composed of margaric and oleic acids; the latter in excess, combined with lime. There was a small quantity of unaltered fat and of free fatty acids, also some nitrogenous matter undecomposed.

2. From adipocere which had gathered round human bones, the same general results were obtained; only the margaric acid salts preponderated over the oleic, and the saponification seemed more complete. This last result seemed due to the longer time during which the specimen had been macerating. The adipocere obtained from these sources, and from a mass of human muscle, burned with a clear flame, leaving a white, alkaline ash; but the fat from fatty hearts burned entirely away without any residue.

3. A portion of adipocere from the human thigh (prep. No. 1832*d*, Mus. Coll. Surgeons) was submitted to a most careful analysis, to test in some way the accuracy of the previous observations. It was composed of white, stringy fibres powdered over with a dry substance, which lay partly between the bundles of fibres, and partly in distinct masses. This substance had no definite form, and only obstructed the view of the fibres to which it adhered. When it was removed by ether, or more completely by cold liquor potassæ, regular fibrous tissue, just such as is seen in muscular fasciæ, came into view. A very little heat sufficed to gelatinise this tissue.

The nature of the different constituents having been determined on separate portions, an exact

quantitative analysis was made of ten grains of the specimen, giving:

Free margaric and oleic acids . .	4·1
Margarate and oleate of lime, with traces of magnesia	2·4
A peculiar fibre, containing nitrogen and traces of phosphate of lime . .	3·4
Water	0·1
	10·0

In the fatty matter here present, margaric acid so predominated that it was necessary to add olive oil to allow it to crystallise freely in its characteristic form. In this, as in all other respects, this adipocere agreed perfectly with other specimens of adipocere from the human subject, and contrasted strongly with the results of fatty degeneration.

To recapitulate these conclusions. The muscular tissue of seemingly healthy hearts contains a variable amount of fatty matter. In the condition known as granular degeneration, pathologically induced, the quantity of fat and the proportion of oleine is slightly but not constantly increased. In the same, artificially induced by decomposition, there is no such increase. In advanced fatty degeneration the quantity of the fat and the proportion of the oleine to the margarine is much increased.

The common method of obtaining adipocere from muscular tissue, namely, by the action of running water, gives no results accurate enough for the basis of a quantitative analysis; but two other methods, namely, by the action of dilute nitric acid and of dilute alcohol, are readily available. By these reagents fat is decomposed, and saponified if the bases be present; but there is no evidence that fat can be made by either of these methods, or that one kind of fatty acid can be changed into another.

It would be too much to say, that under no circumstances whatever can fatty matter be formed from muscular fibre by a purely chemical process: at least it was not so formed here in these most carefully conducted experiments. And the analysis of adipocere does not favour the belief that it is a newly formed substance, but rather that it is a new arrangement of the old materials, a saponification of the fat already existing.

Adipocerous transformation, then, if I am right in these conclusions, is altogether different from fatty degeneration. The one is a chemical change of dead, decomposing matter; the other is a pathological process, and the part which chemistry plays is, as in inflammation and secretion, subordinate to the influences which are at work, however feebly, in a living body.

Dangers of Giving Medical Certificates. James Day was lately charged with violently assaulting and threatening the life of Mr. John Hackney, surgeon, of Myddelton Square. The prisoner assaulted the complainant because he had signed a certificate in which he stated that the prisoner was of unsound mind. The prisoner said that all the surgeons had entered into a compact to annoy him. The surgeon at the House of Detention reported that during the time the prisoner had been confined there, he had been remarkably quiet, but he seemed to have a delusion that every one was following him and annoying him in consequence of the certificates that had been signed by the complainant and the other surgeons. The prisoner said that he did not want to murder the complainant. Mr. D'Eyncourt committed the prisoner for trial.

Abstract of Lectures

ON THE

PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

LECTURES V and VI.

Mr. Fergusson's concluding two lectures were occupied with the subject of Excision of the Knee; and as these two formed really only a single lecture, we shall treat them together. The subject is one which belongs in so peculiar a manner to Mr. Fergusson, that he could hardly be expected to speak with perfect impartiality about it. Indeed, he candidly confessed as much in a passage with which we cannot but entirely sympathise.

"The subject has still to be dealt with fairly and dispassionately. I doubt if I can do either, although, possibly, having the largest personal practical experience on it of any man living. I fear that I am prejudiced; albeit my efforts in public practice have been made with the hope that, by encouraging others to undertake the operation, I might one day be able to say with more forcible authority that the proceeding is one which should be either abandoned or adopted in the practice of surgery."

This passage touches, indeed, upon the chief cause of the differences of opinion which still exist upon this subject; viz., that it has not usually been dealt with fairly and dispassionately. Some, indeed, of the surgeons who have written in favour of excision of the knee-joint, have done so in much the same tone and spirit which political partisans assume in defence of their party and in vilification of all those who oppose it; and they have supported their advocacy by arguments which have turned out so fallacious that persons whose feelings were less warmly concerned in the matter have been repelled. Mr. Fergusson, however, we are bound to say, was both more moderate and more reasonable in his advocacy; although, even in his lectures, the unfounded assumption so common in the arguments on this subject was constantly peeping out; viz., that there exist some surgeons who have a sort of constitutional predilection for amputation. Now this, we take leave to say, is not so. No one would amputate a limb for the love of the operation; it is only done because, in the judgment of the surgeon, the attempt to preserve the leg and foot by means of excision is not likely to succeed.

Mr. Fergusson's efforts have most satisfactorily established the feasibility of excision in certain cases; and there is no general hospital in London where the operation has not been performed. But the result of the experience of London hospitals, as far as it has gone, and the result of Mr. Fergusson's hospital practice in particular, has been to show, as conclusively as the extent of that experience allows, that the operation is a more dangerous one than amputation. Therefore, starting with that idea, hospital surgeons ask themselves, in each case of knee-joint condemned to operation, whether the probable

advantage to the patient of the preservation of the foot is equal to the increased risk of the operation; and when they answer the question in the negative, it is from no perverse delight in mutilating their patient, but from the conviction forced upon them by recorded experience of the greater risks and uncertainties of excision.

We must endeavour, then, so to analyse Mr. Fergusson's remarks as to see what his ample experience has enabled him to tell us upon each of these points: 1, the risks of the operation; 2, its uncertainties; 3, its advantage; compared in each case with amputation. We say, compared with amputation; because in every case of diseased knee-joint, the first question which occurs is whether any operation is required. This part of the question was very lightly passed over by Mr. Fergusson in the following words.

"What, I ask, is the alternative for excision of the knee proposed by those who object to this operation? It is amputation in the thigh! I cannot allow that which might be an easy answer to the question—Why perform an operation at all? Why not cure the disease, and thereby avoid amputation? That is a question of a totally different kind. I am not now discussing the question of amputation, or continued, and possibly other treatment, to save the limb. It is the question between excision and amputation."

We do not complain of this summary dismissal of the most important part of the question, since that view of the case did not come within Mr. Fergusson's programme; and the two lectures before us are, therefore, to be taken merely as a discussion of the respective merits of amputation and excision for such disease of the knee as absolutely demands operation. Yet it is quite clear that it is very important, even in estimating the mortality after the two operations, to know what were in each case the indications for operating. When we are told that a country surgeon, with a small hospital, and a small population to draw from, excises the knee for chronic disease more frequently than most surgeons of large hospitals, and with a large population to draw from, perform amputation for all causes, we cannot resist the suspicion that the former surgeon has recourse to operation at an earlier stage of disease than the latter; and that, besides other causes of difference, his operations may have been performed on patients more likely to recover from operation, because really in less need of it. Our readers will find in *L'Union Médicale*, May 24, 1864, an article by M. Forget, on Excision of the Knee, in which he has become so interested in the question of avoidance of operation, that he forgets the other question altogether, until at length the reader might be tempted to believe that in France limbs are never sacrificed on account of disease of the knee. This, however, is not the subject which Mr. Fergusson here deals with. He assumes that, in every case, whether of amputation or excision, the indications for removing the diseased joint have been absolutely decisive; and he assumes, also (at least, he says nothing on the question), that the surgeons who have chiefly practised excision, have not been more hasty in applying that operation than those who have practised amputation. Let us see, then, what Mr. Fergusson has to teach us, as to the dangers and advantages of the two operations.

1. With respect to the comparative danger to life; in Mr. Fergusson's lectures, the reader will notice a great alteration from the boastful tone which was at first adopted by the indiscriminate advocates of excision. On the subject of the relative mortality, Mr. Fergusson made the following cautious remarks.

"The largest number of collected and original cases with which I am acquainted, was made some years ago by my friend and former assistant, Mr. Price. The list amounted to nearly 250; and went to show that the fatality was pretty much the same in excision of the knee and amputation in the thigh. I do not think that, as yet, we have data of greater importance on this point. The success, or want of success, of amputation in the thigh, as detailed by Mr. James of Exeter, Mr. Bryant of Guy's, or Mr. Callender of St. Bartholomew's, can have no direct bearing on this question, until a like number of cases of excision of the knee in the same or similar institutions can be brought to bear on the point. There is nothing in physiology, anatomy, pathology, or practical manipulation, which should make this operation more hazardous to life in proportion to amputation in the thigh, than excision of the elbow is in proportion to amputation in the arm.

"My impression is, that excision of the knee is, or should be, by proper treatment, as little destructive to life as amputation in the thigh; and if this be proved and granted, as possibly it may be in time, then I firmly believe that all other objections to this operation must pass away like those which so long retarded the application of excision to the elbow."

With respect to his own experience, he stated that he had himself operated on forty cases, and that fifteen of these had died. To balance this great mortality, he referred to the practice of other surgeons, as Mr. Jones of Jersey, Dr. Humphry, the surgeons of the Exeter Hospital, etc., who had treated a smaller number of cases with a less percentage of deaths; and he very candidly confessed that the great mortality in his own practice might possibly have occurred because he had been "too zealous, and resorted to the operation when he should have selected amputation." But, though Mr. Fergusson's advocacy of his favourite operation was skilful and obviously sincere, an auditor accustomed to the subject might notice the omission of some topics most essential to a proper understanding of the matter in argument. In the first place, has the comparison of death-rates after excision and amputation been made between similar cases of each operation? That is to say, if the mortality after excision of the knee at Cambridge or at Exeter is fairly represented by the death-rate hitherto obtained there, is that death-rate higher or lower than that of amputation of the thigh performed, for similar causes (viz., for chronic affections limited to the knee-joint), by the same surgeons (therefore, with equal skill, and presumably equally strong or weak indications), and on patients in similar circumstances of constitution, hospital atmosphere, etc. We know perfectly well that, both in London and in country hospitals, the mortality after amputation for chronic disease of the knee is trifling, especially if the patients be of sound constitution. Mr. Bryant showed that, for a series of years at Guy's Hospital, such amputations had been fatal only in one case out of seven. The present writer showed that the very same proportion had prevailed for a series of years at St. George's Hospital. At the smaller rural hospitals, if short series of cases of excision of the knee sometimes occur without any or with very few deaths, the same may, also, be said of amputation. Thus, in Addenbrooke's Hospital, Cambridge, for the years 1860-61 inclusive, while, out of eight cases of excision of the knee, three died after amputation,* eleven other cases of amputation of the thigh for disease did not furnish a single death. So, at Exeter, there appears to have been not a single death after excision

* This was an exceptional piece of bad fortune; but such bad fortune will occur in almost all operations, if only the experience is sufficiently protracted. The period was subsequent to the publication of Dr. Humphry's paper on the subject.

of the knee, and only one consecutive amputation; although a record of nine cases has been preserved, and probably others occurred: but, then, neither is there any record of a death after amputation of the thigh for disease, in the same period. At Plymouth, again, no deaths took place after amputation of the thigh, in the years 1860-61, during which twelve cases are on record; and here the operation of excision has not been found very successful. In fact, reasoning from facts so imperfect and so inconclusive as these, can never lead to a sound conclusion. The present writer endeavoured, some time ago, to collect the experience of the London hospitals on the subject; but was baffled by the want of any information at many of them; amongst which King's College Hospital was conspicuous by its utter want of authoritative information, although I had to thank Mr. Fergusson for most kindly assisting me to procure such private information as was available. The attempt resulted in my procuring an account of ninety-five miscellaneous cases, out of which nearly one-third died; and the operation in this, or some other, way was known to have proved a failure in about one-half. (*British and Foreign Med.-Chir. Review*, July 1862.)

Now, these statistics, as far as they go, do not appear open to the above objections. The numbers are sufficiently large to show an average. The operations were performed, as Mr. Fergusson says, "in the same or similar institutions" to those which furnish our data for mortality after amputation. The collection, although it is not complete (that is to say, does not include every operation that was performed), is miscellaneous and free from all selection; and, therefore, probably represents what was the real ratio of success. And that this success is far below that of amputation, for similar causes and under similar circumstances, needs no argument. I think, then, that it may be accepted as proved that, up to the present time, the gross mortality and the gross total of failure, from all causes, after excision of the knee, has been far greater than after amputation of the thigh. Mr. Fergusson took little notice of this point beyond saying:

"Even with the fatality following my own personal experience, I am not disposed to take an unfavourable view of the operation; for, looking to all that I have seen and done as regards amputation, I hesitate to say if I should have been successful in saving life to a larger extent, in the same individuals, had amputation been resorted to."

Surely, here Mr. Fergusson's argument ran away with him. He can never mean seriously to tell the profession, that fifteen out of forty is an average loss after amputation for chronic disease of the knee at King's College Hospital.

Another point in estimating the mortality after excision which Mr. Fergusson omitted, was the relative ages of the patients. M. Forget, in the paper above referred to, shows that, in a table by Heyfelder of excisions of the knee, out of 154 patients whose ages are noted, 102 were below the age of 25, and that in these the proportion of deaths was about one in four;* while, out of fifty-two persons operated on beyond that age (two only of whom had reached the age of 50), twenty-one died to thirty-one who recovered. Now, if statistical tables of amputation of the thigh in London hospitals were formed out of the same elements—that is to say, only of young persons whose limbs were removed for chronic disease—the mortality would certainly be far lower than even the lowest average given by Mr. Bryant's or the St. George's Hospital tables; very much below one in four, therefore.

The reader may, however, consider that this matter has been already sufficiently argued, and that the conclusion is obvious to every impartial person; viz., that, as it has hitherto been practised, excision of the knee has been far more fatal than amputation of the thigh would have been in the same cases.

For myself, who, in my humble way, am a partisan and a supporter of all the operations of "conservative surgery" (but who wish to support them by fair arguments, and not by such as are groundless), let me be permitted just to hint, that this fact, which I believe to be established as a matter of history, by no means proves that it need be the same in future. This great and excessive mortality proceeds, as there is every reason to believe, from the fact, that the operation has been too indiscriminately performed; a consequence, very probably, of the delusive representations of its harmlessness which have been put before the profession; otherwise, though no one has yet shown any reason why excision should be less fatal than amputation, yet no one, on the other hand, has shown any distinct reason, except the greater length of suppuration, why it should be more so.

2. With regard to the second point—viz., the uncertainties of the operation as a curative measure—Mr. Fergusson's lectures were extremely suggestive and interesting. There is a very prevalent idea that the limbs preserved by excision are, in a great many cases, useless, and that amputation is often necessary. Mr. Fergusson attempts, here again, to reduce the uncertainties of the operation to the same level as those of amputation. Allowing, what is indeed unquestionable, that the period of cure is far longer after excision than amputation, and that during almost the whole period the patient is confined to bed, Mr. Fergusson, nevertheless, did not appear willing to concede the inevitable inference that, during this lengthened period of suppuration and confinement, the health of a patient, already weakened by long disease, is very liable to break down, and so the process of union is very liable to fail. That this is so, however, is proved, as far as anything can be said to be proved, by the past records of the operation, in which the list of consecutive amputations is a very formidable one, though, doubtless, far from complete. Another uncertainty connected with the operation, is the possibility of suspension of growth in young subjects.

"This matter was first hinted at in Dr. Humphry's paper, read before the Medical and Chirurgical Society in March 1858, and was more elaborately worked out in subsequent papers laid before that Society in 1861 and 1862. The same author has alluded to the subject in his valuable *Treatise on the Human Skeleton*, published in 1858; and he there comes to the conclusion that, in such instances, when the tibia and femur might unite by ossification, 'the objection urged against the operation might prove valid.'

"The union of physiology, science, and practice here has given great force to the observations of Dr. Humphry; but attention was still more prominently brought upon the subject by a remarkable paper published by Mr. Oliver Pemberton of Birmingham, in 1859. The main object of this paper was to show that, in a youth operated on for excision of the knee in 1854, the limb in 1859 was nine inches shorter than its fellow. Another analogous case is cited from the practice of Dr. Keith of Aberdeen, where, in the course of 'nearly six years, the deficiency of growth is measured by five inches'. To add to this objectionable feature in Mr. Pemberton's case, there was no bony union; and in Dr. Keith's case, at the

* A misprint in M. Forget's paper prevents our quoting the exact numbers. Forty-two were below fifteen years of age, and of these only six died.

end of the time referred to, 'the union was not strong, and there was a bending outwards.'"

And other causes of uncertainty, to which the lecturer hardly alluded, are, that the limb may afterwards bend in consequence of the union becoming soft, or that the disease may be again lighted up in the parts concerned in the operation. Now, against all this formidable array of drawbacks, Mr. Fergusson is disposed to set the occasional drawbacks to the perfection of the stump after amputation.

"The occasional evils of secondary hæmorrhage, of unusual retraction, of scanty covering, of chronic sore therefrom, of caries or necrosis, of tender cicatrix, of neuroma on the great nerves, and of secondary operative interference, have all been in a manner ignored in this comparison. And yet how often have all men of experience seen cases of the kind."

These evils Mr. Fergusson believes to equal the uncertainties of the operation of excision. How far his surgical audience were inclined to follow him in that conclusion, we know not. Anything like a statistical record of cases of imperfect stump has never yet been attempted; but our impression was, that such cases were not numerous in any kind of amputation, and less common in amputation of the thigh for chronic disease of the knee-joint than in almost any other sort of amputation, seeing that in this amputation both the soft parts and the bone are usually quite healthy, and the latter covered by a plentiful cushion of flesh. It is surely rather in amputations in the leg, and especially in those performed on account of injury or its secondary results (where either the flaps or the bone have probably suffered more or less), or for diseases affecting either the skin or the bones to a considerable extent, that the evils enumerated by Mr. Fergusson are wont to show themselves. The attempt to balance against each other things which to ordinary apprehension have so little proportion, seemed to show that Mr. Fergusson felt himself hard pressed in his endeavour to show that excision of the knee was neither more dangerous, nor more likely to prove only an imperfect cure, than amputation.

3. But, allowing this, let us next see whether the lecturer could adduce any such advantages for the ultimate result of excision as should justify its increased dangers and risks. Here we must say that Mr. Fergusson appeared to us to stand upon much firmer ground, and not only spoke with a power which hardly admitted of doubt, but, what was much more to the point, showed the models, the drawings, and the living subjects of his operations, as well as those of other surgeons, to prove what is the difference between the result of a successful excision and an amputation. The lecturer was, we think, in error in saying that, though a comparison had often been drawn between the excised limb and its healthy fellow, no one thought of drawing a comparison between the sxcised limb and a wooden leg. At any rate, we may refer to the above named paper of M. Forget to show that they have mooted the question in France. He quotes the following opinion of M. Velpeau.

"It is not on account of its difficulties that excision of the knee ought to be proscribed, but rather because it is more painful, more tedious, more dangerous, whether immediately or secondarily, than amputation; and, above all, because, in the most successful cases, the limb which is preserved is really less useful to the patient than an artificial limb. The joint cannot be reestablished; and the leg, if it preserves the faculty of motion, moves only very irregularly, and remains bent strongly outwards." (*L'Union Med.*, May 24th, p. 355.)

The expression of such an opinion by one of the most eminent surgeons in France, and still more its quotation as decisive and authoritative by so respectable an authority as M. Forget, show conclusively how little is known about the operation in Paris. Compare the poor mutilated wretch, who cannot get out of bed and stand for three minutes without support, or move across the room unless he hops or uses a crutch, or go about his ordinary business without screwing on a cumbrous apparatus whose mere weight prevents any agility or long continuance of exertion, with one whose operated leg is as sound and nearly as long as the natural one; who can walk twenty or thirty miles a day; can go chamois-hunting, like Heusser's patient; and, above all, is as good a man as ever he was in this particular, that he is always ready for whatever he allows himself to undertake; can spring out of bed and go into action at any call; needs no help from any one, and has not to expend a penny on any machinery. Really, to hear some surgeons talk, one would think that they imagine that their wooden legs, when once put on, grow to the patient's body and become a part of it, requiring no adaptation and no renewal, and occasioning no inconvenience and no expense. But the very idea of a comparison, to any one who has seen a really successful case of excision, is utterly absurd. The question becomes a serious one only in those cases where excision is but partially successful in saving life, but not in giving a perfect limb; where the leg is either so short or so flexible that the patient cannot put it to the ground. Even here, again, Mr. Fergusson expressed his decided conviction that the limb so preserved, though imperfect, was much better than any artificial substitute which could be manufactured; and he laboured to show that in Mr. Pemberton's well known case, where the limb was nine inches shorter than its fellow, and the union flail-like, the patient was in a better condition than with a wooden one. But, at the end of the argument, Mr. Fergusson was fain to confess that it was a matter of opinion, and he candidly recorded Mr. Pemberton's strong opinion the other way. Whatever may be thought as to the comparison when both defects are joined together, there can be little doubt that Mr. Fergusson proved his point so far as mere shortening is concerned. The drawing and history of the celebrated Harvey Leach, or Hervio Nano, a dwarf circus-rider, showed how great agility and power are compatible with shortened and greatly unequal limbs, since, in this man, one of the malformed limbs was sixteen inches long, the other only nine. Whether, however, the patient is better off than after amputation, when the limb is too flexible to allow him to stand on it, seems very doubtful.

Mr. Fergusson dwelt much on the analogy of the elbow, arguing that, as surgeons think a hand worth preserving, however ill the union may progress in the elbow, so a foot is worth preserving, however ill the union may go on in the knee. The obvious reply is, that the use of the hand is independent (at least, to a great extent) of the elbow; that of the foot is entirely dependent on a firm support above. If there is no solid union at the seat of excision (whether with or without motion is another question, but at least solid enough to bear the weight), surely the foot is more an encumbrance than a gain. However, Mr. Fergusson used a much stronger argument by stating it as the result of his experience, that many of these apparently unsuccessful cases can be cured by repetition of the resection. Amongst other cases, the following was adduced.

"Here is a fair example of the kind. A lad carried a limb bent at right angles, and walked laboriously on a crutch. Excision was performed. Things did not go on so well as I expected. Twice alterwards I had to renew the incision, and saw fresh surfaces on the bones. About twelve months afterwards, he left

the hospital with a loose dangling leg. But by-and-by anchylosis set in. It certainly cannot stand comparison with the other limb; but it contrasts favourably with such distortions as these (referring to some models of distorted limbs); and, as a proof of its vigour, the youth recently walked twelve miles to see the Derby run."

Such cases as these do indeed carry further the domain of excision; and others equally striking were brought forward, by which Mr. Fergusson showed with convincing force that many of the objections to excision, drawn from the defective condition of the limb sometimes left, might be obviated, if only the patient has the patience to submit to, and the constitutional strength to survive, the great length of confinement and repeated calls on his powers that a second or third repetition of the operation involves.

Having pointed out so much that was interesting, original, and valuable, in what Mr. Fergusson said on this subject, it may be allowed to us to regret that he omitted one very important part of the subject; viz., the indications for the operation. He himself allowed, in a passage above quoted, that the great mortality of his own operations may perhaps have been caused by a too indiscriminate selection of cases; and there can be little question that, if the mortality is to be brought down to or below the level of amputation, it must be by a more just idea of the powers of the operation; yet Mr. Fergusson spoke of it throughout as if its domain were coextensive with that of the more radical operation. Thus he spoke of Dr. Williamson's case of excision of the ulna with the elbow-joint, and of cases in which he had himself removed sequestra from the femur and excised the knee, in terms which would lead an uninitiated hearer to think that a large quantity of the shaft of the bone might be removed with good prospect of success. Is this so? If so, it is contrary to general opinion, and should be proved by cases. The instances of extraction of sequestra are not to the point, since the very formation of a sequestrum implies the cessation of active disease in the part, and the symptoms may be expected to subside after its removal. Dr. Williamson's case was, I find, not the removal of a sequestrum, as I previously imagined, but the *bonâ fide* excision of the shaft of the ulna, including new bone and sequestrum. But for what purpose this was done remains doubtful to those who read Dr. Williamson's account of it; while there is no doubt that the arm remained useless. Therefore, this case also is not to the point, as illustrating what amount of bone can be successfully removed in an excision. It has usually been held that, in caries, the disease must be limited to the epiphyses in children, and to the articular surfaces and their immediate neighbourhood in the adult, if the operation is to succeed; that, in necrosis, the operation of excision is not usually necessary, but that, if it be so, the existence of sequestra presents no objection to it, provided those sequestra be removeable; that much disease of the soft parts forms an objection, though not a fatal one; that cases of acute disease and patients in weak health are unfitted for the operation; that, in cases of injury, it is seldom advisable; and, finally, that it is peculiarly, if not exclusively, fitted for late childhood and youth, since in early childhood most of the limited affections of the joint are curable without operation, and in later life the patient has not usually the power to bear the confinement and protracted suppuration, and the possibly greater shock. If these notions are correct, they would much limit the application of excision; and, although a tolerably wide field would still be left for it, yet the operation would be far from the universal substitute for amputation that a hearer of Mr. Fergusson might think it. If, however, such notions are inaccurate, we regret much that Mr. Fergusson's ample experience was not used in correcting them.

On the whole, no one could doubt that these two lectures form a most valuable contribution to the literature of excision of the knee, and chiefly as showing how much may be done by patience and repeated operations in curing limbs which would otherwise be condemned to amputation. Whether the prospects of success in such treatment balance the risk and long period of confinement which it involves, is a point which must be left to be decided by more extended experience.

Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

Lecture III. (*Concluded.*)

The Treatment of Fibrous Tumours.

What is then the conclusion to which the present analysis brings us? Gastrotomy for fibroid tumours should not be performed, except—1, in cases of extrauterine tumours; 2, in those cases where the tumour is high up in the false pelvis; and 3, not only must *the whole diseased uterine mass be removed, but also the ovaries.*

A last question remains for inquiry. What circumstances should lead us to interfere in cases of fibroid tumours at all? These conditions, I believe, may be included under four heads—

1. Where, by their rapid growth, they are threatening to interfere with vital functions.

2. Where, by their size, they are threatening to arrest micturition and defæcation especially.

3. Where, by their size and pressure upwards, they are interfering greatly with respiration and the cardiac circulation.

4. Where hæmorrhage is excessive, and threatening to exhaust the patient by its quantity and frequent recurrence.

1. Some tumours will remain dormant for years. I have known of one which made no progress for nineteen years; but this was in an old woman. In advanced age, these tumours are not likely to make great progress. The period of uterine activity is always, as we have before seen, more or less concerned in their development. If all sense of comfort is lost, if this annoyance be on the increase, and if it appear probable that the devolopment will go on, then there may be a reason for interference. The patient is then in better health than she will be; and, surgically speaking, is in a better condition to be operated upon than she can be at a future time.

2. If the functions of defæcation and micturition are interfered with, the suspension of both these functions, especially micturition, must ere long lead to fatal disease. We may, by injections regularly continued, assist defæcation. We cannot, if the

pressure be exerted on the ureters, enable the patient to make water. The ureters will dilate, and the kidneys ere long will be irremediably injured. The tape-like condition of the motions will indicate that the rectum is pressed upon. The constant desire to micturate, great backache high up, the alkaline and thickened condition of the urine, and generally its albuminous character and high specific gravity, will indicate that the bladder or ureters are pressed upon; add to which, the patient herself has a very urinous odour about her. There may be, in addition, some symptoms of poisoning by urea, a tendency to narcotism, and slight convulsive affections. The constant desire to micturate, and the small quantity of urine which can be drawn off by the catheter, give a greater colouring to such a suspicion; and this is certainly a case which warrants interference. It is also more likely to succeed, as in these cases the tumour is low down, and more get-at-able *per vaginam*.

In these two varieties, it is clear the operation should be by that passage.

In lieu of an operation, it has been suggested that it is advisable to push up the tumour by main force into the false pelvis, and so relieve the pressure on the vital organs; and Dr. Oldham has stated to me that he has effected this on several occasions with the best result. This is high and unexceptional authority. I wait, however, to see these cases published; as, in the absence of this information, we must all necessarily be incompetent to state to which *modus operandi* the preference has been given. In several cases where I have attempted to do so, I have failed, and could not have succeeded, except by the use of force which I should have feared to employ. In other cases, I have heard that peritonitis and death have resulted. Where there are adhesions, I should suppose the measure hazardous. If these do not exist, and there be impaction only, then the measure certainly ought to be tried first. If, however, the tumour be a cause of menorrhagia, this symptom is not likely to supersede other local measures to arrest those losses; and we have put our patient in that position, when to operate on the tumour becomes less easy. These, I think, are considerations to be borne in mind before we push up a tumour. On the other hand, there is this advantage from this course, if we succeed in pushing the tumour high up above the pelvis; if it then continues to enlarge, and if it thereby interferes with respiration and circulation, it is high up, and in the condition most favourable for extirpation. It is only where the compression on the bladder and rectum calls for immediate action, that we should act thus; and then, I fear, adhesions would already have been extensively formed.

3. Where the tumour, by pressure upwards, interferes with the free action of respiration and the heart, in these instances—at least, in all those I have seen—the tumour is situated above the true pelvis. In most cases, it is fibrocystic; and in several cannot be felt even through the vagina. Here we have the same indications which call for operation in ovarian dropsy, and they must be fulfilled in the same manner. Interference with these tumours *per vaginam* is more doubtful, because it is so difficult to reach them from below. Except with the double sound pelvimeter, diagnosis as to position in the wall is impossible. These are cases, therefore, in which it may be allowable to think of gastrotomy. Here also we may expect to find the uterus and ovaries pulled up from the lower pelvis into the upper, and therefore more easily got away, because there would be less risk of wounding large vessels.

4. Lastly, where hæmorrhage is excessive, and threatening to exhaust the patient by its quantity and frequent recurrence, it may be justifiable to interfere. But even here the mode of interference must be different, according to the nature of the patient's case.

If the exhaustion be very great, if the anæmia present be very marked, then the use of the knife is contraindicated. We must recollect an exsanguine state is precisely that which renders a patient not only more liable to absorption of putrid matters, if once formed, but to their ready formation. In a patient of weak vitality, a growth of intrinsic deficient vitality will be more likely to slough. The power of a patient, under such circumstances, to resist or recover from an attack of pyæmia, is almost *nil*. Astringent remedies and tonics must first be given to prepare the patient, before more active interference is carried out; and it is precisely in these cases that Dr. Savage's method of previous dilatation by a sponge-tent, and subsequent injection of the uterus, is called for. This, as in a case I previously recorded, will allow the patient to rally for the time; and it is especially at the recurring menstrual periods that she must be watched and cared for. If, however, the patient be in a comparatively healthy condition, once the bowels having been regulated, incision of the os, or of the tumour, may be practised. This preliminary preparation by a course of depurative remedies is particularly useful in all operations upon fibrous tumours. Peritonitis and cellular abscess often follow upon interfering with them. I do not know that the former, if within certain limits, is not of ultimate advantage. I think I have seen it beneficial in promoting disintegration of the tumour. When it occurs, it is best treated by opium and calomel in small doses, injections of laudanum *per anum*, and turpentine stupes. At least, such has been my experience.

It is needless, in addressing a society of medical men, to insist upon these minor points; still less to dwell upon the necessity of operating only upon those patients who have no other advanced organic diseases which are likely to hasten a fatal termination. Upon one point only I wish to make a reflection; and it is, that I hold it to be morally wrong to operate upon cases of fibrous tumours against our better judgment, merely because a patient or her friends are clamorous for the operation. I make this remark, because I have heard it brought forward as an excuse for reckless surgery. We must know better the position of our patient than she does or can know.

In conclusion, I cannot but again here insist upon Dr. Greenhalgh's rule, already several times alluded to—never to operate, in a case of suspected uterine fibroid, until you are certain that the disease is not within the cavity of the uterus. *The sound must have been introduced.* If the instrument cannot be passed in at first, and the os uteri can be reached, proceed as in a case of occluded os. Small punctures, gradually dilated by sponge-tents and extended in the direction of the os, will probably succeed. It is also well, if there is the slightest doubt of coexisting pregnancy, to give ergot before you

operate. It is better to cause a miscarriage than risk the death of a patient. If the os uteri be so high up that it cannot be reached, delay as long as practicable. When obliged, a small exploratory puncture, either *per vaginam* or through the abdominal parietes, is a useful preliminary. It may clear up the difficulties of the case.

With these remarks, gentlemen, I bring these lectures to a conclusion. I trust they have not wearied you; and that, upon the whole, the time thus occupied, has not been unprofitably spent. To me, the preparation for them has been somewhat severe, yet withal very interesting. In the indulgence and kindness with which you have heard me, I am more than repaid for my labour.

Transactions of Branches.

LANCASHIRE AND CHESHIRE BRANCH.

PRESIDENT'S ADDRESS.

By Edward D. De Vitré, M.D., Lancaster.

[*Delivered at Lancaster, June 29th*, 1864.]

Gentlemen,—This appears to be a very fitting opportunity, in looking at the laws of the British Medical Association, to take a retrospective glance at what that Association has done; and I see by our second resolution, that the objects of the Society are: The promotion of medical science, and the maintenance of the honour and interests of the medical profession. Now, if we look at the objects the Society have in view; the means that have been taken to effect them; and the results that have been arrived at; I think that retrospective glance may not be without some advantage to the Association generally.

The first portion of that resolution to which I have referred—the promotion of medical science—is a very fruitful topic indeed, and presents a very large field for observations, of much greater length than I am sure the time and convenience of this meeting will permit me to indulge in. But the mission we have imposed upon ourselves is in itself a noble one—to improve, as members of a liberal profession, that profession to which we have the honour to belong, and it is for the best interests of humanity that we should turn our attention in that direction. The promoters of the British Medical Association very soon found it necessary, for the purpose of advancing the interests of the Association, that they should establish a journal in connection with the Association. That has now been conducted for many years with great ability and talent. It contains a vast amount of scientific intelligence, and many cases of very great importance and of great value to the profession; and, so far, it may be said to have conducted itself in such manner as not only to satisfy the Association itself, but to place the Journal upon a footing with any other magazine in the United Kingdom. Therefore, the means we have used appear to have been extremely legitimate.

It is quite true that a large party of men—I am sorry to say, even of our own professional brethren—are apt to throw a little cold water upon the Association. Some object to it by asking "What has it done?" Some object, from a feeling of dislike, to joining any association of this character. Some may object and cavil—if you please to call it so—for reasons of their own. I would rather deal with these cavillers than with the others; because it appears to me that they can be more easily met and answered. They seem to forget, they themselves being members of the profession, that medicine is not an exact science. Before medicine could be reduced to such a state as that, I am assured there will be no chance of this Association being given up. Now we ought not, I think (and probably it may be somewhat of a reflection, though not intended as such, upon the Association generally)—we ought not to confine the advantages of this Association solely to ourselves. I dare say many of you have read and are perfectly familiar with a very able paper—an address made by Mr. Jordan, of Birmingham, last year, in which he insists (and I perfectly concur with him) on the great value of educating the public generally in medical science. We well know that the public are the worst possible judges of a medical man's talent or ability. That is proverbial; and it must invariably be so while the public, if they express an opinion at all, are expressing it at second-hand and on a matter in which they are in total and entire ignorance. It is a very remarkable fact that, in every other branch of science that I know of, the public, taking them as a body, are pretty well and generally informed. But, as to the science of medicine, the public positively know nothing. Now we send our children to school; we advance them from school to college; and we launch them upon the world in different professions and pursuits; but we take care to give them the very best education we can procure for them in those schools and colleges at which they may have been, and we fill them with every kind of information that the schools can afford. But what would you think, for instance, of teaching a youth astronomy, instructing him in the laws and the science of the heavenly bodies, and leaving him in entire ignorance of the laws and science of his own body? There is nothing to prevent physiology from becoming a popular science, and the members of this Association, and of the profession at large, from themselves becoming teachers. What would be the effect generally of the public having as good a knowledge of physiology, for instance, as of the other sciences? It would have this double effect. It would no doubt stimulate the medical profession to higher excellence, and it would strike at the root of all quackery and charlatanism. If the public at large are incapable of judging of the medical men's qualifications for his profession, and undoubtedly they must invariably be so as matters are at present, how is it possible that we ourselves can find fault with them for selecting an uneducated medical man, or probably a man who is not a medical man at all, in place of him who is well qualified to perform his professional duties? Can we suppose for a single moment that those aristocratical debauchees who flocked to that arch-quack St. John to have mercury extracted from the napes of their necks—can we suppose that people belonging to the higher ranks of society, if they had any knowledge of medical science, would have gone to him for such a thing? Such could not possibly have been the case, and such would not be the case if the public were educated in physiological science, as I maintain they ought to be. I cannot suppose that we, as an association, are at all disposed to limit in any way the operations of our Association; and I recollect that Mr. Jordan states in his paper that it would in every way be worthy of the profession at large if they would endeavour to infuse a taste for physiological science among the public generally. Once let them obtain it, and, interesting as the laws of medicine are, it would in all probability become as popular a science with them as any other that could be introduced. But there is no taste for it, because there is no temptation. Now if we once set a man's mind inquiring, inquiry begets doubt,

and doubt destroys doubt. That is the great point at which we have to aim in raising the profession to that popular position which it ought to occupy in the country. We ought to raise the people to that standard of education, from which they may judge of the talent and fitness of those medical men with whom they are brought into contact.

I have made these few remarks on the first part of the resolution of the Association, to which I referred. The latter part of that resolution is to "uphold the honour and maintain the interests of the medical profession." Now I have again to appeal to your transactions as set forth in your JOURNAL; and I think that, from the commencement of that JOURNAL up to the present moment, it has strictly vindicated the principles laid down in that resolution. Quackery has been assailed on every side, and heavy blows have been struck, as they ought to have been, when regularly educated men abandoned their legitimate profession, and sought by empiricism to advance their own interests. Such conduct is greatly to the discredit of those men, and no longer entitles them to be considered professional men in any sense of the word. We labour under a very considerable difficulty in our profession—a difficulty such as is not experienced in any other. A member of the bar who should conduct himself dishonourably, or do that which was not in accordance with the laws of his own profession, is disbarred, and no longer permitted to practise. A clergyman, if he have committed faults of a similar character, has his gown stripped from him. An attorney is read out—struck off the rolls—can no longer practise his profession, when he has done that which is dishonourable in itself either to the public or to the profession. But we have no such regulations. We are governed by our own laws, but we have no kind of ethics laid down for our guidance, let alone stating that we have no such legal authority given to us as a body as the other professions have. We can only act upon conventional views to maintain each other in our good work and check any professional man from acting improperly. Further than that, I am afraid, we cannot go. Mr. Jordan has advocated all these matters and proposed extensive reforms. Will any of you gentlemen cast your minds back for the last five and twenty years—there are some of you, probably, who cannot do that; I am sorry to say that I can—cast your minds back for twenty-five years as members of your profession? What a wonderful change has taken place in the science of medicine and in that of surgery. How deeply we are indebted to organic chemistry, and how largely to microscopic inquiry, and what immense fields for inquiry these matters have held out to the profession. The oldest of us are only students yet, and in a profession like this we must ever remain students, for I will tell you this fact, that medical science never will be complete.

I am sorry to have detained you thus long; but it appeared to me that the opening remarks of the President ought to bear in some measure upon the objects of the society, of course having due regard, more than anything else, to the promotion and well-being of the profession at large. I am myself satisfied that a great deal has still to be done, not only to place ourselves in that position at which we so anxiously aim, but also to bring the public up to that standard of education which will enable them to judge of the qualifications of the professional candidates who come before them. We never shall be able to succeed until something of this sort is done. Pains and penalties have no effect; but public opinion is a powerful engine, and in such a matter as this is of infinitely greater value than any pains or penalties that could be inflicted. If the public only knew a little more of physiological science it would open the door for inquiry, and they would never rest satisfied until they were capable of judging for themselves.

British Medical Journal.

SATURDAY, AUGUST 6TH, 1864.

THE ANNUAL MEETING OF THE ASSOCIATION.

THE thirty-second Annual Meeting of the Association commenced, at Cambridge, on Wednesday last. The retiring President, Dr. Symonds, took the chair at 4 P.M., nearly two hundred members being present. After a few earnest valedictory remarks, Dr. Symonds resigned the presidency to his successor, Dr. Paget, who delivered an able address, which is published at page 141.

Dr. Humphry proposed, and Dr. Falconer seconded, that the thanks of the Association be given to the retiring President; and that he be appointed a Vice-President of the Association. The motion was carried by acclamation, and was acknowledged by Dr. Symonds.

The Report of Council was then read by the General Secretary, Mr. Watkin Williams. From it, it appeared that the number of members on the list was above 2,400—a greater number than in any previous year. The Report recommended a perseverance in the efforts made by the Association to obtain for non-resident members of the Royal College of Surgeons the right of voting by proxy, and to improve the condition of the medical officers of the Army and Navy. The adjudicators of the Hastings Prize—Drs. Sharpey, Richardson, and A. T. H. Waters—reported that, of six essays sent in, one on "Urochrome" was most worthy of the prize; and, the sealed envelope containing the author's name having been opened by the President of the Council, it was found that Dr. Thudichum was the successful candidate. The medal was delivered on Thursday morning. On the motion of Mr. Lord, seconded by Mr. Flint, the Report, after some discussion, was adopted.

Dr. Melson and Mr. Hadley were appointed auditors, and Mr. Watkin Williams was re-elected General Secretary, for the ensuing year.

ACTING ASSISTANT-SURGEONS.

IF the three hundred gentlemen who have, in answer to the Director-General's advertisement, offered to accept the degrading conditions therein laid down by him, are not yet awake to the false position in which they have placed themselves, we fancy they will soon become so, and in a very unpleasant way. Unless we are much mistaken, these gentlemen will find

they have not only eaten dirt, but that they have got nothing in return for their performance of that unpleasant operation. Let them reflect, that *as yet*, out of the three hundred, only twelve have been gazetted to office. Why is this? Is it that the Director-General finds them such an indifferent lot, that he can't get out of the three hundred more than four per cent. fit to walk through Coventry with him? or is he merely using their names as a cat's paw? Are we really to understand that three hundred gentlemen have already signed the one-sided offer of services issued by the Director-General (see the JOURNAL of May 28, 1864, p. 590), binding themselves to serve Her Majesty; and that they are now held, like a flock of simpletons, at the beck of that gentleman, who probably will make no further use of them? We ask these three hundred gentlemen to reflect upon their position. Surely the Director-General either wants their services or he doesn't. Will they accept the position of being kept on hand month after month, that he may use them, if he can get nothing better for his money? To us these three hundred gentlemen seem to be placed in a position of unmitigated degradation. They are, in the first place, *as candidates*—merely *as candidates*, let it be noted—made to sign a most unfair, one-sided agreement, undertaking to serve Her Majesty as long as she requires their services, and ready to be kicked out, *per contra*, at a moment's notice; or, to use the words of the Director-General's agreement: "I understand that my employment is of a temporary nature, and that my services may (without any previous notice or compensation*) be dispensed with at any time," etc.

It is incredible, that three hundred gentlemen should have been found ready to sell themselves into this bondage? But what will they think if they discover at last that they have done all this in vain? What will they say if the Director-General does not appoint them? How long will they consent to hang dangling on the outer hem of the skirts of the Horse Guards? We would, at all events, suggest to them, from the fact that only twelve acting assistant-surgeons (after all these months) have been appointed, something for their serious consideration. One of two things: Either the Director-General does want a large number of army assistants, or he does not. If he does, and does not use up his three hundred, it is clear that he does not like them, or is afraid to use them. In such case, he keeps this large lot of impracticable materials dangling on hand solely that he may boast of being well supplied with the article. If, on the other hand, he does not really want more than twelve out of the three hundred, then it is very evident that the balance of the three hundred, say two hundred and eighty-eight, are being fed on very barren hopes—*i. e.*, are being humbugged. Either way, we would suggest to these three hundred gentlemen that their prospects are not very flattering. The twelve who get service take it upon terms which a menial servant would reject; viz., prospect of instant dismissal, without a month's warning or a month's wages; and the balance of two hundred and eighty-eight, who are eager to accept these degrading terms of office, are kept in the pleasant position of waiters on the Horse Guards providence; and will in the end, after having stood hat in hand at the door of the Horse Guards for some six to eight months, most probably be told, when they least expect it, that their services are not required, and then ignominiously warned off the premises of the Horse Guards. For their own sakes, we strongly urge these three hundred gentlemen to reflect upon their real position and the contingencies of it. The Director-General may regard them as a forlorn hope called in to defend the breach at the Horse Guards; but they may be well assured, if their hopes turn out forlorn, that the profession will not regard them in the light of the three hundred martyrs who died at Thermopylæ.

* Of course we must not be hard with the English of the Horse Guards—of those who have an instinctive dislike to competitive examinations; but we should strongly advise any acting assistant who takes service to have an explanation about this word *compensation*. We hardly suppose that it is used here to imply what it actually does; viz., that the acting assistant shall receive no compensation whatever for his services rendered, if so it please the Director-General. What the Director-General probably meant to imply is, that the acting assistant is not to expect compensation of either (say) a month's wages or a month's warning, should he be turned out of his situation at a moment's notice. The Director-General impliedly admits, that any man who is served as these passive acting assistants are, might naturally expect "backshish" in case of summary dismissal; and he therefore tells them before hand that they are only to expect monkey's allowance. EDITOR.

THE NETLEY MEMORIAL.

ON the 1st inst., the Prince of Wales laid at Netley the first stone of the memorial to be erected in memory of the medical officers (non-combatant!) of the British army who fell in the Crimean war. The monument is a plain cross, around which will be affixed tablets of the names, etc., of the departed medical officers. The monument has been raised by subscriptions, and costs about £1000.

An address was read to the Prince by Dr. Gibson. During the war, it was stated, that fifty-four officers of the Medical Department who were serving in the campaign, and six physicians and surgeons attached for duty, perished. Their deaths, it was inferred, mainly resulted from the immense pressure of work thrown upon them through the notorious imbecility of the Horse Guards of that day. One cannot help drawing a moral from this tale, and ask, Would not the lives of our medical officers be again sacrificed at the present moment, and in an exactly similar way, if another like war were to break out? Would not the supply of medical officers again fall far below the demand? The best memorial which could be raised to our departed brethren would be some act of sense

nd justice exhibited towards the present medical fficers; as an atonement for the sacrifice of such ives in the way spoken of—not in the mere service f their country, but as a necessary consequence of nismanagement at the Horse Guards. "The greater art of these gentlemen," said Dr. Gibson, "died of lisease contracted in the discharge of their duties, or roke down under the enormous pressure of profes- ional work, etc."

We trust that the erection of this memorial may end to open the eyes of the public to the injustice nflicted on the medical officer, and, above all and hereby, on the soldier, his patient. The best notice we can take of this occasion is to improve it to the advantage of the future; and with this intent, we ask, again, of those who preside over this depart- ment, Is it not, according to your own showing, self- evident that, under you, the medical service has been brought into such a state that, if a Crimean war were to break out to-morrow, the very similar and unnecessary sacrifice of lives which occurred then would occur now? Has experience and the death of these men taught you or brought you to make any fitting provision for the future?

The death of these men, the break down of the Army Medical Service, at that time brought forth the famed Medical Warrant of 1848. But with the pressure of those days, has also perished the War- rant of 1858; and as a fitting appendage, therefore, we would recommend that this fact also be inscribed upon the monument at Netley; viz., that through a trick of the Horse Guards, the life of this Her Ma- jesty's warrant, which was created to appease the manes of our brethren who died in the Crimea, has also been destroyed; and that at this moment, also, the Horse Guards is at its wits' ends to obtain a supply of medical men for the soldier. "Eyes have they and see not", may be truly said of such Com- manding-in-Chief.

SYPHILIS IN THE ARMY AND NAVY.

[*Communicated.*]

There is no subject, having reference to the health and efficiency of the army and navy, more important at the present moment than the great amount of syphilis prevalent in these services. The analysis, in the *Annals of Military and Naval Surgery*, lately published, of the latest Annual Health Reports of the Army for 1861, and of the Navy for 1860, shows that, in the army, the disease is scarcely, if at all, diminished; while in the navy, it has been decidedly on the increase. In the army, the admissions into hospital for venereal diseases, including gonorrhœa, still exceed in number one-third of the strength, and the inefficiency caused thereby has been equal to the loss of the services of every soldier at home for over eight days and a half, being a trifle under the amount in the preceding year. In the navy, how- ever, there was in 1860 a large increase of admissions from venereal, both in the home and foreign stations, over the preceding year 1859; while we find noted a remarkable circumstance; viz., that the attacks of the disease on the Pacific Station are at least twice as numerous as they were twenty and thirty years ago. The primary disease has not been found less virulent or more tractable than formerly; and, in spite of the more judicious treatment of later days, in all venereal diseases, including gonorrhœa, it does not ap- pear that constitutional infection has been less rare. This is especially noticed in the navy, and is not to be accounted for on the supposition that, from change of theory among the medical officers, a different and less successful practice has been adopted. For it is noted that, in cases of hard chancre, and occasionally of other forms of venereal disease, mercury was con- stantly given. Neither the neglect nor the abuse of mercury, therefore, can be the cause of the great amount of secondary and tertiary disease which is shown to be prevalent in both services.

This is a most important point; for we may rest assured that the Returns do not exhibit the entire amount of constitutional disease caused by the syphi- litic infection. This must act most banefully in in- ducing general cachexia, as also various organic and functional diseases, in such a way, that it cannot al- ways be recognised as the predisposing or exciting cause. For instance, the amount of pulmonary dis- ease, particularly phthisis, is, no doubt, increased by the system having been brought under the influence of the syphilitic poison; and, to some extent, per- haps, by the action of mercury, and the treatment thought requisite for curing the primary disease and eliminating the specific virus from the system. The same may be said, with reference to diseases of the bladder, kidneys, and other organs.

Hence, a question of the greatest importance presses upon our attention: What can the authorities do to lessen the amount of syphilitic infection? To judge from certain isolated attempts in later times, and from previous systems in vogue in the services, it appears that it is quite practicable to keep the disease in check. One of the most encouraging examples for our guidance has been the action taken by the Maltese Government in 1861, at the instance of Deputy Inspector-General of Naval Hospitals Arm- strong. The precise nature of the rules enforced is not stated by Dr. Armstrong (*Times*, March 7, 1864), but they must have included strict police supervision, as well as very early and active surgical treatment. They were, however, completely successful; for Dr. Armstrong says that, after the laws had been in operation over two years and a half, "as far as I could learn, the disease had then no existence in the island", where it had formerly been rife; the only cases known of late among the naval forces being those of importation.

Measures of repression and prevention must differ according to the localities. It is possible that the objections to police supervision and medical inspections, in such places as London, on the score of morality, may be well grounded. But we cannot conceive that there can be any valid objection to the strictest regulations at the seaport towns, which may be said to depend for their existence upon the presence of the navy, or at the chief depôts and garrison towns, which depend upon the presence of the army, as Chatham, Aldershot, etc.

The Navy Health Report informs us, that three-fourths of the disease among the sailors on the home station may be traced to the infected communities of Portsmouth, Devonport, and Sheerness. Surely, in such a case, there need be no squeamishness as to using measures of repression. In addition to strict police and medical supervision of suspicious places and characters, there should be provided the readiest means of cure for the infected; to whom it should not be an object with the authorities to mete out punishment, but to encourage to apply as early as possible for surgical aid, in order that their constitutions may not become permanently deteriorated, and that their services may not be lost to the state for a longer time than may be absolutely necessary for their complete cure. It is said that we must trust to moral influences to wean soldiers and sailors from the vice of promiscuous intercourse, and that it is immoral to try to screen vicious men from the natural consequences of their own misconduct. In accordance with this doctrine carried out to its legitimate consequences, we should refrain from supplying hospital aid to those afflicted with many other diseases incidental to human nature, but traceable too often to the patients' own intemperance, misconduct, or negligence. Let us try all means of reclaiming our soldiers and sailors from vicious habits; but meanwhile do not let us cripple our own resources, and consign the victims of heedlessness and ignorance to premature decay. Let us use all the means in our power, dictatorial and inquisitorial although they will necessarily be, to prevent as well as to cure the plague which now decimates our forces, and brings ruin on the constitutions, not only of those who are infected, but upon countless numbers who are to succeed the present generation. Let police and sanitary regulations in our home depôts and ports be as severe and as strictly carried out as they have been at Malta. Let disease be not only prevented, but carefully searched for, isolated, and cured as speedily as possible, both among men and women. This seems be a positive duty incumbent upon us, as the guardians of our military and naval defenders. To this extent are we responsible as medical advisers of the community. Let moral suasion be also employed to keep the persons in danger from dangerous and vicious courses; but let not this principle of action make us shirk the responsibility which lies more especially at our doors.

GRATUITOUS MEDICINE.

The following remarks appeared in a number of the *American Medical Times.*

"The medical profession is the only one, we believe, which habitually *donates* the time and services of its members to the public, in their charitable institutions. The services of all others are well paid for, even the chaplains of our hospitals and almshouses receiving fair salaries for the time given and talents exerted. The medical profession, as such, stands alone in liberality to the poor and destitute. The extraordinary amount of its gratuitous services is almost beyond calculation. A few years ago, in a paper read before the Academy of Medicine by Dr. Griscom, the aggregate annual amount *contributed by the medical profession of the city of New York to the support of public charities* was estimated at *one million of dollars.* This estimate would now be nearly or quite doubled, as the increase of institutions of medical charity has exceeded the increase of population. We call this a contribution, or tax, for the support of public charity, for the plain reason that, if the members of our profession should at any time unanimously determine to put themselves on the same footing, in this respect, as all others, the inevitable necessity would be thrown upon the public and the Government of *employing* the requisite medical and surgical assistance, at whatever expense. The amount now given by the profession gratuitously would then have to be added to the taxes upon the community; in other words, the expense would be drawn from the pockets of the whole, instead of from the brains and muscle of the few. The reply to such a suggestion would probably be: 'You receive in return the great benefits of the *experience* which so large a field of practice must render highly valuable.' The natural rejoinder to this is: 'The same experience would be had *with* pecuniary remuneration as *without.*' Moreover, it is the practice of these institutions to receive *others than paupers.* In one institution in New York, more than two-thirds of its beds are occupied by patients capable of paying, and who do pay, good prices. As every such patient, in private, would engage the services of some physician, it follows that, by his going to the hospital, the fees are lost to the profession. But a worse fact than this is still to be mentioned. Between this same institution, as well as others, and the general government, a contract exists, by which the latter may fill its wards with sick seamen to a certain extent, for whose maintenance the government agrees to pay a certain amount for medicine and *medical attendance;* but the medical attendance is rendered gratuitously, to the manifest and direct detriment of professional incomes. The sum paid for sick and wounded soldiers is much above the cost of their maintenance, and the hospital is consequently making money by them. In view of these facts, an ethical question arises in our minds, which is this: Is the medical staff of a hospital justifiable in rendering gratuitous services in such an institution, any more than out of it, to patients able and willing to pay for them? By so doing, the income of the profession is diminished; and the more we yield to the practice, the more it is likely to increase. The saying of Boerhaave, 'The poor are my best patients, for God is their paymaster,' strikes a sympathetic chord in the breast of every honourable physician; but it does not follow that all is charity that passes by the name, even when found in public institutions."

About seventy graduates of the Edinburgh University met together and inaugurated the existence of an "Edinburgh University Club" by a dinner at the Freemasons' Tavern on the 1st instant; Dr. Markham was chairman. The success of the club has been beyond all expectation. The enthusiasm which was shown by the meeting together of so many leading members of the profession, both of London and the provinces, demonstrated well the respect and love and pleasing recollections with which the University had inspired its members. Dr. Christison would have come up to London expressly to have taken the chair, had he not been detained in Edinburgh by urgent University affairs. The club has the warmest sanction of the Professors of the University; and from the very large numbers of graduates who have joined its ranks, is already a very powerful body. We believe there is scarcely an instance of a club of this kind which has been so suddenly and remarkably successful. Its existence was evidently a thing required.

Supposing the office of Examiner of the Royal College of Surgeons to be worth £400 *per annum*, we might indulge with some show of reason in the following speculation. Ten Examiners at £400 = £4,000 *per annum;* £4,000 × 60 = £240,000, which may be speculated on as the sum received from the profession at large by London surgeons during the present century. Mr. Lawrence became an Examiner in 1834; he has, therefore, held office for thirty years. Now, £400 × 30 = £12,000—the sum which he may be supposed to have received from the office of Examiner. Mr. Arnott became an Examiner in 1848; he has, therefore, held office sixteen years, and has received, according to this kind of arithmetic. £6,400. Messrs. South and Cæsar Hawkins were elected in 1849; their portion, therefore, might be put at £6,000. We are not, in stating these things, objecting to the size of the examining fees. We only refer to them in order to show that the office of Examiner is really a thing to which men might reasonably ascribe a certain value from a money point of view.

A discussion touching malignant pustule lately took place in the Academy of Medicine. MM. Gallard and Devers had asserted in their paper, that the disease was developed spontaneously. They argued, for example, that the pustule is not always found on exposed parts of the body; that it sometimes appears on parts which are constantly covered. In such cases, how could it result from inoculation? To this M. Cloquet replied: he had, in his own practice, seen malignant pustule arise on the abdomen of a rabbit-merchant at the very place where his shirt was torn. In a young man, again, with the pustule on his thigh, he learned that he had pricked himself when bathing. M. Cloquet rejected absolutely the idea of spontaneous origin of malignant pustule. M. Piorry admitted such *suâ sponte* origin of the disease. Every day he observed examples of the fact, which were overlooked by others. M. Piorry's idea of the disease, however, turned out to be of wider extent than other people's, including, for instance, gangrenous wounds of the scrotum occurring at the end of fevers. M. Reynal rejected the idea of spontaneous origin; he considered, and gave good reasons to show, that the authors of the paper had been deceived as to the absence of the disease in the department of La Charente previously to the occurrence of their cases. He produced the testimony of a medical man well known in La Beauce, who annually saw between twenty and thirty cases, and could always trace them to their origin. M. Gosselin observed, that in the paper thirty-four cases were related in which the disease could be traced to no ostensible cause.

L'Union Médicale thus criticises Mr. Fergusson's lectures. "Instead of giving a complete and methodical exposition of the progress of operative surgery, the lecturer selected arbitrarily some few particular subjects, on which he discoursed without order or method, citing especially the facts observed by himself or his compatriots, and particularly Scotch surgeons. After taking a general view of the last forty years, Mr. Fergusson treated of conservative surgery; on which he dilated, claiming the term as his own, and comprising under it resections, excisions, and ligature of the artery, substituted for amputation in certain cases of aneurism. Then came hare-lip and staphyloraphy, lithotomy and lithotrity, and all this without the mention of a single Frenchman's name. He then concluded with resection of the knee, to which he devoted his two last lectures. Instead of a picture giving at a glance, and in striking colours, the principal features of this history, we are presented with an imperfect sketch. The work is quite beneath the reputation of the master."

M. Nélaton informs the Academy of Sciences that he has destroyed a naso-pharyngeal polypus by means of an electric current. He made use of Bunsen's pile, with nine plates, and two platina needles of half a *millimètre* in diameter. The first application was continued for ten minutes. The pain was quite bearable. A slight difficulty arose from the white frothy matter, resulting from the decomposition of the parts in which the needles were fixed, falling into the pharynx. There was no hæmorrhage. The patient entered the hospital in January, and was cured by the end of May.

M. Lemaire has demonstrated the presence of the achorion of favus floating in the air, and has thus shown how favus may be transplanted by currents of air to a distance.

Association Intelligence.

YORKSHIRE BRANCH: ANNUAL MEETING.

The annual meeting of the Yorkshire Branch was held in the Philosophical Hall, Leeds, on June 30th; Samuel Hey, Esq., President, in the Chair. There were present about thirty members.

A cordial vote of thanks was accorded to the retiring President, J. Haxworth, Esq.

Report of Council. The Secretary read the following Report.

"The Council of the Yorkshire Branch of the British Medical Association have much pleasure in again meeting their fellow-associates in Leeds; and would, in the first place, congratulate them on the absence of any exciting subject in connexion with medical politics, requiring notice in this report, and subsequent discussion in the meeting. Your Council feel glad in being able to place the time, thus saved, at the service of the members who have kindly promised communications.

"Your Council, however, consider they would be neglecting their duty, if they failed to call your attention to the unsatisfactory condition of the Medical Departments of the Army and Navy. They would suggest that some expression of opinion should go from this meeting, which, together with the efforts made by members of the profession elsewhere, may assist in obtaining the removal of the grievances to which the medical officers of the army are subjected, and of which they so justly complain; viz.: 1. The uncertainty as to rank, by the several alterations of the Warrant of 1858; 2. The slowness of promotion, on account of vacancies not being filled up; 3. The difficulty of obtaining leave of absence, or even *sick leave;* 4. The objectionable position of the medical officer, when called upon to superintend the branding of deserters.

"Your Council, feeling assured that the vacancies in the Medical Department of the Army will not be filled up with a right class of men so long as these grievances exist, strongly urge the necessity of aiding every effort to remove them."

Mr. Nunneley moved, Mr. Garlick seconded, and it was resolved—

"That the Report be received and adopted."

Branch Council for 1864-5. The following members were elected to form the Council of the Branch for the ensuing year:—W. E. Swaine, M.D.; G. Shann, M.D.; B. Dodsworth, Esq.; W. D. Husband, Esq.; W. Matterson, Esq.; and H. Keyworth, Esq. (York); J. P. Garlick, Esq.; W. Hey, Esq.; T. Nunneley, Esq.; T. P. Teale, Esq.; S. Smith, Esq.; C. Chadwick, M.D. (Leeds); H. Jackson, Esq.; J. Haxworth, Esq.; J. C. Hall, M.D. (Sheffield); John Ness, Esq. (Helmsley).

Representatives in the General Council. W. D. Husband, Esq.; W. Matterson, Esq. (York); T. P. Teale, Esq.; T. Nunneley, Esq.; S. Hey, Esq.; C. G. Wheelhouse, Esq. (Leeds); and H. Jackson, Esq. (Sheffield), —were elected representatives in the General Council of the Association.

Place of Meeting in 1865. It was unanimously resolved—

"That the next annual meeting be held in York; and that B. Dodsworth, Esq., be the President-elect."

The Public Medical Services. It was resolved unanimously, on the motion of Mr. Nunneley—

"That the Council be requested to prepare and transmit to the proper authorities a memorial embodying the various grievances of which the medical officers of the army and navy have so just ground of complaint, and pointing out their injurious effect on the present and future efficiency of the Army and Navy Medical Departments."

Communications. The following communications were read.

1. The President communicated an interesting case—probably Congenital Dropsy of the Ethmoidal Cells.
2. Symblepharon. By T. P. Teale, jun., Esq.
3. Practical Remarks on Cases of Tumour obstructing Parturition. By S. Smith, Esq.

Dinner. The members and visitors afterwards dined together at the Queen's Hotel.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 1st, 1864.

H. Oldham, M.D., President, in the Chair.

Three gentlemen were elected Fellows of the Society.

Craniotomy Forceps. Dr. Hall Davis showed a Craniotomy Forceps, with a fenestrated blade, of the form of a very elongated horse-shoe. It was composed of two parts, male and female; the former was serrated deeply, the serrations pointing backwards, and fitting into the depression in the female part. The lock was like Naeglé's, and the handles fastened by a spring and rack at their extremities. This instrument he had tested practically, and found it answered admirably.

Bandage After Labour. Dr. Meadows exhibited a Bandage, which he recommended in place of the jack-towel usually applied after labour. It was made of stout calico, shaped to the abdomen and hips, having one bone for extra support in front. When adjusted, it could be fastened firmly, either by bracket, or laced like a corset. The advantages were facility of application, combined with comfort and greater efficiency.

Drs. Routh, Oldham, Rogers, Graily Hewitt, and Meadows, discussed some points connected with bandaging after labour.

ON IMMEDIATE TRANSFUSION.

BY J. H. AVELING, M.D., SHEFFIELD.

The author stated that transfusion had been performed now for two hundred years, and that for the first hundred and sixty years of that time the immediate method had been solely employed. He described the numerous forms of immediate apparatus hitherto used, and pointed out their faults and advantages. He also exhibited an instrument of his own, which consisted of two small silver tubes to enter the recipient and emittent vessels, and of an India-rubber tube to connect them. This had in its centre a small elastic receptacle holding about two drachms, by compressing and relaxing which the blood was made to circulate through the tube, and the quantity passing was measured. He believed that there was less chance of coagulation by the immediate method, and that it had advantages over the mediate mode. The blood was not exposed to the air; the operation was uninterrupted and the closest imitation of nature.

Dr. Cleveland thought there would be danger of introducing air in the apparatus shown by Dr. Aveling, which was not transparent.

Dr. Graily Hewitt said that, in the course of last year he had brought the subject of transfusion before the profession, in a paper read at the annual meeting of the British Medical Association held at Bristol;

and he had exhibited at that meeting an apparatus for the performance of transfusion, which he now laid before the Obstetrical Society. The great desideratum in an apparatus for transfusion adapted for use in obstetric emergencies was a simple, certain, and ready means of conveying the blood. The instrument which he had contrived fulfilled, he believed, these indications; and he had had an opportunity of using this instrument only a short time since in the case of a poor woman, dying from loss of blood connected with placenta prævia. The instrument acted admirably, and by its means he was enabled to transfuse two successive portions of blood. The operation was unfortunately delayed, as it proved, a little too long, and the patient failed to derive benefit from the operation; but the experience afforded by the case was such as to justify him in expecting the best possible results from its use in similar emergencies. The apparatus devised by Dr. Aveling, which in principle, he believed, resembled one that had been recommended by Dr. Richardson, was, he considered, objectionable for a variety of reasons. The want of transparency prevented the observer from ascertaining what was going on in the tube; it was not easy to connect, off-hand, the tube with the vein of the individual supplying the blood; and, further, it would be found very objectionable to bring the individual supplying the blood into close proximity with the individual dying from loss of blood. The person supplying the blood was often, in obstetric practice, the husband of the patient; and, unless under very exceptional circumstances, the nerve and fortitude of the individual in question would be likely so to break down as to interfere with the carrying on of the operation. For these reasons, therefore, he believed that, however ingeniously contrived, the "immediate" method could not become a practical operation. The instrument which he (Dr. Graily Hewitt) had employed—constructed for him by Messrs. Whicker and Blaise—was a two-ounce glass cylinder, fitted at one end with a piston and rod, and at the other adapted to the tube entering the vein of the patient. The blood was received into the syringe itself, the piston being removed for this purpose, and the blood was then injected. The peculiarity of the instrument was that the blood was received directly into the syringe, without the necessity for a funnel or other apparatus; and the exposure of the blood to the air and to foreign objects—which hastened coagulation—was thus reduced to a minimum. The operation of transfusion required forethought and arrangement, and accurate appreciation of the difficulties surrounding its performance. These difficulties he had endeavoured to point out and to obviate, in the paper to which he had already alluded.

Dr. Eastlake was able to confirm Dr. Graily Hewitt's statement as to the applicability and value of this instrument, having assisted Dr. Hewitt at the operation in question. It would have been impossible in this case to have brought the husband, who supplied the blood, to the bed-side. His nervousness and agitation under such circumstances would probably have prevented the performance of the operation.

Dr. Braxton Hicks hoped he should be able some day to bring before the Society a plan which he had employed with success in the lower animals, and also in a case of hæmorrhage in a lady. The principle of its action was to prevent fibrillation, thereby doing away with the greatest difficulty attending the operation.

Dr. Aveling, in reply, would remind the Society that the operation of transfusion had been successfully performed by the simplest means—such as quills; and he differed from Dr. Graily Hewitt in his estimate of the difficulties of the operation.

Dr. Greenhalgh read a paper on Placenta Prævia, the discussion upon which was adjourned till next meeting.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, June 3rd, 1864.

A. W. Barclay, M.D., President, in the Chair.

ON THE VARIOUS INSTRUMENTS REQUIRED FOR APPLYING REMEDIES TO, AND OPERATING ON, THE LARYNX. BY MORELL MACKENZIE, M.D.

The author said that, for applying remedies to the larynx, nothing was so convenient as a camel's-hair pencil, cut square at the end, and firmly attached to the end of a piece of copper wire plated with silver. The copper wire could be bent in any position, and yet remain rigid; and it was convenient to let the wire form one or two coils at its posterior extremity, where it was fixed to a handle of suitable size and shape. This instrument could be bent at any angle; and, in consequence of the coil, could be easily lengthened or shortened. Thus it enabled the operator to introduce solutions into the larynx under almost any circumstances that made such treatment desirable, and in some cases rendered it possible for him to apply topical remedies to the lower part of the windpipe.

For the application of solid nitrate of silver, Dr. Mackenzie recommended a piece of aluminium wire, roughened at its laryngeal extremity, and of course suitably curved. This should be dipped into some nitrate of silver fused over a spirit-lamp. By this means, sufficient of the salt adheres firmly to the extremity of the wire, and can then be safely applied to the interior of the larynx. It was rarely, however, necessary to use the solid nitrate, as the solution was generally found sufficient. Some few laryngoscopists had recommended the application of remedies by means of syringes; but this method generally caused more irritation than when a brush was used. The late Dr. Theophilus Thompson had used a curved silver tube, terminating at one end in a finely perforated extremity, whilst at the other there was a small caoutchouc bag, by means of which the fluid was forced into the larynx. This instrument had lately been revived; but as, in its use, the palm of the hand or the thumb has to be pressed against the elastic bag, the position of the instrument is thereby altered, and medicated solutions cannot be applied with much certainty. Rauchfuss had lately recommended a somewhat similar instrument; but his is made of vulcanite instead, and is, therefore, much cheaper. Rauchfuss's instrument could be employed either for powdered substances or for solutions. The author remarked that, by having the caoutchouc bag at the upper part of the tube, the pressure could be applied from above downwards with the index finger, and thereby the position of the point of the instrument was not altered.

The author next briefly described his laryngeal galvaniser, which, he said, was now used by almost all laryngoscopists, both in this country and on the continent. In support of its value, he referred to his pamphlet on the subject. He next showed his scarifier. This instrument the author described as very useful in œdema of the larynx, whether of an acute or chronic character; also in some cases of thickening of the mucous membrane; and sometimes for operating on excrescences, opening abscesses, etc.

The author next exhibited his pharyngeal forceps for removing growths from the larynx. He observed, that all the instruments which he had introduced

acted on the same principle, or rather required the same method of manipulation. They were all to be held firmly between the thumb and second finger; so that the index finger is left free, to press down a spring on the upper part of the instrument. In this way, the position of the point of the instrument was scarcely altered at all; and where one was, in fact, aiming at an image, that was of the greatest importance. In Dr. Mackenzie's forceps, the closure of the blades is effected by means of a hollow which is made to inclose them, so that the blades themselves do not move. The merit of the instrument consisted in the great number of indications it fulfilled; in fact, it was adapted for operating in any case, in any larynx, in any part, from considerably below the vocal cords to the lingual surface of the epiglottis. 1. The blades of the instrument turned round, and could be directed to either side of the larynx, or anteriorly and posteriorly. 2. The instrument was provided with tubes curved at different angles—an arrangement adapted for overcoming the difficulty arising from the varying inclination of the laryngeal opening in the pharynx. 3. The instrument could be made shorter or longer, according to the circumstances of the cases. 4. Different kinds of blades could be used; the teeth could be either at the side or the extremity; and the blades could be either long or short.

The tube which passed over the forceps was made in two pieces, united by bayonet joints. By this means the instrument could easily be kept clean—a matter of great importance, as regards the safety of an instrument employed in the larynx. The author observed, that with this instrument he had operated on more than a dozen cases. In nine, the growths had been completely removed; and in most of them, aphonia of many years' standing had been relieved. The author said that the great ingenuity of this instrument was due to the mechanical skill of Mr. Krohne of the Whitechapel Road, who made the forceps, as well as the other instruments.

In conclusion, the author exhibited several patients suffering from rare morbid conditions. One was a case of aphonia, of eleven years' standing. In this case, the anterior two-thirds of the vocal cords were completely atrophied, so that only the posterior intercartilaginous portions approximated. Another was a case of aphonia which had existed for fourteen years; it was caused by adhesions of the inner surfaces of the true vocal cords. The two cords were adherent for about a quarter of an inch from their anterior insertion; their posterior three-fourths scarcely moved at all. In a third case, in which there was a shrill voice and stridulous breathing, the symptoms depended on spasm of the left vocal cord, probably arising from pressure on the recurrent nerve. The cause of the pressure was not determined.

Death from Hydrophobia. A case of death from hydrophobia took place on the 28th ult., at Stockport. Early in June, the deceased, a boy aged 16, was attacked by a strange large dog. Three persons were bitten—the boy, his father, and a younger brother; the father in his arm; the youngest boy, Jacob, on his thumb, drawing blood; and the deceased, Job, on his thumb—slightly, a mere scratch. The father and youngest boy had their wounds attended to by a surgeon; but it does not seem that the scratch on the hand of the elder boy was thought to require such treatment. On July 26th, the boy was taken ill with symptoms of hydrophobia, which rapidly developed. The attack lasted three days from its commencement.

Medical News.

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 26th.

Blair, Charles Edward, Wandsworth
Brewer, Alexander Hampton, Victoria, Monmouthshire
Collier, Thomas, Bridgend, Glamorganshire
Covey, George, Basingstoke
Craigie, John Hamilton, Finsbury Square
Daglish, Richard Rothwell, Wigan
Davies, Thomas Henry Whitehouse, Stroud
Develly, Henry James, Wandsworth
Duke, John Challen, Leominster, Sussex
Fisher, John Moore, Hull
Gill, George, Liverpool
Gornall, John Hankinson, Liverpool
Hedley, John, Newcastle
Hills, George Henry, Old Kent Road
Laffan, Thomas, Dublin
May, Augustus Square, Plymouth
More, James, Rothwell, Northamtonshire
Morris, Thomas Henry, Spalding
Reed, Walter Hugo, Tiverton, Devon
Renton, William Matthew, Shotley Bridge
Roberts, John Coryton, Peckham
Savage, George Henry, Brighton
Turner, Frederick, Buxton
Vise, William Foster, Spalding
Wraith, John Hargreave, L.S.A., Over Darwen

Admitted on July 27th—

Bailey, William, L.S.A., Tipton, Staffordshire
Barnes, Henry, Wigton, Cumberland
Collingwood, Joseph Edward, Corley, Lincolnshire
Fairbank, Thomas, Islington
Fyson, Ernest Last, Exning, near Newmarket
Goddard, Richard Carter, Stockport
Harding, William Henry, Wormley, Herts
Lawrence, Henry Cripps, Surbiton
Martin, Paulin, L.S.A., Abingdon
Morgan, Lewis Wayne, Hafod, Glamorganshire
Nivison, Thomas Renny Strachan, Edinburgh
Renton, David, M.D.Edin., Madeira
Richardson, James Francis Hamilton, Down, Kent
Roberts, Thomas Edward, Gibraltar
Rogers, Charles Edward Heron, Westmeon, Hants
Shearwood, Joseph Hiram, Spilsby
Turner, Ebenezer Fulham, Upper Clapton
Wilmot, Alfred Edward, Ryde
Wilson, Stephenson Moreton Wightman, Mowsley, Leicestersh.
Wood, William Thomas Hurd, Notting Hill
Wright, Charles James, Wakefield

Apothecaries' Hall. On July 28th, the following Licentiates were admitted:—

Best, Frederick Arthur, Cambridge Street, Hyde Park
Brown, George Arthur, Welchpool, Montgomeryshire
Byles, James Cotton, Victoria Park Road, Hackney
Evans, Alfred Paget, West Bromwich
Haigh, Thomas Hinchliffe, Golcar, near Huddersfield
Jones, John Foulkes, Dolgelly, North Wales
Lavin, Michael Drury, Bushy, Herts
Lawrence, Frederick George, Malmesbury, Wilts
Lawrence, George Richard, Wantage, Berks
Martin, James Hamilton, Tregoney, Cornwall
Morris, Griffith Davies, Dyffryn, North Wales
Quick, John Roy, Old Kent Road
Taylor, James, Chapel-en-le-Frith, Derbyshire
Turner, John Sidney, Guy's Hospital
Watts, William Frederick, Dewsbury, Yorkshire
Wearing, Allen, Lancaster

At the same Court, the following passed the first examination:—

Berry, Other Windsor, Charing Cross Hospital
Clothier, Henry, University College Hospital
Flint, Frederick, King's College Hospital
Haydon, Nathaniel Thomas John, St. Mary's Hospital
Hembrough, John William, St. Bartholomew's Hospital
Hughes, John Pearson, University College Hospital
Marsh, William Joseph, Guy's Hospital
Taylor, Theodore Thomas, St. Mary's Hospital

APPOINTMENTS.

Army.

Johnston, Surgeon J. W., M.D., 85th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.
Meade, Assistant-Surgeon R. W., 88th Foot, to be Staff-Assistant-Surgeon, *vice* H. P. Gregory.

ROYAL NAVY.

GRANT, William Esq., Acting Assistant-Surgeon, to the *Warrior*.
HURLEY, Francis N., Esq., Assistant-Surgeon, to the *Meander*.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

ALLAN, P. M., Esq., to be Assistant-Surgeon 1st Forfarshire R.V.
DOWNES, P., M.D., to be Hon. Assistant-Surg. 28th Cheshire R.V.
KENNEDY, J. B., Esq., to be Assistant-Surgeon 3rd Essex A.V.
MORRIS, S., Esq., to be Hon. Assistant-Surg. 48th Lancashire R.V.

BIRTH.

RICHARDSON. On August 1st, at 12, Hinde Street, the wife of *Benjamin W. Richardson, M.D., of a daughter.

DEATHS.

*BELL, W., M.D., at 33, George Street, Hanover Square, on July 23.
DON, James, M.D., Retired Surgeon-General, Bombay Army, at Bearehill, Brechin, on July 18.
FURBER, George, Esq., Surgeon, at Torriano Avenue, Kentish Town, aged 70, on July 25.
GIBBS. On July 24th, at Westbury, Wilts, aged 48, Amelia Jane, wife of J. H. Gibbs, M.D.
RAY. On July 25th, at Lowestoft, Kate, wife of James Ray, Esq., Surgeon.
WILDBORE, Daniel H. G., M.D., at 2, Charlotte Street, Fitzroy Square, on July 27.
WILKIN, Henry, Esq., late of 39, Connaught Terrace, aged 62, on July 26.

THE BRITISH ASSOCIATION. The next meeting or the British Association for the Advancement of Science will be held at Bath, on September 14th; Sir Charles Lyell being President.

PUNISHMENT FOR STRIKING AN ASSISTANT-SURGEON. At Jullundar, in India, a private in the 19th Regiment has been sentenced to penal servitude for life for striking an assistant-surgeon.

PUTRID MEAT. In the House of Commons, lately, Mr. Crawford said it appeared from the report of the Sanitary Committee of the city of London that in the twelve months ending September 1863, not less than 114,000lbs. of diseased, and 76,000lbs. of putrid meat, were seized and condemned in the city of London.

QUEEN'S COLLEGE, BELFAST. The report of the President shows that the institution is increasingly prosperous. Since 1852, the number of students has risen from 154 to 388. The Medical School of the Belfast College is highly prosperous, the number of students having increased, since 1850, from 55 to 143. Dr. Henry ascribes the success of the College, and the honour which the students confer upon it, to the great ability, zeal, and unity, of the distinguished corps of professors.

DEATH FROM UNSKIFUL INOCULATION. On the calendar, at the late assizes at Donegal, were five cases of homicide, in four of which young children lost their lives from being inoculated by unprofessional and unskilful persons. It would seem that this mischievous practice is prevalent in that county. It was a matter of amazement, Judge Monaghan said, that the peasantry allowed themselves to be duped by ignorant impostors, seeing the care the legislature had taken to place at their very doors the gratuitous services of skilled practitioners.

DEATH FROM MORPHIA. An inquest was held on the 29th ult., at Hoxton, on Richard Tuckwell. The deceased gentleman was visiting London, for the purpose of passing his examination at Apothecaries' Hall. He had been studying hard lately, and complained of being unable to sleep at night. On Monday night, he took a dose of morphia in order to sleep, and retired to bed at half-past nine o'clock. He was heard breathing heavily, and could not be aroused. Remedies were applied without effect, and he died in five hours.

THE RESPONSIBILITY OF MEDICAL MEN. At Shrewsbury, last week, a plate-layer of Stourbridge brought an action against a medical man, to recover damages for negligence in the treatment of the dislocated shoulder of the plaintiff. In March, the plaintiff dislocated his shoulder, and was attended by the defendant; but whether the latter set the joint or not was the point in dispute. In the middle of April, the plaintiff began to experience serious symptoms in his shoulder, and was at length compelled to go to the Birmingham Hospital, where he was put under the influence of chloroform, and his shoulder set; but he would never be able to work with the arm again. The jury found a verdict for the plaintiff; damages, £50.

THE DISEASES OF CATTLE. The Select Committee to whom the Cattle Diseases Prevention Bill and the Cattle, etc., Importation Bill were referred, considered the Bills, and took evidence thereon: and went through the Cattle Diseases Prevention Bill, and made amendments thereunto; and with respect to the Cattle, etc., Importation Bill came to the resolution that it is inexpedient to proceed with the same. The committee recommended that when foreign cattle are imported affected with pleuropneumonia, scab, or foot-and-mouth disease, only the animals actually at the time affected with these diseases should be detained or slaughtered, and that the remainder of the cargo should be allowed to pass without being detained.

LUNATICS IN GAOLS. Judge Monaghan stated, at the recent Donegal assizes, that there were in the prison of the county forty lunatics, all in charge of an ordinary turnkey, assisted by persons who are undergoing their sentences of imprisonment with hard labour. The prisoners were thus transferred into keepers or warders. Nothing worse than this state of things could be conceived. It virtually set aside the sentence of hard labour; it prevented the curative treatment of the lunatics; and it was subversive of prison discipline. If a gaol were to be converted into a lunatic asylum, care should be taken that the lunatics should not be left in charge of an inefficient staff of officials. There is, however, a lunatic asylum for the district in course of erection, and some months hence the poor lunatics of Donegal will have a chance of proper treatment.

BAD MEAT IN LONDON. The officers have condemned 60,823 lbs., or rather more than 27 tons of meat, as unfit for human food, during the last quarter. The chief increase was in the quantity of putrid meat, and of meat from animals that had died from accident or disease; for the former rose from an average of 6,503 lbs. in the quarter, to 28,186 lbs., and the latter from 4,887 lbs. to 11,058 lbs. Nearly half of the putrid meat was condemned in the third week of May, when the temperature suddenly rose to above 77° Fahrenheit. Amongst the items which contributed to this amount were 60 prairie-birds. Prairie-birds are largely imported from America; and although they come here in apparently good condition, yet there is at times something about them, either in the nature of the food which they have eaten or in the manner of their preservation, which makes them unwholesome. Again and again, it was reported that persons who had eaten the birds had been made ill by them, and had been affected with sickness and diarrhœa. Dr. Letheby, however, failed to discover anything of a poisonous nature in the food or flesh of the birds; and was, therefore, disposed to think that, like German sausages, they are occasionally subject to some peculiar kind of putrefactive change from the manner in which they have been kept.

Dublin Drainage. The Registrar-General for Ireland, in his weekly report for Dublin, ending July 16th, says: "The Registrar of No. 3 North District, City, states 'that no house drains exist in Greek Street, although a main sewer runs through it!' He adds that 'Bull Lane is a filthy alley, ill-ventilated and overcrowded;' and that 'cases of small-pox, fever, and scarlatina have occurred in the house, 39 Bow Street, since January 1st, 1864.'"

Testimonial to Mr. W. J. Clements. On the 19th ult., a magnificent testimonial was presented to Mr. W. J. Clements of Shrewsbury, amidst the applause of hundreds of his fellow-townsmen. The testimonial consisted of a magnificent silver table ornament, weighing 1,000 ounces. On it was inscribed as follows: "This testimonial is presented to W. J. Clements, F.R.C.S., by the members of the Council of the Borough of Shrewsbury, and by a large number of his professional brethren and other friends, as an acknowledgment of the munificent and graceful manner in which he discharged, during the past year, the duties of Mayor and Chief Magistrate of Shrewsbury; as a memorial of sincere respect for his distinguished professional talents; and as a tribute of esteem for his earnest zeal, ability, and generous aid in promoting works of usefulness and charity. July 19, 1864." This was accompanied with a handsome book, containing the names of the subscribers. Acts of this kind are happy testimonials of respect shown to the whole profession; and the profession cannot but feel deeply indebted to those of its members who, like Mr. Clements, have so lived and acted as to excite and gather the applause of those amidst whom they live.

University College, London. On the 29th ult., the distribution of medals and certificates of honour to the students of the Faculty of Medicine for the summer term, took place; Professor Sharpey, M.D., F.R.S., presiding. Medals and certificates of honour were awarded as follows. *Pathological Anatomy. Gold medal,* Philip Brookes Mason, of Burton-on-Trent; 2, George W. Rigden, of Canterbury. *Medical Jurisprudence. Gold medal,* Philip Brookes; *Certificates*—2, George Jackson, of Beeralston, Tavistock; 3, Geo. W. Rigden. *Practical Chemistry. Gold medal,* Thos. B. Hay, of London; *Certificates*—Ethelred Dessé, of the West Indies; 3, Wm. R. Gowers, of Coggeshall, Essex; 4, Nicholas Marshall, of St. Austell; 5 (equal), T. R. Loy, of Stokesley, Yorkshire, and Thomas Hopgood, of Chipping Norton; 6, Robert C. Joy, of London. *Midwifery. Gold medal,* William Spooner, of Southampton; *First silver medal,* Bryan H. Allen, of London; *Second silver medal,* William Hoffmeister, of West Cowes; *Certificates*—4, George Crowe, of London; 5, William A. Stuart, of Barbadoes; 6, Joseph Thompson, of London; 7, Francis J. Grose, of Dinapore, Bengal; 8, J. N. S. Shrapnell, of Isle of Wight; 9, John D. Wathen, of Fishguard; 10, Wm. C. Cass, of Cowes; 11, Richard D. Logg, of Agra. *Botany. Gold medal,* W. R. Gowers; *Silver medal,* Ughtred J. Kay Shuttleworth, of London; *Certificates*—3 (equal), J. Wreford Langmore, of London, and Henry Cass, of Isle of Wight; 4. William B. A. Scott, of London.

Poisoned Flesh Prohibition, etc., Bill. On the motion in the House of Lords for the second reading of this Bill, Lord Wodehouse observed that it was necessary in the country to use poison for the destruction of rats, but if the Bill passed no poison could be laid for rats outside a dwelling house, not even in a garden. The Duke of Buccleuch remarked that the custom of throwing strychnine about for vermin led to the destruction of shepherd's dogs, which ate the poisoned vermin. The Marquis of Clanricarde observed that pheasants were poisoned by eating worms generated in the bodies of poisoned animals. It was a curious but well known fact in natural history that though those worms did not die from the effects of the poison, they communicated it to birds. Lord Wodehouse was certainly not in favour of laying poison for small birds, which, so far from being noxious, were extremely useful. Lord Portman supported the Bill. The practice was for keepers to poison rabbits with strychnine and then use the rabbits to poison other things. But if one of these rabbits was found by any passers-by and eaten the result would be deplorable. The Bill was read a second time.

Criminal Lunatics. At Michaelmas, 1863, there were 929 criminal lunatics or insane persons under detention in asylums and licensed houses in England and Wales, 717 males and 212 females. Their offences have been various—from murder down to that of being a wandering lunatic. The number in custody in the course of the year is stated at 817 males and 331 females, but it is probable that nearly 100 of the latter are counted twice over—namely, in Broadmoor Hospital, to which they were removed, and also in the asylums from which they were brought. Only a small proportion of these prisoners were acquitted on the ground of insanity; the majority became insane after trial, and many were committed being found insane. Nearly half have been more than four years in custody, several more than twenty years. In the course of the year 137 men and 40 women were added to the number; on the other hand, 53 died, six escaped, and 45 (32 men and 13 women) having become sane, were either discharged or removed for trial or punishment. It is stated that in 37 county asylums the average cost per head for the year was £23 : 5*s.*; that at Bethlehem Hospital the charge payable from the public funds gave an average of £46 : 14*s.* : 2*d.*, and at Fisherton £30 : 14*s.* : 1*d.*; and that in some of the licensed houses individual cases will be found where the costs, defrayed from private funds, amount to £150, £200, £400, £480, and even £530.

A Caution to Surgeons Wanting Assistants. On Friday, July 8th, before Mr. Justice Erle and a special jury in the Court of Common Pleas, Thomas Nicholas Gray, who described himself as "late of the Federal army" and of Dublin, sued Mr. E. J. Morris of Adelaide Terrace, Barking Road, for £52 or a year's salary at £1 per week. The plaintiff swore that he had applied for a situation through Mr. Langley of Lincoln's Inn Fields, and had been been put into communication with Mr. Morris on April 4th; that Mr. Morris had said that he would engage him, but would write to his references, who, the plaintiff admitted, were not professional men. After a lapse of three weeks the defendant sent him a letter stating that he would not require the plaintiff's services. He further alleged that his references had been written to; and that, as he was satisfied their replies were satisfactory, he claimed a year's salary for non-fulfilment of contract. The defendant being sworn, declared that Gray did not come to him until April 28th, and that he had written to a medical man of standing who had been mentioned by Gray as a reference, but who had advised him to have nothing to do with the plaintiff. He declined to engage Gray because this reference was unsatisfactory. Mr. Langley corroborated Mr. Morris as to the date of the application. He proved also that a month's salary only could be claimed according to custom; and further that, if an engagement had been concluded, there would have been a fee due to him (Langley) which had never been tendered or paid, and which he had never considered to be due, and had never applied for

entered on his books. The Judge pointed out t, if such an action as this could be sustained, no ployer of any kind—even a lady engaging a maid would be safe. The jury after a brief consultation, urned a verdict for the defendant. The defence the action has cost Mr. Morris a considerable sum money; and there is no probability of his recover- the costs.

Middlesex Hospital Medical School. The distribution of prizes took place on July 25th, Lord dstock in the chair. The following prizes and certicates of honour were awarded. *First Year's Students:—Summer Session*, 1863. *First Prize*, Mr. arles Wills; *Second Prize*, Mr. Vincent E. Noel. *rtificates of Honour. Materia Medica.* Mr. C. Wills; r. John Swindale; Mr. V. E. Noel; Mr. Alfred nes. *Botany.* Mr. C. Wills; Mr. V. E. Noel. *Prize Herbarium.* Mr. James Worthington. *Practical emistry.* Mr. V. E. Noel; Mr. C. Wills; Mr. J. indale; Mr. James F. Cadle. *Winter Session*, 63-64. *First Prize*, Mr. John C. Bailey; *Second ize*, Mr. John H. Casson. *Certificates of Honour. natomy.* Mr. John R. James; Mr. J. C. Bailey; Mr. H. Casson; Mr. Horace Chaldecott: Mr. William aper. *Physiology.* Mr. J. C. Bailey; Mr. J. H. sson; Mr. William W. Smith; Mr. W. Draper. emistry. Mr. J. R. James; Mr. J. H. Casson; Mr. C. Bailey; Mr. H. Chaldecott; Mr. W. Draper. *cond Year's Students:—Summer Session*, 1863. *First ize*, Mr. Henry W. Freeman; *Second Prize* (equal) r. George Clements; Mr. Robert King. *Certificates Honour. Midwifery.* Mr. H. W. Freeman; Mr. Clements; Mr. R. King; Mr. Horace Basan. *Medical Jurisprudence.* Mr. G. Clements; Mr. R. King; r. H. W. Freeman; Mr. H. Basan. *Winter Session*, 63-64. *First Prize*, Mr. C. Wills; *Second Prize*, Mr. Swindale; *Third Prize*, Mr. V. E. Noel. *Certifites of Honour. Medicine.* Mr. C. Wills; Mr. E. Noel; r. J. Swindale. *Surgery.* Mr. J. Swindale; Mr. C. ills; Mr. V. E. Noel; Mr. Henry S. Shaw. *Anatomy.* r. C. Wills; Mr. V. E. Noel; Mr. J. Swindale; Mr. chard M. Williams. *Physiology.* Mr. C. Wills; Mr. E. Noel; Mr. J. Swindale; Mr. R. M. Williams. thology. Mr. J. Swindale; Mr. V. E. Noel; Mr. C. ills. *Prize offered by the Medical Society for the best per of the Session.* Mr. H. W. Freeman. *Third ar's Students:—Clayton Prize for Comparative Anamy* (equal) Mr. Charles Wightwick Pitt; Mr. V. Noel. *Clinical Medicine. First Prize*, Mr. George ements; *Second Prize*, Mr. Edward Norton. *Clinil Surgery. First Prize*, Mr. G. Clements; *Second ize*, Mr. E. Norton. *Governor's Prize for the best Reorts in Clinical Medicine and Surgery and for General xcellence.* Mr. H. W. Freeman. *Honorary Certificates General Good Conduct and Diligence.* Messrs. H. asan; Alfred Bick; Henry P. Chandler; G. Clements; Henry Cribb; John S. Dickenson; H. W. reeman; R. King; Anthony J. Newman; E. Norton; ohn Ring; Charles E. H. Rogers; Ebenezer Snell; illiam F. Vise; Albert Waymouth; and William Wey.

Curious Lead-Poisoning. Mr. Tuson, of the oyal Veterinary College, writes that in May three ows died at Rugby, with obscure symptoms. On aking a *post mortem* examination, fragments of lead ere found in their alimentary canals, especially in e paunches. It was then remembered that the ows had been kept in fields immediately adjoining e butts of the rifle volunteers. Among the herbage ere discovered fragments of lead which corresponded ry closely with those found in the stomachs of the ows. The lead here referred to is called "bullet pray. Some of this spray had been evidently picked by the cows, and doubtless, poisoned the animals. Since the death of the three cows, the owner has lost two more under precisely the same circumstances. The viscera of one of the cows which died last were sent to Mr. Tuson for analysis, and he was enabled to demonstrate the presence of lead, not only in the coats of the stomach and intestines, and in their contents, but likewise in the liver and kidney. [From another source, we learn that the symptoms for above a fortnight before death, as described by the owner of the cows, were entire loss of appetite, great thirst, violent purging, increased respiration, grunting as though in considerable pain, indisposition to move, etc. The cows had not been in the field where the lead was, since November; hence it is supposed to have lain in their stomachs for several months.]

A Protest. The following has appeared in the daily journals. "We have been much surprised at the assertion made by Dr. Hanks at an inquest held by Mr. Humphreys at the Three Cups Tavern, Bow, on July 21st, 'that it was a common practice for medical men to let the bodies of still-born children be buried in back gardens.' Knowing such a statement to be contrary to the fact, and likely to lead to serious consequences if not contradicted, as medical men of the East-end of London we beg to enter our indignant protest against such a charge, medical men having long known that a certificate was necessary in all cases of still-born children. Dr. Hanks's statement that 'the medical profession wished particularly to know whether still-born children required certificates,' and 'that after the verdict they would know what to do,' was quite uncalled for. E. M. Davey; G. Rogerson; Raphael Meldola; J. G. Massingham; Fredk. J. Reilly; B. T. Shaw; Samuel Thompson; L. Llewellyn; C. Rose; Ben. B. Lyel; Geo. Davies; W. Nix; W. R. Goodfellow; Chas. Hawker; E. Moore; J. B. Hamilton; A. Atkins; A. Nelham."

War. A special correspondent of the *American Medical Times* writes as follows from Fredericksburg, on the state of the wounded of Grant's army: "The disposition of the wounded throughout the city is the most available that can be made under the circumstances. Old stores, warehouses, printing-offices, etc., without ventilation, and filthy and musty in the extreme, were occupied. As there were no bedsteads or bedsacks, the patients were laid on the uncleaned floors on their wet and soiled blankets. Being impressed with the importance of keeping their wounds constantly wet, each wounded man carried his canteen well filled with water, and every few minutes deluged his limb. The effect was to render their clothing wet, and oftentimes to flood the floor with water. It was very evident that the gathering of so many patients upon the floors of old, deserted, filthy, and confined buildings, having wounds that must lead to enormous suppuration, would result in a fearful mortality. Nor has that anticipation been unfulfilled. Pyæmia, erysipelas, etc., promptly occurred, with all their destructive results. Tetanus also appeared, and has prevailed to an alarming extent. Much as the sympathy of the people may be excited by the long exposure of the wounded upon the field before they are placed in hospitals, there is no doubt in my mind that in this pleasant weather such exposure to the elements is infinitely less dangerous than exposure to the poisonous atmosphere of old deserted buildings. It was a frequent remark that the wounds of those who had lain two or three days on the field were in a perfectly healthy condition. The wounds were of every conceivable kind. The severest wounds were received in the head, neck, and upper part of the chest, which, for the most part, took an oblique direction from before, downwards, and backwards.

This direction of the track of the ball was due to the fact that much of the fighting was done by both armies while lying upon their faces. In some instances, the ball penetrated the supraclavicular region, and lodged deeply among the viscera. There was, also, the usual number of compound fractures of the lower extremities, in which the limbs had not been amputated. But, under the circumstances of their admission to the Fredericksburg hospitals, they admitted of only palliative treatment. The period for primary amputation was past, and the period for secondary amputation had not arrived. Permanent dressings for union of the fractures were wanting; and, besides, these hospitals were only temporary stopping-places, and a long and tedious transportation awaited them. We could only place these patients upon 'bunks', adjust the limb, attach a suitable weight to the foot, and place sand-bags upon the sides of the fractured portion to retain it upon its posterior surface."

Varieties.

Wound of the Heart. Dr. L. G. Hicks of Simpsonville, Kentucky, mentions in a business note, a remarkable case of wound of the heart which came under his observation. He says: "A man shot through the left ventricle of the heart *was moved four miles and lived forty-eight hours*, and was perfectly rational." The nature of the wound was revealed by a *post mortem* examination. (*Med. and Sur. Reporter.*)

Smallest Brain on Record. In the transactions of the Anthropological Society, Dr. Gore furnishes an account of a female aged forty-two years, whose brain without the membranes weighed two ounces and five grains, it being the smallest mature human brain on record. She was five feet high and her intellect was infantile. The brain of the adult male averages forty-nine ounces; in females it averages forty-three and a half ounces; giving forty-six ounces as the general average of the human brain.

Diabetes in a Monkey. M. Berenger-Feraud brought two monkeys from Algiers; and, in the hope of saving them from pulmonary consumption, tried to persuade them to live on a mixed diet of animal and vegetable food. One positively declined, and soon died of acute tuberculosis. The other adopted the mixed diet, and stood the cold well for a time; but unmistakeable symptoms of diabetes manifested themselves, and this monkey also died after a residence of nine months in France.

Plasticity of Blood-Corpuscles. In the proceedings of the Royal Society, Dr. Sharpey remarks: "The plasticity of the blood-corpuscle is unrivalled by any other physical body. It will assume all sorts of protean shapes under the slightest influences, elongating to a mere thread; it will pass through a narrow chink; it will enwrap itself round an acute projecting angle, or protrude feelers and tails under the influence of currents. In its natural state, it possesses sufficient elasticity to resume its original shape on the cessation of the modifying influences; but when gum or gelatine has been added, or when the plasma has been permitted to thicken spontaneously, the corpuscle retains any form it may have assumed, till again altered by fresh influences."

Poison-Bottles. Poison-bottles and poison-corks, poison-caps and poison-stoppers, have all successively been tried, with the object of preventing careless or sleepy nurses from giving medicines out of the wrong bottles and thereby poisoning their patients; but they are all open to the objection that when the liquid for which they have been originally used is exhausted the very nice-looking bottle is generally replenished with eau de-Cologne, tincture of senna, or such like innocent compounds, and the object of having a peculiarly contrived bottle is thereby defeated. Perhaps the most unobjectionable of all these attempts to substitute a mechanical contrivance for ordinary caution and common sense, has been brought forward by Mr. Thonger before the Pharmaceutical Society. It consists of a patent label having a border of sand-paper round it, thus appealing strongly to the sense of touch, which is presumed will warn the holder that danger is near. These labels are applicable to dispensing bottles and to the smallest phials, and possess an advantage over any other contrivance, as they can be stuck on any vessel, and as readily removed when the poisonous contents are done with, and the bottle is required for something else. (*Quarterly Journal of Science.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....	Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.
Tuesday.	Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.
Wednesday...	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.
Thursday.....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.
Friday.....	Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
Saturday.....	St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

The crowded state of our columns prevents the insertion of many of our correspondents' communications this week.

M.D. has no right to complain that his anonymous note has not been noticed.

Therapeutical Inquiry. No. IV. Scarlatina.—Sir: I am sorry to say that only the following gentlemen have sent me Schedules:

	No. of cases
T. J. Dyke, Esq. (Merthyr Tydfil)	24
Charles Steele, Esq. (Clifton)	102
Edward Procter, Esq. (Strood)	21
W. G. Walford, Esq. (Hertford)	15
Vincent Jackson, Esq. (Wolverhampton)	3
Wm. Soper, Esq. (Stockwell Road, Surrey)	28
R. W. Watkins, Esq. (Towcester)	7
J. K. Spender, Esq. (Bath)	15
Dr. Kelly (Taunton)	3
Dr. Coates (Bath)	2
Dr. J. Hughes Bennett (Edinburgh)	4
C. F. Hodson, Esq. (Bishops Stortford)	34
	258

The aggregate, as you will see, is far too small to serve any of the purposes for which the inquiry was instituted. I will preserve these Schedules, in the faint hope that, during the ensuing year, this branch of the Therapeutical Inquiry may yet receive at the hands of our members the attention it merits. Sincerely thanking those gentlemen who have been at the trouble to send me the Schedules, I am, etc., Charles F. Hodson.

The Chantry, Bishops Stortford, July 27th, 1864.

APPEAL.—The Rev. H. Bromfield, vicar of Blockley, Worcestershire, begs to call the attention of the members of the medical profession to a case of great destitution; and to solicit their contributions on behalf of the bereaved widow and children. Mr. Edgar Bull, surgeon, etc., resided and practised for several years in the village of Blockley. In January 1863, on his way home at night from visiting a patient, he fell from a bank and sustained a bad fracture of the leg. A long confinement to his bed, and the consequent loss of income, preyed heavily upon his mind; and, though he partially regained the use of his limb, the constitution had received so severe a shock, that his mind gave way, and in a paroxysm of mental aberration he precipitated himself from a window, and was killed. Mr. Bull has left a widow and four children. The eldest son, aged 19, is an assistant in a draper's shop; but two daughters, a son, and the widow, are utterly destitute. The money collected will be applied to establish the widow in a grocery business, in the hope that she may support herself, and keep a home for her children, until some provision can be made for them. Contributions will be received by—Rev. Henry Bromfield; or Admiral Collier, C.B., Blockley; Dr. Kingsley, Stratford-on-Avon; Dr. Moore, 15, Charles Terrace, Victoria Park, London; or Charles W. Morris, Esq., Surgeon, Chipping Campden, Gloucestershire.

THE ROYAL COLLEGE OF PHYSICIANS AND THE TITLE OF DOCTOR.—SIR: The recent resolution of the College of Physicians to address some of its members by the title of Dr., induces me to inquire how far, consistently with the terms and spirit of the Charter of the College, the title can be extended to all physicians.

I find the following remarkable passage in the Charter: "Doctoribus Joan. Chambre, Thomæ Linacre, Ferdinando de Victoria, Medicis Nostris, Nicholao Halsewell, Johanni Francisco, et Rob. Paxley, Medicis."

Considering that not one of these gentlemen was a Doctor of Medicine of an English university, that they *must* have been qualified physicians under Act 3 of Henry VIII, and that they are named physicians, and not doctors of physic (in fact, the expression doctor of physic does not once occur in the Charter), I think we are justified in concluding that the founders of the College were entitled *doctors* on the ground of their being qualified English physicians, and not because some of them happened to be graduates of foreign universities. The fact that just before the very same names in the same order, with the same affix, are mentioned with this difference, only that the prefix "*doctorum*" is used instead of "*doctoribus*", strongly supports the view that the substantive and adjective are used much in the same sense, and are given on the same grounds. It would thus seem that all physicians are *ipso facto* "doctors", just as the clergy are reverend, and barristers are esquires.

I have pointed out the passage to several legal friends, and they are all confident that the prefix could only have been given on the grounds stated, and that it recognises and sanctions the claim of all physicians to the prefix doctor.

I am, etc., JAMES GAGE PARSONS, Physician.

Bristol, July 23rd, 1864.

OPPROBRIUM ERGASTULI.—SIR: I believe that in considerable collections of that class of persons in whom the stamina of health is somewhat below par—I mean those who are generally admitted into our workhouses and workhouse schools—many are very liable to become the subjects of strumous ophthalmia; perhaps not of a very severe type, yet sufficiently so to become very troublesome. Many, especially children, have it in succession; and some several times over. The usual remedies are generally successful, in apparently curing the disease; but no known means have as yet been found successful in rooting it out of the establishment. The workhouse school in which I am interested has been subject to it for several years; in fact, is never without it. All ordinary means have been perseveringly tried, such as good diet, plenty of air, and out-door exercise, cleanliness and cold bathing. The persons affected are carefully kept separated, and that for a considerable time. I have suggested in addition, quinine and cod-liver oil.

If any of your correspondents, who may have had experience of this kind, would obligingly furnish me with any means or suggestion that may have been successful in their hands, I shall feel greatly obliged, and they will be conferring a great boon on a considerable number of poor suffering children.

I am, etc., M.D.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—H. Olivey, Esq. (Taunton), 5s.; C. H. C., 2s. 6d.; R. M., 1s.; Dr. Hartshorne (Madeley), £1:1; Messrs. Hovell and Kingsford (Clapton), £1:1; Messrs. Bush and Parsons (Frome), £1; Thomas Hewlett, Esq. (Harrow), £1:1.

Amount previously announced, £43:11:6. Received at the *Lancet* office, £2:18.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 3rd, 1864.

COMMUNICATIONS have been received from:—Dr. GEORGE E. PAGET; Dr. ORMEROD; Dr. G. M. HUMPHRY; Mr. TIMOTHY HOLMES; Mr. CLEMENTS; Dr. KITCHING; Mr. T. M. STONE; Dr. RICHARDSON; and Dr. FOWLER.

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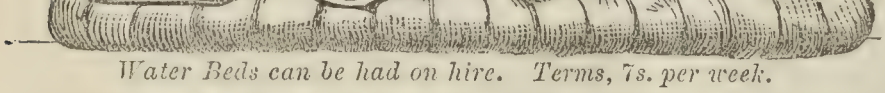
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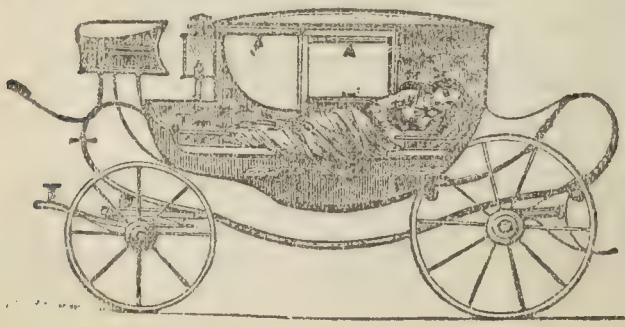
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READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

THE

ADDRESS IN SURGERY.

BY

G. M. HUMPHRY, M.D., F.R.S.,
SURGEON TO ADDENBROOKE'S HOSPITAL.

My reluctance to undertake the present task, and my diffidence in attempting it, are, in a great degree, counterbalanced by the pleasure and pride that I feel in addressing you in this place, at a period which may, I think, be regarded as an era of no small importance in the social relations and the science of surgery.

If we look back to those early periods when the light of history shines obscurely, and tinted with chivalry, through the mists of fable, we learn that surgery was, as we might expect from the nature of things, the elder brother, perhaps I should say the father, of medicine. The first cultivators of our profession—Chiron and Æsculapius, Podalirius and Machaon—were chiefly occupied in surgery. That it was an honourable vocation is proved by the fact that demigods and heroes, princes and priests, devoted themselves to it, and with such success as to be deemed worthy of deification among men, and of incurring the hostility of Pluto.* Still, knowledge was little, superstition and fancy were great; and all played their part, the two latter the chief part, in helping nature to heal the wounds which man inflicted on man; for the work consisted chiefly in the treatment of injuries. Hence, for many ages, and in most countries, the offices of priest, of necromancer, and of surgeon, were combined in one person. Internal maladies soon came in for their share of speculation, of spells, and of drugs; and the ἰατρος of the Greeks, the

"ἀνὴρ πολλῶν ἀντάξιος ἄλλων"

was a general practitioner. Indeed, all the knowledge of those early times was within the grasp of one mind, and was included in the study of each of those who bestowed much attention upon education. Physics and metaphysics, philosophy and anatomy, were blended, or rather grew up together, and served to elucidate as well as to confound one another. Thus Plato entered into physiological discussions respecting the functions of the body and the effect of their derangements in inducing morbid conditions of the system. It is not improbable that Pythagoras acquired some knowledge of anatomy by the dissection of animals; and Aristotle has left us the first regular treatise on comparative anatomy. Indeed, it was not till the parings and the additions made in the Alexandrian school had given substance and individuality to the several sciences, that they admitted of separation from one another. Then medicine began to be studied with much assiduity, distinct from, though in company with, philosophy and theology; the dissection of the human body was first practised; the department of surgery was separated from pharmacy and dietetics, and there seemed good promise of much progress in them all.

A promise soon to be broken; for no sooner had this point been attained than all was again thrown into confusion, and the sciences were reduced again to chaos by that disorder of nations and conflagration of learning which were typified and aided by the Alexandrian fire. Science was, indeed, well nigh consumed; its only representatives in Europe, amid the general return to superstition, magic, and astrology, being alchemy and the like silly strainings after the impossible; the very folly exhibited in the search for the philosopher's stone and the elixir vitæ shewing that some such ignoble though potent stimulus was necessary to keep alive any germ of science at all. Islam, for a long period, afforded it the only shelter; and in Arabia, where chemistry seems first to have acquired an individuality, amid the strange philosophising works on medicine, some additions were made to surgery by Rhazes and Albucasis; but the savage proceedings with knife and cautery tell of no real advance in practice.

The great mistress of the world, of military and orderly rather than of philosophical genius, was no zealous patron of science. Even in the zenith of her power and refinement, when literature held a worthy place in her courts, medicine was at so low an ebb that its practice was prohibited, and its professors were banished on account of their barbarous and unsuccessful proceedings. These interdicted mutilators were practitioners both in medicine and surgery. They included none of the higher families, few even of the free Romans; but were chiefly Greeks and Asiatics, or slaves. The honour of being the first native Roman physician of eminence, as well as of being the first who treats of surgical operations, was reserved for Celsus.

That second mistress upon the seven hills, whose power rested on the spirit rather than the sword, and whose empire, based upon the deep yearnings and secret motives of man, was destined to exert so wide and lasting an influence upon the human family, was far too wise to neglect the great engines of philosophy and science. Though she watched them with a jealous eye, and reined them with a nervous hand, that indicated a consciousness of fault, and therefore of weakness in her system, she could not but encourage them as subsidiaries to her stability and her power; so the lamp of knowledge began to glow in her cloister, and shed light into the darkness around. The priestly and the medical offices were again united; and medicine and surgery derived some benefit from the slight education of the ecclesiastic. Still there was little progress. Science was extremely low. In our own country it can be scarcely said to have existed till the intermingling of people consequent on the Crusades, the breaking up of the feudal system, and, above all, the discovery of printing, helped to loose the bands of

* It is related that the death of Æsculapius was due to the jealousy of Pluto, excited by the numbers whom he rescued from the grave.

superstition, and gave a new impulse to knowledge. The increasing time and attention required for the treatment of the body, and the gains consequent on it, diverting the monks too much from their appropriate duties, necessitated a change. We find, accordingly, that surgery, as being the most obviously inconsistent with the priestly office, was first detached and forbidden; and it fell into the hands of smiths and barbers. The separation, thus a second time commenced, was by no means beneficial. Medicine, detached from the more lucrative branch, fared badly enough, and seems to have consisted chiefly of cabalistic notions and strange concoctions from the animal and vegetable kingdom; and, under the sign of the forge or the bandaged pole, little could be expected for surgery. No wonder that astrology and magic, the sympathetic powder and the royal touch, were needed as auxiliaries to the searing irons, the tents, and the unguents.

The impulse given to the study of human anatomy at Bologna, in the fourteenth century, and the foundation of schools in Montpellier and Vienna, as well as in Paris and Italy, aided by printing in the fifteenth century, gradually rolled back the cloud of ignorance from east to west, and produced their effect in England, especially upon medicine. It made rapid strides. The learned of our Universities not unfrequently took the honourable degree of doctor of medicine, visited foreign Universities, especially Bologna, Padua, Salerno, and Paris, and maintained that position in our court and country which their learning and their profession deserved. Through them Medicine held its ground on a level with Divinity and Law. The effect of reviving knowledge was much slower upon Surgery. Degraded from the monastic to a lower class, it little attracted the attention of the learned, and did not deserve the name of a science. Still it could not fail to glean something from the general spirit of improvement; and its practical character made some amends for other imperfections. The surgeon-barbers were the more dignified section of their order, and were incorporated as a separate body by Edward IV. In the field of Agincourt the body-surgeon of the king, and the surgeons of the army, were held in some estimation. Each succeeding sovereign had his serjeant-surgeon; and patients in the hospitals were consigned to the care of the surgeons as well as of the physicians. Hence it is scarcely credible that the incongruous connexion between the surgeons and the barbers should, even nominally, have continued so long as the time of George II, and that not till the beginning of the present century were the surgeons incorporated as a separate body.

During the last century, though I cannot but fear that medicine has, in some degree, descended from its high estate, there is no question that surgery has advanced with rapid strides; and, through its connexion with pathology, and the clearer enunciation of principles deduced from a careful observation of facts, has acquired the position of a true science. It is no small satisfaction to know that a scientific cultivation of their profession has formed the real basis of the reputation of the most eminent surgeons of the past and the present generation. We cannot but cherish the recollection that it was by the renowned surgeon of our boyish days, in whom zeal and patience met in a rare degree, that anatomy and pathology were pushed to the utmost verge the unaided eye could reach. Look round some of our best Museums, the choicest specimens in them still proclaim the master-hand of Astley Cooper; and remember that they were made in the zenith of his career, and in the later periods of his life. The early mornings, snatched from days of an unequalled professional career, were eagerly devoted to the tedious work of unravelling the anatomy of the breast, the thymus, and the testicle.

In him who has lately passed from among us, full of years and full of honour, the physiologist, the philosopher, and the sound practitioner, was ever present the anxiety to attract others along that path of science which he had himself found so sure a way to success. My last conversation with him was on the question of rendering our Universities more available to our profession for that purpose. Full of honour I have said he was; and yet I could have wished that an additional mark of that honour—the well-earned tribute of a coronet—had been allowed, in the person of Brodie, to testify to a due appreciation of our profession.

The survivor of that illustrious trio, who still helps to bear the burden of the day, has contributed no less than the other two to widen the area of our knowledge, and to build up surgery securely upon the basis of physiology and pathology. His lectures, dating nearly half a century back, remain, to my mind, the best embodiment of surgical science ever written, and have done more than any other work to disseminate sound views of pathology and correct principles of treatment. Of Cooper, Brodie, and Lawrence we may well be proud; and not we only, but this country and this age. I need but mention the names of Bowman and Paget among those now occupying the foremost rank, to prove that deep research in physiology and pathology is still an acknowledged road to surgical eminence. Long may it be so! May it be so to a greater extent than it is.

To a greater extent than it is; for let us not boast too much. It needs no lynx's eye to see that the evil, the *auri sacra fames*, which always has, and which doubtless always must, enter more or less into our composition, and which should therefore be the harder fought against; the evil which had much to do with our great degradation in mediæval times, and which has of late been dragging upon medicine, is exerting its influence upon surgery. Few are attracted to our ranks except by the hope of a livelihood, to which practical work offers the readiest and the surest prospect. Even of those who, in early life, are induced by disposition or ambition to cultivate the science, nearly all are soon drawn away into the more lucrative paths of practice, and become wholly engaged in them. Their very success in the one leads them to desert it for the other:

"Science self destroys her favourite sons."

She tells them how little of direct reward, of that kind of reward which most men seek, she has to give. She shews them, too,—the most discouraging revelation of all,—how hard it is to link her on to the work we have to do, the work of stopping disease and repairing its ravages; and how much harder it is to render her available in scanning the character and meeting the fancies of those we have to treat.

The subdivision of labour also,—a necessary consequence of the ever-widening area of the field of knowledge, and the rapid increase of wealth,—conduces to the same result. The great practical gain attendant

thereon is shewn by the improvement which has, of late years, been made in the treatment of so many diseases; but the loss to the profession as a science, from this narrowing of the range of observation, and this concentration of thought upon special subjects, must, I think, be admitted. It is an evil difficult, impossible directly, to combat. Indeed, the overweening practical tendencies of the age, of which our profession does but furnish an example, can only be counterbalanced by giving greater heed to early training, to education, that is, during the period when the mind has not yet become absorbed in the engrossing avocations of money-making life.

To do this, to prolong that period, to promote high mental culture and refinement of thought, to foster the taste for literature, and to prevent its being borne down and swamped by the ever-swelling tide of practical energy, is the especial work of the Universities. Never were these noble institutions more required; never was there greater scope for them, and greater opportunity, and, therefore, greater responsibility. Their influence upon education, radiating through the public and private schools, pervades the whole land. We look to them to hold up the banner of science at its proper level. We ask them not, indeed, to forsake the ancient and approved standards. Let classics and mathematics, logic and theology, wave as proudly and as securely as ever; but let other pennons float beside them. Other sciences have risen up, and claim their share of attention and assistance. By standing forward as the nursing mothers of these sciences, by fostering them judiciously, by controlling their wayward tendencies, by holding them up above the din and clatter of the world, by promoting their study in a calmer, higher, more philosophic manner than could otherwise be done, the Universities will be exercising their proper sway over the great onward movement, will be promoting the revival of a truer spirit of philosophy, and will be assisting it to harmonise and keep pace with the practical genius of the age.

Surely, gentlemen, these remarks are not uncalled for, are not inappropriate, at this time and in this place; for I may ask, what have our English Universities done for surgery? What influence have these cherished and richly endowed seats of learning exerted upon our science? We must answer, almost nothing, except the little derived through its partnership with medicine. Upon surgery, directly, they have had little or no effect. Very few of those trained in our colleges have entered its ranks; fewer still have risen to eminence in it.* Not that surgery was altogether overlooked. We find in the statutes of Henry V and Elizabeth provisions for granting a license to practise in surgery; but it is probable that this referred to practice within the Universities, just as the licenses of the London Colleges of Physicians and Surgeons referred to practising in the city and its immediate vicinity. At any rate few availed themselves of the privilege; and the statute had been obsolete for many years.

The real cause of the Universities having been so little connected with our profession, especially the surgical branch of it, is probably owing to their not being metropolitan. The tendency, in this country, for things to adjust themselves according to circumstances, rather than to be moulded by the directing agency of imperial rule, has shewn itself in this. London, from an early period, the chief and most increasing centre of trade and of fashion, of government and of literature, took some steps, by the foundation of the Colleges of Physicians and Barber-Surgeons, and the Apothecaries' Company, after the model of its guilds and other corporate bodies, to secure the welfare and the proficiency of those who practised the healing art within its district. The provincial towns, left without such provision, or the means of supplying it, naturally looked to the metropolitan institutions. Thus the London colleges became long ago, in reality, what they have only recently been named, the Colleges of England. In awaking from its lethargy, in reasserting its dominion over surgery as well as medicine, and in aspiring to control the general practice throughout England, the College of Physicians has taken an important step, the full effect of which can scarcely be at present determined. While the more liberal charter of the College of Surgeons, and the institution of the fellowship, must raise the character of that body, and bind it more closely to its provincial members. Had the Universities been situate in London there is every probability that they would have been, in England, as they are in some other lands, the great portals of the profession, the dispensers of surgical as well as of medical qualifications throughout the country.

But is there no part left for Oxford and Cambridge in connexion with medicine and surgery? Is the influence of these Universities upon our profession to be allowed to dwindle and die out? Gentlemen, I think it will be a serious loss to us if it be so. I think the history of the past, and the features of the present to which I have alluded, tell us that an important part still remains for them to play in relation to us. It is highly desirable that the members of the profession should be drafted from different classes of society, and trained in different ways; and though it is not to be expected that the Universities can contribute more than a small proportion to the number of those engaged in practice, yet if only some of that small proportion, highly educated, and imbued with a real love of learning and a desire to cultivate science for science sake, could be annually added to our body, how great would be the boon. The leaven thus infused would have its influence upon the whole mass. It would induce a higher system of teaching in our schools, and would help to resolder the links of the chain that should bind medicine to literature and philosophy. Many such men wander forth from the Universities not knowing whither to go, or where to direct their energies. My longing hope and heart's desire for surgery is that more of them should be drawn into her service. Some have recently entered; and the good work they have done is full of promise for the future. And I cannot but trust that the recent recognition of surgery in this and some of the other Universities in the United Kingdom, will, in course of time, tend to enlist greater numbers of their graduates into our ranks, and will conduce to a more genuine and successful prosecution of our science.

And surely the science that deals with the aberrations and the restorations of the noblest and most complicated of nature's works, is no unworthy object for the lifelong energies of the highest mind. It is the topmost branch of the tree of physical knowledge. True, the very height and complication of our science remove it further than most others from the

* Sir Everard Home was a member of Trinity College. John Sterne, M.D., founder and first president of the College of Surgeons in Ireland, was a member of Sidney College.

region of calculation, and deprive it, in some measure, of definiteness and exactness. If, with all the present accuracy and range of mathematics, and knowledge of material, the construction of an iron bridge is still deduced from experiment rather than from calculation, we cannot be surprised that much uncertainty attends the investigation of the functions of the human body, and that the treatment of its diseases is often empirical rather than deductive; but this only proves the difficulty of the science, and the need of applying to it the highest powers of the mind strengthened with the best aids of education. I cannot doubt that rich fruit would, in due time, follow from the bestowal upon medicine and surgery, and the collateral sciences, in Oxford and Cambridge, of a fair share of that cultivation and favour which are granted with so liberal a hand to the more peculiar studies of these places. I trust that, ere long, this will be done. Physical science is gradually taking more root in these Universities; and it is for you, with your voice and interest, to aid the residents in Oxford and Cambridge to obtain for it, and, through it, for our profession, that *status* and consideration which are their due. That keen and deeply interested observer of passing events, especially of those relating to science and the Universities, the late Dean Peacock, entered warmly into this view, and said to me, not long before his death, "I am astonished that your profession does not look more closely to its interests in our Universities. Depend upon it, it will have reason to regret its apathy. It will assuredly lose ground in position and in public estimation."

Excuse my dilating so long upon these matters. I feel that the occasion and the place justify, if they do not demand, some allusion to them; and the deep interest I take in them would scarcely allow me to forbear.

I will proceed now, in closer conformity with the duty assigned me, to a brief review of some of the more important changes that have taken place in surgery in my time (eight-and-twenty years), and in my own experience. I should rather say, to give a hasty account of my own experience of them.

The marvellous results in our social system, from the application of steam to the transmission of our bodies, and electricity to the transmission of our thoughts, make us impatient of ordinary progress, and impel us to look for extraordinary steps in the advance of surgery. Happily we do not search altogether in vain. There is one discovery which, from the amount of human suffering, and that of the sharpest kind, it has spared, deserves to be classed in the same rank with the great inventions I have named. On the benefits of CHLOROFORM, which may be taken as the representative of ANÆSTHETICS, in this respect, I will not dwell. They are too patent to need recital. I think I am warranted in speaking of this benefit as a pure gain: that is to say, though some evils may attend upon the use of chloroform, others equally great have been removed; so that the dangers of operative surgery have not been increased, while its horrors have been greatly diminished. It is too much to expect that so powerful an agent, quickly pervading the blood, and paralysing the sensorium, can be employed without occasional damage, even fatal damage; and the instances in which this occurs are most appalling and impressive. Happily they are few; and, with increasing experience and care, their proportion may, perhaps, be diminished. We are thankful, in this place, that we have not hitherto witnessed any disaster from its use; which must, in no small degree, be attributed to the care bestowed upon its administration by our house-surgeons. The after ill effects have been confined to depression, nausea, and sickness. These have been by no means common, and have seldom been attended with serious consequences. In a few cases I thought that, by lowering the patient's strength, they contributed to determine the fatal issue; but that has not been quite certain in any instance.

Chloroform has greatly widened the range of operative surgery, especially of the tentative and conservative kind. There is no question that operations can be more carefully and better done under its influence; and little excuse is now left for secondary hæmorrhage. That sequence is almost always attributable to negligence in the surgeon, not to disease in the patient: that is to say, it occurs far less often from a fault in the vessel, or in the healing process, than from carelessness in the application of the ligatures. Had chloroform done no other service than that of inducing us to bestow more attention upon this stage of an operation, it would have deserved well at our hands.

While dwelling upon the blessings of this discovery, let us not forget that, though the medium we use is due to the zealous and enterprising physician of whom Scotland is justly proud, the credit of the introduction of anæsthetics into operative surgery belongs to America, and is one of the results of that energy of character, of that impatience of *antiquæ viæ*, and that aptitude for meeting the ordinary requirements as well as the extraordinary emergencies of life, which have there been so highly developed. It has often been a matter of surprise to me that these qualities have not told more upon surgery; and yet I am not unmindful of the names of Mott and Warren, of Sims and Müller, and of the obligations of pathology and operative surgery to them and others of our transatlantic brethren. This one addition, however, may be well accepted in lieu of many.

Blessing as chloroform has proved, it could scarcely have been so considered, rather might it have been regarded as a curse, had not the way for it been paved by a gradual increase of knowledge and an improvement in practice, especially in the TREATMENT OF WOUNDS. This has, from the earliest periods, occupied a large share of the attention of surgeons; and no feature in the history of surgery, or, indeed, of the human mind, is more curious and more interesting. The ingenuity with which mischievous theories have been promulgated, and impediments to nature's reparative processes have been devised, as well as the tenacity with which they have been retained, are scarcely credible. The greatest advance, perhaps, ever made in our art was effected through the acute mode in which superstition was combated with her own weapons by Sir Kenelm Digby and his sympathetic cure. The notions of purification and mundification had taken such deep hold on men's minds, and the practices with spells and setons, with caustics and irritating unguents, were so firmly grafted upon them that nothing short of a proceeding, the very absurdity of which gave it an air of mystery, and so constituted a claim to respect, could suffice to uproot them. This transference of the mischievous applications from the wound to the inflicting weapon,—

> "And with a charm she staunched the blood,
> And salved the splinter o'er and o'er,"

was a grand success of that use of deception to enforce truth which is the basis of the highest order of quackery. In spite, however, of this great hint, and the important principle of "union by first intention," thus introduced, strong prejudices in favour of plasters, unguents, bandages, and other interferences, have descended even to our time, and are still too prevalent. In Addenbrooke's Hospital we have, for several years, discarded these applications almost entirely in the management of ordinary wounds and after operations. The edges of the wound are kept in apposition by sutures if any assistance is required, and are then left quite uncovered, quite exposed to the air, for the first few days; no plaster or bandage, not even lint wet or dry, being used. After a time fomentation, or poultice, is applied if there be need; but often the healing of the wound has saved further trouble. By this mode the wound is kept cool and clean, and is exposed to the air and to the eye, so that its condition is known, all the distress of the subsequent removal and reapplication of dressings is avoided, and our patients are not unfrequently discharged, after amputation and other operations, without having experienced one twinge of pain during the operation or subsequently. This anæsthetic treatment of wounds is the proper sequel to the anæsthetic mode of performing operations. I am glad to find that the practice is finding its way into other hospitals, and trust that ere long it will be still more general. Adopting it, we may be said to have pretty well realised the *ne plus ultra* in the treatment of wounds.

It has not appeared to me that METAL offers any decided advantages, as a material for SUTURE, over thread or silk, provided these be properly, not too tightly, tied; and certainly, if there is much tension, the metal cuts its way out sooner than the others, and is, therefore, less serviceable. This I have found by inserting thread, or silk, and metal sutures alternately in the same wound.

The LIGATURE is so effective a method of securing blood-vessels, and its disadvantages, which seem to have been rather magnified, are so much counterbalanced by the drain it affords from the depths of the wound, that I have not resorted to either of the recently proposed modes of arresting bleeding. I still regard the ligature as the most important addition ever made to surgery, and have already expressed my belief that secondary as well as primary hæmorrhage may, in almost all cases, be prevented by its proper application. Having this faith in it, I have hitherto been content to leave the proving of its proposed substitutes to others. Still, as the ligature does necessitate a slight amount of sloughing and suppuration in the wound, I shall be glad if experience shews that even this good thing is superseded by a better.

In the management of patients after operations, surgeons are relinquishing the idea that any particular plan, stimulating or lowering, sedative or otherwise, is, as a rule, to be enforced; and are falling back upon the common-sense view, that each case is to be treated according to its special requirements, due regard being had to the habits, the appetite, and the inclination of the individual, and due regard being also had to cleanliness and fresh air. Simple things are, after all, the most important; and to nothing, in late years, can we look with more unmixed satisfaction than to the increasing respect that has been paid to plain hygienic rules. In a stricter observance of them, advancing civilisation provides an antidote to one at least of its own poisons; making the towns to vie in healthiness with the rural districts, and removing some of the greatest opprobria from our hospitals.

We know, however, too well that the tide of increasing success is not without its ebbs. We do not flatter ourselves, as we blot out or mitigate certain classes of diseases, that others will fail to spring up and flourish. Such an illusion would at once be dissipated by the mention of that malady which has of late years proved so frequent a cause of death after operations, and which has been named, somewhat inappropriately and unfortunately, PYÆMIA.

The name, I say, is inappropriate; for though it is highly probable that the disease is associated with, or dependent on, some morbid condition of the blood, there is much reason to presume that that condition is not a result of the admission of pus into the circulating current. A tendency to suppurative inflammation in various parts of the body, accompanied by certain phenomena of a peculiar and rather variable kind, is what we observe, and is nearly all we know about this formidable affection. The tendency is commonly, but not always, associated with a wound or sore; and there is often a premature and irregular coagulation of the blood, such as we find under many other circumstances,—clots forming quickly after, or perhaps before death, and containing sometimes white patches of varying consistence, which resemble spots of pus, but which are probably composed of clustered white corpuscles, or fibrine alone. Of the dependence of this condition of the blood upon the accidental admission of pus from the wound, there is little or no evidence. The disease is more liable to occur in some constitutions than in others; and is, I believe, more frequent in the metropolis than in the provinces. In this district we do not very often witness it; and when it does appear, it is rather the wind-up feature in a sinking case than a real malady.

There is often much in a name; and the name "pyæmia" is, I think, unfortunate as well as inappropriate. It is suggestive too much of an accidental, and too little of a constitutional cause. It thus rather tends to divert attention from those precautions by which the disease may be warded off, and it leads too directly to inactivity and despair when the symptoms have commenced; whereas, if we regard it not exclusively as an accidental invasion, but as, to some extent, a constitutional disease, we shall be more induced to seek its prevention by measures which are conducive to the general health before and after operations; and when it has commenced, we shall not at once give up the case as a hopeless one of blood-poisoning, but shall still endeavour by general means, by stimulants, or the contrary (according to requirements), by cleanliness and abundance of fresh air, to improve the condition of the patient; and we shall find that success will sometimes reward our efforts. Indeed, close observation shews us that this "suppurative fever," as it may be better called, has its milder as well as its severer forms. There are instances in which it consists merely of a slight febrile attack followed by one or two abscesses which burst, or are opened and do well, and which do not much retard the recovery of the patients. In such cases the idea of blood-poisoning scarcely occurs to us; and yet they are of the same kind with the formidable and rapidly fatal forms of the disease, and—which is the important practical point—are connected with them by an intermediate

range of cases varying in severity, and in the opportunities they afford for treatment.

My own impression is, that the more frequent occurrence of this disease in late years is mainly owing to the richer dietary of our people; and that its prevalence is, generally speaking, proportionate to the amount of animal food habitually consumed. It is most common in the upper classes, and in the metropolis and larger towns, where wages are high and living is high; and it is least seen in the agricultural districts, where the people are, to a greater extent, graminivorous. The affording a comparative freedom from this disease is, I believe, one of the ways in which the ordinary spare diet of the agricultural labourer renders him a good subject for operations, and give a favourable aspect to the statistics of provincial hospitals.

To the practice of administering Opium, either by the mouth or hypodermically, after operations, for the purpose of preventing the pain that is likely to follow them,—a practice which has many advocates,—I am, in most cases, decidedly opposed. The immunity from suffering, which, be it remembered, does not by any means always occur, and which improved treatment of the wound will render still less common, is, in my opinion, dearly purchased by the languor and enervation that often follow the opiate. As a general rule, I prefer that my patient should run the risk of a sleepless night after an operation, rather than incur the effects of the sedative.

In the old capital operations, some changes have been introduced, but no very decided improvements. In Lithotomy, we do not excel Cheselden and Martineau. The lateral operation, as practised by them, is, notwithstanding the suggestions by Alanson and others, probably, on the whole, the best mode yet known of removing a stone from the bladder by cutting. Lithotrity has been perfected,* has been overrated, and is acquiring its proper place in our estimation. In Addenbrooke's Hospital we have not very often resorted to it; because, in the class of patients who there come under our care, it is difficult to ascertain the duration of the symptoms, and to estimate the size of the calculus. These persons are, moreover, commonly intolerant of the repetition of operative procedures; and, in the cases that are suited to lithotrity, we find that lithotomy is attended with very little danger and very little pain. I think that, except in a few practised hands, and in the upper classes, it will be found, on the whole, to be less successful than lithotomy, even in the cases that seem most fit for it.

With regard to Amputation, it seems a question whether the double flap incision will long survive the skilful hand that gave it a temporary ascendency. Competitors for favour are rising in the quadrilateral methods of Teale, Spence, and Carden;† though they have scarcely yet been sufficiently tried. Many surgeons are rather falling back upon the old circular mode, which recommends itself by its smaller wound and its much smaller cicatrix, as well as by the greater facility for securing vessels and the less liability to secondary hæmorrhage that attend it. In the commencement of my practice, actuated by the growing feeling of the time, I performed the double flap amputation exclusively. Mr. Lestourgem usually did the same; and we had the advantage of comparing it with the circular operation, admirably performed by our colleague Mr. Hammond. The result has been, that we have, to a great extent, relinquished the flap. Still, in the thigh, I think that the double flap, or some modification of the flap operation leaves the best stump, especially if the comparison be made after a few years have elapsed; and I still usually adopt it, when amputating at that part, in feeble delicate persons, having observed that in such cases, where early union is most important, there is less liability to reopening of the stump and protrusion of the bone after the flap than after the circular incision.

The allusion to Liston, just made, reminds me that from the Edinburgh school has proceeded a freer, bolder, yet more precise style of performing operations, which by him, and by the present Professor of Surgery at King's College Hospital, has been carried to a degree of perfection that will probably never be surpassed; while to the occupant of the chair of Clinical Surgery in Edinburgh we owe the introduction of new and important operations, as well as other improvements in practice. The amputation at the ankle-joint, introduced by him, has preserved many a useful limb; although my own limited experience inclines me, in most cases, to give a preference to the mode of performing the operation proposed by Pirogoff.

Syme's operation for the treatment of Stricture I have performed in eight severe long-standing cases; and I am satisfied that the tendency to a recurrence of the disease, though it exists and must be provided against, is less determined, and therefore more easily under the control of the patient, than it is after the ordinary modes of treatment. Nevertheless, we must hope that additional improvements in the process of dilatation, gradual and rapid, will render it unnecessary to resort to incision for the treatment of stricture.*

The Excision of Diseased Joints, though not originating with Professor Syme, yet received its first real impulse from his successful cases of excision of the elbow, and has now been so extensively practised, and has excited so much attention and discussion, that we ought to be able to arrive at some conclusions respecting it. Still, in a question involving so many considerations based, in each instance, upon uncertain data—such as the constitution of the patient, the reparative power in the joint, the relative prospect of recovery after amputation or excision, etc.—positive statements betoken ignorance and prejudice, rather than fair judgment based upon experience. Unquestionably, the introduction of the operation has increased the difficulties and responsibilities of the surgeon. It is, however, on difficulty and responsibility that true usefulness and dignity are based; and the fear of encountering them will have little effect in deterring the true lovers of our profes-

* I may refer to Mr. Fergusson's plan of removing the fragments, at the time of the operation, by means of a small lithotrite or scoop (described in his recent lecture at the College of Surgeons), which seems to have answered well in his skilful hands.

† *Edinburgh Medical Journal* and British Medical Journal, April 16th, 1864. I have performed Teale's operation in the thigh in six cases. Of these, three (two severe traumatic cases, and the third a case of acute suppuration in the leg and knee-joint—all, therefore, unfavourable cases) were fatal. In one of the three that recovered, there was a tendency to protrusion of the bone through the flap. The two others recovered quickly: and a good stump was gained in each.

* The performance of the operation by subcutaneous incision, as proposed by Dr. Dick at the Royal Medical and Chirurgical Society, June 14th, may be an improvement upon the mode in which it has hitherto been done.

sion from entering upon new fields of practice and of hope.

The frequent success and the slight danger attendant upon excision of the elbow are generally admitted to justify its trial in most of the cases in which amputation would formerly have been performed, as well as in some others.* In the shoulder, when discharging sinuses indicate ulceration of the articular surfaces, and the patient's health is failing through this cause, excision offers a good prospect of saving both life and limb, provided the glenoid cavity is removed, as well as the articular end of the humerus. It should certainly be attempted.† Excision of the wrist has scarcely been attended with sufficiently satisfactory results in my own practice, or in that of others, to encourage its repetition. Of the three instances in which I have performed it, in one only was a moderately useful limb retained.

Excision of the hip I have not yet attempted. I have proposed it in a few cases which seemed likely to go on to a fatal termination, but have not felt justified in urging its adoption, for the following reasons. *First*, the question arises chiefly in children and young persons; and we know that instances are not uncommon in which they survive, and the joint becomes ankylosed, so as to bear the weight of the body well, even after extensive destruction of the articular parts has taken place. *Secondly*, it appears to me that the acetabulum, forasmuch as it is usually as much or more diseased than the head of the femur, should be gouged or sawn out, to afford a fair prospect of the wound healing. This would, of course, necessitate more or less interference with the pelvic cavity, involving a liability to suppuration there; and I have felt doubtful as to the prospect, in case of recovery, of the limb sufficing to bear the weight of the body. Moreover, I have not thought the results of the experience of others in this operation, so far as I have been able to glean them, very encouraging.

The construction of the ankle-joint and the disposition of parts about it are by no means favourable to excision; and the operation in this part must always be attempted with much hesitation. I have performed it in four cases. In two, good, firm, useful feet remained, enabling the patients to walk well. In a third, the disease was very extensive, necessitating the removal of the whole of the astragalus and navicular bone, as well as the ends of the tibia and fibula; and amputation was subsequently performed. In the fourth, suppuration continued, phthisis ensued, and the patient died six months after the operation. In a lad, in whom I removed the navicular bone with the adjacent surfaces of the astragalus and cuneiform bones, as well as parts of the os calcis and cuboid bone, the recovery was complete; and, four years afterwards, he could run about as though nothing had happened; indeed, it could scarcely be credited, that so large a part of the instep had been taken away.

But it is in the knee that the great triumphs of excision have been obtained and are to be won—perhaps the greatest triumphs of modern surgery. How often has one lamented that the whole lower limb should be sacrificed by incurable disease of this joint! and how often has life been sacrificed, rather than the mutilation of amputation should take place! How have we all longed for some substitute for that mutilation—some mode of clearing away the hopelessly diseased parts, and leaving a serviceable limb! Yet how reluctant a reception has this operation met with! How many objections were thrown at it! It would be fatal in its issues. The diseased parts could not be thus removed. The wound would never heal, and the bones would never grow together. The limb would be useless. The disease would return. The limb would not grow. I must acknowledge to having once entertained these prejudices myself; and I was only induced to a trial of the proceeding by its favourable results in the practice of Mr. Jones of Jersey. Since that, I have performed it in thirty cases—an experience which is probably greater than that of any other person except Mr. Fergusson, to whom, I need scarcely say, we are indebted for the revival of the operation. Six of my patients died; of these, one was a case of acute suppuration of the knee in a child—a case unfavourable for any kind of treatment; another was a severe contused wound of the knee; a third—a young woman in whom the wound was proceeding remarkably well, indeed, was nearly united—died, ten days after the operation, from hæmatemesis supposed to proceed from a chronic ulcer of the stomach. The fatal issue in this case can, therefore, scarcely be said ta have had any dependence upon the operation. It would probably have occurred had the operation not been performed. Three sank after amputation consequent on the excision. Five others underwent amputation, and recovered; and the remainder—that is, nineteen—regained very useful limbs.

The general conclusions at which I have arrived from the observation of these cases, and much thought and reading on the matter, are, that in the cases in which the condition of the joint is such as *directly* to imperil life—severe acute suppuration, for instance—amputation should commonly be performed; but where the condition of the joint is such as to undermine the health gradually, and so endanger life only *indirectly*, or merely to destroy the usefulness of the limb, excision should generally be resorted to.* This latter class of cases, let me remark, where life is spared, but the usefulness of the limb is lost, forms no inconsiderable or unimportant a class, especially among the agricultural poor. In them the type of disease is not, for the most part, acute, but enduring and recurrent. Inflammation of the knee creeps on month after month, arrested by occasional treatment in hospital, but not ceasing until the joint is so marred as to be unable to bear the body and permit

* I have excised the elbow in twelve cases. Of these, nine regained useful limbs; three did not do well, being sickly persons, and dying of phthisis from six months to a year after the operation.

† I have excised the shoulder in three cases. Of these, two recovered with very useful limbs; the third died, not long after the operation, of acute phthisis.

It may be observed, that the reparative powers in the upper limb are greater than in the lower, while its exposures to injury are less, and its opportunities for repose are greater. Hence, a given amount of disease in it is, proportionately, more indicative of constitutional debility than in the lower limb. This should be taken into account in considering the question of excision in the upper limb; and it militates, to some extent, against the operation. The truth of this remark is entirely corroborated by my own cases, so far as they go; forasmuch as the failure of excision in the upper limb was, in each instance, due to a phthisical or unhealthy state of the patient.

* I am supposing that they are cases, in other respects, fitted for excision; that is to say, that disease does not extend much into the shafts of the bones, and that the patient's health is such as to render it probable that he will bear the operation and the trials from suppuration, confinement to bed, etc., that are likely to follow it. The cases of scrofulous disease of the synovial membrane, which form a large proportion of the diseases of joints in this district are, for many reasons, not favourable for excision, but should not be excluded from it.

the movements of the limb. It is little satisfaction that the disease now ceases, or is cured, as we may be pleased to call it, if the limb remain a burden and a drag, instead of being a propeller of the body; and we feel no pride in seeing these crippled members carried about our streets. In the greater number of such cases, usefulness may be preserved or restored to the limb by excision, performed during the progress of the disease, or soon after its cessation; and, as far as my own experience goes—and I have tried a good deal—this cannot be accomplished with anything like the same good effect in any other way.

The excellent results of successful excision will not be questioned by those who have seen the patients walking and running about after the bones have become firmly united; and they will have perceived that all ground for apprehension of a return of the disease is excluded. With regard to the important question of the danger of the operation, I am probably making a fair statement in saying, that in acute cases it is rather greater, and in chronic cases rather less, than that of amputation under corresponding circumstances; whereas, in the important class of cases just mentioned, where disease has subsided after destroying the joint, and where the operation is undertaken for the purpose of reclaiming the limb to service, I think it will prove that the risk from this, as from most other operations upon bones, is very slight.

The various questions relating to this operation have, however, recently been so fully and so ably discussed by him who is best able to give an opinion upon them,* that I will detain you no longer with my views regarding it, and will merely further observe, with reference to excision of joints—*first*, that it is very desirable—I do not say essential—to remove all the diseased joint structures, the synovial membranes, the cartilages, and the bones; and this combines with other causes to render cases in which the affection is chiefly synovial among the least favourable for the operation. *Secondly*, the surrounding tissues, being only secondarily affected, may be left, and will be sure to recover their natural condition, however much they may be thickened or traversed with sinuses, when the source of their irritation has been removed.

The remark, gentlemen, that an operation is a disgrace to surgery, has doubtless often grated upon your ears, as it has upon mine; and you have felt it to be either one of those truisms that need not be uttered, or one of those statements, plausible rather than true, that ought not to be made. True, it is only in the same sense that the imperfection of knowledge is a disgrace to man, or that the destructiveness of disease and the tendency to death are a disgrace to nature. While these remain, operations, well conceived and carefully performed, far from being a disgrace, will be an honour to surgery, and will furnish the greatest triumphs to our art. Advancing knowledge, instead of diminishing, serves to increase their number; for, though it shows some to be unnecessary, it introduces more. It gives us, I grant, a fuller insight into the resources of Nature, and a greater reliance on them. It tells what we may leave to her, where we may assist and direct her; but it tells us also of her failures and her aberrations, and shows us more clearly where we should interpose to arrest her processes and to remove their products. While, on the one hand, we learn that popliteal aneurism may often be cured by pressure upon the artery or by flexure of the limb, we find, on the other hand, that the annoyances and dangers of hernia may sometimes be judiciously averted by an operation for its radical cure; that clefts in the palate may be closed, vesico-vaginal fistulæ stopped, prolapsing wombs retained, etc., etc.

By nothing, probably, has the range of operative surgery been increased so much, and so usefully, and so safely, as by the introduction of SUBCUTANEOUS INCISIONS, attended with a knowledge of the mode in which healing, under these circumstances, takes place. The application of the principle to tenotomy has enabled us to make amends for some of Nature's shortcomings, has planted many a foot upon the ground which would otherwise have remained curled up and clubbed, and has restored many a squinting eye to vision and to beauty; while the reduction of dislocations and fractures has been facilitated, and various other deformities have been rectified.

In the treatment of club-foot, my own plan differs somewhat from that usually recommended. In the *first* place, instead of making two or more operations, I divide, at one time, all the tendinous structures that seem chiefly to interfere with the proper position of the foot. These, in varus, commonly, are the tendo Achillis, the plantar fascia, the tendons of the anterior and posterior tibial muscles, and of the common flexor of the toes. *Secondly*, I bring the foot into its normal position at the time of the operation, and fix it there. I have not found any failure of union of the divided parts from this; and a quicker, and, I find, better result, is obtained by it. *Thirdly*, I do not use Scarpa's shoe, or any other complicated apparatus, but merely a well-padded splint, secured on the side of the leg; and fix the foot in position, by its means, with plaster and bandage. It is necessary to do this very carefully, and to protect the leg and foot well with cotton wool; and the whole is removed and reapplied daily for the first few days. The earlier the operation is done, after the first month from birth, the easier is the treatment, and the quicker the cure.

That a proceeding, so easy and so often successful as tenotomy, should be pushed to excess, is only what we must expect. Tenotomy has, no doubt, been rather too frequent of late, and has diverted us from the good effects which may be, and which in olden time often were, obtained from extension well applied and perseveringly maintained. By recalling us to this practice, and showing us how it may be better carried out, and by reminding us that tenotomy is only the auxiliary to orthopædic treatment, Mr. Barwell has recently done good service.*

* See report of Mr. Fergusson's lecture at the Royal College of Surgeons, in the *Lancet* of July 16th. See also papers by myself on excision of the knee and is effects upon the growth of the limb, in the *Medico-Chirurgical Transactions*, vols. xli, xliv, and xlv. I can quite endorse Mr. Fergusson's opinion, that amputation has, in many cases, been performed after excision, when the limb might have been saved by longer patience, with, perhaps, further incisions to lay open sinuses or remove diseased bone. The dissection of some of my own early cases proved that I had been too hasty in removing the limbs; for the disease turned out to be less than I expected. Acting upon the information thus obtained, I have, by secondary incisions, saved some limbs, after excision, that at an earlier period of my practice I should have amputated.

* The view of the etiology of congenital club-foot taken by Eschricht, which attributes the malformation to an imperfect unfolding, or unrolling, of the limb during the fœtal state, does not appear to me quite satisfactory. I think no one can examine the distorted part without being convinced that there is something besides this—that an abnormal contraction of the muscles on the hinder and inner side of the foot is, at least, an important element in the matter.

Let me here observe, that the effect of extension in subduing muscular spasm, and so inducing rest, which has its familiar illustration in the stretching out of the leg for the cure of cramp, is a most important principle, explaining some facts with which we were before conversant, and giving us certain new laws to regulate the position of diseased joints and limbs. Observation had already told us that the straight posture was the best for a fractured thigh. We now know that it is so, because in it the flexor or more powerful muscles are extended, and are, therefore, at rest. A patient suffers under diseased hip or knee, with, perhaps, ulceration of the cartilages. The agony is severe, and greatly aggravated by involuntary movements or spasms of the limb. The joint becomes bent; and the more it is bent, the more frequent are the startings, the greater the distress, and the quicker the progress of the malady. We administer chloroform, extend the limb, fix and support it carefully in that position by splint and bandage; and it not unfrequently happens, that immediate relief is given, a night of sleep follows, and the disease is arrested. The principle may be carried out under various circumstances, and in other joints. Indeed, the plan of fixing the limb in the extended position is, perhaps, the greatest improvement that has been made in the treatment of diseased joints. If I mistake not, it was first adopted by Mr. Key in affections of the hip-joint. By combining the two requisites of steadying the joint and quieting muscular action, it is in complete accordance with the views so fully and ably advocated by the late Professor of Surgery at the College of Surgeons.

Ovariotomy may now be said to have fairly run the blockade, and to be surely anchored in the harbour of legitimate surgery; and the success which has recently attended it in the hands of Clay, Spencer Wells, Bird, Baker Brown, and others, constitutes it one of the greatest achievements of British surgery—so great as at length to have excited the emulation of our brethren across the Channel, though it has hardly yet gained a place in our own metropolitan hospitals. That it has been slowly received in these hospitals, where men are hard occupied in combating disease in other forms, and are compelled to show a tendency to limit rather than extend their range of work, is no wonder. Fully aware of the great uncertainties, difficulties, and dangers inseparable from this grave operation, before undertaking it, I went carefully over the whole ground, literary and pathological, examining the specimens in various museums, and collecting all the recorded cases I could find. I came to the conclusion, that the prospect of success is, on the whole, proportionate to the fluidity of the tumour; that, where it is solid, the operation should not be attempted at all; that, where it is fluid, and the patient young or middle-aged—that is, in the most favourable cases—the prospect of success is about two to one. This, or a lower average of success, I thought sufficient to justify the operation in the ordinary run of cases, where the disease advances steadily, and is likely, after some months of misery, to terminate fatally. My success, however, has hitherto not equalled the average I deduced from the practice of others. Of four cases, one only recovered; she has since married and borne children; one died of tetanus, after she had apparently passed the ordinary dangers of the operation; and two others died, after a few hours, from hæmorrhage and peritonitis consequent on the division of extensive adhesions.

Of that strange disease—Syphilis—which seems to have a close relation to the gregariousness of men, and which becomes of increasing frequency, and therefore of increasing importance and interest, with the growth of our large towns, which forces itself upon the attention of the statesman and the moralist, as well as of the pathologist and the surgeon, and which has proved a puzzle to them all, no less than to the historian,—we have gained great additions to our knowledge, but, I think, not proportionate improvement in our treatment. If, as has been remarked, secondary and hereditary manifestations are more common than they formerly were, this may be due partly to the greater frequency of the malady; but may it not be also partly due to a less definite treatment of the primary indication, which is a consequence of the different views that have been promulgated? The mercurial plan, especially for the indurated form, is again in the ascendant, and, I think, deservedly so. Regarding the primary sore or spot as the continuing source, as well as the origin, of infection to the system, we can have no question of the importance of eradicating it as quickly as possible; and what we especially require is some more rapid and effective means of doing this. The milder caustics seem to me simply to increase the amount of induration; and the severer ones, even when freely applied, very often fail to destroy it. I was accordingly led to try the removal of the sore with the knife, when it admitted of being easily and completely insulated—in the cases, for instance, of chancre on the prepuce, especially near the margin, or on its exterior (and in this latter situation they are, in my experience, peculiarly liable to be followed by secondary symptoms). I am, in such cases, in the habit of removing the prepuce. The earlier it is done, of course, the better the prospect of complete eradication of the malady. Even at a late period, when secondary symptoms have set in, the primary lump still being large and hard, I have sometimes followed the same course, believing that the removal of that, which seems to be, not merely a source, but a maintainer of infection, would facilitate the cure of the patient; and I have found reason to be satisfied with the practice under these circumstances. The wound has in every instance healed kindly. I would warn those who may be disposed to resort to this summary method, that the incision should be carried quite wide of the base of the sore, so as to include a clear and considerable margin of healthy skin and tissue with it; for in this, as in cancer, the influence of the disease extends for an uncertain distance around its apparent site; and I have, in some instances, been disappointed at the recurrence of induration in the cicatrix, when I had not been sufficiently careful on this point.* I would warn them also against giving too strong an assurance of immunity from a subsequent appearance of the disorder; for it is impossible to tell when the infection of the system begins, and whether, therefore, in

Moreover, the fœtal position of the foot is rather that of talipes than of varus: whereas we know that the former deformity is very rarely congenital, while the latter very commonly is so.

* This, taken with the fact that I have never known induration in the cicatrix to follow when the incision was made well beyond the range of the chancre, militates, to some extent, against the growing opinion that induration about the primary sore is an evidence and result of constitutional infection. I find from an excellent paper on Syphilis, by Dr. Veale, in the *Edinburgh Medical Journal* of last month, that he has also been in the habit of practising the excision of chancres, with good result.

any particular case, it has taken place; neither do we know what is the period of incubation, or whether there is any regular period; and I have seen secondary symptoms commence after the wound caused by ablation of the primary sore had healed with a sound soft cicatrix. They have, however, been slight. I think the prospect may be represented thus: If induration have not taken place, or isonly commencing, the probability of an appearance of secondary symptoms, after the complete removal of the sore, is very slight; and, if they do appear, they are not likely to be severe. If the induration has set in, the operation will diminish the probability of their occurrence; and if they, in addition, have already appeared, it will facilitate their cure. After all, however, this treatment is applicable only to a few cases—to those, namely, where the prepuce or the exterior of the penis is the seat of the primary disease. I have not tried it in the female.

One's anxiety to quench at once, and as early as possible, the first spark of the disease, has, of late, been greatly heightened, in consequence of the disclosures, by Mr. Hutchinson, Dr. Wilks, and others, of its persistent vitality, smouldering on from generation to generation, interfering with development and nutrition, imprinting its tell-tale marks upon the teeth, the nose, and other parts, exciting or modifying disease in the organs of sense, the skin, and most of the internal organs, and bursting out, in the original sufferer or his descendants, in a variety of ways, and at protracted periods. This impresses upon us, more forcibly than ever, the conviction that the combined efforts of law, physic, and divinity are urgently needed to arrest the ravages of the disorder, and to check its deteriorating influence upon our race. It is possible that these views are exaggerated; and it must take more years of the patient investigation of many persons to analyse with precision the influence of this subtle virus upon the nutritive processes.

And along, or near by, the path of that investigation lie some of the hardest and most interesting questions in pathology—questions as to the origin, communication, and extension of disease—questions as to its relation with the nutritive and formative processes—questions as to the part which the blood and the tissues have in holding and in developing it—questions of the kind represented by the humoralism and the solidism of our forefathers. Let it not be thought that such questions—theories, if you will—respecting the nature of disease, are far beside the practical work of curing it, though they may seem to be so; and though, to excuse ourselves from the trouble of entering into them, we are willing to think that they are so. I feel sure it is quite the contrary. Good practice is ever closely allied to good theory; and it is hopeless to look for improvement in the one without advance in the other. Discoveries may appear to be accidental. They crop up, as it were, unawares and unexpectedly; but they have their laws; and one of those laws is, that they are usually made when the time—that is, the mind of the age—is ready for them. Hence, the same discoveries are often made by several persons cotemporaneously. Or, if a discovery be made prematurely, before the time is rife to appreciate and take advantage of it, it dies out and is forgotten, to be re-born in its proper season. Hence, the pathologist who, in his study, with microscope and crucible, investigates the obscure processes of disease, and gives us deeper insight into its mysteries, is combating it no less truly and effectually, though less obviously and less directly, than the surgeon who is fighting it, hand to hand, in the hospital wards. The one primes the gun, the other fires the shot.

Indeed, to the *direct practical work* of surgery, that branch of pathology which we call morbid anatomy is scarcely second in importance to healthy anatomy. It is essential to anything like precision in diagnosis and confidence in treatment; and it is always a matter of regret to me that it is so little pursued in our schools, and that our rich museums are made of so little real use to our students. I have even heard eminent surgeons discourage their pupils from working in them. I am sure that those who have acted in opposition to such advice will agree with me that some of their most valuable knowledge was acquired from the study and comparison of specimens in museums.

And to the *science* of surgery, I need scarcely say, that pathology, in all its branches, is the very cornerstone. It is only by a close observation of the manifestations of disease that we can hope to obtain an insight into its real nature. In this work, the microscope is doing vast service, opening up new regions of observation and thought, and teaching us more and more of the close connection between pathology and physiology—a connection first fully recognised by Hunter. Through the revelations of the microscope, we are seeing, more and more clearly, that disease is not a thing foreign, or additional, to the body, so much as an evolution from it; in other words, that it does not consist in new processes, but rather in modifications of the old or natural processes; and, therefore, that the parasitic-theory—the theory of the insertion, incubation, and proliferation of exogenous germs—is becoming less and less generally applicable. We learn that inflammation, and many other morbid processes, consist in a *plus* or *minus*, with slight variation, of the ordinary circulatory and nutritive processes. We are coming to more sure conclusions, through the researches of Virchow and others, that the pus-cell is but a variation of the areolar or epithelial cytoblast. Moreover, careful observation of the components of cysts and tumours, even of those most destructive in their effects, and, apparently, most foreign to the ordinary structures, brings out such close resemblance to the natural elements of the body, in their intimate composition and mode of growth, as to confirm the view, propounded some years ago, by myself* and, probably, by others, that they are not new growths, or additions, but merely out-growths, or hypertrophies, with more or less modification, of the natural tissues; in short, that there are no new structures produced in the organism by disease. In the words of a recent writer, "heterologous tissues have physiological types; and there is no other kind of heterology in morbid structures than the abnormal manner in which they arise, as to place, time, and quantity."

If this be so, it almost follows that disease spreads, not by the propagation and dissemination of germs, but by impressing upon the nutritive processes in adjacent tissues, or in other parts of the body, of a tendency to like variation with its own; that is to say, by assimilation or fermentation, rather than by germination. Thus, inflammation spreads, like excitement

* Lectures on Surgery, in the *Provincial Medical and Surgical Journal*, 1850 and 1851.

in a mob, by the extension of the disorder from cell to cell and from vessel to vessel; and suppuration at one part may, especially in particular states of the system, induce suppuration at other parts. Thus, cancer grows by moulding the adjacent growing elements into its likeness; while the cause which first gendered it, the constitutional predisposition, or whatever it may be, facilitates this influence over the surrounding area as well as over the immediate circumference of the disease. The communication of a disorder by inoculation is analogous to the effect produced by a ferment; and that by contagion resembles the influence exerted by a decomposing mass in a larder.

But I must not stray into these pleasant paths of theory. Not, as I have before said, that they are without their practical import; and I am sometimes tempted to think that the view of disease just taken does seem to shed a dim, distant glimmer of hope upon that black and desperate disease which is the most grievous curse of our species and the saddest opprobrium of our science, the great emblem, and may we not say also, a great agent, of evil. If CANCER, after all, be the result of a modification of the ordinary processes of nutrition, may we not indulge a hope that, when those processes and that modification are better understood, some mode of control may be found, some means discovered, of arresting the disorder and of restoring health. When helplessly watching the sinking frame racked with this horrible malady, one feels that the remotest prospect of finding a remedy, or even of clearing the way to that knowledge of the malady which may lead to a remedy, is stimulus enough to urge on the pathologist through years of patient work.

There is scarcely a single page in the book of pathology which has not received additions, or undergone revision, within my own knowledge; while some long and important chapters, such as those on FATTY DEGENERATION and BLOOD-CLOTTING in the living vessels, with EMBOLISM and all the consequences resulting from them, are altogether new. The thinking over what has been done, like the gloating over the recollections of a feast to the glutton, makes us yearn for what is to come. And, perhaps, in no direction are my own yearnings so strong as in that of the desire to know something of, and to be able to do something in, TETANUS. I speak of acute traumatic tetanus; for in the chronic and idiopathic forms of the disorder, as we all know, the patient, if carefully tended and well fed, not unfrequently recovers. But never do I feel so utterly depressed, depressed with the double feeling that I can do nothing and that I ought to be able to do everything, as when that horrid grin tells that the malady has commenced and is proceeding quickly. Hoping against hope, after so many disappointments, I try what has been reported to do good in the hands of others, only to be again disappointed, and come to the conclusion that the prospect of recovery in any case depends upon the power of the patient to wear out the malady rather than upon anything that I can do to mitigate its force. What is it? and where is it? Is it in the blood? in the nerves? or in the muscles? Surely science will one day point out its dwelling and its nature, and help us to dislodge it.

Let me not forget thankfully to acknowledge that for the great progress in pathology and minute anatomy we are chiefly indebted to the persevering labours of Germany, more particularly to the professors in the German universities, whose position, and simple habits, and moderate pecuniary ambitions, combine to induce a life-long devotion to such subjects. Among ourselves, pathology and other branches of our science are, as I have already said, more commonly cultivated with an eye to their practical application, and are early deserted for practical work. In it, therefore, we ought to excel; and my own observation, in most of the important French, German, and Dutch hospitals, makes me bold to think that we do so; that our patients are, on the whole, better and more carefully treated, with less of meddlesomeness and interference with Nature's ways, and with more consideration for the avoidance of pain and the promotion of their real comfort and welfare. The ingenuity and delicacy of manipulation of the French, together with their quickness of apprehension and good spirit, the painstaking and kindness of the Germans, and the quiet good sense of the Dutch, are worthy of all admiration; and, as belonging to their respective national characters, are peculiarly suited to the temperament of the patients they severally have to treat. Each nation contributes the produce of its own peculiar genius. To the enterprising spirit of America, we are indebted for the inestimable boon of anæsthesia; to the ingenuity of France, we owe the ÉCRASEUR of Chassaignac,* and various instrumental improvements; from Germany, have come the OPHTHALMOSCOPE of Helmholtz, the LARYNGOSCOPE of Czermak, and great additions to every branch of pathology; while the persevering ability, the courage, and practical discernment of Britain, may lay claim to most of the great improvements which have recently been effected in the surgical treatment of disease.

Nor must I conclude without an allusion to a feature which promises much for the welfare of patients in all classes of society, and in our hospitals in particular; a return to one of the best elements of the days of chivalry, and an instance of the good offices which the Church Catholic has, in all ages and all her vicissitudes, tendered to the poor and the sick; a feature with which the name of Nightingale will be long and thankfully associated. Let me not be thought wanting in appreciation of our present NURSES. They have done much. Indeed, I do not think that they receive, at the hands of the public, the gratitude and consideration which they deserve, and which would encourage them to the still better performance of their arduous and self-denying duties; and I often wish that our great pourtrayer of human character, whose popularity and excellence rests, in no small degree, upon the sympathies which he enlists for the humble and the deserving, had made the *amende honorable* to these useful and hardworking, but, by him, severely represented, persons. Still, we can scarcely over-estimate the moral and physical

* Perhaps the most really useful application of the *écraseur* is for the removal of polypus of the uterus. In that, I have found it peculiarly advantageous. A few weeks ago, I removed with it a fibrous polypus, larger than a child's head, with a thick neck, quite beyond the reach of the finger. The mass was extracted by means of midwifery-forceps, after its neck was cut through with the *écraseur*. No bleeding or unfavourable symptoms followed; and the patient is quite well. I have repeatedly removed internal hæmorrhoids with the *écraseur*. In one case, in which I was present at the operation, severe hæmorrhage ensued; and it was necessary, next day, to insert needles, and encircle the bleeding surface with ligatures. The patient did well. In operations upon the tongue, and, occasionally, in the removal of tumours, I have found the instrument of great service.

benefit that may be anticipated from the devotion to such duties of a higher class, gifted with a better education, actuated by a nobler feeling, and well trained for their work; while, to many in that class, the work will afford, not merely a maintenance, but an occupation and a home. Already the system is beginning to bear good fruit; and some of the best appointed of our hospitals are evidence to its success, and give encouragement to its more general trial.

In this address, I have not attempted anything like a systematic review of all that has been done, even in my own experience. Such an essay, I had not the time nor the disposition to undertake; and the nature of these addresses is wisely left to the judgment and disposition of those to whom you entrust the honourable task of delivering them. I have merely touched upon some points, and upon those cursorily and imperfectly, my object being, chiefly, to impart my own thoughts and feelings upon them; and this must be my excuse if I have seemed desultory and egotistical. I would that I could make you an offering more worthy the occasion; for I know how to value, if I do not know how to improve, the opportunities which these annual meetings afford; and I know that the addresses delivered at them, in past years, have been a source of much interest and instruction to many hearers and readers. To myself, they have been more than that. The first spark of professional zeal, and the first real impulse to work, I owe to the perusal, nearly thirty years ago, of one of the earliest of these addresses, delivered by one of the first and most earnest members of this Association, the founder of the East Anglian Branch, one of the most incessantly energetic of men and one of the best of surgeons—I mean the late Mr. Crosse of Norwich. His strong desire that the Association should meet in Cambridge has at last been realised; and the pupil's feelings to the master forbid my allowing the event to pass away without this slight tribute to his memory.

I think, gentlemen, that the profession of the surgeon is one of peculiar difficulty and anxiety. The requisites, physical and mental, for real success in it are, perhaps, greater than in any other; and failures are more directly apparent, often more distinctly traceable to ourselves, more startling, more shocking, and, I suspect, more disturbing to our peace of mind. But the balances of human happiness are pretty evenly swung; and in the opposite scale, we are able to place the satisfaction resulting from a vast amount of suffering prevented, of functions preserved, and life prolonged. This might be enough; but we have also the still greater satisfaction of feeling that, forasmuch as the higher and better part of man—the psychical, or moral—is closely connected with and, to some extent, dependent upon the lower, or physical, and the perfection of the one has a near relation to the perfection of the other; so a good done to the body has a deeper and more enduring effect than may at first appear. Its influence passes beyond the corporeal, and extends into the regions of the spiritual. We are accustomed to speak of the moral advantages and opportunities attendant upon sickness and infirmity; and we do so rightly, for every condition has its opportunities; but I have no question that those attendant upon health and soundness of body are greater. A damaged body is a moral disadvantage. Reason tells us that it should be so; and experience tells us that, on the whole, it is so; that the *mens sana*, using the phrase in its widest and best sense, is most to be found in *corpore sano*. Such a view sets the greatest value upon health, and holds in highest estimation the profession whose work it is to maintain and to restore health. It shows us that every disease cured and every limb saved is a blot removed from the face of Nature's noblest work, and is a help to man's march along the steep and rugged road to Heaven.

British Medical Journal.

SATURDAY, AUGUST 13TH, 1864.

THE CAMBRIDGE MEETING.

THE members of the British Medical Association have, for the thirty-second time, met in friendly conclave; and have again dispersed, thoroughly gratified with their reception, and refreshed by the intellectual and social communion which they have had the opportunity of enjoying. To say merely this, however, would be to say scarcely more than may be expressed of any meeting of the Association in any locality. The Cambridge meeting has been one of especial interest. For many years the Association has had before it, as a thing to be hoped for, a visit to that great seat of learning; and when, at the Bristol meeting last year, the proposal that the invitation from Cambridge should be accepted received the enthusiastic assent of all present, the expectations of a pleasant and profitable sojourn for a few days in that classic region were undiminished by the modest representation that Cambridge, at the time of the meeting, would not be seen at its best, while they must have been even increased by the assurance given that, notwithstanding all drawbacks, Cambridge would do its best. In any circumstances, a visit to Cambridge—with its University, its colleges, its libraries and museums, its associations with the names of great and good and learned men, and its picturesque scenery—would have been of high interest. And when to all these, the fixed and permanent attractions of the place, were added the hearty welcome, not only of the President and his professional fellow-townsmen, but of the University authorities, the ungrudging hospitality shown both to the Association as a body and to individual members by the colleges, and the opportunities afforded of gaining the acquaintance of men whose lives are passed in the cultivation of learning and of science—it cannot be but that the recent visit to Cambridge will long be remembered as one of the greatest events in the history of the Association.

And while we here record, in general but inadequate terms, the feelings of gratification and gratitude which, we are sure, every member who was present at the meeting must have felt, and while it

is impossible to enumerate by name all to whom obligations are due, we cannot let this opportunity pass without heartily thanking the local Committee, and especially their excellent Secretary, Dr. Latham, for their admirable arrangement of details, and for their endeavours to make the meeting such as we have described it to be. Few but those who have undertaken the task of local secretary to a general meeting of such an Association as ours, can understand the labour and anxiety which are therein involved; and this labour and anxiety are by no means diminished by such an *embarras de richesses* as exists in Cambridge. To arrange matters, in such circumstances, so that business and pleasure shall at once alternate and harmonise, and that the visitors shall be refreshed and instructed, not surfeited and perplexed, is no light task; but Dr. Latham has proved himself to be one of those capable of performing it. We are assuredly only expressing the feelings of all who attended the meetings, when we offer him cordial thanks for his labours, and congratulations on his success.

The interesting essay, also, of Dr. Humphry, on Cambridge, published lately in the JOURNAL, and liberally distributed in pamphlet form during the meeting, must also have not a little contributed to the instruction of members.

The details of the meeting are given in the pages which follow. A few points, however, may be here commented on.

The attendance of members was large. Our list of those present contains 215 names; but these were probably not all. The presence of so great a number —at least as many, indeed, as ordinarily form the list of those attending the meetings in towns with a large medical population—must have been due to the special attractions of Cambridge, and to their influence in causing an unusual influx of visitors from a distance. Those, in particular, who had been educated in the University, and had been admitted to its degrees and honours, came in considerable numbers; and many at least gave additional testimony of their respect for their *Alma Mater*, by wearing, while there, the academic dress which she had conferred on them.

The address of the President was fitting to the place and to the occasion, and full of sound sense. Cambridge, he acknowledged, had not done all that she might in encouraging the study of natural science; but she was becoming more and more alive to the importance of such study; and Dr. Paget showed that his efforts, at least, to promote further progress in this direction, would not be wanting. He advocated most ably the necessity of introducing into public instruction some one branch of natural science —not so much for the sake of the special knowledge itself, as of the training, in the way of distinguishing truth from falsehood, derivable from such study. He remarked—very correctly, in our opinion—that the wonders of modern science themselves seemed to render the untrained mind more ready to receive the pseudo-wonders which impudence and charlatanry offer to it; and hence he derived an additional argument in favour of the course which he was advocating. We commend his remarks to our associates; and would especially ask them to consider well whether they cannot, in their respective localities, and by very simple means, follow out the plan sketched for them by Dr. Paget, and thereby do their share in the dispelling of ignorance and the prevention of its attendant evils.

The report of Council showed the state of the Association to be very satisfactory. Its members have reached 2,400; and a continuance of that steady progress, which has attended it for several years, may be reasonably expected. The Branches are reported to be prosperous, and fruitful of good. During the last year, two new Branches have been recognised, one of these being the first colonial branch. We trust it will be followed by others in the British dependencies. The financial report, made up to the end of 1863, is, from causes described, apparently less favourable than could be desired; but, although the present state of the Association finances was not alluded to, we believe we are correct in stating that the subscriptions for the present year are, on the whole, well paid up; that the amount of arrears is steadily diminishing; and that there is reason to expect a favourable account from the Treasurer at the end of the year.

Of political and social matters, several of much interest came under notice.

The Council Report referred to the failure of the attempt made last year to induce the College of Surgeons to provide for its country Fellows the means of voting by proxy, and recommended a renewal of the efforts made.

The army medical question also, as was to be expected, received attention both from the Council and from the meeting. The defence of the Director-General, attempted by Dr. Wood, appeared only to strengthen the hands of those who sought to ameliorate the condition of the army medical officer; and the able report on the subject, brought up on Thursday by Dr. Falconer, with the consequent resolution proposed by Dr. Stewart, received the unanimous assent of the meeting: the sanction and approval of the Association being thus, in effect, given to the proceedings recently taken by the Metropolitan Counties and other Branches.

Two events occurred which, in whatever locality the meeting might have been held, must give it a prominent place in the history of the Association.

Last year, the Association assented to a proposal made by Dr. Richardson, for the appointment of a committee to consider the possibility of establishing a Provident Fund. At Cambridge, a report, drawn up after most careful consideration, and founded on

the advice of Mr. Tidd Pratt, whose intimate connection with friendly societies gives his opinions much weight, was brought up and approved; so that the formation of a fund, for affording relief to members during disability from sickness or accident, becomes henceforth an integral part of the Association. That such a fund is demanded, there is unfortunately too much evidence; and, if the project brought forward be successfully carried out—and we see no reason why it should not—the institution of the Medical Provident Fund will be an act on which the Association, and especially Dr. Richardson, will be able to look back with unmingled satisfaction. Of the objects and details of the scheme, we shall probably have more to say hereafter. In the mean time—*Floreat!*

The gold medal—bearing most appropriately the name of the respected founder of the Association—was this year presented for the first time; the successful candidate being Dr. Thudichum — a man known, by repute at least, to the majority of our readers for his high scientific attainments, and whose character commands respect. We congratulate him most sincerely on being the first recipient of the Hastings medal; especially because the results of competition in previous years have shown that it is a prize which is not to be lightly bestowed, and because of the authority given to the award by the well known scientific character and honesty of the three adjudicators —Drs. Sharpey, Richardson, and Waters. The essay of Dr. Thudichum will be published in the JOURNAL, in accordance with the terms on which the prize was offered.

With these remarks, we close our comments on this most pleasant and successful meeting of the Association, of which it may truly be said—

"Hæc olim meminisse juvabit."

THE "LANCET" AND DR. HUMPHRY'S ADDRESS.

As our readers are well aware, the *Lancet* has more than once attempted to obtain possession of the addresses and papers read at the Annual Meeting of the British Medical Association. It has hitherto been foiled in its efforts; but this year, through a breach of faith on the part of one of its agents or reporters, it has been successful in obtaining the MS. of Dr. Humphry's address, and in printing and publishing it before it was delivered. Dr. Humphry, who was evidently quite unaware of the previous proceedings of the *Lancet* in this way, on being requested, delivered his MS. into the hands of an accredited agent of the *Lancet*. Dr. Humphry, at the same time, distinctly informed the agent that the address was not to appear in the *Lancet* of the 6th inst., unless it was also published in the JOURNAL of that day. On finding that the address would not be published until the 13th, Dr. Humphry immediately informed the reporter that the address must not appear in the *Lancet* of the 6th, and that he must at once return the MS. Nevertheless, to Dr. Humphry's great surprise and regret, the address appeared in the *Lancet* of August 6th. We give this explanation, as some of our readers may otherwise be surprised that the address of Dr. Humphry was not published in our last number. The weekly journals go to press on Thursday evening, and appear in London on Friday morning. Consequently, to have published Dr. Humphry's address in the last number of the JOURNAL would have been to publish it many hours before it was delivered! We apprehend that few of the members of the Association would have thought it very complimentary if they were asked to listen to an address which they might have read hours before in a journal! Every member of the Association at Cambridge might in this way have read in the pages of the *Lancet* Dr. Humphry's address long before he delivered it.

Whether the *Lancet* is or is not proud of what we must call this very smart transaction, we cannot tell. The *Lancet* knows right well that the British Medical Association regards as its own, for printing, just as all other large Associations do, the papers read at its meetings. The *Lancet* also knows that this is the intention of the Council of the Association. The *Lancet* also knows that, unless in some kind of underhand way, the papers and addresses cannot be obtained from their authors by the *Lancet*. But, knowing all this, it does not scruple to take advantage of a breach of faith on the part of one of its agents, and to print Dr. Humphry's address, the agent having been informed that it would not appear in the JOURNAL of the 6th. On a former occasion, when the same attempt to obtain illicit possession of our papers was made, the *Lancet* attempted to hide its retreat by talking buncombe, and accusing us of illiberality. We will, therefore, anticipate any such excuse by saying, that proof-sheets of all the addresses are at the service of the *Lancet* and other journals, so that they may be published on the same day as they appear in the BRITISH MEDICAL JOURNAL. We are ready to supply the *Lancet*, as we last week supplied the *Medical Times and Gazette*; but having a clear and undoubted priority of claim for printing all the papers and addresses read at our meetings, we shall certainly not allow the *Lancet* to repeat again, with success at least, its attempts in this wise.

We could have hoped that the ordinary courtesy and the professional propriety which distinguish the intercourse of medical men might have existed in the relations between members of the medical press; but we regret to find that the *Lancet* will not have it so, and that it is, in truth, still determined before everything to vindicate its claim to the character of a commercial undertaking.

THIRTY-SECOND ANNUAL MEETING

OF THE

British Medical Association.

Held in Cambridge, 3rd, 4th, and 5th August, 1864.

WEDNESDAY.

The Committee of Council met at Twelve noon; and the General Council at half-past Two P.M.

At Four o'clock P.M., the first General Meeting of Members took place in the Senate House of the University. The attendance was large.

The following are the names of the members and visitors who, as far as we have been able to ascertain, were present at the meeting.

Acland, H.W., M.D., F.R.S., Oxford
Aikin, C. A., Esq., London
Alford, S. S., Esq., London
Anstie, T. B., Esq., Devizes
Armstrong, J., M.D., Gravesend
Baker, J. Wright, Esq., Derby
Balding, D. B., Esq., Royston
Ballard, Thomas, M.D., London
Barclay, A. W., M.D., London
Barham, C., M.D., Truro
Barry, J. Milner, M.D., Tunbridge Wells
Bartleet, E., Esq., Campden
Bartlett, Wm., Esq., London
Beddoe, J., M.D., Clifton
Begley, W. C., M.D., Hanwell
Bell, the Rev. D., M.D., Goole
Bottomley, George, Esq., Croydon
Boycott, Thos., M.D., Canterbury
Branson, F., M.D., Baslow
Bridger, John, Esq., Cottenham
Buchanan, George, M.D., Glasgow
Budd, Wm., M.D., Clifton
Burrows, G., M.D., F.R.S., London
Cadge, W., Esq., Norwich
Camps, W., M.D., London
Carter, James, Esq., Cambridge
Ceely, Robert, Esq., Aylesbury
Child, G. W., M.D., Oxford
Church, W. J., Esq., Bath
Clark, Andrew, M.D., London
Clover, J. T., Esq., London
Cooper, George, Esq., Brentford
Cormack, J. R., M.D., London
Cribb, H., Esq., Bishop's Stortford
Crosse, T. W., Esq., Norwich
Curling, T.B., Esq., F.R.S., London
Dalton, P. H., Esq., London
Daniell, Edward, Esq., Newport Pagnell
Davey, J. G., M.D., Northwoods
Day, W. E., Esq., Bristol
Day, W. H., M.D., Newmarket
Death, R., Esq., Buckingham
Deighton, J., Esq., Cambridge
Dick, Henry, M.D., London
Dickson, J. T., Esq., Cambridge
Drosier, W. H., M.D., Cambridge
Durrant, C. M., M.D., Ipswich
Eddie, W. H., Esq., Barton-on-Humber
Erichsen, John E., Esq., London
Evans, J. J., Esq., St. Neots
Evanson, R. T., M.D., Torquay
Ewen, Henry, Esq., Long Sutton
Faircloth, R., Esq., Newmarket
Falconer, R. W., M.D., Bath
Fayrer, George, M.D., Henley-in-Arden
Firth, G. W. W., Esq., Norwich
Firth, John, Esq., Macclesfield
Fisher, W. W., M.D., Cambridge
Flint, R., Esq., Stockport
Forsyth, J., Esq., Hampstead
Foster, B. W., L.K. & Q.C.P., Birmingham
Foster, M., Esq., Huntingdon
Fowler, R. S., Esq., Bath
Freeman, S., Esq., Stowmarket
Gaunt, J. S., Esq., Alvechurch
Gibb, G. D., M.D., London
Gibbon, S., M.B., London
Gillibrand, W., Esq., Blackburn
Girling, G. L., Esq., St. Ives
Goodeve, E., M.B., Clifton
Goodwin, J. W., M.D., Bury St. Edmunds
Gould, H. M., Esq., Wateringbury
Gourlay, F., M.D., Weston-super-Mare
Graham, A. R., M.D., Cosgrove
Grant, A., Esq., London
Green, Thomas, M.D., Cambridge
Hadley, J. J., Esq., Birmingham
Hall, C. R., M.D., Torquay
Hall, F. R., Esq., Cambridge
Hammond, J., Esq., Cambridge
Hardy, H. G., Esq., Byers Green, Durham
Harris, F. H., Esq., Mildenhall
Hart, Ernest, Esq., London
Hastings, Sir C., M.D., Worcester
Hatton, John, M.D., Belvedere
Haviland, H. J., M.D., Cambridge
Hawkins, Charles, Esq., London
Hemming, J. H., Esq., Kimbolton
Henry, A., M.D., London
Hewitt, Graily, M.D., London
Hey, Samuel, Esq., Leeds
Higginbottom, John, Esq., F.R.S., Nottingham
Hillier, Thomas, M.D., London
Hodson, C. F., Esq., Bishop's Stortford
Hornby, T., Esq., Pocklington
Hough, J., Esq., Cambridge
Humphry, G. M., M.D., F.R.S., Cambridge
Hutchinson, J., Esq., London
Jeaffreson, S. J., F.R.C.P., Leamington
Jenkins, J., Esq., Bassingbourn
Jones, George, Esq., Birmingham
Jones, T. S., Esq., Ely
Kingdon, J. A., Esq., London
Kirkman, J., M.D., Melton, Woodbridge
Kite, W. J., Esq., West Bromwich
Lankester, E., M.D., F.R.S., London
Latham, P. W., M.D., Cambridge
Laycock, T., M.D., Edinburgh
Lord, C. F. J., Esq., London
Lund, Edward, Esq., Manchester
Macintyre, P., M.D., Liverpool
Mackenzie, M., M.D., London
Mackie, James, Esq., Heighington, Darlington
McNab, D. R., Esq., Epping
Manley, John, Esq., West Bromwich
Markham, W. O., M.D., London
Marshall, Henry, M.D., Clifton
Martin, A. Rae, Esq., Rochester
Martin, Robert, M.D., London
Martin, W., Esq., Hammersmith
Martyn, Samuel, M.D., Clifton
Mead, G. B., M.D., Newmarket
Mellor, T., Esq., Manchester
Merriman, S. W. J., M.D., London
Moore, C., Esq., London
Moore, George, M.D., Hastings
Moore, W. D., M.D., Dublin
Muriel, J., Esq., Ely
Nalty, J., M.D., Dublin
Newham, J., Esq., Doddington
Newton, Lancelot, Esq., Alconbury Hill
O'Connor, Thomas, Esq., March
Ogle, Wm., M.D., Derby
Ormerod, E. L., M.D., Brighton
Paget, G. E., M.D., Cambridge
Paget, James, Esq., F.R.S., London
Paul, J. H., M.D., Camberwell
Pemberton, O., Esq., Birmingham
Perry, Marten, M.D., Evesham
Philipson, G. H., M.D., Newcastle-upon-Tyne
Pinchard, B., M.D., Cottenham
Pitt, J. B., M.D., Norwich
Porter, W. G., Esq., Peterborough
Propert, John, Esq., London
Pyne, R., Esq., Royston
Radcliffe, C. B., M.D., London
Ramsay, W. F., M.D., London
Raynes, Henry, Esq., Potton
Rhodes, James, Esq., Glossop
Richardson, B. W., M.D., London
Roberts, O., M.D., St. Asaph
Roberts, W., M.D., Manchester
Routh, C. H. F., M.D., London
Sankey, Wm., Esq., Dover
Sansom, A. E., Esq., London
Seaton, Joseph, M.D., Sunbury
Semple, R. H., M.D., London
Shipman, R., Esq., Grantham
Sibson, F., M.D., F.R.S., London
Simpson, Henry, M.D., Lymm
Skinner, T., M.D., Liverpool
Smith, E., M.D., F.R.S., London
Smith, F. M., M.D., Great Hadham
Smith, T., M.D., Cheltenham
Smith, T. Heckstall, Esq., St. Mary Cray
Solly, S., Esq., F.R.S., London
Solomon, J. V. Esq., Birmingham
Southam, G., Esq., Manchester
Spence, James, Esq., Edinburgh
Squire, Balmanno, M.B., London
Stear, H., Esq., Saffron Walden
Steele, H. C. B., Esq., Stoke Ferry
Stewart, A. P., M.D., London
Stewart, W., M.D., Diss
Stocks, George, Esq., Blackburn
Stookes, A., M.D., Liverpool
Symonds, J. A., M.D., Clifton
Teale, T. P., Esq., Leeds
Terry, H., jun., Esq., Northampton
Thorp, D. L., M.D., Cheltenham
Thudichum, J. L. W., M.D., London
Trousdale, W. M., Esq., West Bromwich
Tuke, T. H., M.D., London
Tunstall, James, M.D., Bath
Turner, Thos., Esq., Manchester
Veasey, H., Esq., Woburn
Vose, James, M.D., Liverpool
Wales, J., Esq., Downham Market
Wales, T. G., jun., Esq., Downham Market
Walker, J. W., M.B., Spilsby
Walker, Thomas J., M.D., Peterborough
Wallis, George, Esq., Cambridge
Walton, Haynes, Esq., London
Ward, William, M.D., Huntingdon
Waters, A. T. H., M.D., Liverpool
Waters, Edward, M.D., Chester
Watson, J., Esq., Hemingford Grey
Webster, J.H., M.D., Northampton
Welsh, F. F., Esq., Saffron Walden
Wells, T. Spencer, Esq., London
Westall, E., M.D., Caterham
Whiteley, G. B., M.D., Cannes
Whitfeld, Henry, Esq., Ashford
Whitton, C., M.D., Stony Stratford
Wilkinson, W. C., Esq., Spalding
Williams, E., M.D., Wrexham
Williams, Joseph, M.D., London
Williams, T. Watkin, Esq., Birmingham
Witten, E. W., Esq., London
Woakes. Edward, M.D., Luton
Wood, William, M.D., London
Woodhouse, R. T., M.D., Reading
Wright, Henry, Esq., March
Wyman, George, Esq., Alcester
Wyman, H. S., Esq., Hatfield Broad Oak

ADDRESS OF THE RETIRING PRESIDENT.

Dr. Symonds (who, on taking the chair, was warmly cheered) said that it was his duty and his pleasure to make a few valedictory observations, and he would promise that they should be but few. To say much, would be to encroach upon the attention of the meeting, and upon the time all but exclusively due to his successor; but were he to say nothing, he should be wanting in respect to the Association, and be acting in violation of those feelings of gratitude which were called forth by the pleasure he had experienced in filling the office of President of their Association. [*Cheers.*] He met the members last year at Clifton with mingled feelings—with a feeling of pleasure, but, also, with a feeling of anxiety as to the success of the proceedings, so far as they might be affected by his direction; though he admitted that this latter feeling had been displaced by their assistance and indulgence. Now, however, his feelings were unmingled. He had the pleasure of meeting here old friends and new; and of congratulating them on being assembled under the protection and countenance of that mother of learning, the most august and time-honoured University of Cambridge. [*Cheers.*] But if there were nothing in the *genius loci*, they would always expect a prosperous meeting under the presidency of the able physician who was about to preside over them. [*Applause.*] Under his able guidance, this meeting would be worthy of the high character of the Association, and deserving of the encouragement of the place in which they were met. There was much ground for gratification and for profit in the programme; but there was one point in particular, which he would notice, because it was

one of great importance; and that was, that there would be brought before the meeting a plan for the formation of a Provident Society in connection with the Association. As he (Dr. Symonds) could not be present at the discussion of the plan, he did not like to let the opportunity pass without saying how warm an interest he took in the scheme. He thought such a society highly calculated to give support and comfort to many suffering members; and, also, to give them heart and encouragement in the midst of work, relieving them of that consuming care which was so very detrimental to them. If this meeting at Cambridge, prosperous and brilliant as it would be, should succeed in establishing such a society, he could not but think that it would confer an inestimable boon on the profession, and augment much the influence of this Association; and if in this matter only it was successful, the meeting at Cambridge would deserve to be held in everlasting remembrance. [*Cheers.*] He should ever remember with pride the honour he had derived from holding his office; and he should never forget the kindness, co-operation, and cordial support, which he had received from the founder and from every member of the Association with whom he had been brought into contact. He fervently wished them all augmented prosperity; and he was sure their own hearts would echo the wish that that prosperity might be evidenced, not only in their happiness, but also in their usefulness. "The old year", added Dr. Symonds, "is gone, the new one is come.

> "There's a new foot on the floor, my friends,
> There's a new face at the door, my friends,
> There's a new face at the door.

"We shall all rejoice to let him in, and give him a hearty welcome." [*Cheers.*]

Dr. Paget, the new President, then assumed the presidency, amid loud cheering; and proceeded to read his inaugural address, which was published at page 141 of last week's Journal.

VOTE OF THANKS TO DR. SYMONDS.

Dr. Humphry (Cambridge) said an important task had devolved upon him, but one which he had accepted willingly, because he felt assured that the resolution he was about to propose would be most cheerfully adopted. There were certain persons and certain events which made a life-long impression; and he was sure the members would agree with him that one of those persons was their late President; and one of those events, that generous courtesy and that elegant and liberal hospitality which they had received from him. [*Cheers.*] No advantage they derived from these meetings was greater than that of the acquaintances they there formed. At Bristol, he had made the personal acquaintance of Dr. Symonds, and in him he had realised his *beau ideal* of what a physician ought to be, though that ideal was no low one. He had found Dr. Symonds a kind, courteous, noble-hearted, learned man. Now the mantle was fallen from him, and it had fallen upon most worthy shoulders. He proposed—

"That the cordial thanks of this meeting be given to Dr. Symonds, the retiring President; and that he be appointed a Vice-President." [*Cheers.*]

Dr. Falconer (Bath) briefly seconded the motion; which was carried by acclamation.

Dr. Symonds said he thought he had already said his last word; but their kindness called from him one more last word, and that was, his expression of profound gratitude for their kindness and cordiality in passing the resolution which had been so eloquently and flatteringly proposed by Dr. Humphry. His year of office had been a pride to him; and that was most agreeably consummated in receiving the thanks of this great Association in that noble Hall of the University of Cambridge, and in his having those thanks offered to him by one of the brightest ornaments of the University. [*Applause.*]

REPORT OF COUNCIL.

Mr. Watkin Williams, General Secretary, read the following Report.

"Your Council has sincere pleasure in meeting the members of the British Medical Association in Cambridge.

"This is the first meeting the Association has held in this renowned seat of learning.

"Your Council has reasons to expect that this, the thirty-second anniversary, will be as brilliant and as successful as any of its predecessors.

"The Committee of Council elected at Bristol has held its quarterly meetings in Birmingham; each time under the presidency of Sir Charles Hastings.

"The members of the Committee desire very gratefully to acknowledge the great service rendered to the Association by Sir Charles during the past, as in former years.

"*Branches.* Since the last annual meeting, two new Branches have been recognised by the Committee of Council; viz., the Hull Branch and the Bengal Branch.

"Your Council would very earnestly urge upon the members of the Association the desirableness of forming new Branches in those parts of the country in which the present Branches are not easily accessible to the members of the Association. This will be found to be the most effectual means of increasing the number of members.

"*Number of Members.* The total number of members on the books on the 31st of December, 1863, was 2156; since then there have been added 266. The total number on the books at this time is 2422.

"*The late Mr. Peter Martin.* Since the last annual meeting, twenty-seven members have died. Among them occurs the name of Mr. Peter Martin of Reigate. Your Council cannot allow this event to pass without bearing its tribute of regard to the memory of so good a man. Mr. Martin had been a member of the Association for very many years, and succeeded his father as Honorary Secretary of the South-Eastern Branch of your Association. By his zeal, energy, and great devotion to the cause, he succeeded in making his Branch one of the most efficient in the Association. In the manner in which he performed all he undertook, he was truly a model which the best of us might well aspire to imitate.

"*The Branch Secretaries.* Your Council desires to bear grateful testimony to the able manner in which the Honorary Secretaries of the different Branches have performed their duties during the past year. The continued success of the Association is mainly due to the unceasing labours of these gentlemen.

"*The* Journal. Your Council has much pleasure in acknowledging the continued ability with which the Journal has been conducted during the past year.

"*Finance.* The following is the Financial Report for the year 1863, published in the Journal in accordance with Law xxix, the accounts having been audited by Dr. Melson and Mr. Hadley, the auditors appointed at the annual meeting.

"'*Financial Statement for* 1863. Your Committee regret that the financial statement on the present occasion is not so satisfactory as that which was made last year to the Association.

"'Instead of a balance of £221 : 1 : 10½ being due from the Treasurer to the Association, the balance-sheet now submitted, and found correct by the Auditors, shews a balance of £8 : 3 : 0½ due to the Treasurer.

"'This excess of expenditure over income is mainly due to the issue of an extra number of the Journal,

involving a cost of £134:10. The salaries, also, for the last year amount to a higher sum than for the previous year.

"'As these causes of increased expenditure are not likely to operate in the current year, your Committee have reason to believe that at the end of 1864 the income will be found equal to the expenditure.

"1863.—RECEIPTS.

Balance from 1862	221	1	10½
Subscriptions	2118	9	0
Donation by Dr. Evans (Gloucester)	10	10	0
Advertisements	626	16	4
	2976	17	2½
Balance	8	3	0½
	£2985	0	3

"1863.—PAYMENTS.	£	s.	d.
JOURNAL EXPENSES:			
Mr. Richards (Printing)	1784	9	0
Ditto (for Extra Number)	134	10	0
Mr. Richards (for Directing, etc.)	66	16	0
Mr. Honeyman (Sundries)	92	18	0
Mr. Davidson (Commission)	77	19	0
Mr. Orrin Smith (Engraver)	5	3	6
Editor of Journal	200	0	0
Dr. Henry	50	0	0
Contributions	301	8	0
Interest and Commission	3	16	4
EXECUTIVE EXPENSES:			
Dr. Williams and Clerk	117	0	0
Mr. Williams	52	10	0
Dr. Williams (Petty Cash)	49	9	8
Mr. Williams (ditto)	8	5	11
Bristol Reporter	11	14	6
Birmingham Stationer	10	9	6
Sundries:—District Expenses; Post-Office Orders; and Collecting	18	10	10
	2985	0	3

"*The Royal College of Surgeons.* In accordance with a resolution passed at Bristol, a memorial, signed by the President and Secretary of the Association, was presented to the Council of the Royal College of Surgeons, requesting them to alter their bye-laws, or take such other necessary steps as may enable those Fellows of the College residing in the provinces to vote by proxy papers in the election of members of the Council. The following is a copy of the memorial, with the reply received by the Secretary.

"*Memorial.* 'To the President, Vice-Presidents, and Members of Council of the Royal College of Surgeons of England.

"'The Memorial of the President and Members of the British Medical Association sheweth,

"'That the British Medical Association numbers more than two thousand medical practitioners in the metropolis and the provinces, including many Fellows and Members of the Royal College of Surgeons.

"'That the mode of election of the Members of Council of the College of Surgeons has been brought under the notice of your memorialists.

"'That your memorialists understand it to have been the intention of the Charters granted to the College, that the opportunity of voting in the election of Members of the Council of the College should be afforded equally to all its Fellows.

"'That, under the present bye-laws of the College, personal attendance on the day of election is required; whereby many Fellows residing in the country, and prevented by their professional duties from going to London, are prevented from recording their votes, although desirous and justly entitled to do so.

"'That, in the Universities of Oxford and Cambridge, the voting at the election of members of Parliament is conducted by means of voting-papers, filled up by non-resident electors, and sent by post; proper provision being made for their authenticity.

"'That your memorialists are of opinion that the adoption of some such method would remove the dissatisfaction at present felt by the profession as to the mode of election of Councillors for the Royal College of Surgeons, and would entitle the result of the election to be considered a more correct expression of the wishes of the Fellows than it now is.

"'Your memorialists, therefore, earnestly request that you will be pleased to take into consideration the propriety of altering the bye-laws of the Royal College of Surgeons of England in regard to the election of members of Council, or, if necessary, of obtaining the legal powers for doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of members of Council, in accordance with the principle which has already been advantageously adopted in the Universities of Oxford and Cambridge.

"'Signed,

"'J. A. SYMONDS, M.D., etc., *President.*

"'T. WATKIN WILLIAMS, M.R.C.S.Eng., *General Secretary.*'

"*Reply.* 'Royal College of Surgeons of England, London, 24th day of November, 1863.

"'SIR,—I have laid before the Council of this College your letter of the 23rd ultimo, addressed to the President of the College, together with its inclosure, a memorial from the President and Members of the British Medical Association, requesting the Council of the College to take into consideration the propriety of altering its bye-laws in regard to the election of Members of Council, or, if necessary, of obtaining the legal power of doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of Members of Council.

"'And I am desired, in reply to your communication, to transmit to you the inclosed copy of the 15th Section of the Charter of the 7th of Victoria, from which it will be perceived that the voting at elections of Members of the Council by the Fellows in person is not regulated by bye-laws, but is a provision of the Charter by which the fellowship of this College was instituted.

"'I am also desired to inform you that, although every consideration has been given to the wishes of so large a number of the profession as the members of the Provincial Medical Association, it is not thought expedient, by applying for a new or supplementary Charter, to endeavour to effect the object to which their memorial relates.

"'I am, sir, your obedient servant,

"'EDM. BALFOUR, *Secretary.*

"'T. Watkin Williams, Esq.,

"'Secretary to the British Medical Association.'

"*Copy.* 'Section 15. Charter 7th Victoria. That the Members of the Council of the College shall hereafter be elected by the Fellows of the said College, including the Members of the Council as such; and such Fellows, whether Members of the Council or not, shall be allowed to vote in person only, and not by proxy; and that any number of Fellows (not being less than fifteen) present at a meeting convened for the purpose of electing a Member or Members of Council shall be competent to proceed to such election. 'EDM. BALFOUR, *Secretary.*'

"Your Council recommend that a memorial be again presented to the Council of the College on the same subject, and that the Committee of Council be empowered to take any other steps they may deem requisite to obtain the alteration; feeling quite assured that so just a request must in time be conceded.

"*The Army Medical Service.* A memorial was also presented by your Association to the Secretary for War, and to the First Lord of the Admiralty, respecting the grievances of the medical officers of the

army and navy. Your Council regrets that no improvement has yet taken place; but your Council feels quite confident that the authorities at the Horse Guards and the Admiralty will, at no distant period, be induced to do justice to a class of officers not second even to the combatant officers in importance to the well-being and efficiency of the united service. The medical officers have done their duty nobly, both by sea and land. Unquestionably, the profession has the remedy in its own hands, if the members thereof will but be faithful and true.

"Under these circumstances, it seems to the Council highly desirable that the Association should urge upon the Commander-in-Chief, the Secretary for War, and the Secretary for India, the necessity of making such concessions as will place the medical branch of the service in a more satisfactory position; but that they should especially take steps to have the matter brought prominently before and discussed by both Houses of Parliament.

"*Poor-law Medical Reform.* Mr. Griffin and his fellow-workers continue their praiseworthy efforts to improve the condition of the Poor-law medical officers; they have succeeded in obtaining the supply by the guardians of some of the more costly medicines.

"*Benevolent Fund.* This most valuable institution continues its work of mercy; and your Council begs very earnestly to recommend it to the support of the members of the Association, as well as to that of the public at large. A report will be read by the Treasurer of the Fund.

"*Medical Provident Fund.* A report will be read from the Committee appointed at Bristol to inquire into the formation of a Medical Provident Fund.

"*The Hastings Prize Medal.* The adjudicators of this prize have forwarded the following report.

"'*To Sir Charles Hastings, M.D., D.C.L., President of the Council of the British Medical Association.*

"'Dear Sir Charles,—We, the undersigned, being the Committee appointed by the Committee of Council to adjudicate the Hastings Gold Medal for 1864 for an Essay on Physiology, beg leave to state that, of six essays sent in in competition, an Essay on Urochrome, bearing the motto 'Original Research', is the one most worthy of the prize.

"'We therefore inclose to you the letter accompanying the MS., containing the name of the author, with the seal unbroken; and we will ask you to be kind enough to break the seal, and to communicate the award to the President, Dr. Symonds. We will further ask you—in order that he may be present at Cambridge on Thursday next to receive the medal—to inform the author himself of his success, and to express to him our congratulations on the result of his learned and successful effort.

"'We remain, dear Sir Charles, yours faithfully,

"'W. Sharpey, M.D.
B. W. Richardson, M.D.
A. T. H. Waters, M.D.

"'London, 29th July, 1864.'"

"The President of the Council having broken the seal and examined the inclosure, in accordance with the wish of the adjudicators, your Council has the pleasure to announce that Dr. Thudichum is the successful candidate.

"The medal will be presented to-morrow morning.

"*The Address in Medicine* will be delivered by Dr. Ormerod.

"*The Address in Surgery* will be delivered by Dr. Humphry, F.R.S.

"*Alterations of Laws.* Dr. Styrap has given notice of the following alteration of Law xv; viz., after the words '*one guinea annually*' shall be inserted, '*provided that such sum be paid not later than June 30th, after which date each member shall, in default, pay £1 : 5.*'

"Mr. Watkin Williams has given notice to alter Law xv, by inserting '*the 1st of December,*' instead of '*25th of December.*'"

Mr. Lord (Hampstead) moved—

"That the Report now read be received and adopted."

He considered the Report a very satisfactory one.

Mr. Flint (Stockport) seconded the motion.

Dr. Gibbon (London) said, with regard to the Poor-Law Officers' Superannuation Bill, that it was inapplicable to the medical officers in the various unions, inasmuch as those who were benefited by it were to have given their whole time exclusively to the service of the guardians. But there was one great evil, upon which the report did not touch at all—that of gratuitous medical services. The guardians said to themselves, and other public bodies said to themselves—"The hospital medical men do their work for nothing, why should not our medical officers do their work for nothing?" It would come to this eventually, that both in the unions and in the army and navy, gratuitous medical services would be in vogue; and he felt called upon to say that these gratuitous services were literally eating up the profession, and ought to be put down. Hospitals were continually being established ostensibly for the relief of the poor, but in reality were used by persons for whom such institutions were never intended. Dr. Gibbon instanced a case in London, where a firm, employing a large number of men peculiarly liable to accidents, paid £300 a-year to a surgeon to attend their men. The manager, a shrewd Scotchman, subscribed £10 a-year to a new hospital, and discharged the medical man, sending all their cases there, and boasted to Dr. Gibbon of the saving thus effected.

Dr. Stewart (London) said there was another subject of great importance in respect to which he thought it would be well for this Association to take some steps. He alluded to the question of medical services in the army, in which he had himself taken some interest. He thought the recommendation given in the report of the Council on this subject would prove itself to all present to be very timely, especially when they remembered the scenes in the last session of Parliament and the narrow escape they had had from a great injustice in the passing of Sir Charles Wood's Bill bearing on Medical Services in India. He thought that a committee should be appointed to report to a future meeting as to the course to be taken with respect to army medical officers.

Dr. Wood (London) said that, with respect to the Army Medical Service he, like Dr. Stewart, had taken great interest in the subject. He had found great exaggeration prevalent as to the evils attendant on medical service in the army. That there were grievances he did not deny; but these grievances had been very much exaggerated. A statement had been made as to there being two hundred vacancies, and from the manner in which he heard the assertion repeated, he began to believe that there was some truth in it; but he had been present at one of the deputations which had waited on the authorities on the subject, and he had been told that instead of two hundred vacancies in the service there was only eighteen, and this in consequence of a change which had taken place in the Indian army. Justice had not quite been done to the Director-General, who had explained certain things which had not been noticed, and who had promised other things which had been done, but which also had not been noticed. One of the grievances complained of was the degradation of branding soldiers; and the Director-General had said that, as far as lay in his power, the grievance should be attended to; and an

order for its removal, if it were not actually in print, had passed the authorities. This instance, he thought, shewed the disposition of the authorities to meet the real grievances of the army medical officers. It was alleged that the position of these officers was inferior to that of the military officers. So far from this being the case they were, from the first to the last, in a better position. The assistant-surgeon took better pay than the lieutenant; he had the rank of captain, and six years service gave him the rank of major, and afterwards he had the probability of becoming equal in rank to lieutenant-colonel. The grievances, he repeated, were not so bad as had been stated. The great complaint, so far as he could understand it, was that medical officers were not allowed to take the chair in certain committees of inquiry; and this it was alleged was a gross breach of faith, and hard words had been used. A warrant was passed in 1858, which gave the medical officers a position they never had before; and when it was found that this warrant did not work well, a slight modification was made which constituted the grievance now complained of. Now if there had been any breach of faith, it certainly must be borne in mind that it could only be made applicable to those who had entered the army before the warrant was issued.

Dr. STEWART: This new regulation of the Horse Guards was not made public at all.

Dr. WOOD: These regulations, it might fairly be supposed, if not known to civilians, were known to the parties interested. He thought that every man, if he deemed it expedient, was at liberty to make any change in his household. If he kept many servants, he was quite at liberty to make what alteration he liked regarding them; and this being so, the military authorities could not be held chargeable with committing a breach of faith. As to the alteration made with respect to the courts of inquiry, he was not going to defend the course adopted by the authorities; but this he must say, that the Association was doing vast injury to the medical service in the army in misstating things, and in taking upon itself to dictate to the "powers that be," they injured both themselves and their medical brethren in the army.

Dr. SIBSON (London): The report of the deputation to the Director-General stated that he (the Director-General) was not in office when the alteration in the warrant was made.

Dr. WOOD: Dr. Sibson would admit that credit was not given the Director-General for the disposition he had evinced to do all he could do, and for his wish to see done that which he himself could not do.

Dr. RICHARDSON strongly pressed the meeting not to shirk the point at issue. There were great grievances to be redressed.

Dr. WOOD admitted there were great grievances, but objected to any expressions implying compulsion of the authorities by the Association.

Dr. SIBSON said that when the deputations from the Metropolitan Counties Branch were formed, he, as President, took charge of the memorials. The Branch Council had caused the memorials to be drawn up in what was thought the most fitting language; and his own opinion was that, if they had not stated the simple truth, they would have been traitors to their medical brethren. That all that had been stated was the truth, they were in a position to prove to any two gentlemen, to be nominated by the President and Dr. Wood. As to the grievance of branding being removed, the matter was mentioned in the report drawn up by Dr. Henry. He would repeat that there was a full statement made in the report with respect to the issue of the order of December 1858. The Warrant was issued in October 1858, and the second Warrant, withdrawing the first, so far as it related to medical officers presiding at Boards of Inquiry, was not issued until May 1863. The Warrant was the issue of the Royal Prerogative, and ought to carry obedience from the highest to the lowest subject; and neither the Commander-in-Chief nor the Secretary of State had any right to transgress that prerogative. The authorities had been guilty of a breach of faith in this respect, and also in withholding the publication of the alteration they had made in the Warrant, whereby men joined the service under wrong impressions. The Director-General had shown that he had no concern in this transaction. Dr. Sibson alluded to the anomaly of a junior medical officer being received as a member of a board, whilst a senior medical officer was merely a witness. As to the objection, that the presidency of boards would give the medical officers the power of arrest, Dr. Sibson said that it was not wanted that they should have the power of arrest, but that they should be treated like gentlemen. If the privileges demanded were conceded, the authorities would never find that they gave the medical officers more than they received from them. Instead of the third-rate men, with whom they said they were now content, men of first-rate talents would join the service. He trusted that the Association, which had done good service for the medical men of the navy, would also do equally good service for those in the army.

Dr. TUNSTALL (Bath) expressed his regret that any opposition should have been offered to the report of the Council. The medical men of England considered the profession degraded by the manner in which the medical officers in the army were treated.

Dr. LAYCOCK (Edinburgh) thought they were not in possession of the actual facts as regards the army medical officers, and that it would be advisable to adjourn the debate. There were various points on which they required more knowledge; and it was due to the public, as well as to the profession, that these points should be cleared up. Let them have an opportunity of discussing the question, so that the voice which went forth might be a deliberative voice, as on this would depend much the effect that was produced.

Dr. WOOD seconded Dr. Laycock's amendment.

SIR CHARLES HASTINGS thought they had better not adjourn the debate, as they would then not have time for the scientific business.

After some remarks from Mr. Lord, the President, the Secretary, and other members, a few verbal alterations were made in the report, and it was adopted in the form in which it now appears.

APPOINTMENT OF AUDITORS.

Mr. BARTLEET (Campden) moved, Dr. TUNSTALL seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to Dr. Melson and Mr. Hadley of Birmingham for auditing the accounts of the Association: and that they be requested to continue their services for another year."

VOTE OF THANKS TO THE COUNCIL.

Mr. PROPERT (London) proposed, and Mr. GEORGE JONES (Birmingham) seconded, and it was resolved—

"That the thanks of this meeting be given to the Councils of the Association for their valuable services during the past year."

APPOINTMENT OF SECRETARY.

Sir CHARLES HASTINGS spoke of the admirable manner in which the General Secretary performed his duties, and proposed—

"That Mr. Watkin Williams be appointed Secretary to the Association."

Dr. STEWART seconded the motion; which was unanimously carried.

THE ARMY MEDICAL SERVICE.

Dr. STEWART moved, Mr. BARTLEET seconded, and it was resolved—

"That the President, Sir C. Hastings, Dr. Radclyffe Hall, Dr. Sibson, Mr. Bartleet, Dr. Falconer, Dr. Richardson, Dr. Routh, and Dr. Stewart, be appointed a Committee, to consider what steps should be taken to carry out the recommendations of the Council in reference to the Army Medical Service; and to report thereon at a future sitting of the Association."

CONVERSAZIONE AT GONVILLE AND CAIUS COLLEGE.

Gonville and Caius College is the senior of the two Cambridge Colleges which recognise and support more than any of the others the Medical Faculty; and the Master and Fellows invited the members of the Association to a *conversazione* in the College Hall on Wednesday evening, at nine o'clock. The invitation was very numerously responded to, and the entertainment highly pleasing. The *conversazione* was held in the dining-hall of the College, a comparatively recent structure of great architectural beauty and adornment. The roof of the hall, which is beautifully ornamented, attracted considerable attention. There were suspended from the walls, the portraits of some of the chief worthies whom the College has produced. Among these, we noticed a fine painting of the celebrated Harvey, by Rembrandt; another of Dr. Caius; whilst the Divinity Faculty was represented by Jeremy Taylor and others; and that of Law by the late Baron Alderson. On the hall-tables were arranged a variety of interesting objects; and these formed the principal feature of attraction. A skull of *Bos primigenius*, with a flint weapon driven into it during life, discovered, in 1863, at a village in the county named Burwell, was sent for inspection by Mr. James Carter, a local surgeon, and also a geologist of some considerable attainment. Messrs. Smith, Beck, and Beck, had a display of microscopes and microscopic objects. Mr. Coxeter had a valuable assortment of surgical instruments; and among them, Dr. Routh's curved hysterotome attracted much notice. The crystal cube statuette miniatures, from the establishment of Mr. Henry Swan, were the object of much curiosity. By means of this invention, a miniature representation of the human form or bust is obtained, appearing as a perfectly solid figure, the image being apparently imbedded in the thickness of a small enclosed block of glass or crystal, and with the form and expression far more beautifully defined than is possible in a flat portrait. This is effected by a new application of the principles of binocular vision. Messrs. Weiss and Co. also had an assortment of surgical instruments; and, besides the objects to which we have already drawn attention, there was a great variety of binocular and ordinary microscopes, a thermometer for ascertaining the heat of the body, photographs illustrative of anatomy, pathology, etc., in the oxy-hydrogen lantern, and other curiosities. The *conversazione* was kept up till about eleven o'clock; and during the evening refreshments were obtainable in the Combination-room.

THURSDAY.

COMMITTEE OF COUNCIL.

The General Council this morning elected the following ten members of their body as members of the Committee of Council for the next year: E. Bartleet, Esq. (Campden); P. Cartwright, Esq. (Oswestry); M. H. Clayton, Esq. (Birmingham); R. W. Falconer, M.D. (Bath); W. D. Husband, Esq. (York); B. W. Richardson, M.D. (London); G. Southam, Esq. (Manchester); A. T. H. Waters, M.D. (Liverpool); E. Westall, M.D. (Caterham); and M. A. E. Wilkinson, M.D. (Manchester).

The second general meeting commenced at eleven o'clock; Dr. PAGET, President, in the chair.

PRESENTATION OF THE HASTINGS GOLD MEDAL.

The PRESIDENT said the first business was of a very pleasing nature—the presentation of the Hastings Gold Medal to Dr. Thudichum. This was the first time the medal had been awarded; and three more competent judges than those who had awarded it could not well be found. He thought they would agree with him that the most proper person to present this medal was Sir Charles Hastings.

Sir CHARLES HASTINGS (Dr. Thudichum having come forward amid warm cheers) said it gave him unspeakable pleasure to stand up in the Senate House of this celebrated University to discharge a duty at once so pleasing and so important. When the Association was founded, one of its objects was the promotion of original research in the obscure parts of medical science; and as one of the means to promote this object, it was thought desirable to establish prizes which might call into exercise superior talent. Circumstances had hitherto prevented the Association from carrying out this plan; and it was not till this year, when they held their meeting in this great University, that he had the honour of presenting to a distinguished member of that Association the first gold medal that the Society awarded. They did not present this medal to an unknown member of the profession; but to one who had already distinguished himself on many occasions as a painstaking man, and as a proficient in original research; and he (Sir Charles) was glad to find that it was to be presented in consequence of the award of three of the most distinguished medical men in this country, who were known to all, and whose guarantee was a sufficient guarantee that the prize was awarded to a worthy individual. Nay, more, he had heard it as the opinion of one of those gentlemen that, if it should turn out that Dr. Thudichum's facts and arguments were as conclusive as at present they appeared to be from his paper, this discovery of his, with respect to urochrome, would prove to be one of the most important discoveries in medical science during the present day. Having been so long connected with the Association, he need not say how much pleasure it gave him to present to Dr. Thudichum this medal, and to express to him the congratulations of this Association. [*Cheers.*]

Dr. THUDICHUM received the medal amidst the warm plaudits of his fellow-members, and then shook hands with Sir Charles and the President.

ALTERATION OF LAW.

The GENERAL SECRETARY proposed an alteration in Law 15, making December 1st, instead of December 25th, the latest day on which he could receive notices of resignation.

Dr. RICHARDSON (London) seconded the proposal; which was carried.

PLACE OF MEETING FOR 1865: PRESIDENT-ELECT.

The PRESIDENT announced that, in Council that morning, it had been resolved, on the motion of Dr. Richardson, seconded by Mr. Pemberton, that Leamington be recommended as the place of meeting next year, and that Dr. Jeaffreson be the President-elect.

Sir CHARLES HASTINGS proposed the adoption of that recommendation. Leamington was a beautiful watering-place; and the members there had every appliance for receiving the Association.

The Rev. Dr. Bell seconded the motion; which as unanimously carried.

Dr. Jeaffreson thanked the meeting. Of course, hey could not give in Leamington such a reception s that which had been given in the University of 'ambridge. He felt considerable modesty in tak- ng the chair after Dr. Paget; he and Dr. Paget, owever, were of the same mind as to the Associa- ion; they pulled in the same boat—but with how ifferent *sculls!*

PAPERS.

The following papers were read.

1. Some of the Causes of Excessive Mortality after urgical Operations. By Spencer Wells, Esq.

Dr. Routh (London) said the main question was -how were the spores to be got rid of? The ques- ion resolved itself into one merely of ventilation; nd he should shew that a plan had been tried which ot rid of these creatures which inhabited the atmo- phere. Openings at opposite sides of rooms had een tried; but the plan had been found imprac- icable, inasmuch as patients could not bear to have ie windows open; and even if they could, the spores till continued in the air. In the Samaritan Hospi- il, a plan had been introduced, which had proved ery successful—that of putting in the highest point f the room perforated zinc, which allowed the change f air in the room, and prevented the admission of hese spores. The plan acted on the same principle s a chimney in drawing out the bad air, whilst all he fresh air came in from the outside without being npregnated with these spores, which were kept out y the zinc. It was a great evil that this central himney did not exist in more hospitals than it did. Ie had adopted the same principle in the Cripples' Iome, and was quite surprised at the changed state f health existing among the children.

Dr. Thudichum (London) had given some atten- ion to the subject; and with regard to an allusion in he paper to the use of old bandages, etc., said that no ashing or chemical processes could erase the stains om the cloths which had been used for decomposing ounds. He had noticed the hospitals where old andages were not used; and the result of the com- arison was such that he would advise that all band- ges, lint, and in fact everything brought into contact ith a decomposing wound, should be burnt. He lluded to certain sporules which were found in thou- ands and in millions in the muscular fibre in cases of pen wounds, where they multiplied at a marvellous ate.

Dr. Camps (London) thought a good deal depended, n the matter of mortality, on the after treatment dopted. Dr. Valentine Mott, of New York, who ad as much experience and success in these matters s most men, freely used opium. He (Dr. Camps) hought the use of opium might be more freely intro- uced in our hospitals, as it was proved to have a ery satisfactory effect. The after-treatment, no oubt, had a great deal to do with the final issue.

Dr. Radclyffe Hall (Torquay) said that in the xeter Eye Hospital, a simple plan had been intro- uced which had proved very successful. It was simply o have a stove in the usual fire-place, with an aperture lose under the ceiling, through which a tube passed own to the stove. The stove, having a closed door, re- eived the foul air, which was charged with spores, o that these were got rid of, and the air was purified. t Torquay the plan had been adopted with as much uccess as at Exeter.

Mr. Moore (London) said the matter under dis- ussion involved the question—What is a patient? patient in London and a patient in the country ere very different. An important consideration, oo, was the material of which the hospital walls were composed. The material should be such as would bear constant washing down, so that offensive materials might be removed.

Mr. Sansom (London) said the great cause of danger was pus; and the way to lessen the danger was to provide means for preventing the formation of pus. Healthy men who had wounds, etc., should be separated carefully from those who were unhealthy, as the pus in the one case was very different from that in the other.

Mr. Spence (Edinburgh) thought too much reli- ance was placed upon general statistics. Very much as to the percentage of deaths after amputation de- pended upon the particular part of the body where the amputation took place; and a great variety of circumstances influenced the result even of amputa- tions in the same locality of the body. The compari- son of cases which had been treated under precisely similar circumstances would lead to much more accu- rate conclusions than mere generalised statistics.

The President, in concluding the discussion, said that reference had been made to the improvements at Addenbrooke's Hospital. The author of the paper had alluded to the addition of the third story as inju- rious. He (Dr. Paget) agreed with him; and though he had at the first been one of the chief promoters of the alteration, yet at the last he so entirely disap- proved of the course pursued, that he felt bound to disclaim any responsibility in the matter. Still the arguments in favour of the proposed alteration were strong, and it was thought that the new hospital would be a great improvement on the old one. He regretted that the gentleman who had so ably main- tained these arguments was not now present; but, for his own part, he thought that a great mistake had been committed.

2. On the Action of Anæsthetics; and on the Ad- ministration of Chloroform. By A. E. Sansom, M.B.

Dr. Gibbon quite agreed with the opinions set forth by Dr. Sansom, and thought his instrument a good one. His own practice had led to the same re- sults as that of Dr. Sansom.

Dr. Richardson was very gratified at Dr. San- som's remarks, and thought that in the main he was right. There was nothing mysterious at all about the action of narcotics, as they all acted in just the same way. Every substance which produced anæs- thesia produced also a change in oxygenation. Oxy- gen produced combustion; and the whole fact lay in this process of combustion, and in nothing else. With respect to chloroform producing convulsion, Dr. Richardson showed that the action of this narcotic was not on the brain, as was too often supposed, but on the blood.

Mr. Clover (London) expressed his general agree- ment with Dr. Sansom

Mr. Solomon (Birm[illegible]nam) had administered the narcotic by letting it fall drop by drop on a piece of coarse flannel, until the patient became insensible. If there were any evil symptoms, the cloth was re- moved and the window opened; and thus no death had occurred in the course of ten years' experience of this course of treatment.

3. The Radical Cure of Extreme Divergent Stra- bismus. By J. V. Solomon, Esq.

Mr. Hart (London) admired Mr. Solomon's plan, but suggested that prismatic glasses, of sufficient power, might be made to produce the same result.

Mr. Solomon replied, that prismatic glasses had been tried; but no person could bear to use them long enough to be cured by them. Moreover, these glasses had been found quite insufficient to cure anything like a severe squint; and he would ask Mr. Hart if he had ever met with such a case of extreme divergence as that which he (Mr. Solomon) had exhibited, which

had been cured by means of these glasses. He (Mr. Solomon) knew of none. The practice of ophthalmic surgery bore him out in saying that such a cure could not be effected.

4. The Use of the Hysterotome in Uterine Disease. By C. H. F. Routh, M.D.

The meeting then adjourned.

CHORAL SERVICE IN KING'S COLLEGE CHAPEL.

King's College Chapel is the most magnificent architectural pile of its style in the kingdom; and it is celebrated for the magnificence of its organ, which is worked by hydraulic power, and of its choral services. On the afternoon of Thursday, at 3 o'clock, a large number of members of the Association met, by permission of the Provost and Fellows, in this chapel, when full choral service, with a beautiful anthem, was performed. The responses were by Dr. Elvey; the chant to the Psalms by Attwood; the *Magnificat* and *Nunc Dimittis* by Ebdon; and the anthem, "O where shall wisdom be found," by Dr. Boyce. After service, Handel's very fine Overture to *Esther* was played as a voluntary; and, as the congregation were slowly retiring, the National Anthem brought the whole ceremony to a close.

The third General Meeting was held in the Senate House, at 4 o'clock; Dr. Paget in the Chair.

INHALATION OF OXYGEN.

Dr. Richardson exhibited an apparatus for the inhalation of oxygen. He said that oxygen, which had been so strongly recommended in the treatment of disease by Beddoes, Davy, and others, had never been fairly tested, from the reason that no means of procuring or of administering it readily had been found. The apparatus which he (Dr. Richardson) placed before the meeting was so simple that it could be used after a minute's preparation. Some months ago, Mr. Robbins, of Oxford Street, London, had discovered a mode of producing oxygen by means of acting on a substance rich in oxygen, with diluted sulphuric acid. Oxygen was thus evolved in large quantities and for a long time. He (the author), taking advantage of this method, had devised an apparatus for inhaling the gas. The apparatus consisted of two bottles, a connecting tube, and a mouthpiece. The powder was placed in one bottle, and the diluted sulphuric acid poured upon it. The oxygen thus evolved was allowed to pass into the second bottle through a little water; and from the second bottle, to which the mouthpiece was attached, the patient inhaled. After describing the apparatus and showing it in operation, Dr. Richardson noticed the cases of disease in which he had used oxygen evolved by the method received. He had used it in consumption, in congestion of the lungs, in asthma, and in uræmia, with obvious success. His great object, however, was to show the Association a means by which they might easily and comprehensibly determine the exact value of oxygen as a therapeutic agent.

THE ADDRESS IN MEDICINE

Was read by E. L. Ormerod, M.D. It appeared at p. 147 of last week's Journal.

Dr. Webster (Northampton) said they had all listened with deep interest to the able address of his old friend, and he might say fellow-student, Dr. Ormerod. He proposed—

"That the cordial thanks of this meeting be given to Dr. Ormerod for his very able and interesting address.

He had the more pleasure in proposing this resolution, as Dr. Ormerod was an old Cambridge man, representing his University and his profession with the highest credit to himself at Brighton.

Mr. Hough (Cambridge) seconded the motion, which was carried unanimously.

THE ARMY MEDICAL SERVICE.

Dr. Falconer (Bath) read the following Report of the Committee appointed on the previous day.

"After long and extensive inquiry, the Commissioners appointed at the close of the disasters of the Crimean war, 'to inquire into the regulations affecting the sanitary state of the army,' made certain recommendations in reference to the medical officers of Her Majesty's Army, which were embodied in a Warrant issued on the 1st of October, 1858.

"The sixteenth and seventeen clauses of this Warrant granted to the medical officer relative rank, 'with all precedence and advantages attaching to the rank to which it corresponds, except as regards the presidency of courts-martial.' 'But when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters.'

"This Warrant gave complete satisfaction to the army medical officers and the general body of the medical profession; but on the 31st of December, 1858, before the Warrant could be brought into full operation, a general order was issued from the Horse Guards, depriving the army medical officers of the right, granted to them by the above mentioned Warrant, of presidency at all boards, excepting courts-martial, when such medical officer was the senior officer president. By this general order, the most important provisions of the Royal Warrant were contravened.

"That this general order, though acted on, did not receive the sanction of the Royal prerogative till the 1st of May, 1863, when a Royal Warrant was issued, modifying Clause 17 of the Warrant of 1858, in the following terms: 'But such relative rank shall not entitle the holder to military command of any kind whatever, nor to the presidency of courts-martial, courts of inquiry, committees or boards of survey; but when the president of such courts, committees, or boards, shall be junior to the officer of the civil department, then such member of the civil department shall attend as a witness, and not as a member.

"There is no desire on the part of the medical officers of the army to exercise any purely military functions; but they consider that they are justly entitled to preside at all courts, committees, or boards, where their relative rank qualifies them so to do. To this, however, it has been objected by the highest authorities, that a due regard to discipline, and the necessity of withholding from the medical officer the power of arrest, have rendered it inexpedient to carry out the Warrant of 1858. Such power of arrest has never been desired by the medical officers of the army.

"But that the provisions of the Warrant of 1858 do not interfere with discipline, has been shown by the experience of a century in India, where medical officers sat on boards according to their rank, and assumed the presidency when they were senior, without at any time leading to the subversion of discipline. Such was the practice in India until 1858, when a Horse Guards order changed in a moment the custom of a century. Hence, in a great measure, has arisen the difficulty experienced by the Secretary for India in filling up the vacancies in the Medical Department of the Indian Army, and in attracting to that service men of the same high qualifications as formerly competed eagerly for those appointments.

"The recent issue by the Director-General of an advertisement for acting assistant-surgeons, without examination, sufficiently testifies to the disfavour with which the non-enforcement and ultimate withdrawal of Clause 17 of the Warrant of 1858 has been regarded, and manifestly tends to the further dete-

ation of the army medical service by admitting
o it those who have been unable to attain a posi-
n in general practice, and by deterring those of
her qualifications from entering on a career which
y would otherwise regard as the great object of
ir ambition.

It must not be forgotten, that upon the efficiency
he Army Medical Department ultimately depends
vigour of the British Army, to which the casual-
s of War are far less fatal than sickness due to the
nt of sanitary arrangements, which the highly
alified medical officer knows so well how to esta-
h. And, without insisting upon the importance
the question in an economical point of view, it
st be admitted by all that the British soldier is
itled to the best medical skill that can be pro-
ed for him by the state.

Under these circumstances, the Committee re-
mend that the collective and individual influence
the Association should be directed towards the
oration in its integrity of the Royal Warrant of
8, and its subsequent enforcement; and also to-
ds the discontinuance by command of the em-
yment of acting assistant-surgeons without exa-
nation. The most obvious means for carrying out
s recommendation is the adoption of memorials, by
s Association and its Branches, to the Secretary
War, the Commander-in-Chief, the Secretary of
te for India, and the Director-General of the
ny Medical Department. But they attach the
atest importance to the thorough discussion of
s question by both Houses of Parliament; and,
h this view, they recommend the adoption of peti-
as to the legislature, and the communication to
ividual members of the fullest information as to a
stion so closely related to the welfare and effi-
ncy of the British and Indian armies.

"G. E. PAGET, *President.*

"Cambridge, August 4th, 1864."

Dr. FALCONER briefly moved the adoption of the
port.

Dr. EVANSON (Torquay) seconded the motion. He
l seen the Under Secretary at War lately, and a
words passed between them on the subject of this
port, which showed a disposition on his part fa-
rable to considering the claims of medical men in
army, though there were some difficulties which
uired to be got over. He (Dr. Evanson) attempted to
w him that by the Warrant of 1858 a medical officer
he army received the position of a gentleman; and
nedical man had then no hesitation in joining the
ny, because this fact of his being a gentleman, equal
position with the other officers, was acknowledged.
wished to second this resolution, because it was
st essential to the carrying out of their object.
ll they must do everything in a quiet gentlemanly
nner, not attempting to dictate to the powers that
but remembering that their difficulties would be
reased if they forgot what was due from them as
ntlemen. [*Cheers.*]

The Report was unanimously adopted.

Dr. STEWART (London) said that, after the lengthy
cussion of yesterday, he would not enter further into
ails; but the question presented itself—what should
be done? They wanted actions rather than words.
was quite clear that, if anything were to be done
the medical officer in the army, they would require
at strength to do it, and that Parliament must be
ir field of operation. They must be able to com-
nd a large amount of force in the House of Com-
ns; and he looked forward to next February as a
e when the waging of a great warfare would be
menced in Parliament. He proposed—

That petitions and memorials from this meeting
he Association, in accordance with the report just
read, be prepared and presented to the Secretary for War, the Commander-in-Chief, the Secretary of State for India; and that the further carrying out of the recommendations of the report be referred to the Committee of Council."

Mr. CEELY (Aylesbury) seconded the motion, which was unanimously carried.

PAPERS.

The following papers were read.

5. The Diagnosis of Early Pregnancy. By C. H. F. Routh, M.D.

6. The Physiological Meaning of Inframammary Pain. By Samuel Martyn, M.D.

CONVERSAZIONE AT DOWNING COLLEGE.

On Thursday evening, the members were entertained by the Master, Professors, and Fellows of Downing College, at a most successful *conversazione* in their Dining Hall, and notwithstanding the happy result of the somewhat similar entertainment on the previous evening at Caius College, we can but compliment Dr. Latham on his success in having secured, with some few exceptions, almost an entirely different exhibition. Soon after nine o'clock, not only the members of the Association, but large numbers of members of the University filled the Hall, representing almost all professions; and these were soon followed by a large number of ladies, who had been entertained at the lodge of the Downing Professor of Medicine, by Dr. Fisher.

The microscopic department was well represented in some very beautiful instruments, by Mr. Ross, Messrs. Smith and Beck, Mr. Pillischer, Mr. Samuel Highley, and Mr. Baker, exhibiting to the greatest perfection some of the most exquisite preparations that skilful mounting could accomplish. Amongst those which called forth general praise were some slides of selected diatomaceæ, some polycystina, and some marine polyzoa. Messrs. Whicker and Blaise exhibited a large collection of surgical instruments, apparatus for fractures, and supports and instruments for deformity. Mr. Ernest Hart's demonstrating ophthalmoscope, showing the choroidal and retinal arteries in the eye of a rabbit, was also exhibited. This instrument can be used without the necessity of a dark room, with perfect ease. Messrs. Weiss and Son, and Messrs. Maw and Son, also exhibited some instruments. Portraits of many eminent medical men were exhibited; amongst them were the members of the Medical Council, very well executed by Mr. G. R. Fitt. Mr. Mayland also exhibited a very fine collection of "Photographs of Views of Cambridge." Dr. Thudichum again gave some very graphic descriptions of the Trichina, and exhibited the parasite living, in various stages of development; which he obtained from the muscle of a rabbit infested with them, and also from some pork chops. He believes that, if meat thus affected is thoroughly cooked, the entozoon is entirely destroyed. Mr. Dickson of Downing College had a most interesting table of microscopes, exhibiting circulation in healthy and inflamed tissue, and an exquisite section of the spinal chord; also some natural history specimens, amongst which the "Actinophrys Sol," and a specimen of Rotifera (*Brachionus Urceolaris*), were extremely beautiful. Mr. Pain of Cambridge exhibited a most successful specimen of vallisneria under a Ross' 1-12th inch power and highest eyepiece. In the combination room was Messrs. Aubert and Linton's "piping bullfinch;" and in a small darkened room Mr. Deck performed experiments showing the stratification of light by electrical discharges through rarefied media. Some beautiful specimens of delicate chemical substances crystallised in groups were exhibited by Messrs. Johnson; as well as some magnesium wire in

a state of combustion, the pure white light of which is used by photographers on account of its possessing actinic properties. During the evening the grounds were most brilliantly illuminated by a powerful electric light sustained by 40 Grove's cells (the platinum being 6 inches by 8 inches), under the direction of Mr. Ladd.

FRIDAY.

The fourth General Meeting was held in the Senate House, on Friday morning at 10 o'clock, Dr. PAGET, President, in the Chair.

REPORT OF THE MEDICAL BENEVOLENT FUND.

Mr. WATKIN WILLIAMS, General Secretary, read the following report:

"Although the income of the Fund during the past year has not equalled that of the year 1862-3, the Committee nevertheless have much reason to give a satisfactory and hopeful report of the condition and prospects of their charity.

"In the first place, the diminution in the amount received in donations and subscriptions during the past year, may in a measure be ascribed to the circumstance, that in the year 1862-3 considerable sums were received as the result of the appeal issued in the year 1861-2.

"The Committee beg to report that, during the year just past, the Donation Fund has afforded relief to seventy-eight cases of distress, at an expense of £538, and it also paid £140 to the Annuity Fund. And they may add that, howsoever great and direct has been the alleviation of distress by means of pecuniary aid, they feel that indirectly they have also afforded no slight amount of benefit by enlisting the active sympathies of others in behalf of the distressed, by inducing them to visit the cases and to administer the grants in such ways as were found to be most judicious. The Committee also feel that, by not unfrequently making grants conditional upon the co-operation of the friends of the applicants, they have often succeeded in obtaining permanent help to those previously helpless, and almost friendless.

"In the course of the past year, the sum of £236: 17 has been invested for the Annuity Fund in bank stock; making the present income for annuitants amount to £443: 12: 6.

"The biennial appeal, in place of a public dinner, has been prepared, and is to be issued immediately.

"The Committee—with a desire to carry out the objects of the Fund as efficiently and, at the same time, as inexpensively as possible—have, at the suggestion of your Treasurer, appointed a Subcommittee to consider the best mode of working the Fund, and to revise its laws. The Committee trust that the effect of the labours of the Subcommittee will be apparent in their next Report.

"The Committee again thank the Honorary Local Secretaries and the ladies for their valuable aid; and, in conclusion, they beg to express their conviction, derived from increased experience, that the principles on which the Medical Benevolent Fund is conducted, are the principles of true Christian charity, and they look forward with confidence to its increased success."

Mr. PROPERT (London) proposed:

"That the Report be received and adopted."

He regretted that the funds of this institution were not quadruple their present amount; for there was no society in the world that did more good, in proportion to the means at its command, than this Benevolent Fund. In moving that the Report be adopted, he might add that he was glad to hear that another appeal was to be made to the profession, and he hoped that it might be most liberally responded to.

Dr. VOSE (Liverpool) seconded the motion, which was unanimously carried.

MEDICAL PROVIDENT FUND.

Dr. RICHARDSON read the following Report of the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund:

"The Provident or Relief Fund Committee was appointed last year at the Bristol meeting, to consider and report on the question, 'whether it be possible to establish, under the direction of the Association, a Relief Fund, which shall enable the widows members, or members themselves, during sickness to receive pecuniary aid, by annuity or otherwise, on the principle of mutual protection and right.'

"The Committee has to report that its first meeting was held at Birmingham, the second in London and the third at Cambridge. A Subcommittee was also appointed by the first meeting, and has been actively engaged.

"The Committee has aimed at the attainment of two objects: First, to procure trustworthy information on the whole subject; and, secondly, to frame such suggestions as appear, after due inquiry, to arise out of the facts that have been collected.

"Before entering into particulars, the Committee would briefly observe that, in the course of its labours, they were for a moment interrupted by the suggestion that an enlarged annuity scheme, in extension of that which became law during the last session of Parliament, would probably be introduced at an early period by the Chancellor of the Exchequer. The chairman of the Committee was, therefore, directed to ascertain, if possible, whether the statement was well founded; and he has been informed by Mr. Gladstone, that 'the Government have not formed any such intention as that referred to.' This supposed obstacle is, therefore, removed.

"The Committee would next report that, owing to the difficulties of arriving at a correct decision by their own efforts, it was agreed, at the first meeting, on the suggestion of Sir Charles Hastings, that the Subcommittee, consisting of the chairman and Dr. A. P. Stewart, should consult Mr. Tidd Pratt and take his opinion on every essential point of the project. This has been effectively done; and upon the information thus obtained, the following statements are based.

"1. The Committee is satisfied that, in considering a scheme for the formation of a Relief Fund, it is essential that two of the elements suggested at the Bristol meeting—namely, the granting of annuities and the making provision for widows and orphans—must be entirely abandoned; and that the fund must be devoted exclusively to payments to sick members. Deferred annuities are now so easily purchasable from Government, and insurances are so readily effected with good offices, that this decision of the Committee calls for no regret.

"2. By directing the attention of the Association solely to one object, there is no doubt that a provision against sickness could be easily and economically secured; and the Association, through its branches affords an organisation admirably adapted for obtaining these benefits.

"3. The number of members necessary to give stability to such a fund must not be less, according to Mr. Pratt, than two hundred. He states that 'two hundred would be enough to enable the fund to start with a sufficient average.' This is the lowest estimate; but the Committee do not doubt that, the scheme being once established, a sufficient number of members would be obtained to ensure its permanence. It is, of course, understood that the fur

d only be joined by persons actually in good th.

The payments must necessarily vary with the at which the subscriber commences his member- ; but the Committee have taken the age of 35 he purpose of illustration. They have also taken yment of £2 a week for the same purpose. They that, at the age of 35, the £2 a week can be red by the payment 17*s.* 1*d.* per quarter, or 9 per year. To this must be added a small sum, om 3*s.* to 5*s.* per year, for the working expenses he institution. The payment would be con- ed, in case of need, for one year without diminu- ; and for a second year at a reduction of one- It would, in any case, terminate at the age of These statements are based upon the experience fteen successful institutions; and may be con- red absolutely certain. If larger payments are ied for, they may be made by multiplying the e figures. It would be necessary that members ld contribute for one year before they became tled to relief.

4. In forming a Provident Fund in connexion with Association, three modes of action present them- es; namely:

"*a.* By enrolment under the Friendly Societies' Act.

"*b.* By independent association without legal sanction.

"*c.* By obtaining a Royal Charter of Incorporation.

The first of these is objectionable, because it ld necessitate the enrolment of each separate ich as a distinct society, without any federal centre. The second plan, or independent association with- legal sanction, is perfectly feasible; but the pro- lings would rest entirely on the good faith of the nbers and the management. The Committee feel, ever, that the organisation might safely com- nce on this basis.

The third plan—that of obtaining a Royal Char- of Incorporation—is, in the opinion of the Com- tee, by far the best. It would place the Associa- n in a position that it has never before attained; ould give a legal authority to all its statutes; it ld render the Relief Fund permanent; and would erfully contribute to the stability of the Associa- n. Mr. Pratt is of opinion that, on the basis of Provident scheme, the Charter could be easily ained; and he has sketched out for the Committee method of applying for it. The Committee find t such a Charter would cost from £250 to £300.

The Committee would suggest—

"1. That the Relief Fund might be commenced hwith, from the nominal date of the first of July past; and that the subscribers should be eligible receive benefit from the 1st of July, 1865, after ment of their second annual subscription.

"2. That, in order to carry out the project, a ard of Directors should be nominated in the fol- ing manner: to wit—

"One director to be appointed by the members r Council of every Branch; or, in the case of very arge Branches, two or even three directors, in roportion to the numerical strength.

"Three or five directors to be appointed by the Committee of Council, on account of members not epresented by Branches.

"A chairman to be elected by the annual meet- ng from the body of the Association.

"The directorate thus formed to have power to ppoint their own officers, and to determine their emuneration. They shall furnish the annual re- ort at the time of the annual meeting.

"3. A question which has given anxiety to the Committee is, whether the Relief Fund should be open to the profession generally, or should be limited to the members of the Association. A large majority of the Committee are in favour of the latter scheme; against which it is only urged, that membership of the Association, being of the nature of a luxury, ought not to be a condition precedent to an act of foresight and self-denial.

[Dr. Richardson here said that one of the members of the Committee, Mr. R. B. Carter, had sent in the following protest in reference to the clause which had just been read.

"Stroud, August 3, 1864.

"The undersigned is desirous to call the attention of the Association to the question, whether the proposed Provident Fund should be open to the profession generally, or to members of the Association only.

"Upon reflection, the undersigned feels more and more strongly that its limitation to members of the Association, would be a great and unjustifiable hardship to many struggling men. Such a limitation might, as is justly urged by the majority of the Committee, bring new members into the Association; but would it not certainly keep others, and those the most necessitous (for whom their more fortunate brethren are surely bound to take thought), from sharing in the benefits of the Provident scheme.

"The undersigned begs leave to suggest that the Association might include two forms of membership—membership of the Provident Fund and membership of the General Fund; and that it should not be compulsory to belong to both or neither. He is strongly of opinion that men who joined the Provident Fund would be certain to join the General Fund when their means permitted them to do so; and he would venture to hope that the great majority of members of the General Fund would support the Provident Fund also. But he would much regret that the tax of an extra guinea should stand in the way of any practitioner of small means who yet wished to secure himself against want in the time of sickness. "Robert B. Carter, F.R.C.S.]

"4. Another question of importance is, whether the sick members during convalescence should be absolutely debarred from any act of professional work. On this point, Mr. Pratt is of opinion 'that no member should receive relief in sickness from the Fund, if he is capable to attend to any professional labour'; but the Committee think that this question may be safely left to the patients, and to those who sign certificates for them; and that such certificates should declare *unfitness* for work, rather than positive disability. This, as a matter of detail, the Committee would leave to the directorate.

"5. The Committee have reason to believe that, if the Fund were established, donations and legacies would be added to it; but all the calculations have been made irrespectively of such a source of income.

"6. To meet preliminary expenses, should the Association adopt the Report of the Committee, a moderate grant from the funds will be required. The Committee would suggest a sum of £50, to be paid by the Treasurer as it was demanded.

"7. It would devolve upon the Board of Directors to prepare detailed rules and bye-laws as soon as possible, and to circulate them extensively in the profession.

"8. In conclusion, the Committee cannot too strongly urge the importance of the suggested Royal Charter of Incorporation; which, though incidental to their inquiries, would greatly strengthen the cause they have at heart.

"Signed, on behalf of the Committee,

"B. W. Richardson, M.A., M.D., *Chairman.*

"Cambridge, August 3rd, 1864."

Dr. Richardson, in moving the adoption of this Report, and that it be acted upon, said that it had been so carefully drawn up that it required little explanation from him. Everything in the Report was placed in a clear, intelligible manner, and everything that was said might be relied upon. He regretted that the Committee had been obliged to withdraw two elements; viz., the establishment of a fund for deferred annuities, and another for the relief of widows and orphans. The question had been thoroughly debated; and Mr. Tidd Pratt had shewn the Committee that the three schemes could not be worked together by an association of this description, and therefore they had arrived at the conclusion that only the provident part could be carried out, and that the other two elements must be withdrawn, if they were to get on at all. It was easy to get deferred annuities from several sources; and it would be better for the directors of the Fund to become the agents of the Government, than to run the risk of carrying out the insurance for them themselves. With regard to the widows' and orphans' fund, the Committee had considered that the scheme would be too difficult: the supervision necessary could not be exercised throughout the country, and therefore the idea had been thrown on one side. When such a fund had been formed, as in London, and with success, safety was derived, not from subscriptions, but from legacies and donations. If the Association carried out the scheme of a widows' and orphans' fund, they would require each member, instead of paying about £4, to pay £8 or £9 *per annum*, and this could not be expected—the financial difficulty put this out of the question. In the Provident Fund simply, they might look for success. A member by paying £3 : 10 *per annum*, or £7 if he wished, and receiving in return at the rate of £100 or £200 a year during sickness, need never work himself to death, but would always feel comfort in knowing that there was something to fall back upon in the time of need. With regard to this scheme, the Committee had given no opportunity for anyone to say that it was trammelled by what might be considered exclusive powers; and it was due to the founder of the Association to say that he had throughout insisted on giving to the scheme that true spirit of catholicity which was his own spirit. The Committee had thought it expedient, therefore, that every Branch should become a centre, round which the members should gather, and in which the executive should be carried out. The directorate would be formed mainly by members sent by the various Branches; but, as the duty of representing those who did not belong to the Branches had to be considered, the Committee had come to the conclusion that it would be advisable that the Committee of Council should elect to the Executive Board directors to represent those members of the Association who did not belong to Branches. They felt, too, that the President of the Directorate should be appointed by the whole Association; and thus at the Board he would exercise a more independent power, and would be the responsible man between the independent Branches and the Association. The Committee had now done what they were appointed to do, and their existence and labours were thus far at an end: it was for the Association to say whether it was satisfied with those labours, and whether the project should go on. He was sure that, if they carried this Report, it would be the greatest event in the annals of the Association, and they would always refer back to this meeting in the University of Cambridge, as that from which this act had come, with heartfelt pleasure. The passing of this Report would lead to the strengthening of the Association, to the ensuring of its permanence, and to making each member feel more towards another a brother. He moved:—

"That the Report be received and adopted."

Sir Charles Hastings rose with great gratificati to second the motion. He could call to mind th more than thirty years ago, when this Associati was established, their best energies had been direct to establish an Association which should accompli the objects set forth in the report they had just hea read; but at that time they were obliged to give t matter up, though they hoped the time would co when they would be able to carry out this obje That time had now come; and if this report we adopted, it would be in the power of every membe however small his means, to guarantee for himse the means of support in the time of sickness. The were many in their profession to whom illness cam and found them unable to fight against its difficultie and many who entirely sank under those difficultie He, therefore, thought that, if this great Associatio could bring forward a scheme to relieve this state things, and could carry it out, it would be accon plishing a great work for humanity. He was ver anxious about the matter when this measure wa brought forward by Dr. Richardson; and so far as I was concerned, he was determined that everythin that was done should be done on the soundest pri ciples and under the advice of the most competen authority. Mr. Tidd Pratt was just the person who advice they wanted; he (Mr. Tidd Pratt) had befor him all the details of friendly societies, and he kne exactly their difficulties. And he (Sir Charles) wa sorry to say that the history of friendly societi hitherto, was anything but calculated to afford the satisfaction. However, Mr. Pratt knew the circun stances, and had it in his power to direct them in th right course. He believed, moreover, that if this A sociation carried out the present report, the da would come when the other portions of the schen might be attended to; that day might be far distan but come the time would when, as medical knowledg and medical science advanced, they would be able t afford relief to those who were afflicted and tho who mourned. [*Cheers.*] Sir Charles concluded b seconding the adoption of the report.

Dr. Jeaffreson asked Dr. Richardson if th Committee took into consideration the statistics o the Indian Fund. He objected to their havin merely a Provident Fund; and, as far as he knew the Indian Fund was quite safe, though not supporte by legacies and donations. If a scheme affording re lief to widows and orphans were practicable in Indi surely it was practicable also in England.

Mr. W. Martin suggested to Dr. Jeaffreson tha he was in error, as the Indian Fund was now extinc

Dr. Gibbon asked if the intended relief referred t accidents as well as to sickness?

Dr. Radclyffe Hall asked if it were possible tha the scheme could commence on a sound workin basis if it had but two hundred members. Safet depended upon averages; and could only be absolut when there were large numbers. A great deal, there fore, rested on the question of the least number wit which the concern could be safely worked.

Mr. Manley (West Bromwich) asked, whether person joining the Fund would have to undergo critical examination like that instituted by the li assurance offices. A simple *bonâ fide* statement woul not, he thought, be enough.

Dr. Routh (London) said that, if he understoo this report right, a member of the Fund, when h reached 60 years of age, would no longer be able t obtain one single penny from that Fund. This h considered a great objection; for a man up to 6 years of age might be supposed not to need assis

, and it was just when men approached the pro-ed age that they were most likely to stand in of relief. In this great mathematical Univer-he would propound this question—How many bers present would be likely, in the course of the ten years, to reach the age of 60? [*Laughter.*] many, therefore, of those present would be ex-ed in that time from the benefit of this proposed ? He thought that persons would not readily e forward with their money on these conditions; that Dr. Richardson ought to give this part of question very careful attention.

. Milner Barry (Tunbridge Wells) asked if the mittee were aware of the existence of other simi-societies to the proposed one, which allowed ly payments to their members in time of sick-.

. Tunstall (Bath) asked if Dr. Routh had not nderstood the report. Was it not that persons d not be elected members after they had arrived xty years of age? [*No, no.*] Then he must de-lly agree with Dr. Routh. He could not see persons sixty years of age, who had been long cribers to the Fund, should be deprived of all ntage from the money they had paid.

r. Daniell (Newport Pagnell) said he should look n this Fund as precisely analogous to ordinary dly societies. Those who were acquainted with dly societies knew well how they acted; and he himself been connected with them for forty years, had established several which had turned out essfully. One society that he knew of, merely abourers, secured to each member, for the pay-t of one shilling per month, medical attendance provision during the time of illness. He thought great mistake for them to define the age at h a man should cease to be relieved by this pro-d Fund. If he had paid his subscription, let him have the benefit of it until the end of the chap-and this ought especially to be the case, since e who went past the age of sixty most needed . Nor did he think that the Fund would thus be red. It was not the old members, but the con-ptive and otherwise diseased younger members, were ordinarily the greatest drawback upon a dly society. A man at sixty or seventy would ably soon die, and there was an end of him; but n the young man, who had just started practice had his family about him, fell ill, he was the per-who drew upon the Fund. He hoped this provi-of the scheme would be amended; and, with Sir rles Hastings, he felt confident that the day ld come—not in his time, perhaps, nor in Sir rles's—when there would be a widows' and or-ns' fund. The Provident Fund now proposed he not regard as a final measure; it was only an in-ment. [*Applause.*]

r. Heckstall Smith (St. Mary's Cray) had lis-d with great pleasure to the report read by Dr. ardson; but he could not avoid rising to express surprise that relief should cease to be obtainable ixty years of age. The Fund would be esta-ed on precisely the same principles as those of poorer classes; and there would be merely this rence, that for a multiple of payments there ld be a multiple of receipts in time of sickness; he took it, that there would not be a greater ptation to come upon the Fund among members heir profession than among the lower classes. recommendation, that no relief should be admi-ered to persons over sixty years of age, was a t on which the opinion of the Association should aken. As to the examination before admission, best authorities would tell them, on the authority of the insurance offices, that the Fund would not be safe unless this examination were rigid.

Dr. Thorp (Cheltenham) remarked, that he had lately found some letters as to the foundation, many years ago, of a similar institution in the West Riding of Yorkshire; and the great difficulties attending it were in the carrying out of minor details. As to the desirability of a Provident Fund, there could be no doubt. Medical men were the most improvident of all men. They thought more of others and less of themselves than any other class of men, though he hoped the time was coming when they would begin to think of themselves more than they hitherto had done. It was, of course, premature now to go into details; but he took it for granted that, whatever name this Fund received, it would be such a name as would guard against the possibility of its being thought an institution of a charitable character.

Dr. Cormack (London) thought that there were matters of detail in the report, in which experience would from time to time demand some small changes; but he regarded the basis on which the Committee recommended the establishment of the Provident Fund as in the main thoroughly sound. He differed from Dr. Routh and Mr. Daniell as to the advisability of giving sick-pay after sixty. To do this with safety to the Fund, objectionably high rates would be required; for, after sixty, the annual amount of sickness is great and rapidly augmenting. In fact, sick-pay after sixty is a large variable annuity. This is shewn by the collective experience of friendly societies, and is a point upon which there exists no difference of opinion among actuaries, though it is ignored in the tables of many of the certified societies of the labouring classes. He (Dr. Cormack) presumed that the Committee intended contributions and allowances to cease at sixty. It would be easy at some future time to add a table in which were combined sick-pay to sixty, and after sixty a small fixed annuity. The Committee had steered clear of shoals and breakers, and had brought forward a scheme which was quite sound, provided it were started with a sufficient numerical strength, and provided that strength were well maintained. In this branch of the subject lay the only flaw in Dr. Richardson's able exposition. He told us that two hundred members as a minimum would be adequate —in fact, that with two hundred the Provident Fund would be able to meet its engagements. He (Dr. Richardson) made this statement upon the authority of Mr. Tidd Pratt, but upon what authority did Mr. Tidd Pratt make the statement? It had yet to be seen at what average age members of the medical profession would join the proposed Provident Fund. Dr. Cormack's conviction was that young practitioners, confident in their health, and to whom three or four pounds *per annum* was an important amount, would hold back. Persons of doubtful health might at early ages seek admission; but, as a rule, the healthy would keep back till they were rising over the first difficulties of professional life. If this conviction were correct, or even a possibility, it showed that we could not assume that, if two hundred only joined, they would be men of a given average age. Small numbers combined with mixed ages upset all actuarial calculations; and friendly societies were perishing daily, not so much because they were founded on an erroneous actuarial basis, as because they had not a sufficiently large numerical basis for practical working. The rate of sickness obeys laws which have been pretty nearly ascertained. (Here the speaker referred to the number of days of sickness belonging to particular ages, and said that at his own age the days of sickness *per annum* were 16.48; if he were ten years younger, they would be 10.14; but if he were ten years older, they would reach 33.10.)

With such facts, was it possible to deduce safe working averages from two hundred cases? When claims come in early, the small friendly society, although built up on sound averages, is at once placed in jeopardy. Dr. Cormack said that he spoke strongly and decidedly on this point, not with a view of depreciating the report, but of urging the necessity of an immense effort being made at starting to get at least six hundred members. He had no doubt that such a number as six hundred would inspire confidence and secure permanent success. He would have great pleasure in voting for the adoption of the report in its integrity, and he heartily concurred in all the praise which it had received. [*Applause.*]

Dr. Camps (London) would draw attention to a fundamental question. It was suggested in the report, that the scheme should be carried out under a Royal Charter of Incorporation. Without going into details, he asked the meeting to pause before acceding to this recommendation. The report stated the advantages of this course; but it left unstated the disadvantages. If the Association obtained this charter, they might find their freedom of action very much hampered, and that they were no longer able to do what they liked and when they liked.

Dr. Stewart said there had been an entire change in his opinion since last year on this subject. When Dr. Richardson brought forward his scheme last year, he (Dr. Stewart) was struck with the desirability of carrying it out, and he hoped that the Association might be able to do so; but he feared the difficulties that might arise. He had been appointed to act in the matter with Dr. Richardson; and in their communication with Mr. Tidd Pratt, they had objected to the limitation of the age beyond which relief could be received. However, Mr. Tidd Pratt so strongly insisted on the point which had been so well touched upon by Dr. Cormack, that temporary sickness in old age very frequently resolved itself into permanent infirmity, that they were obliged to coincide. They were told that, if they did not go on this plan, the scheme must be an absolute failure; and therefore, though the feature was regarded as an unpleasant one, they were obliged to yield. He might add that, although various gentlemen had been associated with Dr. Richardson in preparing this report, yet the credit was entirely due to him; and the connection of others with him was merely nominal. Wherever extraordinary zeal and energy were required to carry through a project, Dr. Richardson was the man on whom they might rely.

Mr. Lund (Manchester) asked whether blindness and lunacy would be treated as illness, and whether a member receiving relief would be altogether precluded from exercising supervision over his business. As to the difficulty of age, he would suggest that with increased age there should be an increased payment. [*Hear, hear.*]

Dr. Ogle (Derby) in alluding to Mr. Carter's protest, said that he cordially approved of this movement, though he thought, that if they confined the benefits of the Fund to members of the Association, they would be proceeding on too narrow grounds. Let the institution be quite open to members of the profession generally.

Dr. Barham (Truro) remembered that it was attempted to establish a similar society to this in 1850, Sir John Forbes being chairman of the concern. He (Dr. Barham) most cordially supported the institution, as he did this; but he lost £100 by so doing, the affair proving a complete failure. The Society was open to the whole profession, and there was a branch for widows and orphans. Perhaps Dr. Richardson would state how far the committee had taken this former attempt into their consideration, and also wherein it differed from the present sche He had great faith in Mr. Tidd Pratt, though he known many an association to fail even when act under his guidance. He (Dr. Barham) thought t five hundred subscribers was the smallest num which would make the Fund safe, and also that difficulty as to age might be got over.

Mr. Hemming (Kimbolton) thought the basis two hundred was amply sufficient, if the thing w properly worked. He disagreed with the idea of cluding men over 60 years of age from benefit; he had considerable experience of friendly societies, a he had always found more losses to a society from young than from its old members. He hoped t this scheme would prosper, and that the old memb and founders of this Association would put down th names as members, so that there might be no stigr real or otherwise, cast on those who joined the Fu

Dr. Richardson replied to the various questic and objections. As regarded the Indian Fund, might say that the Committee originally intended look to the circumstances of every similar societ but the task seemed so difficult, that they had c tented themselves by taking the newest facts a acting upon them; and they thought the experier of the present time was better than that of societ established many years ago. As regarded acciden they had been included; in fact, everything that capacitated a man for his work. Blindness and sanity were also included. In reply to Dr. Hal questions about financial dangers, the practical wo ing of the concern would rest with the Directorate, well as the liabilities, though he considered that body of men with an ordinary amount of intell would not be likely to get into danger on this sco The greatest strictness would be observed, as member would receive one farthing of relief, a would forfeit all he had hitherto paid, if his subscr tion were not paid at a given time in each year. to health, they would receive a certificate from t medical man attending the member, that this latt was not in health; and of this medical man questio would be asked. But here, as in other matters detail, a slight amount of latitude must be left to t Directorate. As to the great question of persons n receiving relief who were over sixty years of age, might state that he would be quite satisfied to ha the question referred to the Directorate, who wo be happy to make any modification possible, thou this was one of the strongest points that had be urged. They might, if they liked, risk raising t extreme age from sixty to seventy or seventy-fi though the average age at which relief was stopp was sixty, and ask for an increased payment fr persons over sixty years of age. Still he thought t Committee had exercised a wise discretion in limiti this Fund to persons under sixty, whatever alte tions might afterwards be made. In reply to I Barry, he might say that the Committee knew of similar society now in existence. "The Provide Fund" would be the name given to the societ though, if a better name were suggested, the Co mittee would gladly accept it. The average of 2 members included all ages, and it was based on t mean averages of the friendly societies of Englan He thought this number amply sufficient to ensu success, though the Committee never dreamt th they would have so small a number as 200—mc likely they would have 1000 than 200. Mr. Ti Pratt said that with 200 the society would be wor able; with 500, it would be most successful; and wi 1000, it would be one of the best and safest societi in the kingdom. [*Applause.*] As to Dr. Camps a the Royal Charter, he felt quite certain that, if I Camps had given twelve months' consideration to t

er, as the Committee had done, he would have d the report; but let it be understood that this er of a Royal Charter was merely a suggestion esent—the Association was not in any way d to it by the report. On the matter of sick- it was not intended to be so rigid that a man d not, whilst receiving relief, superintend his ess or see a patient. As to Mr. Carter's protest, ought that the time might come when the pro- n generally would be admitted to the benefits e society, though for the present they must be nt with forming the Fund on the basis of the iation, with the Association as the nucleus. Association had a fixed organisation, which the ssion outside had not. He would add, that the fold scheme originally suggested was too cum- me for a society like this to work. In conclu- he would state that he had received a promise their late President, Dr. Symonds, of the sum of ineas as a primary subscription to a guarantee [*cheers*]; 10 guineas from the President; 10 as from Sir Charles Hastings; and a letter from . B. Brown, stating that he should be happy to ribe 5 guineas. [*Cheers.*]

. W. Budd (Clifton) asked who was to give the cal certificate in case of sickness.

. Richardson: The ordinary medical man.

. Budd: That will be a very delicate matter.

. Richardson: The question will come before ew directorate.

. Heckstall Smith said the last few words of Richardson's reply had altered the face of the considerably. It enabled him to ask a somewhat ate question which he could not ask before— her honorary members should be admitted to payments?

. Richardson said that payments might be made rds lowering the rate of the ordinary contri- ns or towards a guarantee fund.

e Rev. Dr. Bell (Goole) asked to have his name lown for £5.

e report was then adopted, one hand only being up against it.

. Charles Hastings said there was but one n whom they could make Chairman of the Di- rate, and that person was Dr. Richardson; in e zeal, ability, judgment, and strict integrity, he he greatest confidence. He proposed—

hat Dr. Richardson be appointed Chairman of Directorate."

. Daniell seconded the motion, and requested ame to be put down for five guineas at once, and ve guineas for every remaining five years of fe.

is motion also was carried.

. Cormack moved a resolution which he believed of considerable importance. It neither made ecommended any alteration in the mode of form- he first Directorate; but it suggested that at a e time a modification of the constitution would lvisable, with a view to secure perfect sympathy een the members and the managers of the Fund. herefore proposed—

hat the first Directorate be requested to con- carefully the question, whether it ought not to cessary for each member of the Board, and each n entitled to vote at the election of members of Board, to be a member of the Provident Fund."

. Budd (Clifton) seconded this resolution, which carried unanimously.

PAPERS.

e following papers were read:—

A few Words on Bantingism. By C. B. Radcliffe, Lond.

Dr. Andrew Clark (London) expressed his agreement on the whole with Dr. Radcliffe; who, if he understood him rightly, maintained that the diet prescribed by Banting did not introduce as much carbon into the body as was necessary for the vital operations. Still there were other ways by which animal heat was made, besides the introduction of carbon. It was well known that the amount of hydro-carbon, in ordinary health, was insufficient to account for the amount of heat in the body. He thought the extra quantity was owing to the introduction of an amount of nitrogen which went undetected; and ammonia was formed and was expelled from the blood in large quantities.

Dr. Barham (Truro) said there was a cardinal fact which must be noticed—that the diet of Banting was simply a medicine for excess of fat; and on the principle of burning his own lamp, the animal heat required was supplied by the wasting of this superfluous fat. There was no doubt that Banting's system, whether the best of its kind or not, was a great curative agency.

8. Remarks on the Rinderpest or Cattle Plague: with Drawings of the Characteristic Alterations of the Intestinal Follicles. By W. Budd, M.D.

Dr. Budd suggested the formation of a committee to inquire into the subject of infectious diseases.

Dr. Thudichum supported the proposal.

Dr. Barham moved—

"That the best thanks of the Association be given to Dr. William Budd for his able report, and the series of his previous inquiries; and that the Committee of Council be requested to take the requisite steps for carrying his recommendation into effect, by obtaining the cooperation of competent reporters on the several branches of the subject."

Dr. Andrew Clark seconded the motion, which was carried.

9. A New Instrument for the Treatment of Spinal Curvature. By Henry Dick, M.D. Dr. Dick exhibited and described the instrument.

The Fifth General Meeting of the Association was held in the Senate House, on Friday, at 4 P.M., Dr. Paget in the chair during the earlier part of the proceedings, and subsequently Dr. Burrows.

THE ADDRESS IN SURGERY.

Was read by G. M. Humphry, M.D., F.R.S. It is published at page 175.

Mr. Turner (Manchester) moved—

"That the cordial thanks of this Association be given to Dr. Humphry for his very able and interesting address."

He thought that no eloquence or oratory was necessary to recommend this resolution to attention and approbation; for he believed that all that had been intended for this address to be, it had been. The object of an address was to give a review of the past twelve months' history of a subject. He was pleased beyond measure with Dr. Humphry's address, for a more connected and useful view of the whole subject on which it treated could not well be conceived; he had concentrated much into it, and he (Mr. Turner) would remind the meeting that concentration was much more difficult than amplification.

Mr. Solly (London) seconded the motion. He felt proud of Dr. Humphry as a member of their profession; he had taught them and enlightened them, and had shewn them that eloquence was not confined to other professions and excluded from the medical. They would permit him to say that this address shewed how much the metropolis and the provinces ought to be linked together, for the talents of such a man as Dr. Humphry ought not to be confined to so-

limited a field of operation as the University of Cambridge. [*Applause.*]

The motion was carried by acclamation.

PAPERS.

The following papers were read.

On Diphtheria. By John Bridger, Esq.

New Researches on the Pathology of the Blood. By B. W. Richardson, M.D.

VOTES OF THANKS.

Sir CHARLES HASTINGS moved—

"That the cordial thanks of this meeting be given to the Vice-Chancellor and Senate of the University, for their kindness and liberality in granting the use of the Senate House and Arts School for the business of the Association."

The motion was seconded by Dr. STOOKES (Liverpool) and unanimously carried.

Dr. STEWART moved—

"That the cordial thanks of this meeting be given to the Master and Fellows of Gonville and Caius College and to the Master, Professors, and Fellows of Downing College, and to the other Colleges, for the splendid hospitality which they have accorded the members of the Association."

He said: This resolution speaks for itself. It records rightly the splendid hospitality which has been shewn to the Association, collectively and individually, by the University and the different colleges—a hospitality which could not be surpassed. In reference to our meeting here, I venture only to remark, that it is well for our Association, which moves in the atmosphere of the nineteenth century, and has had but a brief, though a vigorous existence, to link itself to the venerable past in the noble old seats of English learning. To have met here, in Cambridge, imparts a dignity and an importance to our proceedings, which it is difficult to over-estimate, and which cannot fail to exercise a powerful influence on the future progress and the scientific tone of the British Medical Association.

Dr. GIBBON, in seconding the motion, said he could but look upon the hospitality they had received at Cambridge as an earnest that this great, ancient, and learned University would for the future give more encouragement to the medical profession; and he hoped to see the day when Fellowships and Scholarships would be given as the rewards of merit in that profession. [*Hear, hear.*]

The motion was unanimously carried.

The GENERAL SECRETARY proposed—

"That the sincere thanks of the meeting be given to Dr. Latham, the local secretary, and to the local committee, for the admirable arrangements which have been made for the reception of the Association." No one could have any idea of what Dr. Latham had gone through during the last two months.

Sir CHARLES HASTINGS seconded the motion, and it was carried.

Dr. RICHARDSON moved the thanks of the meeting to their excellent President, Dr. Paget. They could not but remember the admirable classical address he had given them, and the excellent way in which he had conducted the business.

Mr. HECKSTALL SMITH seconded the motion, which was carried unanimously.

The meeting then dissolved.

UNREAD PAPERS.

The following papers and contributions were placed on the programme, but were not read on account of the absence of the authors, and from other causes.

Injuries of the Head. By Sydney Jones, M.B.

Herniotomy without opening the Sac. By T. H. Barker, M.D.

Some Questions in Reference to the Nourishm of the Working Classes. By Edward Smith, M. F.R.S.

The Collection of Minor Medical Observations. A. Ransome, M.B. (Received for publication.)

Tracheotomy in Croup and Diphtheria. By Buchanan, M.D. (Received for publication.)

Diphtheria. By T. Hillier, M.D. (Received publication.)

The Nature, Varieties, and Treatment of Eczem By E. Wilson, Esq., F.R.S. (Received for publi tion.)

Occipital and Constitutional Impetigo of the Sca By Balmanno Squire, M.B.

Neuralgia. By E. Woakes, M.D.

Intussusception. By G. Philipson, M.D.

A new point in the Pathology of the Skin, in relations to Albuminuria and some Disorders of t Nervous System. By A. Clark, M.D.

Some points in the Treatment of Diabetes. By E. Anstie, M.D. (Received for publication.)

The beneficial effects of Venesection in cases Convulsions occurring with Albuminuria after Scarl Fever. By M. Foster, Esq.

THE DINNER,

At which 120 members and visitors were present, w held in the magnificent hall of Gonville and Caius C lege. Dr. PAGET, President, occupied the chair; havi on his right the Vice-Chancellor of the University, S Charles Hastings, the Mayor of Cambridge, Dr. Tho the Provost of King's College, Dr. Vose, and the Pre dent of Queen's; and on his left the Bishop of Ely, I Burrows, the Dean of Ely, Dr. Acland, Professor S wyn, Dr. Jeaffreson, and Mr. Solly. Among the gue present were, also, the Rev. E. H. Perowne, Profess Challis, Professor W. H. Miller, Professor Liveing, et

The CHAIRMAN gave "The Queen", which was warm received, and drunk standing.

The CHAIRMAN next gave "The Prince and Prince of Wales and the rest of the Royal Family". I thought that all good folks must be pleased th among the first acts of the Prince of Wales was t laying of the first stone of the new wing of a hospit and that only on the previous Monday, his Royal Hig ness took a long journey to lay the foundation-sto of a monumental cross in memory of the medical of cers of the army, who died in discharge of their duty the Crimea. [*Cheers.*] As to the Princess of Wales, knew that the mere sight of her made loyalty mo loyal. Nor, in drinking this toast, must they forget t baby Prince; might he grow up to become a tr English gentleman like his father, and a winner of hearts like his mother. [*Cheers.*]

The toast was duly honoured.

The CHAIRMAN next gave "The Army, Navy, and V lunteers". As regarded this toast, he had some litt difficulty; for he had inquired, and had not been able ascertain whether there were any one present to repr sent the army and navy. Surely there must be prese some one who represented the medical departments these services; one who was, as Dr. Humphry had sa that day—

"πολλῶν ἀντάξιος ἄλλων."

He (Dr. Paget) quite agreed with the old sentiment there was very much in it. Experience proved that o of the most important things to an army was keeping in good health. Sick men can't fight. Campaigns a as often decided by fever and dysentery as by the swor Science applied to warfare must tell in sanitary me sures as certainly as in gun-making. He hoped, the fore, that if there were any gentlemen present belongi to either service, they would stand up, and, as they h been charged with the care of their health elsewhe

would answer for their health there. With regard e volunteers there was no difficulty. They had g them a senior officer—a captain: he meant Cap- Professor Liveing. He coupled Professor Liveing's with the toast with more pleasure, because he was presentative man: he thoroughly represented the c spirit of the volunteers. Though his engagements more than sufficient to occupy any ordinary man, e found time to attend to his military duties with unctuality of a veteran. [*Cheers.*]

ptain Professor LIVEING responded to the toast.

e CHAIRMAN next gave the health of the Bishop and y of the Diocese. The Bishop of Ely had come London that day on purpose to be present at their ing. They ought to remember that, in the middle medicine owed its revival to the clergy, as Dr. phry had told them; and that the school of Sa-, which was the first to become famous as a school edicine, was originally a Benedictine convent. And en happened that these clerical doctors were very somely rewarded for their services, not only with h, but sometimes even with the highest ecclesias- dignities. One of them was raised successively to positions of archbishop, cardinal, and pope. Hap- and wisely, the clerical and medical offices are now ited. To preach the gospel and to heal the sick now separate missions. But it would always be e in mind that they had one common bond of n, for they are but parts of one Divine command.

he BISHOP OF ELY, on behalf of himself and the y, had to return their very hearty thanks for their ness in responding to the last toast. He heartily urred with all that Dr. Paget had said about the n of medical skill with clerical work. They were together here in this great University, in which, aps, more than in any other place, physical science been united to a profession of the Christian faith; he hoped and trusted the union might never be dis- ed. [*Applause.*] He could but remember that that e college had produced Harvey, the discoverer of circulation of the blood, and Jeremy Taylor, one of most eminent of Christian divines; their portraits g from the walls of this hall, equally honoured. In University, he was happy to say, there had never a division between science and religion: the test of men, who ranked eminently in the sciences, zealous for the faith. He might mention Bacon or ton in a bygone day; Airy, Whewell, Stokes, Adams, Miller, in the present. The first men in physical nce of their day had been equally devoted to the re- n of their fathers and to the truth of the gospel; though in this day there was some misunderstand- between science and faith, yet he had no fear for the e. [*Cheers.*] He fervently trusted that they of a ntific profession would follow out their pursuits with ess, and at the same time allow them (the clergy) to w out their spiritual labours. He had no fear of increase of knowledge: the danger rather was in ing too little of it. [*Applause.*] The medical pro- ion and the clerical had the same commission to y out. The one ministered to men's bodily wants, other to their spiritual; the one to the suffer- s of the body, the other to sin and the sufferings of soul; and he (Bishop Browne) was most anxious to ify that, during his lengthy ministerial experience, he ever found the greatest comfort and the greatest stance from the medical men in the parishes with ch he had been connected. The bishop concluded gain returning thanks for himself and the clergy of diocese.

r. PAGET said that it now became his duty to pro- e "Prosperity to the British Medical Association." *ud cheering.*] Its aims are to promote medical nce and to maintain the honour of the profession. se are aims that deserve success—that deserve the good wishes, not of the medical profession only, but of all men. For what household was there into which sickness had ever entered, that did not feel an interest in the advancement of medical science and in the honour and integrity of the profession? [*Hear, hear.*] There were various ways in which this Association accomplished its purpose: they most of them knew how it worked, but there was one feature about it which pecularly struck him, and it was this—that it kept alive, by its migrations to and fro and by its branch meetings, a love of medical science which all must have imbibed during their student life, but which was liable to languish among men who were scattered through the country or isolated in villages, and so cut off from the stimulus and sympathy of kindred tastes. In influencing men thus situated it did good service to the men themselves, and to the cause of medical science, causing the men to observe and record facts and reflect upon them, and to add to the general stock of science while improving themselves. It should be borne in mind, that from rural practitioners had come the greatest boons to mankind in modern times—it was a rural practitioner who discovered vaccination [*Cheers.*] But beyond these considerations, this Association was of service in that it brought them all together in good fellowship [*hear, hear*]; it kept up some feeling of brotherhood among workers in a good cause, and bestowed upon them many advantages, pleasures, and happinesses. The great Harvey, in his will, enjoined that at the London College of Physicians there should be every month a cold collation to be frequented by the Fellows, the purpose of which was, he believed, expressed in the words—"to keep love among the brethren." And Dr. Caius, one of the founders of this College, directed the Masters and Fellows of the College to keep good cheer and to entertain some friends both on the day of his birth and on the day of his death; and, however the type of other things may have changed since those bygone days, yet all would agree with him that there had been no change in men's social feelings. [*Hear, hear.*] Here Sir Charles Hastings was in the midst of founders: he, they rejoiced to see, in vigorous flesh and blood: they (the other founders) in effigy, perhaps also in spirit; for if the spirits of the departed ever revisit the scenes of earth, doubtless those of Gonville and Caius were those present among them. Let them hope that Sir Charles Hastings might long live to enjoy and witness the prosperity of this Association and the good he had himself done in his generation—and might he rejoice in that which is the peculiar and enviable glory of a founder, that he has extended his power of doing good beyond the limits of his own lifetime. He begged to propose prosperity to the British Medical Association, coupling with the toast the name of Sir Charles Hastings. [*Loud and protracted cheering.*]

Sir CHARLES HASTINGS said that on these occasions he was so impressed with the enthusiastic manner in which his poor services were recognised, that he really found it difficult to give expression to his feelings. He would, therefore, briefly say that deeply and from the bottom of his heart he thanked them, and he thanked Dr. Paget especially, for having so kindly spoken of him. The progress of this Association had far exceeded his most sanguine expectations, though those expectations had been very sanguine, and though he looked forward to its progress being even yet more rapid, yet thirty years ago he had no perception of the perfection to which they would attain, in promoting the love of medical science in the three kingdoms. Those who could look back to thirty years ago could remember that it was generally taken for granted that all the strength of the medical profession lay within six miles from the General Post Office—then there was nothing in common between the metropolis and the provinces. But one of the great objects of this Association was to unite the metropolitan

and the country practitioners in one brotherhood. Their meeting in London was a complete success: there their brethren from the country were received with open arms, and it was through the instrumentality of this Association, he believed, that the present good feeling between the town and country practitioners existed, and he himself could but look back with satisfaction at his having aided, in the humblest and smallest degree, in bringing this about. [*Cheers.*] Their meeting first in one part of the kingdom and then in another, gave them an influence in the various localities which they might otherwise in vain seek to obtain; and he thought it was the crowning effort of this Association that it had been so warmly received by all the authorities when it met within the walls of this ancient University. [*Loud Applause.*] He could but say that the way in which the Vice-Chancellor and the various colleges had come forward and wished them God speed, was most grateful to all their feelings, and must give a great impetus to their future progress. It must be known to those he was addressing that for a quarter of a century the Association had had a longing desire to visit this University—for a quarter of a century they had been wooing the authorities, and at last they had won them. [*Laughter.*] The University had set its seal, as it were, upon their proceedings, and had shown them that it desired the progress of medical science and of all those objects for which such an Association as this was formed. In congratulating themselves on the past, they must remember that the future was in their own hands; though he himself had no fear, for he looked upon what they had already accomplished as a guarantee that their future progress would be equally successful with their past. Their meeting in this University had been one of those things which would strengthen their hands; and therefore, in conclusion, he would only say that he saw before them a vast and unclouded prospect. [*Loud Applause.*]

Mr. James Paget, in proposing the University of Cambridge and the health of the Vice-Chancellor, said: I owe the honour of being permitted to propose the next toast to a great personal disadvantage; for the toast is, the Vice-Chancellor and the University of Cambridge, and it is thought right that this should be proposed by one who is not a member of any University at all, as if envy could commend the object of its desire better than love can praise its best possessions. I speak of envy, for I am sure that none of you who have not been members of such an University as this which you have been admiring can have failed to feel as I did, when I first began to teach in a medical school, envious of those who teach here; and this, not only for the opportunities of having all sciences taught, as it were, within one fence, but for the yet greater advantages of social life, and discipline, and the constant presence of the symbols and services of religion. It was my privilege, some twenty years ago, to inaugurate an imitation of the collegiate system at Saint Bartholomew's Hospital. It has worked well, and has answered all our reasonable expectations. But it is yet too small, and too much alone; for no other of the medical schools has yet followed our example. It would be a great improvement in the schemes of medical education, with which we all seem to be ill contented, if our schools were really colleges such as you see here. I still hope for the time when they may be so; but it must be far distant; unless, indeed, another Caius should arise and gather both the wealth and the wisdom for a foundation like to this. But it is not only in our medical relations that we may envy or honour Cambridge: as Englishmen, we owe her yet much higher honour. For there is no form of knowledge which this University has not cultivated or trained men into fitness to pursue. In divinity and laws, in history and literature, in every branch of science, Cambridge men have ever been among the leading spirits of their age, chief workers among those of whose labours we reap the fruits. And not only so; but among our chief legislators and statesmen, Cambridge has instructed many in the power and a thinking; and has taught them, in lessons of submis the first lessons in the art of governing. These are a c of witnesses who, while England has a history, will testimony in honour of the University. But there i another debt, perhaps in its total greater, which Eng owes to Cambridge; that she has trained so large a of our gentry and nobility, not only in fair learning in rectitude and mutual honour, in the love of orde the love of freedom, in the love of home; and, in all th on the foundation of the one true faith. When one th of these things, one's feelings rise to something n than even the heartiest good-will that can be expre in the terms of any toast; the rise to an earnest pr that God may grant to this great school of learning of moral discipline a perpetual prosperity; so that long as England lasts, Cambridge may be a very gar of wisdom, rich in all the fruits of intellectual and m culture, and a training ground for the far future gen tions of English gentlemen—clear-head, stout-hear loyal, and true. I can add to the pleasure with wh you will receive the toast of "the University" by conn ing with it the name of the Vice-Chancellor. You h seen him foremost in the ample and graceful hospita with which the University has received the Associati foremost, therefore, among those to whom we owe thanks. But we also owe him honour for his devotion pursuits that are, in a measure, kindred with our o Not content with very distinguished honours in the cl studies of the University, or with the election with ge ral applause to the Mastership of his College, he has b a keen student of natural history. As an accomplish geologist, he has proved, what it is our privilege to taught from the very beginning of our studies, that th is no better exercise for a strong and well-stored m than may be found in the pursuit of natural science. give, then, "Prosperity to the University, and health him who so worthily represents it."

The Vice-Chancellor said he should always fee difficulty in speaking in behalf of this University, but the present occasion the difficulty was increased tenfo after listening to a speech which he had never hea usrpassed in eloquence. [*Applause.*] When a gr national and distinguished association met within t walls of this ancient University, and so warmly and e thusiastically expressed itself towards the University, hoped he might take that expression of good-will something more than a mere compliment—as an adm sion on their part that they of the University were rea to hold out to them the right hand of fellowship, a willing to maintain those great objects which this As ciation was established to promote [*Cheers*], and as an acknowledgment that the University fully appreciat the great services which their noble profession had re dered to mankind. He trusted this University wou always be ready to honour the sciences of medicine a surgery, and would look upon it as imperative on its to show respect and regard to a great association li the present. [*Cheers.*] The occasion would justify hi in making a few remarks with regard to this meetin He congratulated them on being now assembled with a college which had so long been connected with th progress of medical science. It had been told them l his Lordship, that this was the college of the immort Harvey; it was founded or enlarged by Dr. Caius, a took the lead now in the medical education of the Un versity, numbering among its members, former Fello of the college, some of the most distinguished ornamen of the medical profession; he need not name the though he might call to their remembrance that th eminent physician who had been appointed President their Association was a distinguished member of th college. [*Applause.*] Dr. Paget had for many yea taken an active part in the general affairs of this Un versity, and had devoted his talents and his abilities

romotion of many great public improvements, and e carrying out of the objects of this noble founda-

He (the Vice-Chancellor), as a member of this rsity, begged to return to their President his most re thanks for the manner in which, in his opening ss, he had laid before the Association the relation the University bore to the medical profession, and ature of the education which the University offered students; and for having pointed out to them the s which the authorities at Cambridge were now ng to promote the study of the natural sciences. he Vice-Chancellor) hoped that able, elegant, and practical address might be given to the world in a ate and permanent form, and that the views there rth might spread abroad through the length and th of the land. [*Cheers.*] He might express a and belief that the University would be alive to its s in respect to the natural sciences, and, in addition omoting the time-honoured studies of the place, help forward those other sciences so closely con- l with a profession of the utmost value to mankind. Vice-Chancellor concluded by again thanking the ny for the toast, and resumed his seat amid warm ng.

Drosier proposed the health of the Mayor, who iven them the use of the Guildhall.

e Mayor briefly and suitably acknowledged the iment.

fessor Selwyn, in proposing the next toast, said: ood friend, your President, my friend of thirty- years, has *prescribed* for me this evening. I al- ake his prescriptions in full confidence; they are ways the most pleasant to the taste, but I have by experience that they are good. His prescrip- or this evening is, *Fiat locutio post prandium.* I t tell what good it may do me; at all events, I it will have the effect of inducing you to receive ly the toast I have to propose: viz., "Health and erity to all the other Universities of the British " The President has made me the organ by which ridge wishes the welfare of all her sister-Univer- And never was the word sister more justly applied; nough our Universities are severed by long dis- , and under different climes, yet we are all en- in the same noble aims and pursuits, of advancing edge, and upholding truth:

"Facies non omnibus una,
Nec diversa tamen, qualem debet esse sororum."

rst feeling, on having such a task prescribed, was arse to sink under it, and to wish for a better sman; and after hearing Homer quoted here this ng, I have been saying to myself, "O that Homer be here among us!" for if he sang so fervently the s of one single physician—πολλῶν ἀντάξιος ἄλλων— loquent would he have been under the influence of great assembly of physicians, finding here Poda- and Machaon, Burrows and Paget, and Budd and d, all gathered under one roof! But, after this g of despondency subsided, the next, I confess, feeling of encouragement and elevation of mind. e around me so many of the most distinguished ers of the family of Medici; so many men of st attainments, all engaged in that noble art of ng, so closely allied with our own work as divines, not fail to produce a great elevation of spirits. I y pulse beat quicker; I feel the circulation of the more rapid; I feel the spirit of Galen and Hip- tes rise within me. And how comfortable and s has been our meeting to-day! What a pleasure down at table in company with so many physicians, joying the good things provided for us by the Col- What a contrast to poor Sancho Panza, in his f Barataria, sitting down in solitary state, with one cian standing behind him, who waved his hand as lainty dish appeared, and away it went, before he could taste a morsel! With these pleasurable feelings, I ask you to drink health and prosperity to the other British Universities; and especially to the Medical Faculties; for upon them mainly depends the health of those Universities; and they have come hither, like the shower of August stars, to enliven our University amid the dulness of our long vacation. [*Cheers.*] I could say much, if time allowed, on the connexion of medicine with all our other branches of study; of its connexion with science, and with divinity, there is no need to speak: the physician and the divine are linked together, like body and soul. But, as to classics, it was a physician, Sir William Browne, who gave us gold medals for Greek and Latin odes; and to this draught of Helicon, he added two little pills of epigram, knowing that a good hearty laugh is very wholesome for the human frame. As to poetry, our Christian poet, John Keble, wrote a book of lectures on the medical power of poetry, showing that poetry was given from Heaven as a medicine of the soul, to soothe the troubled thoughts and feelings. As to history, you remember how Niebuhr, when writing his Roman history, said: "He who calls that which has vanished back into being, enjoys a bliss like that of creating." Is not this the very bliss enjoyed by the physician, calling back the vanished bloom of health to faded cheeks?

"Fondly we seek the dawning bloom
On features wan and fair;
The gazing eye no change can trace,
But turn away a little space,
Then look! and lo! 'tis there!"

This is the creative power recognised by the *fiat* of the physician: *Fiat mistura; fiant pilulæ.* [*Laughter.*] But when I speak of creating, you all know what I mean; not that man can really create, or originate anything. Neither we, the physicians of the soul, nor you, the physicians of the body, can ever arrogate to themselves any power like this; we can only apply the means which the bounty of God places in our reach. It is ours to apply the healing words; yours to apply the mineral or vegetable substance, "the lulling potion, or the healing root;" and God gives the blessing.

"Thine be the glory, gracious Lord,
Of every healing work and words;
For every word and work is thine."

I am sorry that I cannot point to any representatives of Edinburgh and Dublin present here to-day; but one of our sister universities is well represented. Oxford has sent Dr. Acland, and a worthier representative she could not send—[*cheers*]—one who, if he had no other claims to our cordial good wishes; if he had not been the chief agent in the institution of that noble museum; if he had not been the most zealous promoter of scientific studies; if he had not laboured to advance the study of anatomy first, and afterwards, as Regius Professor, the general study of medicine; would have earned our goodwill by two works, which will continue to promote the welfare of our country, long after we are laid in our graves; having watched over, and, under the divine blessing, preserved the health of our young prince during his travels in America; and having done his best to purify the rivers of England. Dr. Acland very boldly proclaimed the truth, that God did not make rivers to be used as drains; and let us hope that, in spite of the mountains of difficulty that still lie in the way, he will persevere and overcome them all, and restore the purity of our rivers throughout England. [*Cheers.*]

Professor Acland said that, after the magnificent speech—the speech full of eloquence and pathos, which had fallen from Mr. James Paget—he felt in some difficulty as to how he should respond to this toast. Setting aside the manner in which he had been personally received, and the manner in which the University of Oxford had been spoken of, he said he should be guilty of treachery towards those institutions with which the toast had been connected, if he did not make a few ob-

servations in responding. In the first place, he considered it a positive duty that he should appear and do homage to the University of Cambridge and to the Association there assembled, simply in the public capacity which he had the honour to fill. He (Dr. Acland) did not think that what Mr. Paget had stated (as no University man could have stated it) at all exaggerated the advantages of our English University education. [*Hear.*] Those who had had the privilege of enjoying this education incurred a great and a serious responsibility; but, this responsibility notwithstanding, he desired to see as many members of his profession coming to the Universities as possible, as there was no walk of life in which a preliminary liberal education was of greater service. [*Loud applause.*] He gave it as his opinion, holding a public office in one of these great institutions, that the greater the number of young men to be engaged in the noble art of healing who received a University education, the better. He could, therefore, heartily thank them in behalf of the other Universities of the land—he knew he could thank them on behalf of Oxford, for the best men there were determined to carry on a noble rivalry to Cambridge in affording the best and soundest education to her students. Dr. Acland concluded by admonishing those who received this education to turn it to the best account, and by expressing his desire that the Universities might be more than ever alive to forwarding such institutions as this Association.

The Dean of Ely said a toast had been put into his hands to propose. If there was one lesson which the clergy learned from the laity, it was the lesson of being very brief; and if any additional reason was required for his being so on the present occasion, he found it in the fact that he had a return-ticket to Ely for the mail train, and that it now wanted not many minutes to eleven o'clock. If, therefore, he made a long speech, in all probability he would be rewarded by missing his train. He should say but few words; and in this he had a great advantage, for the toast put into his hands was one of which he knew nothing in the world. [*Laughter.*] He had to propose the health of the General Medical Council. Now what the General Medical Council was he did not know, except that he regarded it as something similar to what they in the Church called Convocation—a sort of institution to apply mild restoratives to medical heretics; "for," added Dr. Goodwin, "if we in the Church have our *Essays and Reviews*, pray have not you your homœopathists?" [*Laughter.*] However, there was coupled with the toast the name of a gentleman whom he ought to know, for he had sat next to him during dinner, and therefore on that account alone he was, perhaps, bound to propose his health. He was thinking of the old question, "What is the difference between a bishop and a dean?" "Dr. Burrows" seemed to be a fitting answer to the question. (Dr. Burrows was sitting between the two worthy ecclesiastics, and the Dean's remark created a roar.) In coupling Dr. Burrows's name with the toast, however, he did so with especial pleasure, because he was proud to recognise in him an old Caius man, and a man who stood nearly at the head of his profession. After facetiously alluding to his own immunity from anything which would require the physician's art, the Dean said he had always felt ashamed of the divinity of his College—it seemed to have worn itself out with Jeremy Taylor; but, in the way of medical science, he was quite satisfied with it. The Dean concluded by proposing "The General Medical Council, and Dr. Burrows."

Dr. Burrows responded. He thanked first the Dean for his complimentary speech, and then the meeting for the manner in which they had expressed their sentiments towards the General Medical Council, though he was well aware that that Council had not done all that had been expected of it in the way of remedying the evils existing in the profession. It was quite true that the Medical Council had fallen short of what was expe of it; but if gentlemen would call to mind the tim which the Council was appointed, and the circumstar under which it was constituted, they would see tha the very nature of things, difficulties must arise to pair its efficiency. Let them call to remembrance, w the English, Scotch, and Irish were first represented one Parliament, how difficult it was for them to The same sort of difficulties appertained to this Cou They had at the board men of eminence in the vari localities from which they came, and having fixed often widely differing opinions on most points. H unreasonable was it to expect men so differing to p together with one united action! It was this fact, t the Council was so constituted, that in a great meas accounted for its having hitherto done so little. For part, he would never have been induced to occupy present position as President of that Council, exc solely with a view to the good of the profession. It no personal advantage—no small thing of that kin which made him accept the invitation offered to hi and they might rest assured that, so far as he was c cerned, he would ever work for the benefit of the p fession. Of course, they could not now expect him commit himself to opinions, though they would exc him saying that he should always endeavour to cond the business in no partisan spirit. They might exp him to express an opinion about medical educati but he felt that it would be better for him to be sil on this topic also. Dr. Burrows concluded by expre ing his pleasure at meeting the Association in t hall, and in a college of which both the President a himself were old members.

Dr. Richardson remarked, in proposing the n toast, that the first prize ever given by the Associat had been awarded to Dr. Thudichum, a well kno member of this Association, whose health he now beg to propose. He remembered the time when Dr. T dichum first came to England. He came as a foreigi knowing our language but imperfectly, but full of p mise and full of great hopes; and, during the time had been among us, he had acquired a knowledge of language such as was possessed by few of oursel He (Dr. Richardson), as one of the adjudicators of prize, said the researches of Dr. Thudichum would read with the utmost pleasure by the members of profession. [*Cheers.*]

Dr. Radclyffe Hall proposed the health of the I sident for the year. [*Loud cheers.*] He was sure t could not have met with a better President; for t had in him not merely one fitted for the office, bi man who was really one of them. They would all dr with the greatest appreciation Dr. Paget's health. [*newed cheers.*]

Dr. Paget thanked them heartily for their kindn not only in drinking his health, but in making h President; and for their extreme indulgence in look over his shortcomings whilst he was in office.

Mr. Southam proposed the health of the readers the addresses—Dr. Ormerod and Dr. Humphry. was sure it was not necessary for him to enter into eulogium of these gentlemen's merits. He had himself the pleasure of listening to Dr. Ormerod, but had heard Dr. Humphry; and of the address of latter, he might say that, whether they looked upo from a practical point of view, or as pointing out them the medical education to be derived from the U versity, he was entitled to their warmest thanks. Southam suggested that some of the resident Fell should give themselves to studying one or other of natural sciences; and advised them, when on the co nent, to visit some of the smaller universities, and v ness the amount of good that had been done in them persons who had thus devoted themselves to scie As an illustration of this, he mentioned especially

Professor Schrœder van der Kolk of Utrecht, whose irable physiological and pathological museum has n shared between the Universities of Oxford and bridge. If this suggestion were acted upon, he ight additional lustre might be added to the name of bridge.

r. HUMPHRY: On behalf of Dr. Ormerod as well as elf, I beg to return you our cordial thanks for this istakeable expression of your kind feeling towards us. gret that the duty of replying to it, of representing n medicine and surgery, has devolved upon me. ow-students in former times, friends then, friends since, Dr. Ormerod and myself have rejoiced lately eing fellow-labourers in the attempt to promote the cts of the Association and the success of this meeting. n that we have, to some extent, succeeded, we have our reward; and this meed of your approbation is much surplus gratification to us. I look back upon meeting, now nearly closed, with unmixed satisfac- ; it will remain stamped upon my memory as one of most enjoyed periods of my life. I have made nu- ous acquaintances with men whose names were by- ds among us; and I now know them, not merely by r good works, but personally. I cannot think that effect of this meeting will be merely ephemeral. I t it will produce, among other lasting influences, that a better knowledge of Cambridge in our profession, a stronger yearning towards her. A gentleman has said to me, "I wish I had known Cambridge before; ould have sent here my two sons, who have been ught up to the profession; but I knew nothing and ught nothing of the university." Henceforth you know more and I hope think more of her. You not have been here for a few days—a few hours, you not have strolled in these classic groves, have rested hese halls saturated with learning and teeming with pitality; you cannot have attended together that le service in that noble building, without acquiring ething of the genius of the place, without some im- sion having been made, some kindly feeling excited. may have been led to think more and more humbly, therefore more rightly, of the great problem im- sed upon us in that service, "Where shall wisdom found? and where is the place of understanding?" s no small privilege to have been here for this short e. You will judge, therefore, that I am not insensible ne very great privilege of being a resident here. I am aware that my lot has has fallen upon most fair nd. With privilege, I know, is ever associated re- nsibility; and I am, and always have been, deeply sible that to my privilege of living here is attached responsibility of endeavouring to extend to others of profession—to those especially who are about to enter some of that which I so highly prize myself, to urge and others to give to the future members of our pro- ion the opportunity of sharing this cornucopia of ntal and material wealth. I love my profession; I my University; and am most anxious to promote a er union between them, being convineed that such on must be for the welfare of both. Gentlemen, I re- iate altogether the idea that the University is for the sician alone. The University is for the surgeon. University is for the general practitioner. The iversity is for all to whom high education, clear ught, and noble resolve are of value. It is with this ing, to promote this end, that I have laboured long, at length, I am glad to say, successfully, to bring ut this meeting: and I trust, indeed I feel sure, that effect of the meeting will not be confined to the plea- e which you, I believe, have experienced in coming e, and to the very great pleasure which, I am sure, have had in receiving and welcoming you. I antici- e from it effects stretching far into the future, effects ductive of much good to our profession, and so to country.

Mr. BARTLEET proposed the readers of papers, eulogising those of Dr. Routh, Dr. Richardson, and Dr. Budd. With the toast, he coupled the latter gentleman's name, thanking him for the diligence and patience he had given to the study of the causes of contagious diseases.

Dr. BUDD, in returning thanks, said it was a peculiar gratification to him to attend this meeting in the University of Cambridge. He had not the honour, and he deeply deplored it every day of his life, of being a member of one of the Universities; though some of his brothers and near relatives owed to the education and the endowments of this University everything that had helped forward their advance in life. Still he loved and revered the place, and he could say that the little mathematics he had picked up in a hap-hazard sort of way, in a country village, from his brothers when they came home for their vacations, had been of inestimable value to him. He had again and again thought that it was in the highest degree desirable that there should be a closer educational unison between the medical profession and the Universities, for he had long held the opinion that the present training for their profession was wanting in that teaching of precise and accurate habits which distinguished our Universities. If one profession more than another required a sound and rigid preliminary education, it was the medical profession, for they needed minds accustomed to thought and to that system of logical induction which enabled them to appreciate in a scientific manner the phenomena which came before them. Dr. Budd, having further pointed out the great need the profession had to be more closely associated with the Universities, resumed his seat amid hearty cheering.

The health of the President-elect was next warmly given and received, and Dr. JEAFFRESON shortly and suitably responded.

Dr. STEWART proposed the health of a gentleman to whom they were very much indebted—Dr. P. W. Latham, the local Secretary. [*Loud cheers.*] The duties of local Secretary were as arduous as could be performed, and Dr. Latham had been unsparing in his energy. The toast was received with as much enthusiasm as any that was drunk during the whole evening.

Dr. LATHAM said he would be affecting a modesty he did not feel, if he said his labours had been light, though he was amply repaid by the kind manner in which he had been received, and by the many hearty congratulations he had received on the success of the meeting. He should always look back with pleasure to the circumstance of his having held this office. He thanked the meeting for the expression of their feeling.

The CHAIRMAN now left the chair, and thus the meeting of the British Medical Association in 1864 terminated.

We cannot draw our report to a close, without expressing our deep obligation to Dr. P. W. Latham, the indefatigable local Secretary, for the courtesy with which he rendered every assistance and information to the gentleman who prepared this report.

PEPSINE FROM THE PANCREAS. Dr. Corvisart removed the pancreas from a man who died suddenly after inhaling chloroform, cut it into small pieces, and shook them up with four hundred *grammes* of cold distilled water. After filtration, one portion of this liquor was rendered slightly acid with hydrochloric acid; another portion was made alkaline with potash, and the third part was left as it was. The digestive power of each was then tested with fibrine and albumen, the mixture being kept at about 104° Fahr., and in every case the digestion was rapidly effected. (*Chem. News.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

THURSDAY. Zoological Society.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

J. W.—The leader referred to by our correspondent concerning the late election of Fellows, excited the indignation of every Fellow of the College of Physicians, except, of course, of that Fellow who communicated the information to the *Lancet*.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Messrs. Clarke and Elliott (Lynton), 10s.; Ed. Hall, Esq. (Ulverstone), 10s.; Geo. Bulmer, Esq. (Leeds), 10s.; W. A. Barr, Esq. (Slough), 10s. 6d.; Thos. Robinson, Esq. (Cheadle), 2s. 6d.; Joseph Toynbee, Esq. (Savile Row), £1:1; Francis Davies, Esq. (Pershore), £1:1.

Amount previously announced, £48:3. Received at the *Lancet* office, £3:11. I am, etc., ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 10th, 1864.

COMMUNICATIONS have been received from:—Dr. WILLIAM BUDD; Dr. RANSOME; Mr. FOREMAN; Dr. G. M. HUMPHRY; Mr. LAWSON; Mr. T. M. STONE; REV. H. BROMFIELD; Dr. ROUTH; Mr. BRIDGER; Mr. E. WILSON; Dr. ANSTIE; Dr. HILLIER; THE SECRETARY OF THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH; Mr. I. HARRINSON; Dr. FOWLER; Dr. G. BUCHANAN; Mr. SANSOM; Mr. H. HANKS; Mr. LORD; and Mr. LANGLEY.

Mr. J. Baxter Langley, M.R.C.S

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For the construction of all kinds of Orthopædic and Anatomical Appliances and Machinery for the treatment of deformities, the suppo of muscular debility, and the supply of substitutes for deficiencies of the human frame.

His long experience in the above capacity, during three years' sojourn at the Orthopædic Institute of Dr. Otto Langgaard, at Hamburgl and his ten years' engagement (the last eight and a-half years as Managing Assistant and Designer) with Messrs. Bigg and Son, combine with a thorough practical and theoretical education in Applied Mechanics, enable him to carry out the wishes of Medical men and thei patients who may favour him with their orders.

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Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

HEMIPLEGIA, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

[*Continued from page* 85.]

Hemiplegia of the Left Side.

CASE XXIV. Male, aged 57. Illness was preceded by much complaint of weariness gradually increasing, with impaired power of left lower extremity, the commencement of which appears to date three weeks ago, and had made great advance in three days. "His speech has not been observed to be affected until the day before yesterday"; this is the sole reference to articulation throughout the case, with one exception, though from the descriptions frequently entered into of specific complaints, and from frequent mention of "wandering," it is evident that the faculty of speech was preserved. Had now complete paralysis of the left arm—incomplete of the leg; sensation blunted; special senses entire; "speech a little affected." Face weakened on the left side; tongue deviated a little. An aortic bellows-sound was audible.

He lived three months and a fortnight; at first there was some effort to regain power in the leg, but this soon ceased to be made; and from the language employed, I infer that the right side of the body was thought enfeebled to some extent; some rigidity appears to have existed in the *extensors* of the left leg during a considerable part of the case, but at its close, the flexors of the arms on the same side also became rigid. Sensibility did not vary from its first condition in the affected limbs, but the patient suffered from much pain in all his limbs ("in the bones"), and in the joints; *he said* that the pain in the left leg and foot was like sticking knitting needles into these parts. Hyperæsthesia then affected the entire surface of the body, so much so, as with the pain in the limbs and joints in moving, to cause him to resist the needful cleaning; the paralysed leg grew so sensitive (though the patient could not exactly localise the point of contact), that it was difficult to test the reflex sensibility, which, however, did not appear much exalted. The legs emaciated equally. His urine was at times passed unconsciously, and constantly so in the last month or three weeks. He wandered at times, and had much frontal headache.

SECTIO CADAVERIS. The right hemisphere of the brain consisted of a large ragged cavity thinly covered by cerebral tissue, having for its floor the parts forming the floor of the lateral ventricle. The enclosing portion of brain seemed firm and healthy. The corpus striatum and thalamus appeared healthy. The base of the brain and the opposite hemisphere were also healthy. The arteries at the base were healthy, excepting that some of the smaller branches were rigid. Earthy degeneration had taken place in the aortic valves. The cells of the liver and of the kidneys contained fat—those of the former, in very large quantities.

CASE XXV. Female, aged 77. Seen four hours after an attack of left hemiplegia; she was "quite unable to speak," though apparently sensible, as when asked if she were in pain, she put her hand to her forehead. "She appears to have retained the power of speech some time after losing the use of her left side"; she was carried upstairs perfectly helpless, and only spoke once again, saying, "it is another stroke".

She suffered from hemiplegia of the right side four years ago; "the right arm has remained feeble ever since, *and her speech a little drawling,*" but she walked as well as ever. She died in three days; she was supposed to continue conscious for twenty-four hours; afterwards she became quite insensible and unable to swallow.

SECTIO CADAVERIS. Heart nearly healthy. A large clot in the right hemisphere of the brain on a level with the ventricle, occupying in longitudinal direction, about the middle third; it approached close to the ventricle without entering it, but had made for itself a passage to the surface of the brain. A cyst in the left hemisphere was filled with a mesh work of cellular tissue; it was on a level with the ventricle, "but quite clear of that cavity"; it passed perpendicularly downwards for the depth of half an inch.

CASE XXVI. Male, aged 39. "An attack of hemiplegia" some time before the present seizure, from which he speedily recovered. This second attack produced complete paralysis of the left limbs, extinguishing all reflex movements; though sensibility was not evidently affected. There was no deviation of the tongue, "and speech, after the first shock had subsided, was only slightly affected." Consciousness was nearly entire. He lived a week. The *post mortem* was necessarily imperfect. An old apoplectic cyst in the *left* optic thalamus; the white matter covering the right thalamus was rather soft, and the outer part of the thalamus and corpus striatum was rather soft, the softening implicating the contiguous substance of the hemisphere. The right anterior meningeal artery was obstructed by fibrine; an accident had destroyed the remaining vessels of that side, but those on the opposite side were healthy. The mitral valve was greatly contracted by adhesion of its flaps; the aortic valves were thickened.

CASE XXVII. Male, aged 68. Symptoms of failure of nervous power for three years, with slight attacks of impairment of muscular strength; then incomplete left hemiplegia with mental confusion, followed speedily by stupor and involuntary evacuations. On the following day I found that he used the left arm more easily. "On awaking, which he did readily (he was asleep at my visit), he looked about him, put out his tongue when told, replied to inquiries, but was not sensible of his situation, and did not know us"; his tongue did not deviate. On the next day the report is; "replies readily, and if the answers required be brief, quite collectedly; but when attempting a long reply, the train of his ideas is interrupted; in replying, an effort is apparent before he begins." He took up things said and commented on them, but was unable to carry on any lengthened conversation.

He died six months afterwards, immediately after an attack of general convulsions. He improved after his original attack, but never fully recovered. In three months after my attendance had ceased, he had again complete paralysis of the same (the left) side; I only heard of him, and my note is, that he is reported to be quite intelligent. In four weeks afterwards, a similar attack again occurred without insensibility, "only confusing him"; and in the afternoon of the same day he suffered from several paroxysms of severe convulsions, "but retained his consciousness so completely, that when able to articulate (*i.e.*, probably in the intervals of the convulsions) he described his attack as one of convulsion."

Convulsive seizures were renewed, accompanied by perfect unconsciousness; but the description of his condition necessarily implies that the power of speech

and his mental faculties were retained, though he was liable to forget events of recent occurrence. The left arm remained permanently paralysed to a considerable extent.

Case xxviii. Male, of middle age; very intemperate. "Twelve weeks ago he fell down with left hemiplegia and *partial paralysis of the right arm*," but without insensibility." The right arm speedily recovered; the left very gradually, and considerable paralysis remained with impaired power over the sphincters. The left arm had wasted. Urine was healthy. The only reference made to articulation is that at my second visit, on the tenth day after my first, "his speech was still thick."

Case xxix. Male, aged 64; temperate. He describes a feebleness in the left arm and leg, with numbness and some impairment of the grasp by the hand. Sensibility is slightly impaired. Memory is also somewhat enfeebled. The attack came on suddenly seven weeks ago; it was not accompanied by vertigo nor by headache. His speech was never in the least affected, nor was he sensible of any change in his tongue; no deviation is present now. In addition to some lessening of muscular power in the arm, the left side of the face is slightly but decidedly feeble, so that he has lost the power of whistling. His radial arteries are tortuous and morbidly firm; there is no arcus senilis. The first sound of his heart is feeble. His urine is healthy.

Case xxx. Male, aged 59; temperate. Failure of memory had been noticed for a year, and for six months diminution of intelligence; for four months some want of power in expelling his urine. Left hemiplegia took place gradually, during the week preceding his admission. He is described as being perfectly "ready" in his answers, but his articulation is once noted as "slipshod." There was loss of power over the left hand, and impaired sensibility in the leg of the same side; his control over his stools was not perfect. The sounds of his heart were clear. His gums presented a lead line. His mental energy rapidly lessened; he became torpid, and his speech more indistinct; he said, "I can hardly pull my words out." The right side was apparently unaffected throughout.

Case xxxi. Male, aged 66. The day before his admission, he had an attack of insensibility, lasting some hours, which left him paralysed in his left arm. As he recovered his consciousness he began to talk, "saying, he 'must have a candle to go to bed.'" The power of each arm was found impaired, and most that of the *right*. "He answers questions without fully articulating." There was no deviation of the tongue. The further report of the case is very meagre.

Case xxxii. Female, aged about 60; probably of rather intemperate habits. She suddenly "felt queer," and in trying to go to the bell fell, and found that she had sustained partial loss of power in the limbs of the left side, with numbness of the *right* side of the face, and impaired articulation. She retained consciousness perfectly. In an hour and a half when I visited her, she could almost stand unaided; she talked plainly, and only some numbness remained in the *right* side of the face. Next morning recovery was complete, excepting a little vertigo.

Case xxxiii. Male, aged 20. He had a fit when three months old, and it was repeated on each of the two following days; epileptic fits have continued to recur ever since. The first fit left him hemiplegic on his left side, and he was unable to walk until he was three years old. *He began to talk when* 18 *months old.* Partial paralysis remains in his left arm and leg, with imperfect control over the contraction of their muscles. The respiratory muscles of the left side also act imperfectly. His memory is enfeebled. No wasting of the muscles. Articulation quite unaffected.

Case xxxiv. Male, aged 55; temperate. He had suffered from symptoms of cardiac disease for three months, and from severe pain in the right side of his head for two months. He had a sudden attack apparently of cardiac apnœa nine months ago. Two days before admission he fell insensible; the attack was preceded, during six weeks, by "startings" over his whole body, but particularly in his right side, by internal squint in his right eye, and by stumbling. The insensibility lasted a quarter of an hour; it left him with left hemiplegia and speechless, and his articulation was imperfect for the day. He had complete paralysis of the left arm, imperfect paralysis of the leg, with some rigidity; his tongue deviated to the left; there was also some paralysis of the left buccinator and of the left side of his mouth. The patient's memory was also slightly affected. No further allusion is made to articulation through the report. There was a double aortic bellows sound. Urine was free from albumen. The patient had been injured by severe accidents, and had been bled repeatedly for cardiac symptoms.

Case xxxv. Female, aged 45. During the last three years she had suffered from three attacks of left hemiplegia of a doubtful character; she was partially insensible after the first, for two months; after the second, for five days; she did not perfectly lose consciousness in the third, which happened a fortnight ago, but it left her speech rather indistinct, and it remained so. A fourth attack occurred the night before admission, asserted to have been accompanied by insensibility. Throughout the period mentioned, she had suffered from vertigo and from headache on the left side. She presented a history of excessive anxiety and harsh usage, with one attempt at suicide apparently in a state of mania. The attack before entering the hospital was followed by feebleness of each foot; the grasp with the left hand was feeble; there was some "indolence in raising *each* foot" in walking. Her articulation was slightly thick. Her vision had been imperfect for three years; she had had to sit very close at her needle, and had lived badly. The ophthalmoscope shewed some atrophy of the optic discs. Her menstruation was very irregular.

Case xxxvi. Female, aged 36. Presents partial paralysis in the left upper and lower extremity, with some rigidity, easily overcome, of the flexors of the wrist. Muscular development is perfect. The paralysis came on two years ago, after violent hysteric fits, which continued to recur. The paralysis, which is plainly hysterical, was accompanied by numbness of the tongue and loss of speech for a fortnight. The whole history of the attack as of the patient's present symptoms, is full of hysteric developments, and without any evidence of organic disease.

Case xxxvii. Male, aged 48; very intemperate. He presented evidence of arterial disease, and had had gout repeatedly. Eight weeks before admission, he was taken with imperfect left hemiplegia, without insensibility, and five weeks afterwards, he had a slight return of the paralysis. At his admission, some remains of the paralysis were observed. His urine was albuminous. No reference is made to articulation; but I distinctly remember that it was perfect whilst he was under observation, as I took, personally, a very long account of his habits as a drinker.

Case xxxviii. Female, aged 24. Eight months ago she had a sudden attack of insensibility, lasting half an hour, in which the "mouth was drawn to the right side"; it was followed by sleep, and she was then found affected with hemiplegia of the left side;

there is distinctly some paralytic affection of the *right* leg involved in the history of the seizure, but her recollection of the circumstances is not sufficiently clear to afford accurate information on the point, save that the right leg "remained weak, after the left leg had been affected." Some paralysis remains in the left arm, with diminished bulk of the muscles. She remained in bed four days, and when she got up she continued to drag the left leg. No reference is made throughout to articulation. The sounds of her heart were healthy.

Case xxxix. Female, aged 42. Attacked with sudden left hemiplegia eleven weeks ago; the arm remains considerably paralysed. No reference is made to the subject of articulation; but from the report, which is very brief (she seems only to have attended once), it is inferred that she told her own story.

[*To be continued.*]

Original Communications.

ON RETENTION OF URINE, PUNCTURE OF THE BLADDER, AND PERINÆAL SECTION.

By Thomas Paget, Esq., Leicester.

Since the paper I read to the Midland Branch Association at its June meeting in 1859, and which was published in the British Medical Journal of July 2nd of that year, I have met with two other cases of impracticable stricture, and they have been similarly treated to those there reported; namely, by simple paracentesis vesicæ above the pubes, and with a permanent tube for micturition: one with like success; the other in too advanced a state of sinking to be more than eased by the operation.

Before entering upon the facts of the present cases, I may say that the former ones are still under my eye. The first patient, now aged 82, is to be seen in his walks, but little further aged in looks by the last five years, firm in his step, and ready in address; the other is as well as at last report, allowing for five years having passed over him.

Case i. The first case I have now to name fell under my notice, in conjunction with Messrs. Cooper and Sidley, in March 1862. Mr. H., aged 71, had suffered from obstruction to the flow of his urine for some years, latterly increasing until entire retention had existed since February 27th; and we could not pass the catheter. At times a stillicidium occurred, but the bladder remained tensely full.

March 2nd. Mr. Cooper punctured the bladder above the pubes, fixing the cannula by elastic cord, in the way named for the former cases.

March 12th. The patient has continued relieved, and without any bad symptom. To-day the silver cannula was removed; and a shorter flexible one, of elastic gum, with silver shield, was readily substituted and fixed.

June 30th, 1864. Without anything untoward, he got about as soon as could reasonably be expected, and now walks as well as legs stiffened by gouty interfibrous deposit will carry him. He says he makes some water by the urethra, but for no consideration would part with his tube.

Mr. Cooper tells me that both his cases prefer short silver tubes to the flexible ones, and that the shields have plugs worked with fine screws to stop them.

Case ii. May 22nd, 1864. The subject of the second new case is Mr. J. W. W., who has experienced difficulty in micturition since a hurt in the perinæum, received by his horse falling with and upon him in the year 1824. He has received occasionally temporary relief from dilatation; but since the death of a relative two or three years ago, who was his surgeon, his stricture has gone on increasing, and now the urethra allows only of very gradual micturition, affected by almost constant and nearly unconscious dribbling. The abdomen is, and has been, I am told, for the last six weeks, occupied up to above the pubes by a tense tumour of the bladder. He has two sinuses *in perinæo*, surrounded by indurated swelling; is frequently troubled with vomiting; the legs are œdematous; and the pulse 110 to 120.

Under these circumstances, immediate relief to his bladder offers the sole chance for life; and the shock of a severe and protracted operation like the perinæal section would add much to the peril of his situation. With the sanction and aid, therefore, of Mr. Shackelford of Husband's Bosworth and Mr. Cox of Welford, I this day (22nd) introduced the trocar above the pubes, filling one chamber-pot full to within an inch, a second up two-thirds from the bottom. The cannula was fixed in by elastic cord; the abdominal tumour wholly disappeared; and we left the patient in high appreciation of the relief he had gained. He, however, sank, and died on June 10th; I am told, from gradually increasing debility, and without any return of pain.

By the result of the four cases, the continuance of the first two in health and activity to so late a period of life, the present course of the third, and the fact that the fourth could not with a shadow of prudence have been submitted to any severe operation, I am convinced that tapping above the pubes, and micturition afterwards by a short tube regulated by plug or screw stopper, is for a patient past sixty years of age, and perhaps for others, a far better course of treatment than perinæal section, though certainly not so glorious for an aspiring operator.

Transactions of Branches.

WEST SOMERSET BRANCH.

PRESIDENT'S ADDRESS.

By J. Hamilton Kinglake, M.D., Taunton.

[*Delivered, July 6th*, 1864.]

Gentlemen,—My first desire, on taking this chair, is to give expression to the regret we all feel at the loss of our much respected President, Mr. Collyns. I had not the privilege of his acquaintance; and am, therefore, debarred from speaking of him in the terms that friendship would dictate. The fact, however, of his having retained through half a century the affectionate regard of the people among whom he dwelt, is in itself an eulogy that would be spoiled by the addition of mere words of praise.

I now turn to the more cheering duty of thanking you most cordially for the honour you have done me, in calling on me to preside over your affairs during the ensuing year. A duty of another kind also devolves upon me. I have to speak the prologue, as it were, to the scientific proceedings of the day; and therefore it is, that I claim a small portion of your time, as well as a large measure of your indulgence.

It would hardly be fitting in me (seeing that the task has been so frequently accomplished, but never perhaps so ably as by our reigning President, Dr. Symonds), to advert in any but the most general way to the objects which the British Medical Association professes to embrace, or to the many services it has already rendered to medicine.

It is sufficient to know, and to have it re-told, that this Association, like all other societies (whether artificially constituted or existing naturally, as in many divisions of the animal kingdom), has arisen from the sense of individual weakness, and the conscious inability to carry out, single-handed, any of the great purposes of life; and that now this same Association, through the systematic combination of the members of our profession, has become a Power which enables us to stand by our order in times both of oppression and of adversity; whilst, by bringing observing and thoughtful minds into communion, it has taken the best possible means of gathering up such of the scattered facts bearing upon medicine, as would otherwise be wholly lost to our art. And, in truth, medicine needs to be thus continually reinforced from without; seeing that it cannot, in the nature of things, secure for itself, as yet, that solid foundation which would enable it to attain the precision which is claimed for those arts that hinge on mathematical or other equally unquestioned truths.

But, although few of the fundamental truths to which medicine is linked have, as yet, been revealed to us, it is clear that they are involved in, or form part of, the great science of life; and hence the task of bringing them to light, as well as of making out the pedigree (so to speak) of the class of facts constituting the branch of knowledge which we call medicine, and so tracing them back to their parent source, must rest with the physiologist; who, recognising at once the imperfection, yet perfectibility, of his science, might so work out the problem set to his hand, as to cause it to be shown that life, health, and disease, are but phenomena arising out of the varied working of one force common to the whole organic world.

But until such time shall arrive, the physician who is true to his mission must be content to work by the imperfect light that is vouchsafed to him. He must endure, moreover, to see the provisional laws, that have sufficed to regulate his treatment of disease to-day, supplanted to-morrow by others, it may be, of larger import, as the materials for a broader generalisation crowd in and compel such displacement. He must rest satisfied with the possession of moveable facts, so to speak, rather than all-enduring truths. He must take many things on trust; and welcome as precious gifts the collected experience of others in the treatment of disease. The British Medical Association, in recognition of the necessity that exists for thus strengthening our hands for immediate conflict with disease, invites its members (without waiting for the physiologist to set out the foundation on which they may be based) to bring in the choice observations and experiences of the year; to try their quality by the searching test of discussion; and to apply the results so obtained to the better treatment of disease. Such being, as I take it, the general objects of the Association, is there, in addition thereto, any special purpose which a district Branch, such as this, is called upon to fulfil? I conceive that there is.

Without entering into the ethical part of the question, further than to acknowledge the advantage that results to the profession from the opportunities afforded to its members of keeping their friendships in repair at these annual gatherings, I would at once state that I consider the special aims of a district Branch should be these: 1, to recognise and delineate the diseases that appear to be indigenous or peculiar to the neighbourhood; and 2, to note the modifications that disease in general assumes, from the influence of the local climate, food, and occupation of the people.

In regard to the first of these subjects of inquiry, I am not aware that West Somerset can lay claim to having any one disease under its special protection, in the sense that Derbyshire (to take a single instance) claims goitre for its own. But, if our division of the county is exempt from any characteristic malady, it is, nevertheless, certain that its climate, in common with that of the more western counties, tends to lower nervous power, to relax the energies, and to blunt the sense of life; and if these be the effects on the inhabitants of a district in their ordinary state of health, may it not be inferred that a like enervating character will be imprinted on diseased states of the body, requiring a corresponding modification of the treatment directed to them? The confirmation or rejection of this inference comes within the range of what I take to be the proper functions of this Branch. But it has yet other work before it in the same direction.

It should determine how far this climate is favourable to the existence of the whole class of nervous diseases: whether epileptic and neuralgic affections, for instance, do not find here a more congenial *habitat* than would be afforded them in a climate of a different character; and if so, to what element or circumstances constituting the local climate these effects are to be ascribed.

In regard to the occupation of the great bulk of the people in this district, looking to that as a possible element concerned in imparting a character to disease, we find that they are engaged mainly in agricultural labour; an employment which, looked at *per se*, must be accounted as exercising a favourable influence on the health; but the good so attained brings in its train the evils of low wages, confined dwellings, and a diet in which animal food—more particularly in the shape of milk and butter—forms a very inconsiderable ingredient.

How far the prevalence of tubercular affections among the agricultural poor in this neighbourhood may be ascribed to the airless rooms in which they sleep, and to the small proportion of oleaginous food supplied to them during the periods of their active growth, is a question that waits on your individual observation for a solution. Certain it is, however, that the out-of-door life of the agricultural labourer is not, in itself, sufficient to outweigh the evil influences (whatever they may be) that contribute to the development of the tubercular diathesis.

Rheumatism is, also, a disease which attains considerable prevalence in this neighbourhood. For this visitation, the chronic use of the ordinary drink of the country, cider, has been hitherto held responsible. I do not join in this condemnation. I am disposed to think that the tendency to form and retain in the system an excess of lactic acid (on which rheumatism is thought to depend), may be better ascribed firstly to the too exclusive ingestion by the poorer classes of farinaceous food; and, secondly, to the diluted condition of the oxygen, as it exists in our humid atmosphere, whereby that portion of the lactic acid destined to be broken up is suffered, through lack of oxidation, to retain too long its chemical integrity, and thus to accumulate injuriously in the blood.

Ague is another disease which has not altogether lost its hold in this district. The low lands around Bridgewater and Langport still furnish their annual contribution of cases; but I am not aware that the disease itself presents any peculiarity, to warrant more than a passing allusion to the fact of its continued existence among us.

This very cursory glance at the diseases that may be said to find here a congenial soil for their development, would fail of its object, without adverting to the maladies that seem to be here, also, "conspicuous by their absence." I think I might say that cal-

culous affections are almost unknown in this county; whilst the comparative freedom from other diseases associated with lithic acid deposits, points to some circumstances in the food of our people, or in the properties of their accustomed drink, which is not shared by those living in the Eastern counties, for instance, where we know that calculus and its allied disorders abundantly flourish.

I have a strong suspicion that the immunity to which I have referred, may be attributed (to some extent at least) to the fact, that cider is much more generally drank in this county than malt liquor; and I am strengthened in the view I have thus formed, by noting the influence which, according to my experience, cider possesses, of correcting various morbid states associated seemingly with the arthritic diathesis.

Had I been addressing you in any previous year, I think I might have also claimed for this district a comparative exemption from the class of zymotic diseases; but the severe and fatal outbreak of scarlatina that occurred last autumn, especially in the Quantock country, coupled with the valuable statistical report of our associate, Mr. Cornish, as to the mortality in Taunton, both from scarlet and typhoid fever, take away the ground for any such exemption.

It is true, that we shared this pestilence with other parts of England; but it is seldom that an epidemic visitation of this kind has fallen on our neighbourhood with the full force of its virulence, as it has done on the occasion in question.

How far the outbreaks referred to are traceable (as regards the intensity of their character and the wideness of their diffusion) to the unusual heat and dryness of the last summer; whereby a more than ordinary amount of decomposing organic matter may have been suffered to contaminate the drinking-water, or to accumulate in the atmosphere surrounding the infested places, instead of being swept away into the neighbouring streams; or may have been washed out of the air and resolved into more elemental forms by the ozone-bearing thunder-storms of an ordinary July; is a matter which those gentlemen who may have had the best opportunity of watching such epidemics may investigate with advantage, aided by the light that the Registrar-General (if I mistake not) has supplied, as to the superior healthfulness of wet as compared with dry summers.

I fear, however, that many of you who may have been led to join with Dr. Christison in divorcing morbific poisons from their old allies, bad smells, might be indisposed to pursue the line of inquiry I have suggested; inasmuch as it might be held to imply a backward step in our endeavour to arrive at the true etiology of zymotic diseases.

Assuming, however, that fever-poisons and the foul odours arising from decomposing organic matter are not necessarily joined together, does it follow that these emanations play no other part (so far as fevers are concerned), than that of depressing the general health, and thus favouring the operation of fever-poisons on the system?

I do not think that the mass of evidence that has, from time to time, been adduced in support of the alleged influence of organic emanations in determining zymotic diseases, can be thus summarily ignored; and I consider that we are not called upon, without further investigation, to acquit foul air of the credit it has hitherto enjoyed of being, more or less directly, concerned in the causation of these specific maladies. At all events, pending inquiry directed to this subject, we may well rest on the provisional theory which regards organic emanations as the favourite breeding grounds (so to speak) of those low typed organisms that are thought to constitute the class of zymotic poisons; and to continue in the belief, until otherwise assured, that, where those emanations are not evolved, or, being evolved, are straightway rendered innocuous through the process of ozonisation, there will these organisms be found to multiply most sparingly, and zymotic diseases (provided the bodily receptivity be the same) be reduced to their minimum spreading power.

You will perceive that, in touching on such of the foregoing subjects as relate to the climate of the place, I have been merely using them as finger-posts, as it were, to point the way to what has hitherto been a comparatively unexplored region in the domain of medicine. It is reserved for you to go in and possess yourselves of the promised land.

But, gentlemen, you will probably say, that the contributions I ask you to make to the medical climatology of the neighbourhood, with the view of enriching our art, will involve an amount of time and labour you can ill afford to bestow. You may say, also, and with truth, "We cannot live on the bread alone that science provides. We have been retained on behalf of suffering humanity, to apply our days, and may be our nights, our talents, and our active sympathies, to the alleviation of bodily misery; and we require in the exchange something more than the approbation of our own consciences, and the conviction that we have done some service to our art. We require in the interest of the same suffering humanity, that the art we practise—an art that has been built up through nearly three thousand years, by the never ceasing work of observing and thoughtful minds—should be placed in its proper niche among the higher departments of knowledge; and that we, as its ministers, sharing in that elevation, should have our position duly recognised, and be entitled to receive a just return for the brain-capital we have invested in this branch of industry."

I will not go into the many questions suggested by this possible remark. It is sufficient to state, that the position in which medicine is held, and will continue to be held by the public, would seem to depend, first, on the character of those who profess and practise our art; and secondly, on the balance-sheet we are enabled to exhibit of the results of our treatment of disease. The outside public will judge us, as well as the art we practise, by the fruits it brings forth. They will respect our calling and appreciate our sagacity, so long as we are successful in our cases; and as surely will they invest our failures to cure with more or less of the discredit that attaches to professional ignorance, or to the following of a wrong scent in the field of knowledge, without stopping to recognise the element of uncertainty inherent in our craft, and which, if taken into the account, would go materially to qualify either verdict.

I am not one of those who believe that this unfair mode of judging of a confessedly uncertain art can be corrected by force of popular instruction in "the Rudiments of Physiology" and the "Elements of Domestic Medicine", or that the public can be thereby educated into an appreciation of the true value of medicine, or taught the duties they owe to the profession. On the contrary, I am inclined to hold to the opinion that, in order to secure a fair hearing for our profession, we must look to the general education and enlightenment of the popular mind, rather than to its special instruction in the alphabet of our art; and this conclusion is supported by what we must all have observed, that men of the most enlarged minds and comprehensive views, are those who are the least disposed to question our usefulness, the most tolerant of our wrong guessings, the most ready to recognise our deserts, and the most forbearing in those periods of humiliation, when we have to stand as mere specta-

tors in face of sufferings we have no power to alleviate, or of the death we cannot postpone.

How comes it, then, that, notwithstanding the *prestige* accruing to our art, from its having gained (as we have given reasons for believing it has already gained) the acceptance of wise and enlightened men, it should nevertheless carry along with it an atmosphere of distrust, and be tainted with the leaven of a false and irrational empiricism? Does it not, in a measure, arise from this, that the mass of mankind (having instinctively a greater faith in the resources of medicine than the physician himself) are apt, when they find their extravagant confidence in remedies unseconded by those to whom they naturally look for re-inforcing their convictions —are apt then, I say, to discredit a system which is trusted least, as they might allege, by those who must know it best?

And if this be the conclusion arrived at by the unthinking masses, what more natural than there should arise a constant transference of allegiance, from a system that is not ashamed to confess its fallibility, to other modes of cure that minister to the unreasoning belief that every disease has its remedy, and that the promise to cure implies the possession of the means?

But, gentlemen, we who have prepared the way for this disaffection, by daring to question the power we use, need not wonder at this secession from the true faith. We should remember, also, that, as a craving for the sensational, and a love of the mysterious, are properties of the infantine or undeveloped mind, so will there always be those who, in the matter of medicine, will prefer being supplied with new and attractive dogmas, promising the attainment of health and long life on the easiest and most agreeable terms, to the unsatisfying diet of hopes and fears with which a conscientious physician of the true faith has too often to sustain the much tried confidence of his patient.

Let us not, however, in our laudable endeavours to check this following after false lights by those who find it an easy process to put aside their reason at the bidding of a stronger will, fall into the mistake of martyrising the propounders of the heresy, or of elevating its doctrines to the rank of a contending art; but rather take our stand on this, that the medicine we profess, inasmuch as it claims to represent the application of physiological truths to the healing of disease, must necessarily prevail against all rival systems not similarly linked to accepted truths. And, even though our calling be challenged by other alleged modes of cure that appeal to the passion of credulity on the one hand, or to the strong instincts of self-preservation on the other, it is not charlatanisms such as these that can tarnish the true metal or obstruct the onward progress of an art which, rooted in the infirmities of our nature, and marching with our civilisation (supplementing in its course the deficient life force that civilisation engenders), is destined to reach a foremost place among those other applications of verified and all enduring principles that have already served to promote the welfare and happiness of mankind.

Gentlemen, I have detained you too long from entering upon the more important business of the day; but I cannot conclude without referring for one moment, by way of anticipation, to the contributions towards the medical history of the past year that will be furnished by this Branch of the Association.

It is true, that the materials of this history are not yet before us; but I have reason to believe they will be of a character that will do honour to the parent stock from which we spring. In the domain of surgery, we shall have to congratulate Mr. William Liddon on having won his spurs in the difficult field of ovariotomy; and, I doubt not, we shall have to thank other gentlemen for the valuable additions they will bring to the literature both of physic and surgery.

METROPOLITAN COUNTIES BRANCH.

PRESIDENT'S ADDRESS.

By Charles F. J. Lord, Esq., Hampstead.

[*Delivered July 12th*, 1864.]

As your President, the honour and responsibility of addressing you become now the most important, and, I assure you, to me, the most onerous part of my duty. While I thank you most heartily for the honour you have conferred on me by electing me to a chair that has been filled by so many of my distinguished colleagues, I cannot but fear that you may have erred in your estimate of my ability to succeed to their office, and to do justice to them as well as to you.

The objects of the British Medical Association are twofold. We have it laid down for us by our rules, and as our first canon, that we are to uphold the art and science of our common profession, and equally to sustain its moral character, its dignity, and its social polity. This Branch has had the privilege of selecting its first officer each year from among men, some of whom have been the representatives of one or other of these principles in their highest development; while it has even had the good fortune to have had as presidents those who have represented both to the fullest possible degree. From me, expect no claim to mastery in the sciences and the arts; but take me as I am, as one who has been devoted through a long professional career to honest work—to the direct administration to the needs of suffering humanity, and to the earnest and persistent endeavour to sustain the social position, the moral character, and the dignity of our order, in all their integrity.

In considering the subjects that I should bring to your notice to-day, I have been embarrassed with the variety of the materials presented. The difficulty of selection I have solved by cutting the Gordian knot, and determining to confine myself, in the main, to those points which have most significantly engaged the attention of the Branch.

The report of the retiring Council has brought under review, perhaps most prominently, that which has been effected in relation to the Army Medical Service; but I may say, as an observer rather than an actor, that the mere report affords but a faint idea of that which really has been done. The spirit of our late associate, Dr. McWilliam, has evidently not ceased to animate our councils. It reminds us still of what has been conceded to the sister service, the navy; and it bids us push on in hope. I think I may say we have done all that could be done. To those who have not carefully followed the arguments on the army medical question, I may state briefly, that the labours of the Branch have been directed to three great objects—1. To obtain for our brethren in the army the same social position as belongs to the other officers; 2. To secure for them increased pay, earlier retirement on pension, and advantages during sickness which they have now in but a limited degree, as compared with their combatant colleagues; 3. To remove from their office certain duties which, as they are now conducted, are considered degrading to the position of the profession, and opposed to the broad and holy character of its humanity. Whether we have or have not made way, a few months must determine; and, from my own observation as to

what occurred at the deputations to the Secretary of State for War, to the Commander-in-Chief, and to the Director-General, I can assure the Branch that every grievance has been faithfully placed before the highest authorities; that the causes for the decline of professional appreciation of the service have been fully explained to the Government; and that if, in any crisis, English soldiers should die, not from the enemy, but from the want of English surgeons, the profession may safely appeal to the public as innocent of so great a calamity. Meanwhile, this is no time for resting. We have spoken to the Government, and may speak to it again; but we must also speak to the people through *our press*, and through our influence in our daily communications with all around us. By these means, there is not a member of either house of the legislature who may not be reached, and to whose mind clear and correct views on the subject may not be brought home.

The question of gratuitous medical services has naturally attracted notice. This, the most delicate of all our internal disputes, has been dealt with, at all events, unhesitatingly, honestly, and ably, by Dr. Gibbon, in this Branch; and by Dr. Markham, to whose able and vigorous editorship we are so much indebted, in the columns of our JOURNAL. If they have committed any fault, it is, perhaps—if such can be a fault—that they have been too unhesitating in their honesty; that they have allowed certain plausible arguments, which depend for their strength on details, to pass, answered only by a broad opposition, which, though strictly true, may be considered too sweeping to carry with it immediate conviction, or to uproot a system which had its origin in the days of the Pilgrim Fathers, which was once a religion, then a superstition, and now an excrescence. I am one who would even to some extent respect superstitions, and would not remove too roughly the excrescences which mark the stem of old Time; but I am bound to say that, in my opinion, the day has come when this particular excrescence requires removal—gradual, if you please, but decisive. The evils of it are fatal. It fosters, under the name of charity, that which is not charity; it often makes the wealthy ostentatious, and the poor improvident and exacting; and it sows among the profession a seed as poisonous as it is fruitful. That is not, and never will be, a good system, which teaches the newly fledged professional man the policy of establishing himself in a position above his fellows, by founding a reputation on a practice without reward, which practice, if it were not gratuitous, must and would be distributed remuneratively among the profession altogether. Neither, on a comprehensive view, can it be so important for the advancement of science as is alleged; because, if the first requirements of the art become concentrated in the hands of a few, the same requirements must necessarily slip from the hands of the many; and the public must, in the mass, suffer proportionally, seeing that, after every effort, only a small section of the public can possibly on any occasion experience the skill of the few.

But beyond this, granting a necessity for a superior class, having a special experience gained under public service, and for the real purposes of charity, I feel that such service would be in no way deteriorated by the fact that it was *paid for*. No one will assume that the labours of the medical officers of the endowed hospitals are less valuable, or less beneficent, or less scientific, or less appreciated, than those which are rendered without remuneration in other hospitals; and, therefore, it is folly to imagine that mere gratuitous aid is the soul of professional honour and charity. In plain English, the bugbear of *gratuity* is the pride of class in the presence of poverty. It is one of the shows and shams of assumed professional superiority; and, if it rise sometimes into real superiority, such rise is so individual in its character, that it is gained at too great a cost to the whole body, being founded on a principle that is false to the whole. Let me be understood as uttering no word against distinctions among the profession, obtained by devotion to any particular branch of our science. Such distinctions must be, and will be, so long as the constitutions of men differ in regard to originality and power. I object, not to the development of these distinctions in the abstract, but to their development in a way detrimental to the interests of the profession at large.

Lastly, on this point, it must never be forgotten that, according to English law, every person in England is provided with medical services, and that in a way which, however indifferently remunerative, is still remunerative to the medical man. It requires, in fact, but an improvement in the Poor-law medical service to allow to nearly every man the fullest scope for his intellectual activity, without any loss of a pecuniary nature. This applies to the very poorest class of patients—to those who cannot help themselves. For the rest, they ought to help themselves by self-organisation, certainly not by the reckless expenditure of professional labour.

The mention of Poor-law medical relief leads me to notice briefly the present position of the Poor-law question. It is now, I think, twenty-seven years since the subject was actively agitated by a member of this Branch, who, I am happy to say, is still among us—Dr. Webster; and subsequently by another member of the Association, whose death is fresh in our memories, and to whose worth I cannot pay too affectionate a tribute—Mr. Peter Martin of Reigate. These gentlemen, with Dr. Hodgkin and many others, toiled laboriously with me; though, I regret to say, with small advantage. At last, the heat and burden of the struggle fell on Mr. Griffin, who, undaunted and always hopeful, has continued the effort, with the result, within the last few weeks, of obtaining a recommendation from the Select Committee of Poor Relief to Boards of Guardians that quinine and cod-liver oil should be supplied at the public cost; and that the tenure of office should be permanent. It is true that "half a loaf is better than no bread"; and we cannot, therefore, say that all our labours have been fruitless; and perhaps some will tell us that, like Sancho Panza, we "should not look the gift horse in the mouth". But, after all, the concession carries with it no satisfaction to the true medical reformer. It indicates a logical and keen reasoning on the part of the Poor-law Board; but it indicates also a childish reasoning and a culpably foolish proceeding on the part of the body medical. The eagerness with which men seek for office is, in truth, as it always has been, the great bar to the redress sought for. From the Government we can expect nothing more, until the pressure of the want of medical officers has enforced the necessity of further change. I think that this change will be effected, perhaps without further agitation; and therefore I do not at this time commend the special consideration of the question to the Branch. The fact is, that at present the decrease in the numbers of the profession, taking such decrease side by side with the increase of population, is probably near five hundred a year, or a fortieth of the whole medical body in England and Wales. As, therefore, there is no probability that, so long as the present examination for entrance into the profession is so arduous, this decrease will cease, there must ultimately be a greater demand for medical officers in all the services, with an equal demand on the part of the profession for an increased remuneration.

Another point to which I would ask your attention has reference to the benevolent and provident efforts within our own ranks. Thanks to the exertions of the founder of the Medical Benevolent Fund, Mr. Newnham, whose name cannot be mentioned without feelings allied to veneration, and thanks also to Mr. Toynbee, the Treasurer of the Fund, we have a means of affording relief to our distressed brethren, second in its working, if not in its resources, to none. This Fund makes no display; asks for no public thanks; takes no thanks save those which come spontaneously from the relieved; and requires nothing but hearty support to be among the first of our charities. Let me suggest that the members of this Branch should show solicitude for the Fund by setting the example of nominating a small standing committee for increasing the resources of this important department.

"Deus juvat, qui se ipsum juvat"; and I should be failing in my duty if I did not mention shortly the great plan, which was laid last year before the Bristol meeting by our associate Dr. Richardson, for founding a Provident Fund in connexion with our body. It would not become me to forestall the Report of the Committee appointed at Bristol, which Report will be read at the Cambridge meeting; but the Chairman of the Committee, Dr. Richardson, tells me that there is every hope the plan will be carried out; that the basis of the undertaking has been fully agreed upon; that accurate calculations will be forthcoming; and that, if the Association be in earnest, the design will be an eminent success. As President of this Branch, the Provident Fund will naturally call for my strict attention; and I shall wait with full reliance for your zealous cooperation for assisting me during the ensuing year, should the Cambridge meeting, in its wisdom, think it right to establish the Fund as a part of our organisation.

I said, at the beginning of this address, that I claimed no mastery in the science and art of medicine; but, in forty years' experience of medical life, I have been forced to learn many things, and I have observed changes which fall to the lot of but few. I cannot conclude without congratulating the profession on the advancement which, in spite of many obstacles, little popular appreciation, and still less popular sympathy, has been made. I have lived to see the once obscure class of chest-affections rendered so intelligible, that the eye may almost be said to see what the ear listens to. I have lived to see chemistry directly applied to the investigation, not only of disease, but of the phenomena of life. The microscope in this time has made a new science, has unravelled healthy structures, and discovered diseased structures. The ophthalmoscope and the laryngoscope have, if I may use the expression, anatomised the living organs without the scalpel; and the beneficent discovery of the application of anæsthetics has divested the operating-room of those horrors against which the earlier student of surgery had so resolutely to "hold his heart". Then, there have been successfully performed operations which, forty years ago, madness itself would not have ventured on—I refer especially to ovariotomy; while the operation of crushing stone, which I once heard denounced as "ingenious, but impracticable," has reached a degree of perfection which is marvellous. Turning to the insane, we have seen an entire transformation in their treatment. Chains and straight-waistcoats are become forgotten; brute force has melted into loving-kindness; and the asylum has ceased to be a prison. In what is now called "sanitary science", there has been presented to us a department of medicine which is entirely new. This, but little favoured by those whom it most concerns—the people—and supported for years by the unselfish and unaided efforts of medical men, has at last secured the attention of all our governing bodies, central and municipal. This science has become a practice of itself, presenting results which are absolutely startling when viewed in their comprehensiveness. In this great work, the names of Snow, McWilliam, Southwood Smith, are before us—their labours their best monument: their future lies in a history yet to be written. In pathology, means have been given us for interpreting some of the most obscure phenomena through the doctrine of remote and reflex irritation. Diseased conditions of the blood have undergone revision; and various forms of sudden death, the cause of which was not even dreamed of, have been explained by the great advances that have been made in regard to the separation and deposition of fibrine in the heart and vessels during life. Lastly, in the application—I may say discovery—of the process of synthesis in the investigation of such diseases as diabetes, epilepsy, rheumatism, uræmia, and cataract, there has been opened a field of knowledge which promises more than any other to bring medicine into the pale of the exact sciences.

In recording thus cursorily these immense strides, which I have followed without being associated with them as a discoverer, I cannot let pass the opportunity of saying how proud I am to feel and know that the major part of them have been made by our own countrymen, and some by men whom I have had the honour to enrol on my list of friends. Nor can I observe without regret a fashion, far too prevalent among English writers, to overlook the claims of their own country, and to describe as coming from abroad that which has been discovered at home. We ought to value every new thing that is good, and our *amor patriæ* should never blind us to the merits of our neighbours; but, after all, the *amor patriæ* should so prevail as to make us just to all our brethren.

I shall trespass on your time but a little longer. Yet, if I might be allowed, there is one suggestion which, as an old practitioner, I would make to our energetic discoverers. It is, that, having advanced diagnosis and pathology to such a degree, they should now turn their attention more exclusively to the investigation of the treatment of disease. It is a fact, that now we often know too much and too well, in comparison with what we can do. It is a fact that, when we are agreed in diagnosis, we differ in the most lamentable manner respecting the remedy. In many cases, we must always feel at a loss; but it cannot be sound, that, in cases of the most ordinary kind, we should exhibit such marked difference as to our methods of cure. Fixed principles on this point—nay, approximative principles—would do more to establish the confidence of the public in ourselves, and to abolish quackery, than all the laws on the statute-book. Nor can we ever hope to be the right worthy and well trusted of the nation till this grand object is attained. As a body, we are disinterested, benevolent, laborious, learned, and useful in our ministration; but we are not exact; we are not consistent. "Nullâ in re homines propiùs Deos accedunt quàm salutem hominibus dando." This should be, after all, the object of our ambition—the end and aim of all our works—to give health to the sick; and this, I am sure, may be our achievement, if our labours be continued as they have commenced, and, based as they are, be directed to the perfection of the art of prescribing, with certainty attached to the act.

When Nelson had just laid down his life for his country, a group of sailors were conversing on the forecastle of the *Victory*. Said one, "Poor fellow!"

Said another, "I hope he has gone to Heaven." A resolute old boatswain replied, "Why, in course he is. I should like to know who ever kept him from getting where he had set his heart on going." Let us remember this simple and graphic exposition of the secret of success of the great admiral. Let us feel that we can go where we have set our hearts on going, and do what we have set our hearts on doing; then, by another and a better Power than Fate, we shall see our noblest aspirations realised, and our expectations of to-day will be the facts of to-morrow.

READING BRANCH.

PRESIDENT'S ADDRESS.

By I. Harrinson, F.R.C.S., Reading.

[*Delivered July* 20, 1864.]

In preparing an address, suitable to the occasion on which I now have the honour of presiding, a somewhat unusual course has probably been taken. I have not attempted to crowd everything and something more into one brief hour; but have endeavoured to state my own observations and convictions, and to draw inferences therefrom.

It must never be forgotten that each individual sees things from his own point of view, and observes them through a different medium. This point is infinitely varied by education, opportunities, and natural bias.

It is well, then, at these gatherings, that the orator should slightly sketch that which strikes him most from his own point of observation. From the teeming field of medical communications, discussions, and occurrences, selection is not an easy task. I shall avoid detail as much as possible, and touch only on those subjects which have arrested my attention and found a place in my note-book. Such an address must necessarily be fragmentary; but not on that account, I trust, less interesting and acceptable.

Anatomical discoveries of any magnitude can, in these days, scarcely be looked for. Mr. Turner, of the University of Edinburgh, has pursued the distribution of the abdominal vessels further than his predecessors, and has found an anastomosis previously unrecognised. He has discovered that there is a much greater amount of communication between the different branches of the abdominal aorta than is commonly supposed; "that not only is it possible to inject the arteries of the abdominal wall from those of the viscera; but that, to some extent, the blood-vessels of one viscus may be injected from those of another; and this not through the main trunk from which they both proceed, but through their mutual communications with an intermediate set of anastomosing arteries." The efficacy of local blood-letting in inflammations of the abdominal viscera is elucidated by this discovery.

When a practice is found, by a multitude of observers, to be good, our duty lies, I think, not in cavilling at the practice, because we cannot, at the moment, make out its *rationale*; but rather in endeavouring to discover its explanation, which generally is found to be a simple one. This is a notable instance; and, doubtless, there are many such on the brink of elucidation.

Dr. Pavy, of Guy's Hospital, whose physiological discoveries are well known and appreciated, has recently investigated the "immunity enjoyed by the stomach from being digested by its own secretions during life." "He found it not due to the living principle; nor to the epithelial layer, with its capacity for constant renewal; but to the influence of an alkaline circulation, neutralising the attacking acids of the gastric juice." "This", says the reviewer, "is one more conquest from the vague domains of the 'vital principle' theory in the gradually increasing field of chemico-physical investigation." This is an example of a determination to examine a subject simply as it was—not preconceived; and this was the brilliant result.

Medicine is pursuing the even tenor of its way steadily but irresistibly. At no previous period has there been the same soberness of pretension, the same diligence of investigation, the same severity of deduction, that success in practice, as at present. Without anything strikingly new, every disease is receiving that careful study and rigid analysis which must and do make the rough places smooth, the crooked straight, and the dark light.

A disorder not yet imported into this country to any extent, demands a passing notice; as it may be the lot of some of us—we cannot tell how soon—to encounter it. I refer to the "trichinous disease." "A few months ago, there was a festive celebration at Hettstädt, a small town near the Hartz Mountains, in Germany. Upwards of one hundred persons sat down to an excellent dinner; and having enjoyed themselves *more majorum*, separated, and went to their homes. Of these 103 persons, mostly men in the prime of life, eighty-three are now in their graves; the majority of the twenty survivors linger with a fearful malady; and few only walk apparently unscathed among the living, but in hourly fear of an outbreak of the disease which has carried away such numbers of their fellow-diners." A full report of how they lived, and how they died, and what is to be done, will be found in the British Medical Journal for January 16th, 1864. Now, it must be confessed that there is something, not in a manner repulsive, but to a degree revolting, in being eaten up alive after this fashion. This and like occurrences have created quite a panic in Germany. It may be observed that, in Prussia, at the best tables, ham is handed round uncooked; and among the lower classes bacon is always eaten raw. A favourite sausage is largely consumed by all, in the same degree of non-preparation. Every pig, when killed, is subjected to a sanitary inspection by an officer, microscope in hand; and each housewife puts on her best "specs" with a similar intention. It is posted at the hotels, "No pork eaten here." An operation, not less novel, has been devised for the detection of this disease in the human subject, which is not calculated to originate agreeable considerations. An instrument like a cheese-taster is gently insinuated and deeply dipped into the calf of the leg, for the purpose of involving some of these epizootic intruders.

Public attention has lately been prominently directed to the system of unfattening. This has been done by a non-professional man. The application of one remedy or system to a number of resembling but dissimilar cases is, to the professional mind, sufficiently absurd; yet the public do not understand the difference. The discussion of the subject will do good. It will more particularly direct professional attention to the subject of obesity, while it will teach the public that the best adviser in matters medical is not even a successful upholsterer.

"A large amount," says the *Critic*, "of medical scepticism exists. This manifests itself either in the distrust of legitimate medicine and the employment of specifics, or the repudiation of medicine and the adoption of special systems. Empiricism in the one and scepticism in the other instance, both eventuate in the practical abandonment of those principles by which medicine as a science reduces its observation and teaching to practice, giving to theory an eclectic reality which, for the treatment of disease and the

purposes of life, is available as an art. Not the least of the many advantages which must result from the assembling together of members of the medical profession, is their practical refutation of such impressions, which ignorance suggests and prejudice or self-interest too frequently maintains."

From the varied ranks of the medical assembly, surgery stands out unassailed and unassailable. Conservative in principle, bold in conception, brilliant in operation, and successful in result, it silences cavil and defies reproach.

It must be conceded that, in cautiousness of proceeding, in ingenuity of appliance, and in completeness of treatment, obstetric surgery takes the foremost place.

What operation, I would ask, can surpass, in the brilliancy of its rescue from the darkness of its unaided issue, the successful removal of a large ovarian tumour?

I do not forget the wonders of the laryngoscope, of the ophthalmoscope, and the minute examination of the eye.

As examples of the conservative tendencies of surgery, may be named the proposal to tie the spermatic artery in enlargements of the testicle, and the lingual artery in cancer of the tongue.

The grandest example of the application of a principle remains to be told; viz., the obliteration of an aneurism of the abdominal aorta by compression. This was accomplished by Dr. William Murray of Newcastle.

Did I say that surgery was unassailed? There is one reservation. To thoughtful minds, it must be a source of pain and regret to observe the increasing tendency in the public to bring actions for malpraxis against medical men. No doubt such a practice was set on foot by the now all-prevailing custom of bringing actions against public companies, in cases of accident by railway, for example. This is a rule frightfully abused, and requires all the vigilance of medical men to stop rather than to encourage. With this tendency of the public to blame everybody except themselves, surgeons could scarcely hope to escape. Liverpool has earned a notoriety in this matter not to be envied, in the case of Hodges *v.* the Surgeons of the Northern Hospital. Had this action succeeded, it would have led to mischief not easily estimated.

The prominent features, then, of the practice of medicine, surgery, and obstetrics, may be noted as non-perturbative, conservative, non-meddlesome, and practical.

Extremes in all things are to be avoided. Mr. Haynes Walton probably erred in this way, when, speaking of the detection of iritis, he said: "Take the state of the sight as your test, and never think of the direction of vessels. The less you know of the appearance of diseased eyes, the more will it serve you."

Good examples of non-meddlesome practice are shown in Dr. Richardson's plan of the treatment of suspended animation. Dr. Aldis, also, observes: "In addition to the propriety of not meddling too much in cases of suspended animation, as from drowning, etc., I found that animals recovered more quickly from the poisonous effects of coal-gas, when merely exposed to the effects of fresh atmospheric air, than when any other means were used."

When it is remembered, that pathological actions are nothing more than physiological ones out of order, it would naturally seem to be the best plan to persuade, rather than attempt to force them to their normal duties. For this purpose, the gentlest means, the smallest doses, that will effect our object, are undoubtedly the best.

We must forget, also, some long cherished notions; for example, we must try to persuade ourselves that mercury has no action on the liver, etc.

Much might be said about the analysis of medicines, and whether the separation of the so-called active principles helps the prescriber or not. Take podophyllin. "In the powder now in extensive use under the name of podophyllin, there are several cognate resins, the difference between which is clearly marked by their being soluble in different menstruums. It is the group in combination that is valuable as a remedy, not the resin which predominates in quantity."

This principle is beautifully illustrated by the aniline and toluidine in the magenta dyes; also by the striking experiment of Bernard with amygdaline and emulsine. Aloes is another example.

Do medicines only hasten, and retard or modify, physiological actions? How otherwise are to be explained the truant effects of mercury, opium, etc., in kidney-disease? Is narcotism anything more than suspended oxidation?

In a paper on the Synthesis of Organic Compounds, Professor Wanklyn has ventured to declare: "Hereafter, perhaps, medicines as much more potent than quinine as quinine is than the extracts of the commonest herb that grows wild, may be the produce of our laboratories."

Dr. R. D. Thomson has clearly established the analogy between milk and flour.

This part of an address might not be considered complete without one word being said about the new *Pharmacopœia*. Is it good, or bad? Is it useful? Or is "a recognised *Pharmacopœia* but the instrument of disciplined empiricism, which prescribes remedies in ignorance of their *modus operandi*"? My verdict is, that, for an essay, it is good. "It is full of errors," say a hundred voices. What book of such a character is not? "It must be amended," say they. That is the usual course of proceeding. The fact is, the natural irritability of the profession had become so aggravated by delay, and so turgid by accumulation, that it relieved itself by a torrent of hard words and morbid criticism when informed that the book issued was only a *Pharmacopœia*. Expectation was raised too high, and the disappointment was devenomed by comments which gave "neither lustre nor illustration to the subject". "The compilers could not agree," the objectors persist. Who expected them to agree? If any error were committed by the Council, it was a psychological one. The members of Committee, in three different capitals, were placed in a similar position to Sydney Smith's two viragos in confronting garret windows. He said, "They never could agree, because they argued from opposite premises." In vindication of their disagreement, it may be asked, In what matter do men agree? It is marvellous how few men are found to accord in opinion on the most ordinary topics. I have been much struck with this fact during the last few months, in the discussion of some non-medical affairs.

The Medical Council, as a body, appears to have laboured under a similar infirmity. I observed with much regret, in their votes, the numbers stand thus: "For, 11; against, 6; declined to vote, 5." Now this should not be. If a man is elected a member of Council, he is bound to express his opinion, and to vote, if called on. "In this matter, he is responsible for what he does, and what he allows to be done. His support of a wrong cause, or his silence while it is advanced, attaches to him something of moral guilt." By some such spoliation, the Council were led to arrive at a conclusion in which nothing was concluded.

It must always be borne in mind, that the medical method of thought differs from that of most other

people. From necessity, the medical man is obliged to take a circumspective survey, and, by a method of exclusion, rapidly, silently, and after a while intuitively, arrive at a conclusion. Of course, from imperfect or partial comprehension, the inference may be spoiled, and the conclusion erroneous. He is apt to apply this habit of thought to things in general, and is consequently often found to be petulant with others, who consider it needful to go over a good deal of audible rigmarole before they come to a decision. Again, some people's ideas are so big that they can only see one side of them. The remembrance of these inevitable differences counsels us charity, and the broadest liberality and regard for the opinions of others. He does best who endeavours to see, as far as possible, both sides; to consider both; to act on both. One qualifies the other, like faith the fruit of love, opposed, but not opposing.

I cannot follow the Council through the long but able discussion on medical education. This is the less necessary, as they came to no agreement on the subject. One thing was clearly admitted by all: that the medical student had too much lecturing; "that the system of teaching medicine was too much professorial, and too little tutorial." While the medical student has from fourteen to twenty-one lectures a week, the Oxford man has only twelve, and these easier, and yet thought to be too many.

It must have been gratifying to the thoughtful portion of the medical community, to see that the Archbishop of York, a few weeks ago, distributed the prizes at St. Mary's Hospital, London, and, himself a distinguished teacher, give the ripe results of his experience in the management of another class of students, with different though not dissimilar aims, and both with aspirations equally elevating and elevated. Humanity is interested that the two professions, necessarily coming into frequent contact, should not only be joined, but cemented, and should mutually agree and cooperate in their several and sacred duties.

The British Medical Association, as far as I know, has been unusually quiet during the past year. There have been no internal convulsions that I have felt; no external thunderings that I have heard. I do not find fault with this state of repose. That nothing has happened during the past year is no reason why nothing should occur during the next; why an occasion should not arise demanding the utmost exertions of the Association to help or to crush, to defend or to defeat. It is very easy to find fault with the Association for doing nothing; but it is not so easy—as was lately said in another place—to suggest a different or a better course.

Under the protecting influence of our new Secretary, we may confidently hope that, financially, the Association will come out strong and unembarrassed.

In the lack of graver duties, I may be pardoned for suggesting that the Branches, as well as individual members of the Association, might engage themselves usefully and actively in hygienic measures. There is range enough; and, of course, proceedings would be modified by the requirements of the neighbourhood. It is freely admitted that preventive medicine is medicine in its highest degree of development. The profession had better initiate advances, rather than ingloriously follow, in matters pertaining to their office. For example, houses of reception for zymotic diseases should be established in every town. Asylums for the lower middle classes are grievously needed. Baths, gymnasia, and elevating amusements should be instituted; and exercises for ladies invented and encouraged.

Our Journal might be made the medium of communication and discussion on these and kindred topics. Under its present able editorship, a mass of information might soon be collected, digested, and utilised, which would redound to the credit of the profession, and minister to the general weal.

Reviews and Notices.

The Essentials of Materia Medica and Therapeutics. By Alfred Baring Garrod, M.D., F.R.S., Professor of Materia Medica in King's College, and Physician to King's College Hospital. Second Edition. Pp. 391. London: 1864.

The appearance of this edition seems to have been hastened by the publication of the *British Pharmacopœia*, as the author contemplated a fuller exposition of therapeutics, which he now intends to bring out as a separate volume a few months hence. This volume is, therefore, to be viewed as a handbook of materia medica illustrative of the *British Pharmacopœia*.

It begins with an useful table, showing the more important differences of nomenclature between the *London Pharmacopœia* of 1851 and the *British Pharmacopœia* of 1864. A second table shows the alterations in strength.

An introductory chapter describes the weights and measures, and the various groups of pharmaceutic preparations.

The materia medica follows, and is divided into—1. Inorganic substances; 2. The vegetable kingdom, following the natural orders; 3. The animal kingdom, arranged according to classes and orders.

Reference to any substance is facilitated by a good table of contents in front, and an index at the end. A good posological table, and another showing the proportions in which the more important drugs are contained in the officinal preparations, conclude the work.

The book contains a well-condensed compendium of materia medica. The descriptions are short, but clear. The chemical processes are so described as to show the *rationale* of the separate steps. The properties and composition are then given; after which follow the therapeutics, dose, and adulterations, the chemical tests for which are given, with full information as to the substances to be detected by them.

An occasional error may be detected, from the author following too implicitly the directions and formulæ of the first edition of the *Pharmacopœia*. As one of its authors, he may have felt a delicacy in correcting these. In describing the formation of hydrochloric acid, he omits to state that heat is essential to the success of the process. He accepts without criticism the *Pharmacopœia* formula for nitrite of soda ($Na\,O,\,NO^3$), as if it were a pure homogeneous chemical, though it is known to be a mixture of nitrate and carbonate, with about one-fourth only of nitrite (Squire-Redwood).

In the scaled preparations of iron, he has followed the large edition, and ordered the preparation to be evaporated in this liquid state on porcelain or glass plates, which leads to failure, instead of directing them first to be evaporated to the consistence of syrup, as is done in the small edition.

For collodion, he gives the formula of the *Pharma-*

copœia, which directs equal parts of sulphuric and nitric acid; this gives an insoluble pyroxylin. He adds, in a bracket, "A weaker acid is required for making a soluble pyroxylin." He thus practically leaves the reader without exact information as to which acid should be weaker, and how much. The error has been elsewhere explained to depend on the strength of nitric acid having been changed from specific gravity 1.420, as first intended, to 1.500.

These errors do not greatly detract from the merits of a work, which, as a whole, seems to deserve confidence for its accuracy.

The therapeutic part is practical, giving briefly the main effects of medicines; though, in the brief compass of his work, these are by no means exhausted. We trust that, in his forthcoming work on therapeutics, he will attempt to generalise, as far as present knowledge will permit, some practical therapeutic theories, so that the profession may see the barrenness of the land in this direction. At present, the great majority of us prescribe without any deeper view than a knowledge of certain sensible effects, and a traditional faith in certain occult influences for which we can give no reason. A probable *modus operandi* for every medicine administered ought to be part of any work on therapeutics. At present, it is little alluded to, except in chemical medicines.

We subjoin a few therapeutic notes on a class of medicines to which Dr. GARROD has given special attention.

Carbonate of Lithia is valuable in keeping uric acid in solution during its transit through the urinary organs, and in preventing its deposition in the structure of the body. It acts as a diuretic; and, in the same dose, renders the urine more alkaline than the corresponding salt of soda or potash.

Bicarbonate of Potash acts as a direct antacid, but does not produce the sedative effect of liquor potassæ. It renders the blood and urine, and probably many other secretions, powerfully alkaline; hence it is a powerful alterative.

Bicarbonate of Soda is very similar to the above, except that urate of soda is very much less soluble than the potash salt; and hence the bicarbonate of soda is less adapted for the treatment of the uric acid diathesis.

Lime Water is an antacid, both in the intestinal canal and after absorption into the blood and secretion. It differs from soda and potash in being astringent and desiccative, diminishing secretion; and is hence very useful in diarrhœa connected with acidity.

Colchicum increases the flow of bile. The fæces are more coloured, and give evidence of containing the organic portion of that fluid, as well as the colouring matter. The urine is sometimes increased in quantity; and it is generally asserted that the urea and uric acid are also augmented, but this he doubts. The heart's action is diminished; and to this Dr. Garrod thinks that its controlling action in acute rheumatism and other inflammatory affections is due.

Phosphate of Ammonia in solution can dissolve a considerable amount of urate of soda. Clinical experience has shown that it is of great value when a tendency to uric acid calculi exists; also in certain conditions of the gouty habit.

Dr. Garrod expresses frequent doubts as to the reputed efficacy of medicines which have still a reputation, such as arnica and taraxacum.

Of *Ammonia*, he says its action differs much from that of alcohol, probably influencing the ganglionic and spinal systems rather than the brain proper, and increasing the functions of the secreting and excreting organs.

Caffeine or *Theine* possesses the power of checking the changes or metamorphoses of the body, as shown by the diminished formation of urea.

Ferrum Redactum is useful when we want the blood-restoring properties of the metal without any astringent action.

Tincture of Perchloride of Iron is a most powerful astringent, useful in passive hæmorrhages and other discharges.

These give an insight into Dr. Garrod's sketches of therapeutics. We shall be glad to receive from his hands a complete work on the subject.

A SHORT DESCRIPTION OF THE THERMÆ ROMANO-BRITANNICÆ, or the Roman Baths found in Italy, Britain, France, etc. By R. WOLLASTON, M.D. Pp. 68. London: 1864.

IN this elegant volume, Dr. WOLLASTON proposes to show the identity of structure of the Roman Bath, as found in Britain, Italy, and other countries of the continent; and also "to exhibit the archæological and decorative features of the baths, rather than to elucidate their medical properties." The volume will be found to contain an interesting description of the Roman Bath in general, and of many of the baths found in different localities; and doubtless fully proves the proposition of its author.

RIOT AT TUNBRIDGE WELLS. At the last Maidstone Assizes, several persons, living at Tunbridge Wells, were charged with riotous proceedings in that town. It appeared that a medical gentleman named Webber, residing at Tunbridge Wells, had rendered himself obnoxious to the inhabitants in consequence of his having written a letter to the Secretary of State reflecting upon the sanitary state of the town. An inquiry had been instituted, and a government inspector reported favourably upon the drainage and sanitary condition. Mr. Webber's opinions, however, remained unaltered, and he became subject to great unpopularity because he was known to entertain, and was believed to express opinions injurious to the town as a place of fashionable resort. Meetings were got together, and a determination announced to drive him out of the place. On Saturday, July 2nd, a number of people collected on the common and proceeded with a figure stuffed in the form of a pig to Mr. Webber's house, before which they assembled, and with shouts, cat-calls, and discordant cries they proceeded to set fire to the effigy, having first fastened it to the iron railings in front of the area. Some of the burning material fell into the area, fireworks were thrown into the verandah, and the plate-glass windows were smashed with stones. At this time there were several ladies in the house, including Mrs. Webber and her daughters. Some of them were struck with the broken glass, and all were much alarmed and terrified. The disturbance went on for nearly two hours, and at one time nearly two thousand people were collected together. Baron Martin suggested that it was a case for arrangement, and in the end the prisoners were dismissed on their own recognisances, and an engagement to pay £20 for the damage done.

British Medical Journal.

SATURDAY, AUGUST 20TH, 1864.

ARMY MEDICAL SERVICE.

PROFESSOR DOUGLAS MACLAGAN, in his address to the graduates of Edinburgh on August 1st—the capping day—remarked as follows on the Army Medical Service.

"Rank in the army is the index of the estimation in which a man is held. Uniform is the sign of rank; and army medical officers would be quite right in insisting upon a proper uniform so long as they wear one, with all the rights and honours to which the rank indicated by that uniform entitles them. It is also said to be a wild ambition on the part of the doctors for military authority and command. These writers see, or pretend to see, in army surgeons only what Jonathan Oldbuck saw in his vision when, in the height of the old volunteering fever, he went to consult his surgeon.

"'He came, but valour had so fired his eye,
And such a faulchion glittered on his thigh,
That, by the gods, with all that load of steel,
I thought he came to murder—not to heal.'

(*Laughter.*) A complete delusion. Medical men as a class have, I hope, a better idea of the value of their own professional functions than to think that they gain status by exchanging them for military work. His Royal Highness the Commander-in-Chief tells a deputation of medical men, who wait upon him on behalf of their brethren in the army, that it is all for discipline. Perfectly right. Common sense asks, what has a doctor, who has had no military education, to do with commanding men in action, so long as the youngest ensign is alive to give an order? But how, if this refer, not to commanding men in action, but to boards of inquiry as to the healthiness of barracks, hospitals, and other sanitary questions? Here common sense would say that, as these are things specially belonging to the doctor, he is the proper person to preside over such boards. But, no; upon this principle of discipline, we are told, he is to give place to the combatant officer. Is no one to be under discipline but the doctor? If it be wholesome discipline for him to yield to the combatant, though junior to him in rank, as regards matters purely military, would it not be an equally wholesome discipline for the combatant to yield to the doctor in matters purely medical? Is the medical officer to be held as possessing less of that devoted courage which has always so nobly characterised British officers? My answer is, that the man who can coolly take up an artery under fire, requires at least as much courage as he who, with the excitement of battle, leads his battalion or his company. [*Applause.*] Do medical officers not display this quality in actual warfare? My answer is, that in proportion to their numbers, more medical than combatant officers have earned for themselves the Victoria Cross. Upon what principle, then, is the medical officer to be placed on a lower platform than the combatant of equivalent rank? So long as he does his own duties properly, and sticks to them, I maintain that the medical officer has a full title to every advantage, every honour, every mark of public consideration that belongs to his rank, whatever that may be; and it is the refusal to carry out fairly the Warrant of 1858, which promised these, that constitutes the real grievance of the army medical department."

Dr. Maclagan then gives this advice to the ninety-three gentlemen who had just been capped, and were entering upon the business of life. We hope that the Horse Guards will note the fact; and reflect upon the necessary consequence of such advice as this from the Edinburgh University.

"It is a significant fact, that there are in her Majesty's British and Indian forces about two hundred assistant-surgeonships vacant, and not a fourth part of that number of candidates for them. It has, within a short time, been asserted that there is a host of young men from Dublin and Edinburgh ready to apply for them. Let Dublin answer for itself; but speak you for Edinburgh. The Horse Guards have a traditional policy of yielding nothing to the doctors except from necessity. Tell them that you decline to join the army while things remain as they are. Tell them that you decline to enter a service the head of which tells us, apparently with perfect satisfaction to himself, that the men at present joining the department are good third class men. [*Laughter.*] Tell them that you decline to place yourselves in that category. [*Applause.*] Let us, as a profession, firmly but temperately tell the authorities what is the mind of the profession on this subject; and let them candidly and dispassionately weigh what we say to them. If we speak out unitedly, firmly but calmly, we shall be heard. What happened last Tuesday, when the House of Commons threw out a bill which would have had the effect of lowering the character of the Indian medical service, gives me the assurance that our voice will find in Parliament an echo which will reach the deafest ear of the War Office and Horse Guards. Let them provide more adequate pay for those who enter, and more adequate retiring allowances for those who spend their best years in their service. Above all, let them abjure all punic faith; and give security that they will carry out warrants in an honest and faithful spirit; and then no one will be more ready than I to encourage young men to join a service to which any of you might be proud to belong."

RESPONSIBILITY ATTACHING TO CHLOROFORM ADMINISTRATION.

A CASE of death from chloroform, which lately occurred at St. Mary's Hospital, and which has been the subject of a coroner's inquiry, raises a question of much importance: On whom should rest the responsibility of the administration of the chloroform? It would seem that, at the present moment, the answer to this question is not satisfactorily given. The surgeons in most hospitals, we believe, have little or nothing whatever to do with the responsibility of the administration. The surgeon decides to operate; and the patient is then handed over to the chloroformist of the hospital, who is, it would appear, the only person responsible in the matter. Now, we venture to think that this should not be so. The decision as to the administration of the chloroform should, in all cases, rest upon a surgeon or physician of the hospital. If the surgeon have any hesitation in ordering the administration of the chloroform,

then he should call in the advice of one of the physicians of the hospital; and so arrive at a conclusion. Certainly, in our opinion, the decision as to the giving of the chloroform should not rest with the chloroformist. The chloroformist should receive his directions, as to the administration, from the surgeon or the physician; and then, of course, proceed duly to exercise his skill in giving the chloroform. We think this position of the matter is so clear, that we hope it will be generally adopted in our hospitals. When precaution of this kind is taken, if any unfortunate results ensue, there is always a responsible person on whom at once falls the burthen of the event. If the surgeon, or the physician at the request of the surgeon, consent to the giving of the chloroform, then, of course (due care having been exercised in coming to the conclusion), the public will be satisfied that all human precaution was taken, and that no one is responsible for the fatal occurrence. Chloroform never should be administered except under the direct authority of either the surgeon or the physician.

A CORRESPONDENT from Calcutta gives us the following account of the reception of the new Medical Warrant for the Indian Service in India.

"The long expected Warrant for the Medical Service in India has at length arrived. The financial part of the scheme is now settled for the military medical officers; and no doubt, in the opinion of the authorities, the long vexed question has received a satisfactory solution. There need be no more grumbling. The medical service is well paid, and nothing is left for complaint.

"To an ordinary observer it may appear so; but, when tested by the application of the principle which governs the remuneration of all government appointments in India, the reality will become apparent. The medical officers have received the pay of their rank (to which they were entitled five years ago); but they have had all head money and staff allowances discontinued. They are, in fact, worse off than they have ever been, and all incitement to work and distinguish themselves taken away; for, under the new scheme, a medical officer will receive as much pay when on leave in the cool breezes of Simla, as on duty with his regiment in the arid plains of the North West or the swamps of Bengal.

"The scheme must prove a failure; and it is impossible that men will be found to enter a service where they are paid less after twenty years than the uncovenanted clerks of the Government offices, or the civilian of one-third of their service and half their age. If the medical service is ever to be restored to its original integrity, to say nothing of its being raised to its proper standard, such measures as the one now before us must be entirely superseded. The medical officers seek only their just dues—the pay of their rank, staff allowances like their military brethren for charges or staff appointments, and the consideration that is accorded to all other officers of their rank and standing. Until this be done, the service will never thrive. It needs but a few concessions—most reasonable, and clearly their just right—to make the medical officer of the Indian and the British service as contented as they have generally proved themselves to be efficient. There is no want of loyalty or desire to do their duty; but there is intense and universal despondency and despair as to their present position and their hopes of improvement. Let any one study the old and new Warrants, and he will be convinced that this new Warrant, instead of being an improvement, is but another disappointment—another push towards the bottom of the ladder it has so rapidly been descending."

WE are certainly what the Yankees call "progressing" in the matter of advertising ourselves to the public. We had thought that, one way or another, the thing had been already pretty well worked; but ingenuity or self-interest has discovered another way of how to do it. A plan, which seems to be developing into a system, has lately sprung up, of discussing and treating learnedly points in medical and surgical practice in the *Times* and other daily journals; so that, in truth, members of our profession, who are continually, and with very great justice, accusing the public—even the educated public—of the grossest ignorance on medicine and surgery, are now actually appealing to the same public to decide moot questions of practice! The truth is, we need hardly say, that at the bottom of all this letter-writing to the daily journals lie presumption, vanity, and the advertising vein. A death from chloroform occurs in one of our hospitals, and up starts a doctor to tell the public that no one knows how to administer the anæsthetic but himself. A man is shot through the chest, and forthwith, in the public papers, comes out a discussion touching the extraction of bullets. All this shows very ill for our profession. Those who write such letters must know as well as we do that those to whom they address their remarks are utterly incapable of giving an opinion on the matter. As a proof of the fruits of this most unprofessional proceeding, we give an extract from a daily paper, not very flattering to our profession, but certainly not an unfair commentary on the part of the ignorant public who have been appealed to by these paper letter-writers of the profession. Gentlemen may gratify their own conceit by the proceeding; but we will tell them that they add nothing either to the credit or the knowledge of their profession by evoking comments of the following character. The *Lancet*, moreover, does its best, apparently, to encourage the unprofessional proceeding. Again and again have we noticed that these anonymous and addressed-to-the-public effusions are seized upon by the *Lancet*, and solemnly criticised by that journal, instead of being treated as they ought to be, with silence and contempt.

"A very serious question arises among the 'medicos', and one which only shows that even in surgery, by far the strongest point of modern therapeutics, we are in a very poor way indeed. Sensible people have for many years abandoned the superstition that medicine, as practised among us, is anything but an imperfect and empirical set of experiments. The

est men are those who meddle least with Nature. here are specialists, there are lady-doctors, there re speculum-men, and the rest of them; but Heaven nly knows the statistics of the victims who 'die of ne doctor'. But in surgery, which is mechanical, nd which has also been growing conservative in- tead of 'slashing', the public had confidence; yet hat does it see? It sees a famous professor groping n the wound of Garibaldi, and finding no bullet; hile a little grey Frenchman pokes a bit of rough hina pencil into the hole, and finds it marked with ead; extracts the token of Italy's gratitude, and aves a hero. It sees now a tremendous discussion rising as to whether the bullet, which could be lainly felt under the skin of the poor guardsman, ught or ought not to have been extracted. The all, after lodging invitingly for a time within reach, lipped back into the cavity of the chest. Conges- on of the uninjured lung set in. The man sank ast, and died at the end of all the hope and all the iscussion, certainly partly—perhaps wholly—through ne fact that the bullet was not extracted. We pub- sh a letter from an experienced surgeon, which akes a view decidedly at variance with that of the entleman who conducted Cooper's sad case. The onderous professional influence of the *Lancet* goes ne other way; but then the namesake of the little eapon that stabbed Cavour, and slew its thousands fty years ago, is rather of the opinion of Molière's octor—namely, that a patient had better die *se- undum artem* than live by heterodox means. All we ay is that, were we markers at Wimbledon, we hould like to be sure that the profession had made p its mind whether to leave an ounce of lead in a an's body, when it can be got at without probing, the kind of allopathic dose to ensure his recovery."

THE second number of the *Ophthalmic Review* has ppeared. Its contents indicate, as did those of No. , that Germany is still more active than England, merica, and Australia in the cultivation of matters phthalmological. In this number, Dr. Rosebrugh f Toronto gives a paper "On a New Ophthalmo- cope for Photographing the Fundus Oculi". Mr. J. . Laurence tells "Of some Ophthalmic Instru- ents". A Clinical Lecture by A. von Gräfe, on Exophthalmos, is translated. Mr. Thomas Windsor ives a "Note on the Terms Sclera and Sclerotica; nd a Retrospect of British and Foreign Medical ournals", in which England cuts a very meagre gure. Our own JOURNAL is mentioned in flatter- ng terms, as "having done good service". We uote the passage, as a specimen of the style of the ournal

"Our erudite contemporary, the BRITISH MEDICAL OURNAL, has indirectly, and surely undesignedly, one good service to the cause of scientific progress. eeply impressed with the pestilent character of all nowledge, and groaning under the conviction that he members of the medical profession are too learned nd not sufficiently venal, the journal in question has ent its columns to an endeavour to crush what is, erhaps, the greatest of the many modern triumphs f surgery. It has sown dragon's teeth, and they ave sprung up armed men. The careful and com- lete lectures of Mr. Wells are only a single evi- ence that the members of the medical profession ecognise it as their first duty and their truest in- erest to seek to heal the sick by every means that industry and science can command. Such a convic- tion is irreconcilable with that worship of the 'al- mighty dollar' which it is the chief function of the 'organ of the Association' to advocate. The same man cannot pursue truth, and be over-greedy after gain. Our contemporary will do well to profit by a contro- versy which teaches that medical practitioners will not accept an American view of their moral and social obligations."

As some doubts seem to have been entertained with regard to the correctness of a statement lately made by us, we beg again distinctly to repeat, that we have heard from the most unexceptionable authority that the late Mr. Green most earnestly endeavoured to persuade the College of Surgeons to introduce into their last Charter a clause enabling country Fellows to vote by proxy at the election of Councillors. He was very greatly chagrined and disappointed that his efforts to effect this act of liberality on the part of the College were unsuccessful.

M. DIDAY complains that medical literary criticism is almost dead in France. The cause of this he attri- butes to the advertising system, which is becoming so general in medical journals.

"It is a common failing, one of the minor sins of every operator," says M. Diday, "to try and make out that none of his patients die from the effects of his operations."

Our readers have already been told of the strange disease, the demonopathico-hysterical epidemic at Morzine, in Savoy. Dr. Kuhn, physician to the In- sane Asylum at Pau, and who has been sent on a mission to Morzine, repudiates the interpretation given of the nature and cause of this affection by Dr. Munaret. He says, in writing to the *Gazette de Lyon*: "I have been two months at Morzine; I have seen all the patients, and all the people. Your correspondent attributes the disorder to a pro- testant propagandism. This is the first time I have met with such an explanation, which exists in reality only in the mind of its inventor. The present epi- demic has been produced as follows. During the whole of January, a mission has been preaching at Morzine; a dozen priests were engaged in the busi- ness; and the inhabitants passed eight or ten hours a day in church. This mission laid the train, and Monseigneur the Archbishop exploded it. These in- opportune ceremonies could but have one result, in causing a renewal of the epidemic, as every person engaged in the cure of nervous diseases must be well aware."

Experiments made by M. Verhegen at Brussels prove (so we read) that the quantity and the rich- ness of the milk are increased by removing the horns of the cow. The operation must be performed at an early age.

M. Flourens has presented to the Academy a book written by himself, entitled *Comparative Psychology.*

In a late discussion at Lyons on resection of the knee, the following remarks were made. M. Garget said that, from what he could understand, some surgeons, like Mr. Fergusson, were over-fond of resections; whilst others, like Mr. Prescott Hewett, were declared enemies of the operation. In the wards of the latter gentleman he had seen a patient who had been operated upon by Mr. Fergusson, and set down as a cure. M. Ollier remarked, that such facts were, no doubt, often to be noted in English statistics. The journals employ persons to take notes of interesting cases in hospitals; and, if the patients operated upon live only a week, they are set down on the list of cured. There are in London surgeons like Mr. Paget, who are, as a rule, wholly opposed to resection of the knee—an operation which has been so much abused of late years. We are even told of a patient who went on foot to Mr. Fergusson to be operated upon. M. Delore believed that the operation was very seldom needed. In a vast number of cases, all that is required are general curative agencies and the expectant method. M. Ollier objected to the operation, as a rule, in children; because in them the diseased articulations may be cured without operation, and because of the great shortening of the limb which is produced in these cases. In England, its employment in children is much too frequent.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the Committee, appointed at the Freemasons' Tavern on July 7th, favourable to an alteration of the existing laws by which the election of members of the Council is at present conducted, was held in the Arts School, Cambridge, on Thursday, August 4th; George Southam, Esq., of Manchester, in the chair.

At this meeting the Fellows of the college were invited to attend, and the chairman requested that any gentleman present desirous of doing so, would express his opinions upon the subject.

The Secretary read a letter from the Assistant-Secretary of the college, stating that he had received the resolution passed at the previous meeting, and had laid the same before the Council.

An animated discussion then followed upon the objects of the meeting, in which several Fellows took part; when it was finally and unanimously resolved, on the motion of Mr. Martin of Hammersmith, seconded by Mr. Bottomley of Croydon—

"That this meeting request that the Committee appointed by the preliminary meeting at the Freemasons' Tavern, be requested to continue their efforts to procure the necessary alterations as to the mode of voting, so that proxies may be introduced."

JOHN HATTON, M.D., F.R.C.S., *Hon. Sec.*

N.B. Any Fellow of the college wishing to express his opinion upon the subject, is requested to forward his communication to the Honorary Secretary, Graythwaite Lodge, Belvedere, North Kent, S.E., in order that the same may be laid before the next meeting of the Committee.

THE ARMY MEDICAL SERVICE.

THE following memorial has been presented to Lord Palmerston by the Royal College of Surgeons of Edinburgh:—

"That the Royal College of Surgeons of Edinburgh have long been charged with the duty of licensing surgical practitioners, and have always endeavoured, to the utmost of their power, to promote the welfare of the medical profession for the public good. That the attention of the College has been called to the present state of the army medical department. That it is obvious that that department is not in a satisfactory condition, there being, as the College have reason to believe, wide-spread discontent among the army medical officers,—the medical service of the army having become so unpopular that medical men are repelled from it instead of being attracted to it,—and that there is found to be great difficulty in filling up vacancies as they occur, and that to an extent which seriously mars the efficiency of the service, and imperils the health of the army. That, under present regulations, the service does not hold out inducements sufficient to secure a supply of competent medical men; and that much fewer high class medical men than might be expected, under different arrangements, offer themselves at the competitive examinations. That, in consequence of this lack of candidates, the army authorities have been obliged to resort to the very extraordinary expedient of advertising for civilians to act as assistant-surgeons, to whom appointments for home service are offered without examination. That further, for the same reason, it has been proposed by the Secretary of State for India to abandon competitive examination in the case of army medical officers for the Indian service, and to return to what would be equivalent to the old system of patronage. That a due regard to the health of our brave soldiers demands that they should be protected from incompetent medical attendants, and that in that important view a state of matters so unsatisfactory should be put an end to. That various reasons have been stated why the service should be at the present time so unpopular; such for example as that the excellent warrant of 1858, which gave so much satisfaction when it was originally issued, has not been carried out as it ought to have been; that its operation has not been extended to India, as was due to Indian medical officers; that medical officers, in consequence of the deficiency in their numbers, have a difficulty in getting leave of absence, have an undue share of foreign service, and are very slowly promoted. That, moreover, they are slighted as regards rank, have degrading duties unnecessarily imposed upon them, and, as regards pay and arrangements as to retiring pension, are not remunerated as is due to men belonging to a liberal and scientific profession—qualifications in which can be attained only after long years of study, and at great cost. That the College refrain from giving an opinion as to the relevancy of these alleged causes, believing, as they do, that the only satisfactory means of ascertaining the real causes and amount of the evil, and of applying the proper remedies, is the appointment of a Royal Commission to inquire into and report regarding the whole matter. That this College would therefore respectfully, but earnestly, petition your Lordship to advise Her Majesty to issue a commission, constituted of men of weight and impartiality, in whose judgment confidence may be reposed by all concerned, and especially by the public, who are so deeply interested in the issue. In name and by authority of the Royal College of Surgeons, BENJAMIN BELL, *President.*"

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

E 1st of August is always an important day in the iversity of Edinburgh; for on that day the cere- ny of *capping* the successful candidates for the de- e of Doctor of Medicine takes place. The crowded emblage of ladies who always throng to that emony shows how much interest these proceedings aken—an interest which has a double origin, in nature of the ceremony itself, and in the fact that not a few cases the beholders stand in the relation mother or sisters to the newly-fledged young tors.

The custom of capping is one of great antiquity in Scotch Universities, and consists in the success- candidates for degrees being presented to the ancellor or Vice-Chancellor (formerly to the Prin- al or Regent), who, placing a cap upon the head each, admits him to the degree. Although the emony may be of much greater antiquity, it is tain that in the seventeenth century the custom "capping" graduates prevailed. In the appendix Spottiswoode's *History of the Church of Scotland,* blished in 1677, the ceremony of *laureation* in ng's College, Aberdeen, is described. From the rds pronounced by the Regent, it is evident that cap was at that time placed upon the candidate's ad, as an essential part of the ceremony. "Et in num manumissionis tuæ, caput tuum hoc pileo rno; quod ut tibi felix faustumque sit, Deum imum maximum precor." Formerly the capping d to take place within the walls of the University. late years, however, the Assembly Hall of the urch of Scotland has been preferred, as it affords re ample accommodation than our University ildings. It is, I may remark, to be deplored, that have no room in that building which, from its e, can be considered well adapted for holding large iversity meetings; hence our graduations and the eting of the General Council of the University essarily take place outside its walls.

The graduation on Monday was not certainly be- d those which have preceded it, either in the mber of successful candidates, or in the *éclat* and cess which attended their legal admission into the porate body. Ninety-three candidates were on t occasion presented to Sir David Brewster, who ites in his person the two offices of Vice-Chancellor d Principal. Of these gentlemen, four received d medals for their theses. It may not be known all of your readers, that in Edinburgh the old cus- n of requiring every candidate for the degree of ctor of Medicine to defend a thesis before the Uni- sity is still kept up. The majority of candidates tent themselves with the presentation of mere npiled essays. A few of the more ambitious, how- r, aim higher; and every year a certain number of essays attain a high degree of excellence, being founded on the original investigations of their authors. To the best of these theses the Medical Faculty awards gold medals; the *sine quâ non* to a thesis being admitted to competition consisting in the fact of its being the result of original investigation, and of its containing some contribution to medicine or the allied sciences, which, if published, will reflect credit on the University. It is, I presume, merely for the purpose of keeping up the *original* essays, that the old custom of requiring theses is continued.

This year, eleven theses (an unusually large number) were deemed worthy of competing for the medals; and of these, four were successful. The medallists were: Dr. William Mitchell Banks, for a thesis "On the Wolffian Bodies of the Fœtus, and their Remains in the Adult;" Dr. Charles Parsons, who wrote "On a Form of Bronchitis (simulating Phthisis) which is peculiar to certain Branches of the Pottery Trade;" Dr. Robert Bremner Thomson, who presented "Contributions to Vegetable Physiology;" and Dr. Alfred Marchmont Watson, whose thesis consisted of "Observations on the Contractions of the Uterus after Labour, and on the Alteration in Form and Bulk which it undergoes during the Lying-in Period."

After the capping and the presentation of the medals, an address was delivered to the graduates by the "promoter" for the present year, Professor Maclagan. As your readers have already had an opportunity of perusing that address, I shall confine myself to saying that the appropriate nature of the sentiments therein expressed was fully equalled by the manner in which Dr. Maclagan delivered his admirable address. The severe tone in which he alluded to the medical services of the army and navy, and especially to the former, has given the greatest satisfaction to the general body of students and medical practitioners in Edinburgh.

Professor Laycock drew his summer course of lectures on Medical Psychology to a close a few days since, and chose as the topic of his last address the *legal responsibility of the insane,* with special reference to the case of a man (Bryce) who was recently tried before the High Court of Justiciary in Edinburgh for the murder of a girl, and who was found guilty and executed. On the occasion of the trial, Dr. Laycock was called as a witness for the defence; and gave evidence to the effect that the murderer was, in his opinion, a man of unsound mind; and that he had committed the murder under the influence of an attack of maniacal excitement.

Without attempting to give any of the details of this case, I may in a few sentences state the chief facts, so as to show how differently the case has been judged by the public and the general body of the profession here, and by Dr. Laycock.

Bryce, the murderer, is proved to have been a man of low mental capacity, which he had probably lowered by the abuse of intoxicating liquids. Of a naturally jealous and passionate disposition, education had done nothing for this man; for, as he grew

older, his passions became more and more uncontrollable. Having suspected that a poor girl (Jane Seaton) had attempted to thwart his designs by speaking unfavourably concerning him to a sweetheart of his, he persistently threatened for some months to do her some harm. At length, arming himself with a razor, he proceeded one morning to the house where his victim lived as a servant, and there perpetrated the crime. Shortly before committing the murder, the prisoner was seen by a blacksmith's apprentice, who described him as having a very peculiar expression of countenance. After committing it, he quietly walked away across some fields; and it was only after being informed that he was being pursued, that he made any attempt to escape. When captured and brought before the sheriff for examination, he made a declaration to the effect that he recollected nothing from the time when he first entered the room where he first attacked his victim until he was found lying in a field at a considerable distance from the scene of the murder. The facts of the case are now not complete, unless we add that, after being sentenced to death, the convict Bryce admitted the justice of the sentence, and confessed that the statements which he had made as to not recollecting the crime were made with the purpose of misleading.

The public saw in the case of Bryce the ordinary chain of circumstances revealed in trials for murder. A man of degraded mind, given to vicious habits, of an uncontrollable temper, suspects, from certain circumstances, that he is the object of the ill-will of another person; and, after meditating over his crime for some time, he carries it into effect. In the "*raised*" look of the guilty man, the majority of people can see nothing more than they would expect; for who would expect an appearance of coolness in a man who was about to carry out a crime which he had meditated for months? A lunatic alone could, under the circumstances, have had an appearance of indifference and unconcern. In the statement made when captured, the public only saw the wilful falsehood of a guilty man trying to evade justice. On the other hand, Dr. Laycock formed the opinion that Bryce was a man originally predisposed to morbid brain-action. He appears to have formed this opinion from there being a history of hereditary insanity; from the morose and passionate character of Bryce; from the imperfect development of his skull; and from the want of symmetry between the two sides of the face. "This wasting," Dr. Laycock remarks, "corresponds to some internal brain-defect of the same kind, the nature of which a careful examination of the body after death might have revealed." At last, Dr. Laycock supposes, Bryce became the subject of well-marked insanity, of a morose, melancholic character. In an aggravated state of his malady, he committed a murderous attack upon a girl against whom he entertained insane suspicions (?), which was probably followed by a loss of memory, such as is so characteristic of the homicidal delirium of epileptics. And who can tell, argues Dr. Laycock, that Bryce was not an epileptic? For his part, he would have had him watched, especially at night, to determine this point. From the "*raised*" look which Bryce wore before the murder, Dr. Laycock drew what he considered evidence of diagnostic value. "It (*i. e.*, the look) was morbid. Its true nature is known to us, who have seen it; but those who have not seen it could not conceive what it was like, nor what it meant." "The probability is that, as he had just awoke from a prolonged comatose sleep of eleven hours' duration, his brain was in a state something like that of somnambulism; and the look, which was so peculiar as to attract the notice of the blacksmith's boy, was of the kind observed in sleep-walkers." Lastly, Dr. Laycock attaches no value to the confession of the prisoner.

Although the great part of Dr. Laycock's lecture was taken up with a fuller exposition of the views which he had expressed at the trial of Bryce, he yet devoted considerable attention to questions of general interest in connexion with it. Dr. Laycock insisted on the anomalous condition of English law with regard to insanity. Our laws, he showed, do not in any way fix the responsibility of the insane. He pointed out the objectionable nature of the mode which prevails of examining medical men in our courts of law; they being obliged, by the very way in which their examination is conducted, to take a *side*—to become, as it were, partisans for the prosecution or defence. He appeared to advocate the system, could it be introduced, of submitting medical questions to medical juries. He insisted, in conclusion, that medical men should be protected in the exercise of their difficult and personally dangerous duties towards lunatics, and should be exempt from actions at law for damages.

After the conclusion of Dr. Laycock's lecture, prizes were delivered to the members of his class by Dr. Browne, one of the Commissioners of Lunacy for Scotland.

Considerable excitement prevails as to the issue of the contest between Professor Lister and Mr. Spence for the Chair of Surgery. The first meeting of the curators (in whose gift the chair is) will be held in about a fortnight's time; and it is expected that the result of their deliberations will probably be made known during the first days of September.

THE FIGHT BETWEEN THE ALABAMA AND KEARSAGE. M. Dufour, a surgeon of the Imperial navy, has published an interesting account of the wounded seamen who were brought to the naval hospital at Cherbourg after the engagement between the *Alabama* and the *Kearsage*. Of fifteen men, one is dead, two remain in a dangerous state, the others are recovering. For some days victors and vanquished lying near each other in the same room forgot the civil discord of which they were the victims. They were visited with the same solicitude and the same humanity by the officers of the ship which survived the engagement. One of the first remarks suggested by reading M. Dufour's statement is that the greater number of the wounds were caused not by cannon shot or shell but by splinters from the ship.

Association Intelligence.

THE MEDICAL PROVIDENT FUND.

ıE Chairman has the pleasure to announce the ɔmise of the following sums to the Guarantee ınd:—

	£.	s.	d.
Dr. Paget (Cambridge)	10	10	0
Dr. Symonds (Bristol)	21	0	0
Sir Charles Hastings (Worcester)	10	10	0
Rev. Dr. Bell (Goole)	10	10	0
I. B. Brown, Esq. (London)	5	5	0
T. Turner, Esq. (Manchester)	10	10	0
Dr. Radford (Manchester)	21	0	0
Dr. Paul (Camberwell)	5	5	0
E. Daniell, Esq. (Newport Pagnell)	5	5	0
E. Lund, Esq. (Manchester)	5	5	0
E. Bartleet, Esq. (Chipping Campden)	5	5	0
T. Heckstall Smith, Esq. (St. Mary Cray)	5	5	0

rther contributions will be announced.

Reports of Societies.

)YAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 28TH, 1864.

. PARTRIDGE, Esq., F.R.S., President, in the Chair.

THE CONDITION OF THE STOMACH AND INTESTINES IN SCARLATINA.

BY SAMUEL FENWICK, M.D.

The object of this paper was to prove the following ɔpositions :—

1. That the mucous membrane of the œsophagus, ɔmach, and intestines is inflamed in scarlatina.

2. That desquamation of the epithelium of these rts takes place.

3. That, notwithstanding the anatomical changes the mucous membrane of the stomach, the forma- n of pepsine is not prevented.

4. That the condition of the skin is similar to the ıdition of the mucous membrane in scarlatina.

In support of the first proposition, the microscopic ımination of the mucous membranes of the œsopha- s, stomach, and intestines, sixteen cases of death ɔm scarlatina were detailed. The first effects of the ırlatina poison upon the gastric mucous membrane re congestion of the bloodvessels, and stripping off e epithelium from the tubes and the surface of the gan, and also softening of the tissues. The tubes e greatly distended by granular and fatty matters, by small cells intermixed with granules, and in ne cases they are lined by a new membrane. Some- ıes no normal cells can be distinguished ; in other ɜes they are present, but are scattered irregularly. ter the second or third week the tubes are less dis- ıded than at an earlier period, and their closed ds are still loaded with granular matters, which eatly obscure the gastric cells. These become more ident towards the surface of the mucous membrane. ıe cells at this period are sometimes very large, netimes loaded with fat or coated with granules, d seem to have but little adhesion to their base- ɔnt membrane, as they readily separate from the ɔes, but adhere closely to each other. The effects the inflammation upon the intestines seem, in ghter cases, to consist in the effusion of granular d fatty matters into the mucous membrane ; but in ɔre severe cases the tubes of Lieberkühn are ob- ıucted by epithelial cells, whilst extravasations of ɔod take place in the villi, and these, with the rest the mucous membrane, are loaded with small cells and granules. In one case the mucous membrane was entirely stripped of villi, excepting a few frag- ments which still remained, and the enlarged and prominent openings of the follicles of Lieberkühn gave its surface the appearance of a sieve. In some instances in which the pancreas was examined, evi- dences of disease presented themselves.

The second proposition was more difficult of proof, as vomiting usually occurs only in the first stage, and the author had no opportunity of examining the vo- mited matters at this period. In one case, in which the vomiting took place in the third week, fibrinous casts of the stomach-tubes were discovered, and in- flammation of the mucous membrane was proved to have existed by *post mortem* examination. The opin- ion that desquamation of the epithelium occurs was founded chiefly on microscopic examination of the contents of the stomachs of those who had died. The contents in recent cases consisted of pieces of fine membrane, of cells, and of granules and shreds of membrane. The membranes were of the shape and size of the tubes of the stomach, and were covered with granules and fat. The cells varied from 1·1200th to 1·2200th of an inch, and were usually fringed with fine pieces of membrane. In cases of longer duration the membranes were covered with cells, and were also of the size and shape of the stomach tubes. In order to ascertain if these appearances were trustworthy as evidences of inflammation, the contents of the sto- machs of forty-five subjects were examined at the Middlesex Hospital, the condition of the mucous mem- brane being noted. In only one, a case of acute gas- tritis, were there any fibrinous casts. In eighteen there were only separate cells, chiefly columnar, and in none of these was there inflammatory action. In eight cases casts of the upper parts of the tubes were plentiful, composed only of healthy conical cells ; and in all the mucous membrane was in a natural condi- tion. In eighteen there were either plugs formed of cells and granules from the secreting parts of the tubes, or the casts of conical cells were overlaid with granular matters ; and in all of these the stomach was more or less inflamed. Two cases of gastritis, unconnected with scarlatina, were also quoted as ex- amples of the forms in which casts of the stomach- tubes appeared in vomited matters during life, and the author stated he had detected casts of the sto- mach-tubes in matters vomited by persons affected with gastritis connected with diseased kidneys, with inflammatory dyspepsia, and other forms of inflam- mation of the gastric mucous membrane. It was urged that if casts of the gastric tubes can be dis- covered during life in cases of gastritis, and if in scar- latina this condition exists, and casts have been found in the stomach after death, there is every probability that desquamation of the epithelium takes place in this organ, as it does in the skin and the kidneys.

In support of the third proposition, the results of the following experiments were given in three cases of scarlatina. Ten grains of hard boiled white of egg were digested at a temperature of 90° for twelve hours in an infusion of the mucous membrane, to which three per cent. of hydrochloric acid had been previously added. The average loss of albumen was three grains and two-thirds. Similar experiments performed with the stomachs of eleven males who died of various diseases at the same hospital gave an average loss of four grains ; so that there had been scarcely any diminution of pepsine produced by the fever. In contrast to this were the results of similar experiments upon four cases who died of typhus fever. In two of these the albumen had gained three grains of weight by imbibition, and was not at all softened ; whilst in the other two it was softened, and one had lost only half a grain, the other one grain and a half

in weight. But, as the activity of the digestion must depend not only upon the relative amount of pepsine, but also upon the bulk of the mucous membrane, this was also attempted to be estimated. The average weight of the mucous membrane of the stomachs of ten males dying of various diseases at the Middlesex Hospital was eighteen drachms, the weight in two recent cases of scarlatina was eighteen and sixteen drachms (the latter being in a boy), whilst it only amounted to fifteen drachms in one who died in the third week of illness. In four cases of typhoid fever the average weight of the mucous membrane reached only eleven drachms.

The skin had been examined microscopically in three cases only. In the first, in which the patient died after a few days' illness, the only morbid appearance was an occasional minute extravasation of blood in the neighbourhood of the sudoriferous ducts. The rete mucosum was greatly thickened, and numerous round cells with large nuclei were everywhere visible, intermixed with the natural cells. The basement membranes of the sweat-glands were thickened, and the epithelium lining them was so much increased that in most cases it obstructed their channels. In some of the sweat-glands the coils were loaded with coagulated blood, and were greatly and irregularly distended. In the other recent case the appearances were similar, excepting that the external layers of the cuticle were stained with blood in minute patches, and the sweat-ducts were also reddened; but there were no extravasations of blood either in the glands or cutis. In some of the ducts the epithelium was detached from the basement membranes. In the case of a man who died during the third week, the sudoriferous tubes were still choked up, but in the glands the epithelium seemed in many places to be torn away, leaving the basement membranes bare, or only covered by ragged particles. The cutis was in a natural condition.

In scarlatina, the morbid condition is mostly confined, in the first instance, to the basement membranes, and consists in the formation of layers of new cells, which, in the skin, are transformed into cuticle of natural appearance, and in the stomach contain pepsine. If future researches should prove that a similar condition occurs in the kidneys and other parts, it will be necessary to look upon the structural changes produced as resulting from increased physiological, rather than from pathological action.

ON THE CAUSES OF HERNIA.

BY J. A. KINGDON, F.R.C.S.

The author endeavoured to prove that hernia was the result of an abnormal condition of the peritoneum in its entirety, either from congenital malformation or inherent disposition to be relaxed; and that it did not arise almost entirely from mechanical causes alone. So long as the mesenteries remained unrelaxed, and with their normal attachments, the author held that hernia not only did not, but could not occur, and that there was no disposable force that could stretch the mesenteries and dislodge the viscera. But when, from congenital defect or subsequent derangement, the mesenteries allowed the intestines to descend in the cavity of the abdomen below their proper sphere, then mechanical causes could act—then the arguments of those who advocated the mechanical theory would apply; protrusion would then be due to loss of equilibrium between the muscular parietes and the rings, but not till then. The author further attempted to show that hernia was fundamentally an affection of the peritoneum generally, by pointing out that the condition of the parietal layer determined the kind of hernia—*i.e.*, the aperture through which it escaped.

Correspondence.

THE MEDICAL PROVIDENT FUND.

LETTER FROM B. W. RICHARDSON, M.D.

SIR,—My good and esteemed friend, Dr. Stewar must pardon me for correcting his too generous spee (reported in your last impression) on my exertions i forwarding the Provident Fund of the Associatio In saying that the chief labour of the Committee h been carried out by myself, and that the action of t other members of the Committee had been "nom nal", Dr. Stewart attributed to me what I cannot any sense claim. In the first place, he forgot his ow valued services, which were rendered at every mee ing of the Committee; and he forgot also those of t other members. Let me, therefore, state that a mo active and earnest committee it was never my goo fortune before to meet. Sir Charles Hastings, M Bartleet, Mr. Carter of Stroud, Mr. Pound of Odiha Dr. Bryan of Northampton, and Dr. Day of Staffor attended, at great cost, the various meetings, a collected most useful information. Mr. Carter, M Pound, and Dr. Stewart were equally partners in t drawing up of the Report, every sentence of whi called for the most careful discussion; and Mr. Dani of Newport Pagnell, and Mr. Gramshaw of Framlin ham, sent in various useful and practical facts a suggestions, which were all turned to account.

The whole of the labour was, in a word, fair divided; and, although it fell to the chairman to the exponent of the views of the members of the Co mittee, he can claim and wish for no greater me than to have been their earnest and willing coadjut

I am, etc., B. W. RICHARDSON.

12, Hinde Street, August 14th, 1864.

THE DERMIC APPLICATION OF MEDICATE STEAM IN THE TREATMENT OF DISEASES OF THE SKIN.

LETTER FROM JOHN GRANTHAM, ESQ., F.R.C.S.

SIR,—In the exercise of our profession, all of must have more or less experienced difficulty in t treatment of dermic diseases, for want of means, n only in the cottage, but also in the houses of t better classes of life, of applying the most suita remedies. I allude to the application of heat a moisture, at a high temperature, to the surface of t body, for the relief of pain and disease. I would n direct attention to an economical and easy mode applying heat and moisture in every house, by mea of my "brick bath"; and, first, I wish to admit th the idea emanated from a midwife (who had been great traveller) in my neighbourhood. She used as a means of conveying steam or vapour in a case pruritus pudendi. Nor do I assume this to be t first notice made of the brick bath; but I do cla the merit of being a supporter of the principle, havi used it extensively in my practice during the last s or seven years; and I am bound to acknowledge th it has proved to be a most valuable mode of trea ment, when combined with sulphur, in all those di eases of the skin coming under the class of wate pimple; and in all the forms of lichen, and also in t suppurative affections of the skin in impetigo, I ha witnessed the great palliative powers of the sulph fume.

The method I have adopted in applying the stea vapour alone is as follows. Boil two gallons of wate at the same time put into the fire half a comm

k, which must be heated to redness; have a cane-omed chair, and a hot bath for the feet, with a rge blanket, in the room; put the boiling water an earthen pan, and place it under the chair; put the red-hot brick into the pan. The patient be seated on the chair in a state of nudity, with feet in the foot-bath; and then to be covered, ex-ing the head and face, by the blanket. By these ns the steam is kept up on the surface of the y for the space of fifteen or twenty minutes; after h, the patient is to be well dried, and retire to a m bed, or be placed between the blankets. This simple steam or vapour bath. When the sulphur e is required, boil six ounces of sulphur fifteen or nty minutes in the two gallons of water; or, if an nonia-bath is required, merely put two ounces of strong liquid ammonia into the water just before brick is introduced.

his bath can either be applied generally or lo-. I have used it in chronic injuries to the ts; I have applied it, in shock or concussion, to muscles of the pelvic region, particularly in one painful case, where a horse fell and lay on the without moving him from the saddle, producing only contusion, but laceration of the muscular s. I would, in conclusion, advocate the impor-e of the great advantage pertaining to the sul-fume bath, in conjunction with the nitro-iatic acid treatment; and I might further suggest , in those chronic affections of the liver, the re-of tropical fever, it will be found to be a safe and method of passing the nitro-muriatic acid into skin, thereby proving a very useful adjunct in treatment of glandular diseases, and in a way cost accessible to all.

I am, etc., JOHN GRANTHAM.

rayford, Kent, August 4th, 1864.

REIGN BODIES ON THE SURFACE OF THE EYE.

TTER FROM JOHN THOMPSON, M.D., F.R.C.S.

R,—I quite concur with Mr. Walton, in the re-ks contained in his lecture, respecting the great iency with which foreign bodies are accidentally ected in the integuments and substance of the all. In fact, there is scarcely an operation so iently demanded as that, for the removal of these es. The patient is almost always conscious of nature of his case, and able to tell the time and ner of the accident, but sometimes this is not so, then tact in observation is of service. The par-s when impacted in the eyeball are far more fre-tly in the cornea than the sclerotic, in fact it is exceptional to find them in the latter, and in hing on the cornea for them, it is best to look at yeball sideways, as small particles are much more ly visible in this way, than when looked at with dark structures of the inner eye in the back-nd. Careful examination, with a side view, will ery case enable one to detect the speck. There be far more difficulty in removing the impacted tances in some cases than in others, according to depth and firmness of their insertion, and the unt of inflammation that may have been set up.

nave seen surgeons use a lancet, or a needle, or r similarly sharp pointed instrument, and I have elf tried them, but the best sort of instrument is less pointed than these; I commonly employ a tomy knife, which has also the advantage of a handle, and this allows the operator to rest the and little finger on the patient's face, while with other fingers the instrument is steadily used like a pen, and the point made to lift or scrape out the foreign body.

The best position for the operator is behind the patient, the latter being seated on a chair, with his head resting against the chest of the surgeon, who places the first and second fingers of the left hand respectively on the upper and under eyelids, raising the former, and depressing the latter at the same time by gently compressing the eyeball, rendering it steady. He may with the flat of the knife touch the eyeball once or twice, then with the point at once strike out the offending body with a few quickly applied touches. By standing thus behind the patient he is steadied, and the movement of his body placed in accord with your own, and as he does not perceive your manipulations, or at most only a very small part of them, the motive for restlessness is small. I once saw a case where the foreign body was a thorn; it pierced the cornea through, and fixed its point in the iris, where it was distinctly visible. It was impossible to get it out through the cornea from the peculiar manner in which it had broken off, and the time which had elapsed since the accident had allowed the point of entrance to close up. Mr. Jones of High Bickington, whose patient he was, very cleverly inserted a couching needle, and depressed the thorn point from the iris into the lower part of the anterior chamber and out of the visual field. The result was most satisfactory; all the bad symptoms were removed, and vision preserved. It is now many years since the operation, and I was informed only a short time since, that no inconvenience was felt in the eye. We see from this how tolerant this part of the eye may be of a coarse irritating substance—pathologically a point of importance. The impacted substance will be generally iron; this is my opinion from observation. Stone-breakers, smiths, and millstone-dressers, are the persons I have found most liable to the accident, more especially the last named. A smith in his work strikes iron against iron, and particles flying off are coarsely flattened discs, not commonly the best shaped for penetrating; but the workers on the millstone strike the iron on hard siliceous masses, which cause sharp angular grains to chip from the chisel, some of which occasionally rebound, and enter the eye, or strike other parts of the body with force, and penetrate the integument. Hence it is not unimportant to inquire how the accident has happened, as indicating the depth of the penetration, and the necessity, probably, of gouging out a portion of the cornea, effectually to remove a sharp angular particle. It is worthy of observation that the skin of the eyelids and face is not often pierced by these particles, it being a very tough elastic tissue, and the same applies in part to the conjunctiva of the sclerotic; but the cornea and its covering, from their different structure, have not the same immunity.

The skin of the wrists and arms of the workmen who dress the millstones is thickened and horny, and it is curious to notice how the particles of iron enter and remain in it. I have seen an arm which looked almost tattooed from this cause; no inconvenience was, however, felt. The arms of blacksmiths I have not known marked in this way, which is corroborative of my former position.

Loose particles of dust and fine grit, flying insects, etc., often require removal from their lodgment within the lids, but I have not often found the conjunctiva pierced; it will occasionally happen, but in reference to frequency, so far as my experience goes, there are ten cases of impaction of iron or other spiculæ in the cornea, to one of impaction of any substance in the conjunctiva of the lids, but this will, perhaps, vary according to the occupation of the population among whom the surgeon practises.

To remove loose particles, a very effectual method is to twist a small strip of lint around a silver probe, and inserting this well up under the lid, wipe the conjunctiva from the outer to the inner canthus, keeping the end of the probe well up to the top of the cavity, and pressing it outwards against the lid as it is brought along. The same process may be adopted for the under lid, with the necessary variation. In case the substance is not removed, and an impaction is suspected, the lid must be inverted, to do which well requires tact, as the probe should be pressed down on the upper lid at the same moment the margin is raised by the eyelash below. The offending body is generally about the middle of the tarsus, and not always very easy to remove, as the conjunctiva bleeds readily, and obscures perception, and the elastic tissue of the lid holds a body with tenacity. I know this the more particularly from having suffered from the accident, and remembering with what difficulty to the operators and pain to myself the offending body was removed. It will be well after inverting so much of the upper lid as is practicable to elevate the cartilage still further, by placing the probe under it; a much freer inspection is thus obtained. With careful observation, a foreign body can scarcely fail to be detected; but it may happen that professional advice has not been sought, the patient believing that he has simply an inflammation in the eye, caused, he may truly think, by the stroke of a bush, or other body, but without being aware that a scale of bark, or a bit of leaf, or filament of wood, may be lodged in the sinus and maintaining the disease. In this, as in other cases of surgery, careful inspection will seldom cause regret, and may often essentially serve the patient, and advance the reputation of the surgeon. The inflammation arising from these accidents is very tractable after the sources of the irritation are removed.

I have made these remarks as an epitome of my experience in an interesting point of surgery. The subject was suggested to me by reading the abstract of Mr. Walton's lecture; but they are not intended to be, in any way, a comment on the lecture.

I am, etc., JOHN THOMPSON.

Bideford, July 19th, 1864.

THE USE OF SEA-TANGLE IN CONSTRICTION OF THE MEATUS AUDITORIUS.

LETTER FROM E. W. PRITCHARD, M.D.

SIR,—The following case, shewing the use of sea-tangle as a distending agent, may be interesting.

R. F., a native of Edinburgh, and manufacturer, aged 26, had lost the sense of hearing of the right ear, after scarlet fever, seven years previously to coming under my care. He stated that severe inflammation affected both ears at that time; the right being worse, and attended with considerable swelling and profuse suppurative discharge; and that sound seemed gradually to lessen, until it entirely ceased.

The examination at once detected constriction and almost complete obliteration of the right meatus; the integuments being thickened, and the cuticle thickly studded with hairs. The only perceptible aperture was about the twelfth of an inch in length, forming a small oval slit.

Small tents of the laminaria digitata, saturated in a weak solution of bromide of potassium, were ordered to be worn from time to time; and a mixture, composed of the infusion of dulcamara and the iodide of potassium, was prescribed, which the patient took daily.

In the course of three months, the opening in the right ear was dilated as large as that in the left; and the tympanum was easily examined by the speculu Though his hearing is still imperfect (the wat being heard at two inches distance from the organ), have little doubt of the ultimate complete restor tion. The ease with which the tangle-tents are mad increasing them in bulk from time to time, and t absence of pain in their use, recommend it strong to the favourable consideration of aural surgery.

I am, etc., EDWARD W. PRITCHARD.

Glasgow, August 1864.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. T following gentlemen, having undergone the necessa examinations for the diploma, were admitted me bers of the College at a meeting of the Court Examiners, on July 28th.

Arglis, Frank, Maidstone
Brend, Alfred, L.S.A., Bideford, Devon
Camley, Vaughan, Hull
Colman, Thomas John, Bristol
Dibb, Edward Napier, Sheffield
Fennings, Allen, Islington
Field, Albert, Bradford
Gentle, Peter Hume, M.D.Edin., Inverness
Hill, Philip Edward, Cardiff
Leach, John Comyns, Crediton, Devon
Lever, Edward Kelsal, L.S.A., Padiham, near Burnley
M'Mahon, James T., L.S.A., Rochester Terrace, Camden Tow
Nash, Edmund, Kensington
Newstead, Charles Vincent, Otley, Yorkshire
Philips, Philip George, L.S.A., Bayswater
Powell, Llewellyn, New Zealand
Pullan, Henry William, Epworth, near Bawtry
Sheldon, William, M.D.Edin., Stratford-on-Avon
Somerset, William Porter, Claydon, Bucks
Tayler, Francis Thomas, Deptford
Whidborne, George Herbert, Guildford Street
Woodcock, John Rostrow, Manchester

Admitted on July 29th—

Arnott, Henry, Cheltenham
Carpenter, Edward, L.S.A., Lambeth
Carreg, Griffith Llewelyn, Carnarvon
Constantinides, Petros, M.B., Canada
De Zouche, Isaiah, Pennsylvania
Ellis, Thomas Edward Charles, Bexley Heath
Evans, Alfred Paget, L.S.A., West Bromwich
Fothergill, Thomas Prince, Bedale, Yorkshire
Fraser, John Martin, M.D., Canada
Haigh, Thomas Hinchliffe, L.S.A., Huddersfield
Hingston, Charles Albert, Plymouth
Jones, John William, Bangor
Kelly, James, M.D., Clare, Ireland
Locking, Benjamin, Hull
M'Clure, Andrew Allan, M.D., Pennsylvania
Metcalfe, Fenwick, Wisbeach
Shane, Richard Lewis, L.S.A., Great Marlow
Swann, William Booth, Leeds
Talbot, Richard, Limehouse

Admitted on July 30th—

Bain, John William Devereux, Blackwall
Blewitt, Byron, Algiers
Bryant, William Hicks, Plymouth
Hallett, Thomas George Palmer, Langport
Leadingham, James, M.D., M.C. and M.A., Aberdeen
Macpherson, Robert Nasmyth
Miller, Reuben Zaccheus, Richmond
Moreton, Thomas Peyton, Leitrim
Powles, William, Strand

The following members of the College, having be *elected* Fellows at previous meetings of the Coun were admitted as such on August 8th.

Field, Octavius Adolphus, Sussex Gardens, Hyde Park; diplo of membership dated August 12th, 1836
Yeo, Gerald, Royal Navy; December 24th, 1841

ROYAL COLLEGES OF PHYSICIANS AND SURGEO EDINBURGH. (Double Qualification.) The follow gentlemen passed their first professional examinati during the recent sittings of the examiners.

Beamish, Thomas, Cork
Burt, David A., Fifeshire
Burton, John, Staffordshire

atherwood, William Alister, Donaghadee
harteris, William, Dumfriesshire
lapperton, James, Queen's County
avies, John, Dublin
ague, Samuel, Ashton-under-Lyne
ones, David Joshua, Carmarthenshire
urray, George B., Dumfriesshire
itchell, John, Forfarshire
'Brien, Richard, Ennis
atchett, Henry, Blackburn
ockett, Joseph H., Yorkshire

id the following gentlemen passed their final examations, and were admitted L.R.C.P.Edinburgh, L.R.C.S.Edinburgh.

rrowsmith, William Hixon, County Durham
ustin, Thomas Mein, Edinburgh
rown, Andrew, Biggar
uckley, Cornelius, Skibbereen
arrick, George Lion, Cronstadt
larke, Alexander, Campsie
larkson, Charles Howard, East Indies
ickson, Frank Kennedy, Edinburgh
lmslie, William Jackson, Aberdeen
epburn, William Joseph, Dublin
ughes, David Erskine, Edinburgh
ackson, Joseph, Cumberland
ames, Henry Northage Land, Derbyshire
ing, Thomas Radford, Sussex
ynock, Patrick, Roxburgh
'Craith, Edward, County Cork
'Donnell, Joseph, Roscommon
acgregor, Donald, Perthshire
icholls, Austin Huitson, Dublin
'Connor, Thomas James Haines, County Cork
urves, Henry Black, Kelso
urves, William Laidlaw, Edinburgh
obertson, Schœdde, Athlone
tone, Valentine, Brechin
hompson, William Ballin, Kerry
'alsh, David John, County Cork
heeler, Edwin, Belfast
hite, Francis Buchanan White, Perth

OYAL COLLEGE OF SURGEONS, EDINBURGH. The wing gentlemen passed their first professional examations during the recent sittings of the examiners.

eorge, John, Carrickfergus
ilmer, Robert, County Antrim
'Ilroy, James, Bushmills, Ireland
'Nicol, John Clark, Argyllshire
illiams, R. Gilbert, Kinsale
oung, Alexander, Portglennie

id the following gentlemen passed their final examations, and were admitted licentiates of the Col-

lston, James Montgomerie, Glasgow
nderson, Alexander M., Perthshire
nderson, Robert, Haddingtonshire
odkin, Christopher Patrick, County Galway
rims, James, Caithness
ampbell, William, Fort William
richton, James Smith, Arbroath
unningham, Robert Oliver, Prestonpans
aly, Frederick, County Cork
oley, James Charles, County Cork
illespie, Humphrey Carden, Cork
unn, Robert, Caithness
vine, William Skipton, Londonderry
'Andrew, Andrew Watson, Orkney
'Closkey, Joseph Richard, Londonderry
'Gregor, John, Caithness
'Leod, Kenneth, North Uist
'Neil, William, Wigtownshire
offat, John, Isle of Man
'Keeffe, Patrick, County Cork
rr, John, Glasgow
orter, Angus M'Kay, Belfast
obinson, Cuthbert Henry, Yorkshire
elford, David William, County Antrim
homson, Robert Bremner, Fochabers
horburn, David Arno Smet, Florence
urnbull, George Hogarth, Roxburghshire
right, Robert, Edinburgh

OTHECARIES' HALL. On August 11th, the following Licentiates were admitted:—

arrett, Joseph William, Eton, Bucks
owndes, James Matthew, 213, New Kent Road
ook, James Walbridge, St. Bartholomew's Hospital

the same Court, the following passed the first amination:—

unn, John Roberts, Middlesex Hospital
arshall, Frederick, King's College Hospital

ARMY MEDICAL SERVICE. The following is a list of the candidates who were successful at the Competitive Examinations in February and March last, and who have passed through a course at the Army Medical School; and shows the combined results of the examination, the place of study, and the number of marks obtained by each candidate.

Names.	Studied at	No. Marks.
Wallace, John, M.D.	Edinburgh	5064
Jobson, William, M.D.	Edinburgh	4755
Fleming, Josh., M.D.	Glasgow	4584
Atkinson, Warner	New College, London	4547
Phillips, H. H., M.B.	Dublin	4486
Orwin, Thomas William	London	4447
Hickson, R. C. C.	Dublin	4157
Bolster, Thomas G., M.D.	Dublin and Cork	4121
Melladew, H. F. L., M.D.	London and Edinb.	3981
Middleton, John, M.D.	Edinburgh	3956
Finegan, B. J.	Dublin	3880
Leslie, D. A., M.D.	Aberdeen	3789
Muir, H. S., M.D.	Glasgow	3765
Maxham, John William, M.D.	Edinburgh	3642
Hyde, Robert	Dublin	3628
Barrow, Thomas S., M.D.	London	3611
Cogan, Michael	Dublin	3594
Turner, Richard, M.D.	London and Edinb.	3578
Churchill, C. F., M.B.	Dublin	3493
Babington, T.	Dublin	3486
Ambrose, John, M.D.	Cork	3479
Atkinson, James	Dublin	3435
Anderson, John	Manchester	3402
Johnson, Francis, M.B.	Dublin	3335
Minty, Alexander, M.B.	Aberdeen	3306
Atkinson, George, M.B.	Dublin	3292
Burke, James	Dublin	3257
Gray, John, M.D.	Aberdeen	3226
Malcolm, J. V. T., M.D.	Edinburgh	3226
Kirkwood, T. M.	Dublin	3157
Watts, A. N.	London	3119
Davies, R. W.	London	3091
Wooley, George F.	Dublin	3073
Dunlop, Robert	London	3036
Stock, John N.	Dublin	3035
Ball, John Josh., M.D.	Dublin	3030
King, James George	London	2975
Lithgow, A. M. S., M.D.	Edin., Glasg. & Paris	2964
Ross, D. P., M.D.	Edinburgh	2960

APPOINTMENTS.

ARMY.

BARKER, Staff-Assistant-Surgeon J., to be Assistant-Surgeon 1st Foot, *vice* M. L. White.

BELCHER, Staff-Assistant-Surgeon J. W., M.D., to be Assistant-Surgeon Royal Artillery.

CLARKE, Staff-Surgeon J., M.D., to be Surgeon, *vice* Surgeon-Major T. R. Dyce.

CLERY, Staff-Assistant-Surgeon G. C., to be Assistant-Surgeon Royal Artillery.

CUMMING, Staff-Assistant-Surgeon K. W., M.D., to be Assistant-Surgeon Royal Artillery.

DEVLIN, Assistant-Surgeon H. W., 44th Foot, to be Assistant-Surgeon Royal Artillery.

DREW, Staff-Assistant-Surgeon E., to be Assistant-Surgeon Royal Artillery.

FASSON, Surgeon C. H., 17th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

FERGUSON, Staff-Assistant-Surgeon R. P., to be Assistant-Surgeon Royal Artillery.

FORSAYETH, Staff-Assistant-Surgeon R. W., to be Assistant-Surgeon 95th Foot, *vice* J. Watt, M.D.

GREENE, Staff-Assistant-Surgeon H. R., to be Assistant-Surgeon, *vice* H. W. Devlin.

GRAY, Staff-Assistant-Surgeon C., to be Assistant-Surgeon Royal Artillery.

GRIFFIN, Staff-Assistant-Surgeon M. J., to be Assistant-Surgeon 3rd Dragoon Guards, *vice* St. John Stanley.

HILLMAN, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.

JEPHSON, Surgeon W. H., M.D., 1st Dragoon Guards, to be Surgeon-Major, having completed twenty years' full-pay service.

JOHNSON, Staff-Assistant-Surgeon Y. H., to be Assistant-Surgeon Royal Artillery.

LEACH, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.

M'ADAM, Staff-Assistant-Surgeon J. S., to be Assistant-Surgeon Royal Artillery.

MACLEAN, Staff-Assistant-Surgeon H. H., to be Assistant-Surgeon Royal Artillery.

MAUNSELL, Staff-Assistant-Surgeon C. A., M.D., to be Assistant-Surgeon Royal Artillery.

MILLAR, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.

NICHOLSON, Staff-Assistant-Surgeon E., to be Assistant-Surgeon Royal Artillery.

Owen, Staff-Assistant-Surgeon R. J., M.D., to be Assistant-Surgeon Royal Artillery.
Parr, Staff-Assistant-Surgeon K. J., to be Assistant-Surgeon Royal Artillery.
Randell, Staff-Assistant-Surgeon H. L., to be Assistant-Surgeon Royal Artillery.
Ricketts, Assistant-Surgeon C., 7th Foot, to be Assistant-Surgeon Royal Artillery.
Rutherford, Staff-Assistant-Surgeon J., M.B., to be Assistant-Surgeon Royal Artillery.
Sainter, Assistant-Surgeon J. D., 94th Foot, to be Assistant-Surgeon Royal Artillery.
Sharkey, Staff-Assistant-Surgeon T., to be Assistant-Surgeon Royal Artillery.
Stanley, Assistant-Surgeon St. John, 3rd Dragoon Guards, to be Staff-Surgeon, *vice* J. Clarke.
Watt, Assistant-Surgeon J., M.D., 95th Foot, to be Assistant-Surgeon Royal Artillery.
White, Assistant-Surgeon M. L., 1st Foot, to be Assistant-Surgeon Royal Artillery.
Wright, G. A. W., M.D., to be Staff Assistant-Surgeon.

To be Acting Assistant-Surgeons:—

Bower, W. E., Esq.	Gaffney, J. B., Esq.
Brock, W. K., Esq.	Gaven, J. A., Esq.
Durrant, W., Esq.	Keogh, E. A., M.D.
Fenton, W. F., Esq.	Mulcahy, A., Esq.
Fitzgerald, R., Esq.	Roe, J. A., Esq.

Indian Army.

Christison, Assistant-Surg. A., M.D., to be Surgeon Bengal Army.
Cunningham, Assistant-Surg. J. M., to be Surgeon Bengal Army.
Donaldson, Assistant-Surg. J., M.D., to be Surgeon Madras Army.
Theobalds, Assistant-Surgeon J. K., to be Surgeon Madras Army.
Trimmell, Assistant-Surgeon G. F., to be Surgeon Madras Army.

DEATHS.

Andrews, T., Esq., Surgeon, at Canterbury, aged 59, on August 6.
Bloxam. On August 15th, at Ryde, Rose, infant daughter of J. C. Bloxam, M.D.
*Brigham, William, Esq., of Brigham, Yorkshire, and Lymm, Cheshire, in London, on July 27.
Brown. On August 17th, aged 17, Annie Letitia, youngest daughter of *I. Baker Brown, Esq., of Connaught Square.
Campbell, John C., M.D., late 4th Light Dragoons, at Stanley Hall, Gloucestershire, on August 9.
Comely, George, Esq., Surgeon, of Headley, Hants, at Winchester, aged 35, on August 1.
Francis. On August 13th, at Acton, aged 37, Jennette, wife of Thomas Francis, Esq., Surgeon.
Galen. On August 13th, at Aberdeen, Margaret Smith, widow of John Galen, M.D.
Gilchrist, Archibald, M.D., R.N., at Carluke, N.B., on August 4.
King, George, Esq., formerly of Bath, at the Royal Medical College, Epsom, aged 73, on August 11.
Moon. On August 14th, at Brighton, Mary Anne, wife of William Moon, Esq.
Pratt, Charles E., M.D., at Appledore, North Devon, aged 70, on July 23.
Taylor, Charles G., Esq., Surgeon, at Stratford, Essex, on Aug. 14.
Wakeman, Peter R. W., Esq., Surgeon, at Bryn Hyffryd, Llangattock, Brecknockshire, aged 73, lately.
Walker. On August 15th, at Manchester, aged 38, Elizabeth, wife of Robert Walker, M.D.
Wood. On July 8th, at Halifax, Harriet J., wife of John G. Wood, M.D., Staff-Surgeon-Major.

British Pharmaceutical Conference. The meetings for the present year will be held at Bath, on September 14th.

Infanticide in London. Official reports shew that during the year 1861, there were held 1,103 inquests on children which had died violent deaths.

The Outrage on Dr. Rowe. J. Brice and J. Scott have been sentenced to eighteen months' imprisonment with hard labour for their brutal attack upon Dr. Rowe of Liverpool. They were found guilty of wounding with intent to do grievous bodily harm.

Visit of the Queen to Netley. On the 13th inst., the Queen visited the Royal Victoria Hospital at Netley, accompanied by his Royal Highness Prince Louis of Hesse, Earl Russell, etc. Her Majesty was received at the hospital by Colonel Wilbraham, the Commandant; the principal medical officer, and the staff of the establishment. The Queen went through the different wards, and inspected the wounded men lately come home from New Zealand.

Bequests. The late Dr. Don of Bearehill, beques £1,000 towards raising a hospital at Brechin, pro another £1,000 were raised. Lord Dalhousie has mised £100, and Sir J. Campbell £100 towards second thousand. The late Andrew M. Drumm Esq., has left by will £100 to the South Devon East Cornwall Hospital, Plymouth.

Effect of Oil of Wormwood. M. Marcé lately given an account of some experiments, v prove that *oil of wormwood*, in doses of from thr eight *grammes*, produces poisonous, but not effects. Trembling, stupor, and insensibility are duced, with epileptic convulsions and stert breathing. The experiments throw some ligh the nervous symptoms which follow the excessiv of *absinthe*.

The Nightingale Fund. From the annual r it appeared that fifteen probationers were under t ing at St. Thomas's Hospital for nurses. Altoge thirty-four probationers had left the school to service in various hospitals and infirmaries. Th mand for trained hospital nurses had increased was even greater than could be supplied. At K College Hospital, under the superintendence o authorities of St. John's House Training Instit for Nurses, the school for training midwifery n to be employed exclusively among the poor had satisfactory progress. Ten women had completed training during the past year. These were emp nearly all in country parishes, with the sancti the resident clergy and medical men, and either u their immediate direction or that of some res lady.

Queen's College, Birmingham. The acade year terminated on July 31st. Forty-two stu had been registered during the past session. honoraria have been awarded to the following stud *Anatomy*. Thomas, medal and certificate; Sa second certificate. *Anatomical Demonstrations.* mas, medal and certificate; Sawyer, second certf *Chemistry*. Snow, medal and certificate; Beec cond certificate. *Medicine and Pathology*. Ma medal and certificate; Bousefield, second certif *Physiology*. Thomas, medal and certificate; Sa second certificate. *Surgery*. Mackey, Bousefield medals and certificates. *Summer Session:—Bo* Snow, medal and certificate; Beech, second c cate. *Practical Chemistry*. Snow, medal and c cate; Beech, certificate. *Forensic Medicine*. Th medal and certificate; Bennett, second certif *Materia Medica*. Sawyer, medal and certifi Witherington, second certificate. *Midwifery*. yer, medal and certificate; Witherington, certific

The Flushing Lunacy Case. At the recent wall Assizes, Samuel Porter was placed at the b receive sentence in regard to the charge of ha cruelly ill-used his half-witted brother. Mr. Ju Byles said that the circumstances of the case such as one could scarcely believe could have occ in England, that a human being could have kept eleven years in a village containing a cons able number of inhabitants, in such a state of and neglect as one would scarcely keep a commo mestic animal; that for years he should never been seen, and his existence be almost unkn and that the gentleman, by whose exertions matter was brought to light, should have had siderable difficulty in ascertaining his existence the nature of his custody. The jury had comme the prisoner to the merciful consideration of Court. He (Mr. Justice Byles) understood the gr of this recommendation. It was proved that the ply of food to the lunatic was abundant; his app was probably more like that of an inferior a

an that of a rational human being. Everything ed by the family was freely and liberally supplied him; he had a full share of all. Also there was no ggestion or reason to believe that any violence or elty had been used towards him. His Lordship cluded by passing a sentence of nine months' im- sonment.

CALABAR BEANS POISONING. Last week in Liver- ol, sixty children were poisoned by eating some labar beans. It appears that a little girl was ten to the Southern Hospital by some women. e child was in great suffering, and the surgeons the hospital were informed that she had been eat- some beans, which she had gathered from a heap rubbish. Dr. Cameron, and Drs. Wollaston and ans, immediately attended the child; but before y had time to administer the remedies considered essary for her, about twenty other persons arrived h children in their arms suffering in a similar way. e medical gentlemen found that the children were dently suffering from a narcotic irritant poison. e poor children seemed to be suffering acutely from n, and many of them were retching violently. om 1 to half-past 3 o'clock about forty children re taken to the hospital. One of them, named chael Russell, six years of age, died about ten min- s after he was admitted. This is the only case, up the present, where fatal results have occurred, but eral of the children are not by any means out of nger. The consequences would, no doubt, have n much more serious had it not been for the prompt edies applied. The symptoms which the children ibited were somewhat peculiar. The children were e, very sick, and exhausted, and when they at- pted to walk they staggered about as if they were nk, although they had the use of all their senses, poison which they had taken evidently not pro- ing that stupefying effect which results from the ing of opium. Their pulsation was at first very ; some of them became feverish and drowsy, and ir eyes were bright and protruding from the sockets, l in some of the worst cases the pupil of the eye s contracted. The quantity of the beans which the ldren stated they had eaten produced somewhat erent effects. In one case, where a girl had eaten lve, her recovery was early accomplished; whereas he case of another child, who stated that she had y eaten two beans, it was for some time feared that al results would follow. The child who died ate, it stated, only six of the beans. The children found beans in a load of rubbish. The little things ate ne of the beans, as they had not an unpleasant te. The news of the discovery quickly spread ong the children in the locality, and a number ned in the search and partook of the beans. Sub- uently the rubbish was riddled, when upwards of ushel of the beans was obtained. The rubbish is d to be ship sweepings and ballast taken from a sel which has just arrived from the West Coast of ica. (*Liverpool Mercury.*)

ARMY MEDICAL SCHOOL. The following were the stions proposed at the close of the eighth session of Army Medical School, Royal Victoria Hospital, tley, between July 26th and August 3rd, 1864. *Written Questions.* I. *Military Surgery.* 1. Men- n the several purposes for which the convex and cave spectacles are supplied in the regimental ical and ophthalmoscopic case of instruments; and cribe the method of using them, in conjunction h the test-types, for distinguishing emmetropia, opia, hypermetropia, whether simple, or compli- ed with presbyopia or amblyopia. Explain the ory on which the diagnosis in each instance is ablished. 2. Describe the nature, effects, and proper treatment of osteo-myelitis after gun-shot injuries of long bones, or of amputations consequent upon them. 3. Describe accurately, step by step, the operations of excising the shoulder- and elbow-joints, each by a single linear incision, as practised in the *post mortem* room. II. *Military Medicine.* 1. From what date may cholera be said to have engrafted itself on the epidemics of the soil of India? What are the conditions which appear to act most powerfully as predisposing causes of the disease? What influence do high or low situations respectively exert (*a*) on the proportionate mortality of those attacked; (*b*) on the proportionate number of those seized. Explain in what way excessively long marches appear to increase the virulence of an epidemic of this disease in soldiers, native or European, in India. Give an accurate description of the premonitory and actual symptoms (*a*) in the slight, (*b*) in the severe forms of the disease; and describe the effects of its presence on the blood and secretions. What are the chief points to keep in view in our endeavour to exclude this disease from garrisons, camps, and cantonments; and to mitigate the severity of an epidemic, when it appears? Give a description of the most rational treatment (*a*) in the premonitory; (*b*) in the confirmed; (*c*) in the state of febrile reaction; particularly stating in what stage and to what extent opium is useful and safe. 2. What is the average weight of the liver, in health, in a man between the ages of 18 and 40? Describe accurately its normal position and limits. Explain the most common causes of abnormal position of the gland. Give the precautions necessary to accuracy in the use of percussion and palpation in investigating hepatic disease. 3. Give as complete an account as you can of the therapeutic uses and value of ipecacuanha in tropical medicine. III. *Military Hygiene.* 1. What are the chief cases and effects of impurity of air in the habitations of men? 2. How would you determine the amount of carbonic acid, watery vapour, and suspended matters, in the air? 3. Enumerate the principal adulterations of wheat flour, and state how you would determine (*a*) the quality of the flour; (*b*) the presence of pea flour, oats, and maize. 4. What has been the medical history of the West Indies, as far as Europeans are concerned? State explicitly what you would do in a West Indian station, if there occurred (*a*) a considerable yearly number of diarrhœal and dysenteric cases; (*b*) a considerable number of admissions from typhoid fever; (*c*) a number of admissions from paroxysmal fever; (*d*) occasional outbreaks of yellow fever. IV. *Pathology.* 1. Give a classified account of the lesions in the kidney which were demonstrated during the past session in the practical room. 2. Describe the nature and probable origin of the parasitic cyst in the liver, which proved fatal in the case of Private —— ——, as shown at the *post mortem* examination of June 28th, 1864. 3. Mention the period of incubation, and describe the course and progress, of an infecting venereal sore; and contrast your account with similar details relative to venereal sores which do not infect the system. *B. Practical Examination.* I. *Military Surgery*; and II. *Military Medicine.* Make an examination of the case of —— ——. Write concisely a history of the case, your diagnosis, prognosis, the probable effects of treatment, and the influence of the disease or injury on the man's fitness for service as a soldier. (Twenty minutes allowed for the examination, half an hour for the description.) III. *Hygiene.* Examination of two specimens of water. Examination of adulterated milk and adulterated beer. Microscopical examination of adulterated wheat flour. IV. *Pathology.* Description of various preparations and microscopic specimens, and examination of secretions.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A CORRESPONDENT writes:—"I am 35 years of age. and have been in the medical profession all my life, but have never yet had an opportunity of obtaining a diploma. My friends are very anxious that I should graduate now; and I wish to know whether I can obtain a degree without going through the tedious formula of three years attendance on lectures. I may say that I am well up in practical surgery and midwifery."

THE LATE MR. EDGAR BULL.—The Rev. H. Bromfield gratefully acknowledges the receipt of the following donations for the widow and children of the late Edgar Bull, Esq., Surgeon, of Blockley; and earnestly solicits further assistance:—E. H. Evans, Esq. (Monmouth), 2s. 6d.; A Friend (Paris), 2s. 11d.; Dr. Prichard (Abington Abbey), £3:3; W. Percival, Esq. (Northampton), 10s. 6d.; Dr. Ramsay (London), £1:1; Mrs. Spencer Thomson (Burton-on-Trent), 5s.; Dr. Dale (Bayswater), 5s.; Edwin Bartleet, Esq. (Chipping Campden), £1:1; From "Shaw" (Oldham), 10s.; Dr. Hildige (Dublin), £1; Dr. Bull (Hereford), £1:1; Dr. Hunter Finlay (Glasgow), 2s. 6d.; B. Brooks, Esq. (London), 5s.; Admiral Collier, C.B. (Blockley), £1; Thomas M. Kendall, Esq. (King's Lynn), 10s.; Dr. Jeaffreson (London), £1:1; Dr. Oldham (London), £1:1; Dr. Herbert Davies (London), £1:1; Dr. Risdon Bennett (London), £1:1; Peter Gowland, Esq. (London), £1:1; John Hilton, Esq. (London), £1:1; J. L., Esq. (London), £1:1; Dr. Dadley (London), £1:1; Drs. Sewell and Crosby (London), £1:1; Dr. Sparke (London), £1:1; Cambria (Boston), 10s.; D. F. Stevens, Esq. (St. Ives), 10s.; C. F. G. & J. M., 5s.; J. J. Mason, Esq. (Stratford-on-Avon), £1:1; P. E. (Berkhamstead), £2.

Blockley Vicarage, Moreton-in-Marsh, August 1864.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. A. T. Brett (Watford), 10s. 6d.; G. Harday, Esq. (Rugby), 5s.

Amount previously announced, £52:8. Received at the *Lancet* office, £3:11. I am, etc., ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 17th, 1864.

COMMUNICATIONS have been received from:—Mr. GEORGE NAYLER; Dr. G. BUCHANAN; Dr. KINGLAKE; Dr. C. KIDD; THE DIRECTOR-GENERAL OF THE ARMY MEDICAL SERVICE; Mr. T. P. TEALE, JUN.; Dr. FALCONER; Dr. B. W. RICHARDSON; Mr. J. VOSE SOLOMON; Mr. JAMES ROBERTSON; Dr. J. THOMPSON; Mr. JOHN GRANTHAM; Mr. R. B. CARTER; Mr. G. E. STANGER; Dr. G. H. PHILIPSON; Dr. FAYRER; Mr. T. MARTIN; Dr. GIBB; Mr. WEBB; Dr. FOWLER; and Dr. C. HARRISON.

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Profitable Investment.—A few Gentlemen now forming an Association, under the law o limited liability, for the Advance and Investment of Money, requir others to unite with them. Persons who are disposed to embar from £50 to £500 in such an undertaking, are invited to communicat with P. J., care of Messrs. STREET Brothers, 11, Serle Stree Lincoln's Inn Fields, W.C.

St. George's Hospital Medica SCHOOL.—SESSION 1864-5.—The WINTER COURSE o Instruction will commence on Monday, October 3rd, with an Intr ductory Address by Dr. OGLE, at 2 p.m.

Physicians—Dr. Page, Dr. Pitman, Dr. Fuller, Dr. Barclay.
Assistant-Physicians—Dr. Ogle, Dr. Wadham.
Consulting Surgeons—Mr. Cæsar Hawkins, Mr. Cutler.
Surgeons—Mr. Tatum, Mr. Hewett, Mr. Pollock, Mr. Henry Lee.
Assistant-Surgeons—Mr. Holmes, Mr. Brodhurst.

LECTURERS.

Descriptive and Surgical Anatomy—Mr. Holmes and Mr. Rouse.
Physiology and Comparative Anatomy—Dr. Wm. Ogle.
Chemistry—Dr. Noad, F.R.S.
Medicine—Dr. Pitman.
Surgery—Mr. Tatum.
Pathology—Dr. Ogle and Mr. Henry Lee.

On the payment of £100 a pupil becomes perpetual to the Practi of the Physicians and Surgeons and to all Lectures, may compete f all Prizes, Exhibitions, and for the office of House-Surgeon, and m become Clinical Clerk and Dresser, for two periods of three mont each.

On the payment of £90—£45 paid at the commencement of t first Winter Session, and £45 the second Winter Session—a pu is admitted to the Hospital Practice and Lectures required by t various Examining Bodies.

Gentlemen can enter to the Hospital Practice and Lectur separately.

The Hospital contains 350 beds. Clinical Lectures are deliver by the Physicians and Surgeons every week.

A MATERNITY DEPARTMENT, for the delivery of married lying-women at their own homes, is established at the Hospital, with Ward for the reception of women suffering under diseases peculi to the sex.

The William Brown Exhibition, of Forty Pounds per annum, te able for three years, will be "bestowed on the candidate who sh show the best general fitness for the exercise of the Medical Prof sion, and whose moral conduct shall in all respects be satisfactor

The following Prizes will be awarded at the termination of t Session:—

Sir Charles Clarke's Prize for Good Conduct.
The Thompson Medal.
Sir Benjamin Brodie's Clinical Prize in Surgery.
The Lewis Powell Clinical Prize in Medicine.
The Henry Charles Johnson Memorial Prize in Anatomy.

A general Examination will be held at the end of the Summ Session, and a certificate of proficiency will be given to each pu who passes to the satisfaction of the Examiners, and the followi Prizes to the most distinguished, viz.:—

A Prize of Ten Guineas to pupils in their first year.
A Prize of Ten Guineas to pupils in their second year.
A Prize of Ten Guineas to pupils in their third year.

Further information may be obtained from Dr. Barclay, t Treasurer of the School, from any of the Lecturers, or from M Hammerton, at the Hospital.

St. Bartholomew's Hospital an MEDICAL COLLEGE.—The WINTER SESSION w COMMENCE Oct. 3, with an Introductory Address by M Callender, at 5 o'clock p.m.

LECTURES.

Medicine—Dr. Black and Dr. Kirkes.
Surgery—Mr. Lawrence and Mr. Coote.
Descriptive Anatomy—Mr. Skey and Mr. Holden.
Physiology and General Anatomy—Mr. Savory.
Chemistry—Dr. Odling.
Demonstrators of Anatomy—Mr. Callender and Mr. Smith.
Demonstrator of Morbid Anatomy—Dr. Andrew.

SUMMER SESSION, commencing May 1, 1865.

Materia Medica—Dr. Farre.
Botany—Dr. Harris.
Forensic Medicine—Dr. Martin.
Midwifery—Dr. Greenhalgh.
Comparative Anatomy—Mr. Callender.
Practical Chemistry—Dr. Odling.

The Hospital contains 650 beds, and Clinical Lectures a delivered—On the Medical Cases, by Dr. Farre, Dr. Black, and I Kirkes; on the Surgical Cases, by Mr. Lawrence, Mr. Paget, and M Coote; and on Diseases of Women, by Dr. Greenhalgh.

Collegiate Establishment—Students can reside within the H pital walls, subject to the collegiate regulations. Some of t teachers connected with the Hospital also receive students to resi with them.

Seven Scholarships, varying in value from £20 to £50, are award annually. Further information respecting these and other deta may be obtained from Dr. Edwards, Mr. Callender, or any of t Medical or Surgical Officers or Lecturers; or at the Anatomi Museum or Library.

Clinical Lecture

ON

SCARLATINA AFTER OPERATIONS.

DELIVERED AT

ST. BARTHOLOMEW'S HOSPITAL, 1863.

BY

JAMES PAGET, Esq., F.R.S.

Mr. Paget, referring, in the course of a clinical lecture, to a case of lithotomy recently under his care in the hospital, said:

The boy lately operated on for stone had scarlatina; at least, an eruption exactly like that of scarlatina appeared over nearly the whole surface on the day after the operation, with general febrile disturbance. Two days later, it began to fade; and in a few days had disappeared, and left him in about the same state that we may suppose he would have been in if no such illness had occurred. All went on well for a month; the wound was nearly healed; and he was deemed convalescent, when, perhaps in consequence of exposure to cold, he had severe pain in passing urine, and evacuated with it a considerable quantity of blood from the kidneys, and tenacious mucus. Two days after this, he had sore-throat; then an eruption, like scarlet fever, again appeared: it continued for three days, and was succeeded by desquamation. The urine in about ten days had gradually regained its natural condition, and he again seemed well. But now whooping-cough set in, and again retarded, though it did not finally prevent, recovery.

If I had never seen a case similar to this, I should have hesitated to call it scarlatina; for the symptoms of the first attack were very incomplete, and those of the second were unusual and disorderly. But I believe the case was really one of scarlatina, modified by the circumstances in which it occurred; and that it may be reckoned with other similar cases in illustration of some interesting general principles.

About this time last year, when scarlatina was very prevalent, I saw six cases after operations in private practice; I have notes of four more that occurred either before or since; and I have heard of many more. By some, these cases may be supposed to have been only casual coincidences of scarlatina with surgical diseases; but, if they were so, we ought to find a proportionate number of cases among surgical patients not operated on. But this does not happen. In private practice, I do not remember to have seen scarlatina supervene in any surgical cases except those in which operations had been performed; and, in hospital practice, I doubt whether it is much more frequent among all the other patients taken together than it is in those who have been operated on. I cannot, therefore, doubt that there is something in the consequences of surgical operations which makes the patients peculiarly susceptible of the influence of the scarlatina poison. And, together with this susceptibility, we may observe that the disease undergoes in them certain modifications, especially in the period of incubation, which is much shortened. In all the ten cases that I have noted, the eruption appeared within a week after the operation; and in eight of them, within three days after it; namely, in two cases, on the first; in three, on the second; and in three, on the third day. Other deviations from the typical course of scarlatina were, that in some of the cases the eruption came out over the whole surface at once, and on the limbs more fully than on the face and chest: in some, there was no sore-throat; in others, no desquamation.

The cases are not numerous enough to determine the import of these variable deviations from the type of scarlatina; but that in which all of them, whether complete or incomplete in other characters, agreed, namely, the very early period after the operation at which the rash appeared, deserves particular notice. It adds to the evidence, that the appearance of scarlatina is in some way connected with the early consequences of operations. If it were not so, and if patients after operations had only the same liability as others, there would be no reason why the eruption should appear early, rather than late, after the operation; but, so far as I have seen, it always appears early—always within the first week.

Two explanations may be offered of this fact. Either the condition induced in a patient by a surgical operation is one that gives a peculiar liability to the reception of an epidemic or contagious morbid poison, and any one of these, being imbibed immediately after the operation, produces its specific effect in much less than the usual period of incubation; or else those who suffer with scarlatina within a few days after operations had previously imbibed the poison, but would not have manifested its effects so soon, if at all, unless their health had been exhausted or disturbed. The second of these explanations appears rather the more probable; for it is in accordance with what has been observed when many persons have been exposed to the contagion of fever, and some have been afterwards exhausted by fatigue or otherwise. These have had fever; while those who rested after exposure have escaped it.

But, whatever explanation may be given, the fact of peculiar liability to scarlatina after operations seems certain, and may be important in relation both to the pathology of the disease and to the risks of surgery. In one of the cases which I have seen, it was fatal; in another, it was followed by fatal pyæmia: and I think it not improbable that, in some cases, deaths occurring with obscure symptoms, within two or three days after operations, have been due to the scarlet fever poison hindered, in some way, from its usual progress.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

TAUNTON AND SOMERSET HOSPITAL.

CASE OF SPONTANEOUS GANGRENE: RECOVERY.*

Under the care of H. J. Alford, M.B.Lond., Surgeon to the Hospital.

William Windsor, aged 10 years, living at High Ham, in this county, was admitted into the hospital on November 27th, 1863. His occupation was that of a labourer. On admission, he gave the following history of his case.

His father was alive and healthy. His mother died three years ago, of what he called a tumour. He had one brother alive and healthy. Up to the winter of 1862, he had always enjoyed good health, although liable to suffer a good deal from the cold, when exposed in the fields "keeping" cows. His appetite was always good; he had meat daily, and baker's bread.† He had never taken any stimulants. He was always subject to chilblains.

Last winter, the helix and lobule of his left ear mortified. In time, the dead portions separated by ulceration, and the wounds so produced healed up. The right ear was subsequently similarly affected. Two black sloughs also formed on the left foot, one spot being below the external malleolus, and the other at the base of the fourth toe, over the head of the metatarsal bone. These sloughs separated, and the places healed. Then his eyes became affected during the spring of 1863; the left eye was particularly so. Judging from their appearance when he came into the hospital, he must have suffered from corneitis, if not also from iritis. The state of his eyes confined him to the house for a good portion of 1863; and he was to have proceeded to Bristol, to be under the care of Mr. Prichard, in order to have his eyes cured, had not a more urgent train of symptoms set in, for which he was at once sent to our hospital. Just one month before his admission, his left foot again became affected as before. A week after this, the index finger of his left hand became gangrenous; and then the other fingers and the thumb also became involved. A week before his admission, his right foot was similarly attacked; and, on the day of admission, the middle finger of his right hand showed signs of mortification.

On November 30th, I carefully examined him, and found his condition to be as follows. In general appearance, he was tolerably robust, of average size for his age, but of a somewhat scrofulous appearance. The hair and eyes were dark; the cheeks and lips pink. There was no anæmia. The lungs were healthy. A slight murmur was heard with the heart's systole over the aortic orifice. The tongue was clean and normal. His incisor teeth had a peculiar "pegged" appearance, indicative of a syphilitic taint. With regard to the eyes, I found inflammation with considerable opacity of the left cornea, and partial opacity of the right cornea. The edge of the helix and lobule of the right ear were sphacelated. The edge of the whole pinna of the left ear was notched, showing the seat of former mischief; but was now healed. There was an enlarged gland below the left ear, of the size of a nut. With regard to his hands, I may first state that both radial and ulnar arteries appeared to be normal. The pulse was easily felt at the wrist, and was perfectly compressible, presenting, in fact, no deviation from the normal standard. The two phalanges of the thumb of the left hand, three of the index and middle, two of the ring, and three of the little finger, were dried up, black, and completely sphacelated. There was no distinct line of demarcation; but the black mortified portions seemed to tone down into the surrounding healthy structures. There was a large irregular gangrenous patch on the back of this left hand, of nearly the size of a crownpiece. The ungual phalanx of the middle finger of the right hand was also dead. On the left foot there was a black oval patch beneath the external malleolus, measuring one inch in length, by half an inch in breadth. At the root of the third and fourth toes, over the heads of the metatarsal bones, were two circular gangrenous patches. The pulsation was easily felt in the posterior tibials. On the right foot, there were two small patches over the insertion of the tendo Achillis, on the outer side of the heel posteriorly; and a very small black slough on the great toe at the root of the nail, and on the third toe inferiorly. There was no œdema. The superficial veins of the legs, thighs, and abdomen were somewhat slightly enlarged. The skin was cool. His appetite was good. His bowels acted regularly. He had no headache, slept well, and complained of no pain. When, however, a part was about to mortify, he said that he felt a coldness, tingling, and deadness in the portion about to be affected, which first turned of a bluish purple, and then black. There was no sign of inflammatory action in any of the parts affected.

Nov. 30th. A line of demarcation was becoming slightly apparent. He was ordered house-diet and some ale.

Dec. 1st. There was no further increase in the gangrene. He was ordered syrup of the iodide of iron, and cod-liver oil.

Dec. 4th. The line of demarcation on the right hand became more decided.

Dec. 5th. A slough separated from the helix of the left ear, leaving a healthy wound. Sloughs were separating from the left foot. Lines of demarcation in the fingers of both hands were becoming more marked.

Dec. 10th. A slough separated from the right foot, leaving a healthy surface underneath. A slough separated also on the back of the left hand. Dead portions of tissue seemed also to be separating from the proximal ends of the fingers of the left hand.

Dec. 24th. I found this morning the great toe of the right foot quite cold, and of a bluish purple colour. The rest of the foot was warm, and of natural colour. Cotton wool was kept constantly around the hands and feet.

Dec. 27th. On my visit this morning, I found the toe just mentioned restored to its natural condition. The sores on the right foot looked healthy, and were healing. The boy's general appearance was much improved. The opacity of each cornea was much diminished.

Jan. 4th, 1864. A small portion of dead skin separated from the little finger of the left hand, leaving a granulating surface underneath, which was dressed with solution of nitrate of silver. He got up and went into the convalescent room. The wounds on the foot were nearly healed. The blood, being examined under the microscope, showed no excess of

* The following case was brought before the members of the West Somerset Branch of the Association, at their *conversazione*, on January 20th, 1864.

† I have since heard (August 1864) that he was treated and fed very badly.

white corpuscles. The red corpuscles appeared quite healthy.

Jan. 10th. Mr. Gibson, the house-surgeon, removed some portions of sloughs from the fingers with scissors; which sloughs consisted of cuticle and cutis vera. The remaining wounds appeared healthy.

Jan. 18th. The mortified portion of the forefingers was rapidly separating.

Jan. 28th. The second and third phalanges of the forefinger were removed at the joint, by cutting with scissors through the tendon. There was no hæmorrhage.

Jan. 29th. The last phalanx of the little finger was removed in a similar manner.

Jan. 30th. A portion of the last phalanx of the thumb was removed, and the tip of the ring finger of the right hand.

Feb. 1st. The wounds left by the removal of the dead parts were quite healthy, and disposed to heal. His appetite was good; pulse quiet; and he was soon afterwards discharged quite well.

BIRMINGHAM GENERAL HOSPITAL.

HEMIPLEGIA, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

[*Concluded from page* 213.]

SUMMARY. The result of an examination of the cases which I have presented in this paper will not, I think, prove unfavourable to Dr. Jackson's opinion; it will also present some rather remarkable contrasts between hemiplegia as it exists on one or the other side of the body.

I have narrated twenty-two cases of *right hemiplegia*. Of these, all but one (19) in which the data are incomplete, evidently depend upon organic disease. The number includes four cases of rapid death from the immediate effect of the disease, and two others in which death took place by a slower process. The paralysis was complete, or nearly so in fifteen cases; in four only was it incomplete or temporary; in three its amount was uncertain. Moreover, in nine cases (beyond the six fatal ones) the effects of the hemiplegic attack were still apparent at various periods, from three months to sixteen years. Once more in all the cases the hemiplegia was pure, the opposite side being quite unaffected.

Sixteen cases are reported of *left hemiplegia*. Of these, fourteen depended upon organic disease; two did not. Two cases of rapid death are included, and two of death by a slower process. Of the whole number, paralysis was complete in nine, incomplete in five, and in two others did not depend upon disease in the nervous centres. In three cases, the effects remained from three months to twenty years.

Of the fourteen cases of true organic hemiplegia, it is remarkable that there are seven in which, during the attack, some indication was manifested of affection of the opposite side, without including those in which, as in the preceding group, evidence of more general nervous disease had been afforded, before the attack which is the subject of present observation occurred; this implication of the right side has, of course, an important bearing upon the immediate subject of this paper.

With respect to the function of speech; taking first the twenty-two cases of right hemiplegia, it is stated to have been affected in every case but two. Of these two, in one (15) the paralysis occurred in early infancy; the effect remained in imperfect development of the right limbs, and of late in the occurrence of fits of epilepsy, during which speech was considerably affected. In the other case (21), the paralysis was complete, or nearly so, but the faculty of speech was preserved.

Moreover, the affection of speech was of a most decided character in seventeen cases; speech was extinguished completely in fifteen; in three, the degree of impairment is not clearly indicated. Once more a very close relation was observed in fifteen cases between the extent to which speech was affected, and the amount of paralysis; in one (3), an exceptional case, the impairment of speech was out of all proportion to the paralysis; in the remaining four cases, the impairment of speech is not comparable with the paralysis from deficiency in the details.

If now we compare with the preceding cases, the sixteen cases of left hemiplegia, we find in two, absolutely no interference with speech, and in three others, probably none, as no reference whatever is made to articulation in the reports. In a sixth case, the paralysis took place in early infancy, but, though the paralysis remained after a lapse of twenty years, the patient talked perfectly.

Ten cases remain; in all, some impairment of speech is noted; from these, two may be at once eliminated, as not depending on a central cause; one, if not both, were hysterical. Of the eight cases which remain, in only two was the power of speech quite lost, and in one of these, speech was restored within twenty-four hours; in another case, impairment of the function of speech was considerable; in all the others it was slight.

In further analysing these eight cases of left hemiplegia depending on organic disease, in which speech was impaired or lost, it appears that in five, there was evidence of the *right* side of the body having been more or less implicated in the attack; in one of these (24), the cause of the affection of the right side was apparent after death, in disease of the cerebral arteries. In the sixth case (in which articulation was extinguished at the time of the paralytic attack), speech had remained imperfect from a preceding attack of *right* hemiplegia, occasioned by an apoplectic effusion; in the seventh (in which speech was slightly affected), a former attack of right hemiplegia had occurred from a like cause, though articulation is not alluded to in that connection; and in the eighth (in which articulation was much impaired), there was evidence of general decay of nervous power, tending towards general paralysis.

It is further to be remarked, that among the cases in which articulation was *slightly* impaired, is to be found one of extensive softening of the hemisphere, one of softening of the corpus striatum and thalamus, and one in which the paralysis remained twelve weeks afterwards, and was attended with atrophy of the paralysed muscles. Also that of the five cases in which no impairment of speech existed, or none is reported, there is one in which repeated attacks of complete paralysis of the arm took place, during six months; one in which two attacks of hemiplegia of the left side occurred during two months; another, in which paralysis remained eight months after, with atrophy of the muscles; and a fourth, in which paralysis continued at the end of seven weeks.

Speech is a compound function; articulation is not speech, and speech implies more than articulation. It comprises two elements, a mechanical and a mental.

The former element—the mechanical—requires the healthy action of the different muscles which move the glottis, the tongue, the palate, and the lips; it depends, therefore, upon the ordinary laws which govern all voluntary movements, viz.: a connection between the muscles and the centre of voluntary motion, through the medium of the nerves, and the in-

tegrity of that centre itself. *The second element*—the mental—implies the faculty of remembering the words which are appropriated to certain ideas, and of associating them with those ideas; consequently it necessitates an active condition of the intellectual centre, or as is more probable, of a particular part of that centre, and perfect communication between the intellectual centre and the centre of voluntary motion. As a particular function only of the intellect is involved in that element of speech now under consideration, this element may be impaired whilst apprehension is quick, and the intellect, to all external appearance, is undisturbed, as is found to have been the case in some of the preceding cases.

I recall a striking instance of speech being impaired through defect of the mental element, which occurred in the practice of my father. The patient, at the head of a large manufacturing establishment, had been very much absorbed for a considerable time in a very laborious undertaking of making an inventory of the goods, and his attack was attributed to excessive labour. To every question he made the same reply, "list complete"; and every desire was expressed by the same words. My father found him one day in extreme distress, from his inability to convey some information to his wife; his excitement grew extreme, and even threatened his life; till his wife asked if his life assurance premium were paid; he was relieved instantly; the premium was due on that day. I have not included this case among the preceding, as I cannot obtain sufficiently ample particulars; the widow certainly believes the paralysis to have been on the *left* side.

But in comparing several cases of loss of speech in cerebral disease, we may sometimes observe certain differences in the mode in which defect in the mental element manifests itself, and such differences seem to intimate that this element is composed of more than one subordinate part. In one case, as in the instance quoted, although the patient fails to recall the appropriate word, or expresses different ideas by the same word, he at once recognises the proper word when it is presented to him. Others, again, as in (5), appear to have entirely lost the faculty of associating any word with a particular idea, and are therefore unable to recognise the appropriate expression when repeated to them; whilst others, again, are unable to connect the sound with the combination of letters which that sound represents; such might have been the case in (2), for the patient never attempted to imitate any word she was directed to speak. An instance of a curious form of defect of speech from loss of memory is given by Van der Kolk (*On the Spinal Cord and Medulla Oblongata*, p. 165, note); in addition to loss of speech, the patient "was unable to read, even with large printed letters; and he was equally unable to write; the letters he placed upside down, or made illegible figures, although as an experienced merchant he had been able to read and write very well."

Defect of memory, as a cause of impaired speech, opens a wide field for deeply interesting investigation. Among other remarkable phenomena, is the occasional limitation of the defect in question to a particular class of words. Thus, instances have occurred of the loss of a particular language after recovery from the immediate effects of a blow on the head, which had caused insensibility. In a foot-note to a paper in the *Medical Times and Gazette*, Dr. Althaus, speaking of slight symptoms of poisoning produced in himself by woorara, adds, "Although the consciousness was not impaired, I had, for two minutes perhaps, lost the knowledge of the English language, in which I had just conversed with a friend of mine who happened to be present at the occasion; and I was obliged to entreat him to speak German to me." He quotes mention of a similar circumstance from Sir H. Holland's *Chapters on Mental Physiology*, p. 160.

There is, however, a further condition necessary to be fulfilled, for the completeness of the *mechanical* element in speech, viz.: the arrangement and combination of the different muscular movements involved, so as to ensure their proportionate as well as harmonious contraction. This, the function of co-ordination, is required by the muscles of articulation as much as by those which perform the different movements of the body and limbs; in the latter case, as is well known, its performance has been assigned to particular portions of the encephalon, and especially to the cerebellum; but Van der Kolk has suggested that this co-ordination of muscular movement is more probably effected by particular combinations of the ganglionic cells in which the nerve tubules terminate; that certain of these ganglionic cells are formed into groups through the medium of the filaments emanating from their poles, and thereby particular muscles, or even portions of muscles, are combined into groups, which thus are "prearranged in the several combinations of the groups of ganglionic cells, and ready to be excited by any stimulus, whether voluntary or reflex, so that they are produced just as the harmonic tones of a piano under the fingers of the player."

In the case of the movements involved in articulation, however, the same author, with some apparent inconsistency, places the function in question in particular ganglia, the corpora olivaria of the medulla oblongata.

It is difficult, in many cases of impaired speech, to assign to the mechanical and the mental element the proper proportion of defect; such is especially the case when speech is quite suspended; the difficulty, however, relates in greater proportion to the mental than to the mechanical element. In many of the preceding cases, the fault plainly lies in articulation alone, speaking being freely attempted, but pronunciation being imperfect, or articulation indistinct. Yet even in some of these, an infusion of the mental element may be discovered; in Case 13, for instance, in which the fault lay mainly in articulation, the patient occasionally misplaced words. Some very characteristic instances of each kind of defect are found among the preceding cases of right hemiplegia.

In the cases rapidly fatal, defect of each element of speech is present in a large amount; consciousness is greatly dulled, and paralysis is considerable, the patient often being unable to protrude his tongue; 8 and 9 are instances, although, be it observed, in each there were sufficient intimations of intelligence to render it probable that the patients would have spoken had they possessed the power.

Of purely or chiefly mechanical defect, 1, 3, 11, 13, 17, are good examples; the patients endeavoured to talk, and failed merely through imperfect formation of their words. Of these cases, 3 is a remarkable instance, the more so as no paralysis of the tongue was apparent.

Patients 4, 5, afford illustrations of defect in the mental function involved in speech; the former, at first, articulated distinctly, but "was unable to find words, so that he came to a stand immediately after having begun a sentence;" there was, moreover, reason to distrust the correctness of the signs which he made. The latter affords a striking example of the independence of the mental element in speech; for by applying the test of writing, she was found as unable to express herself on paper as by the mouth. In neither case was there any deviation of the tongue.

Finally, in 2, 6, 7, the mental element was probably largely concerned in the defect, though to what extent it was intermixed with the mechanical element, could not be ascertained. The patients made few or no attempts to express themselves, though in the first two, at least, apprehension was perfect; in two, the tongue did not deviate; in one, it did. In 27, also, although the patient spoke freely in short sentences, yet his recollection was not equal to maintaining a lengthened train of ideas.

It thus appears that, in all cases of left hemiplegia, excepting the one just referred to, when the speech was affected, articulation alone was in fault; and that, in the one exceptional case, the disease appeared not to be confined to the left hemisphere of the brain. So far, therefore, as these cases go, they support Dr. Jackson's opinion, which has reference solely to the mental element in speech; to "want of brain-power, either to form ideas or to find words." Whilst, in fourteen cases of left hemiplegia, every instance of impaired speech, with one *apparent* exception, depended on defect of articulation alone, the twenty-two cases of right hemiplegia afford three instances of very decided defect in the mental element, and three others in which the same defect existed to a minor degree.

Transactions of Branches.

MIDLAND BRANCH.

CASE OF BONY DENTIGEROUS CYST OF THE LOWER JAW: EXCISION AND DISARTICULATION.

By S. W. Fearn, F.R.C.S.E., Surgeon to the Derbyshire General Infirmary.

[*Read at Nottingham, June 23rd.*]

I have lately had under my care, in our County Hospital, a case of disease of the lower jaw, of so rare and interesting a character, that I think a short account of it may prove acceptable to the members of our Branch Association; and I feel the more induced to present it to your notice from the fact that, in most of the works on surgery which I have consulted, there is no mention of the disease, and because also I was myself deceived as to its true pathological significance before its removal.

The following notes are extracted from my hospital case-book.

Mary Smith, aged 13, was admitted into the Derby Infirmary, February 29th, 1864. There was a large resistant tumour of the left side of the lower jaw, extending from the ramus to the symphysis; and there was considerable enlargement also of the right side of the jaw, as far back as the ramus. The tumour had been growing about six months; and there was a constant very fœtid discharge from its surface. Several teeth had been extracted; but the second permanent molar and one of the milk-molars remained on the side most affected. There was much irregularity in the growth of the teeth on the right side. I was unable to detect any opening into the tumour, on examination with a probe. The breath was exceedingly fœtid, though her general health was very good. I ordered her a lotion containing permanganate of potash and glycerine, to be used frequently.

March 15th. The disease being considered one of the enchondromatous growths commonly called osteo-sarcoma, I to-day removed it in the following manner. After extracting the left central incisor, an incision three or four inches long was made along the base of the jaw to the chin; and the soft parts separated from the bone without dividing the lip, so as to allow the passage of a fine metacarpal saw between the lip and the jaw. The mouth had been previously gagged with a contrivance made for the purpose by Mr. Morley, dentist. The bone was partially sawn through at the symphysis, and the division completed with strong cutting forceps. The incision was then extended along the base to the angle of the jaw, and thence as high up as the condyle. The facial artery bled freely, and was at once secured, as were also several other vessels. The soft parts covering the exterior of the bone were carefully dissected away, and the flap raised so as thoroughly to lay open the cavity of the mouth. On the division of the jaw, a considerable quantity of fœtid pus escaped. The separation of the soft parts from the bone within the mouth required much care, as did also the detachment of the soft parts from the ramus and coronoid process. The disarticulation was pretty easily effected, and no vessel of any importance was wounded. Five ligatures were required; and the flaps were brought together with wire sutures at short intervals.

The diseased mass was found to be essentially a large osseous cyst of considerable thickness and density, separating the outer and inner plates of the jaw. The cavity was lined with a thickened, pulpy, very vascular membrane; and the canine tooth was seen growing from its floor. The cyst extended from the ramus of the left side beyond the symphysis for an inch and a half into the body of the jaw on the right side. A portion of the bony cavity on the right side I removed with the bone-forceps; and, in doing this, the muscles attaching the tongue to the inside of the jaw were necessarily divided. This was followed by a retraction of the tongue, which had to be secured to one of the wire sutures by a double thread.

The patient was seated in a chair, in which she was secured with roller-towels during the operation; and, on its completion, she became so collapsed that we were fearful she would have sunk. She was immediately placed on the table, and restorative means employed before the dressing could be proceeded with. The chloroform was very efficiently and carefully administered by my friend Dr. Goode.

8 P.M. She was pretty comfortable; had no pain in the face or wound; but complained of headache, and of the ligature in the tongue, which I loosened, so as to allow of more play in swallowing. She had had tea and wine and water several times. There was very little fever. The headache was probably occasioned by the chloroform. Pulse 120. Should she be restless, she was ordered to have a third of a grain of morphia.

March 16th. She has had a good night, with frequent sleeps of half an hour's duration. She took tea and beef-tea; was rather thirsty. Pulse 120. The morphia was not given.

Vespere. She was flushed and rather feverish. Pulse 116. The thread through the tongue was removed; and she afterwards swallowed a little milk. The bowels were not open. She was ordered to have an injection.

March 17th. She was much better. The bowels were freely open this morning. There was no heat nor flushing. Pulse 108. There was a good deal of ropy secretion from the mouth.

Vespere. The cheek was swollen and red. She was rather feverish; pulse 106. She was directed to repeat the injection, and to apply cold-water cloths to the cheek. She had slept much during the day.

March 18th. She had a good night. The bowels were open twice. There was no fever; less flush. Pulse 100. The wound seemed to be uniting by the first intention.

March 19th. Nearly all the sutures were removed. Union seemed perfect. In all respects, she was going on well.

March 21st. The remainder of the sutures were removed, and three of the ligatures. She was very well.

March 23rd. The remaining ligatures came away yesterday. There was some suppuration and salivary discharge from the parotid gland. There was perfect control over the right half of the jaw; and there was now no difficulty in swallowing, and hardly any soreness in the mouth.

March 25th. The mouth was comfortable; the wound was healing very satisfactorily. She was ordered to use the following lotion to the mouth frequently.

℞ Sodæ biboratis ʒiss; tincturæ myrrhæ ʒiii; glycerinæ ʒss; aquæ ad Oss. M.

March 28th. She was allowed to get up.

March 30th. Three or four points in the line of the cicatrix, from which there was a salivary discharge, were touched with caustic. The face on the left side was entirely paralysed.

April 9th. There was still a little salivary discharge from two or three points. The whole side of the face was swollen and puffy, and the lower eyelid was rather œdematous. The mouth was quite healed.

April 23rd. She was discharged cured.

Remarks. I have said, at the commencement of my paper, that but little is to be gathered from surgical writings on the subject of these cysts. A mere allusion is made to them in Druitt's *Manual;* and in Paget's *Lectures on Surgical Pathology*, at page 440, after speaking of ovarian and other cysts containing teeth, he says: "Other dentigerous cysts occur within the jaws. In some cases, cysts are hollowed out in the substance of the upper or lower jaw, and are lined with a distinct membrane, to some part of which a tooth is attached. I believe these are examples of tooth-capsules from which the teeth, though perfectly formed, at least in their crowns, are not extruded, and which therefore remain, becoming filled with fluid, and growing larger." In a foot-note, Mr. Paget mentions two examples of the disease which are in the museum of St. Bartholomew's Hospital; and a third, which he saw cured by Mr. Wormald, by cutting away part of the cyst, and removing the tooth. Mr. Paget also alludes to the subject in an article on Innocent Tumours, in Holmes's *System of Surgery;* as does also Mr. Holmes, in an essay on Diseases of Bones, in the same work.

I believe the case before us (a preparation of the diseased growth in which, and photographs of the patient, taken four or five weeks after the operation, I have the pleasure to exhibit) is an instance of the kind described by Mr. Paget; and that the thickened pulpy membrane lining the bony cyst is merely the canine tooth-capsule, distended in the first instance with its own proper fluid, and afterwards assuming dropsical proportions. The crown of the tooth seems perfectly developed; but there is no appearance of fang, and there is no indication of the existence of the permanent bicuspids. The fluid contents of the cyst had long been putrid and puriform; and I think, looking to the solid character of its bony wall, and the great size it has attained, it is very improbable that a mere perforation and evacuation of it would have led to a cure of the disease. It is more likely that an exhausting drain would have gone on for some indefinite period, seriously damaging the patient's health, and resulting in necrosis. The cyst was found, on measurement, capable of holding an ounce and a half of fluid.

I was struck, in the after-treatment of the case, by the little trouble occasioned by the remaining half of the jaw. There was scarcely any tendency to depart from its proper position; and this I attributed to the division of the genio-hyoid, the genio-hyo-glossi, and the digastric muscles, at their attachment to the tubercle inside the symphysis. There seemed to be a perfect balance in their antagonism between the pterygoid muscles and the masseter; though later on, when the tongue-muscles and the digastrici had, at their points of division, contracted adhesions to the neighbouring structures, they again asserted their power, and produced some drawing in of the jaw. There is, however, much less deformity than might have been expected after such an operation; and I feel no doubt that, after a further lapse of time, the poor girl will have a very presentable appearance.

The power to protrude the tongue was only partially recovered at the time of the patient's discharge from the hospital. She could then only make its tip touch the lower lip.

It has struck me that much of the trouble experienced, in cases of fracture of the lower jaw, in keeping the broken portions in apposition, is occasioned by the contraction of the tongue-muscles and the digastrici. As long as the jaw remains entire, it is a fixed point for these muscles to act upon; but when the bone is broken through, the resistance being lost, it is drawn inwards by the action of the muscles, which have now lost their natural antagonism. In the absence of a proper mechanical contrivance, might not much of the difficulty, in some of the embarrassing cases we meet with, be got over by a subcutaneous division under the chin, or within the mouth of the attachment of the muscles inside the symphysis?

I may mention, in reference to osseous cysts of the jaws which are not of the dentigerous kind, that the best account I have found of them is contained in Dupuytren's work on the *Diseases and Injuries of Bones*, translated by Mr. Le Gros Clark, and published by the old Sydenham Society. Nine cases are there related of bony cysts of the upper and lower jaws, some containing fluid, and others fibrous growths; but none of them appear to have been of the character exhibited in the specimen before you, though Dupuytren remarks, that "teeth are sometimes found in cysts inclosed in bone", and mentions a case in which M. Loir showed him an osseous cyst developed in the palatine process of the superior maxillary bone, the immediate cause of which, he says, was clearly the reversed position of a tooth. This case was, I suspect, an instance of distended tooth-capsule, though it does not appear to have been so looked upon by Dupuytren. I think it probable, too, that one or two of his other cases had the same pathological meaning, though he seems himself not to have been aware of their true character.

BATH AND BRISTOL BRANCH.

PRESIDENT'S ADDRESS.

By R. Wilbraham Falconer, M.D., Bath.

[*Delivered July 7th*, 1864.]

Gentlemen,—In 1862, the members of the British Medical Association held their annual meeting in London; and when we remember the great interest which attached to that meeting, the importance of its proceedings, and the generous hospitality extended to the members on that occasion, by public bodies, as well as by private individuals, the retiring president (Dr. Francis Ker Fox, of Brislington) of our Branch might

well be excused for speaking somewhat distrustfully, at the conclusion of his address last year, as to the degree of success which might attend the then approaching meeting of our parent Association in Bristol.

Those, however, who were present at that meeting, will remember, it is believed, with unmingled pleasure, how worthy a successor it proved to the metropolitan meeting; how, to make use of the words of its distinguished president (Dr. Symonds, of Clifton), when describing the objects of the Association, "Not only the mutual improvement and instruction of its members, and the promotion of good will, but also the advancement of the character, and the elevation of the aims of the profession," were fully and satisfactorily sustained by its proceedings. This happy result was produced, I need hardly say, by the praiseworthy exertions of those who occupied the most prominent positions in the transactions of the meeting, combined with the unwearied, and by common consent, successful efforts of the Bristol Council, of which body it may justly be said, in the words of the Roman poet,

"Omne tulit punctum, qui miscuit utile dulci."

We are now looking forward, not without eagerness, to the coming annual meeting of the Association at Cambridge. In that ancient seat of learning we may trace memorials of those, who, in the earlier days of our national history, emancipated our country from spiritual bondage, translated into our native tongue the records of our faith, and spread abroad the light of Christian truth. There, too, we may linger amid scenes, where the genius of Bacon, of Newton, and of Ray was fostered, as well as of many of those—whose names time would fail me to tell—who, both in earlier, and in more recent days have adorned the ranks of our profession, and shed lustre over its records. Well are such scenes calculated to impress our minds, and stir up deep thoughts within us, leading us away from the greed, the selfishness, and sensuality of the world, to the pursuit of those higher and more dignified aims, the realisation of which will confer lasting benefit on mankind, and brace us for a more energetic prosecution of those arduous inquiries, by which the mighty weight of human suffering is sought to be ameliorated.

Turning, however, aside from these thoughts, we are naturally disposed to-day to glance at the position which our Branch Association holds, as compared with that occupied by it at the same peried last year.

The Annual Report states that twenty-three new members have been elected during the year that has elapsed; a number which much more than replaces the losses sustained by resignation or other causes, and raisies the numerical strength of our Branch to one hundred and seventy-three. The increased number of our meetings has not led to any deficiency in the number of communications submitted to them, but, on the contrary, many of great interest have been left unread, with which a new session may well be commenced, and the attendance of members has fully equalled, if it has not exceeded, that of any previous year. Thus, we are enabled to refer with satisfaction to the past, and to augur favourably as regards the future.

Since our last annual meeting, one member of our Branch has died, at an advanced age. Mr. James Crang, of Timsbury, was, until a recent period, a regular attendant at our meetings; for a long time he was a member of the Bath Council, and in 1858-59, President of our Branch. Anxious as I am to do justice to the memory of this gentleman, I have failed in obtaining, even from the most likely sources, little more information than, that he entered on his professional duties previous to the year 1815, and for many years enjoyed, in the neighbourhood of his residence, a large and successful practice, from which he had for some time retired, previous to his decease. The only professional appointment he appears to have held, was that of Surgeon to the North Gloucestershire Militia.

The city in which we meet, and the hospital (the Bath General, or Mineral Water Hospital) within the walls of which we are now assembled, have led me to think that a *brief* notice of the mineral waters, for which the former has been for centuries celebrated, and the medicinal administration of which, is the special object of the latter, may not prove uninteresting on the present occasion.

The difficulty which attends the classification of mineral waters is exemplified by the different characters which, from time to time, have been assigned to the thermal springs of this city. Thus, according to their effects, to their predominant constituents, or to the association of certain ingredients in them, they have been classified as hot carbonate chalybeate; chalybeate; saline; calcareous; or earthy, waters.

From the analyses which have been made of them, their contents are found to consist of carbonates of lime, soda, magnesia, and carbonate of the oxide of iron; of sulphates of lime, potassa, and soda; of chlorides of sodium and magnesium; and a small quantity of alumina, and silicic acid. To these ingredients, however, during the last two years, lithium and strontium, the metallic bases of the alkalies, lithia and strontia, have been added. These additions have been made by Professor Roscoe, of Manchester, by means of the *spectroscope*. The complete results of the analysis thus made will be communicated to the British Association at its next meeting, to be held in this city.

The gases of these waters consist of nitrogen, of which 240 cubic inches are evolved from about 126 gallons of water yielded by the King's Bath Spring; of free carbonic acid, of which nearly 26½ cubic inches are found in a gallon of water, at a temperature of 115°F., and a small quantity of oxygen.

There are four springs of waters, "Perennial Springs, whose water is neither increased by the greatest glut of rain, nor lessened by the greatest drought." Their temperature varies according to the spring, from 108°F. to 120°F. Their taste is that of a saline chalybeate water. They are employed medicinally either in the form of baths, douches, or enemata, or by drinking.

Their physiological effects are, a sensation of fullness of the head, flushing of the face, giddiness, quickening of the pulse, a sense of weight and fullness of the stomach, and nausea, succeeded by headache, and a more or less prolonged condition of febrile excitement, and in some cases by constipation. The last mentioned effect has been overrated, for when taken daily, in moderate doses, these waters more frequently tend to induce a regular action of the bowels, especially if taken early in the morning, and in large doses sometimes cause purgation.

The indications which point to their beneficial influence on the system are, a grateful sense of warmth in the stomach, a moderate increase in the frequency of the pulse, a greater secretion from the kidneys, and an augmentation of the flow of the saliva.

When employed externally, they elevate the temperature of the body, quicken the pulse, increase for a while the perspiration, and produce a general sense of alertness and vigour. If the bath be employed either at too high a temperature, or for too long a time, the physiological effects above mentioned, will soon manifest themselves.

Fuller and more accurate inquiries are necessary,

as to the action of these waters upon the specific gravity and composition of the urine, on the temperature and weight of the body, previous, and subsequent to their employment.

The therapeutic action of these waters in cases of *subacute* and *chronic rheumatism* is undoubted. In such instances, pain and stiffness are relieved while the patient is in the bath, or being douched, and this relief continues at first for an hour or more afterwards, which period is increased after each subsequent bathing and douching, until recovery is completed. The symptom which lingers for the longest time is stiffness, but this, by repeated bathing or douching, will eventually be removed. In cases of muscular rheumatism, as lumbago, relief is quickly obtained, except in protracted and very severe instances, yet even in these, much immediate comfort is afforded by the use of these waters. In arthritic rheumatism, in cases most especially where the age does not much exceed fifty years, the benefit derived from the waters is well marked; but where the joints are enlarged by old rheumatic deposits, the feet and hands distorted, while the general relief afforded is great, the alteration for the better in the size of the enlargements, and the direction of the distortions, is but small. In young persons, however, the commencement of the articular enlargements is arrested, distortion prevented, and an improvement in the general health obtained. The age of the patient, hereditary diathesis, the duration of the complaint, and the constitutional powers, are all important facts to be taken into consideration, when calculating the probable amount of benefit which may be obtained from the use of the special remedy under consideration. The employment of the waters soon after an attack of acute rheumatism, when convalescence is completed, or where it is more than usually protracted, or where recovery has been incomplete, is productive of great comfort, removes the remains of the disease, and prevents it from assuming a chronic character. In cases also, of rheumatalgia, attributable to a syphilitic source, relief from pain is soon brought about by the use of these waters, though its continuance is variable.

During the last seven years, there have been admitted into this hospital 2409 cases of rheumatism; 810 of which recovered, 1470 were much better, and 129 not at all relieved. To these may be added, 252 cases of sciatica and lumbago, of which 104 recovered, 128 were greatly relieved, and 20 received no benefit at all. Of 61 cases of all kinds of rheumatism, which came directly under my own observation, during the year 1859-60, consisting of 43 men, and 18 women; 18 of the former reoovered, 22 were greatly benefited, while 3 received no relief whatever; of the latter, 5 recovered, and 13 greatly benefited. The average duration of the treatment of the males was about sixty days, and of females, somewhat more than eighty days.

In *sciatica*, the general or local application of the waters, or, what is better, the two combined, almost invariably gives relief, and frequently, even in severe and chronic cases, effect recovery. Of 25 cases of sciatica, consisting of 21 men, and 4 women; 11 men recovered, and 10 received marked relief; while 2 women recovered, 1 was much better, and 1 no better. These patients had previously suffered from sciatica, for periods varying from five weeks to "several years." The average duration of the treatment of the men was a little more than fifty-one days, and of the women, sixty-five days.

It not unfrequently happens that in many cases of rheumatism, including sciatica, and also of gout, that the employment of the waters is accompanied by only moderate relief; but, after their use has been relinquished, the affection subsides without subsequent recourse to remedial measures. So frequently does this occur as to render it a marked feature in the effect of these waters.

The beneficial effects of the Bath waters in *gout* are those, perhaps, for which they have been longest and most generally known. In former days, those suffering from the suppressed or irregular form of this disease were commonly sent here to the mineral waters, with the intention of inducing a paroxysm of gout by their use. This custom, so prevalent about sixty years ago, is thus humorously alluded to by Heberden in his *Commentaries*:—"Ludovicus XIV, Galliæ rex, cum fortè fistulâ ani laboraret, non pauci ex subditis ejus sibi persuaserunt se eodem vitio fuisse correptos, et non leve negotium facesserunt chirurgis, qui tum vivebant, ficto suo morbo petentes auxilium. Quod si in Galliâ fuisset aqua medicata quæ fistulam potuisset inferre, *illuc puto haud minus cupidè properatum esset, quam Bathoniam nostri petunt, ut reportent podagram.*" (*Com. de Morb. Hist.*, p. 34.) The practice of thus employing the waters is even yet not unusual; but a more complete acquaintance with the pathological conditions of the disease, has rendered the use of the waters, with this object, much less frequent than in earlier times. In acute gout, the employment of these waters is clearly inadmissible, on account of their stimulating properties. When, however, the acute symptoms have subsided, their use accelerates convalescence, and refreshes the system generally. The earlier they are used, after such an attack, the greater is the amount of benefit obtained. In chronic gout, which has not proceeded so far as to produce tophaceous deposits around the joints, to any very marked degree, and, where the dyspeptic symptoms are not extremely urgent, and where the recurrence of acute attacks are frequent, the waters will, when used in the intervals, not unfrequently induce a paroxysm, but when this has been subdued, recourse may be again had to the waters, and, by their prolonged use, the attacks of the disease may be warded off for a considerable period. In cases where there are tophaceous deposits around the joints, it has been thought that their diminution has been effected by means of these waters. The decrease, however, is more apparent than real. The inflammation caused by the presence of chalk stones, induces thickening and ulceration of the contiguous skin. These conditions are, to a great extent, relieved by the waters, so that the enlargement of the joints is in reality diminished in size, but there is no diminution in the amount of the deposit. The effect of these waters does, I am disposed to believe, contribute to check the tendency to the deposit of fresh material, and retard the progress of nascent chalk stones. When, in consequence of repeated attacks of this disease, the functions of the digestive organs have been much impaired, the benefit derived from the waters is soon observed by the decrease of heart burn, and the feeling of distension of the epigastrium, with an improved condition of the tongue, an increase of bile, and a more copious secretion of urine.

As regards *chronic skin diseases*, it has been correctly remarked, that the external use of these waters has been "renowned in all times." Both their local and general effects are such as would lead to the expectation that they would be advantageous in such cases, independent of the circumstance, that many kinds of this class of diseases appear to have a close relationship to that diathesis of the constitution, which is productive of gout and rheumatism. It has been found that numerous cases of skin diseases admitted into this hospital, have succeeded attacks of rheumatism, or have been accompanied with symptoms of subacute or chronic rheumatism; and the termination of an

tack of rheumatism is not unfrequently succeeded by erythematous and eczematous affections of the skin. Many persons, also, who suffer from gout, are subject to skin affections, which subside during an acute attack of that disease, and there are others who, even with an hereditary claim to gout and gravel, suffer from the latter, but exchange the former for intermittent or irregular attacks of eczema and psoriasis. It is in virtue of this relationship to rheumatism and gout, that many cases of skin disease are recovered by means of the Bath waters, and many of a like kind would also recover, under ordinary treatment, if this circumstance were borne in mind.

Lepra, eczema, and psoriasis are the form of cutaneous disease, of which the greater number of cases resorting to this hospital offer examples, and these generally of a chronic, and, I had almost said, an inveterate kind.

Of 454 cases of skin disease, which have been treated in the Water Hospital during the last seven years, 256 have recovered, 193 were much better, and no better; making a total of those who received marked relief, of 449 out of 454 cases.

In *paralytic affections* generally, it is customary to forbid the use of the waters, until several, usually six months, have elapsed after the seizure. This custom has been in many instances too rigidly observed. With proper caution, this remedy may be employed with advantage, as soon as well marked indications of restored nervous power appear, especially in cases accompanied by great general debility, with far more prospect of ulterior benefit, than when delayed for a longer time. A general review of the register of this hospital tends to shew that the recoveries from paraplegia have amounted to 10 per cent., or, taking the recoveries with those relieved, the percentage amounts to between 30 and 40 per cent.; while the recoveries in cases of hemiplegia have been five per cent., or, the recoveries, with the cases which have been relieved, amount to 30 per cent. During the last seven years, 328 cases of paralysis have been discharged from the hospital, of which 25 recovered, 229 were greatly relieved, and 74 no better.

There is a form of paralysis, namely that which arises from lead-poisoning, presenting itself commonly under the form of "*dropped hands*," and occasionally of "*dropped feet*," also, in which the use of the waters is generally attended with remarkable advantage. Of this class, 139 cases were admitted into the hospital during the last seven years; of which number 75 recovered, 63 were much better, and 1 was no better. Of 89 cases, which came directly under my own observation, 24 recovered, 13 were greatly benefited, and 2 relieved. The average duration of treatment was somewhat less than ten weeks.

It has been remarked that those who have suffered from lead-poisoning, are frequently liable to paroxysms of gout, as a secondary affection. It is seldom, however, that those who have recovered from the poisonous effects of lead by means of the waters, suffer afterwards from gout. The same beneficial effects attend the treatment of paralysis arising from other metals, as arsenic for example. A remarkable instance of recovery from poisoning by the latter occurred in this hospital a few years since, in the case of a man who had taken a large quantity of "rat-poison" in the form of powder, which contained at least 90 per cent. of arsenic. The immediate effect was excessive vomiting, followed soon after by complete paralysis of both the upper and lower extremities.

The affections to which attention has now been drawn, are among the principal in which these waters are employed; but there are also others, which it will be sufficient for the present purpose only to name, as *anæmia, amenorrhœa, dysmenorrhœa*, and the more common forms of *dyspepsia*. In *chorea*, their beneficial effects have been frequently noticed and recorded. Of this affection, 28 cases were admitted into the hospital, between the years 1857 and 1864, of which number 26 recovered, and 2 were greatly relieved. Those cases of chorea receive the greatest amount of relief which are associated with, or attributable to, rheumatism, to anæmia, or amenorrhœa, while those, the origin of which may be ascribed to mental causes, do not appear to receive an equal amount of benefit. In any estimate which may be made of the therapeutic powers of the Bath waters, due attention should be paid to the fact, that a great majority of the cases in which they are used are of long standing, have already undergone almost every variety of treatment, and have taxed the ingenuity, and tried the patience of many an intelligent practitioner, before a trial of these waters is suggested, to which the patient ultimately resorts as a last hope. Now, if of one hundred such cases some thirty or forty per cent. recover, which is the case, by means of the Bath waters, this fact alone may be regarded as evidence sufficient to establish their curative powers.

But, it may be asked, to what special properties of these waters are their beneficial effects to be attributed? This is a question not easily answered in the present state of our knowledge of this class of remedies. Something is in the first place due to their temperature, which, for all practical purposes, regarded simply as thermal waters, they are as efficacious as any such springs can be. The higher temperature of other waters is useless, inasmuch as water begins to scald in proportion as its temperature approaches that of the hot bath spring, the heat of which is 128° Fahr. But that there is any peculiarity in their heat, that it is "volcanic," or "telluric," and therefore the waters are endued with peculiar properties, as some writers have asserted, which make it to differ from ordinary water at an equal degree of temperature, cannot for a moment be allowed. Caloric, wherever found, or however produced, is the same. Still, the effect of these waters is distinguishable from that of common water of the same temperature. The general effects of the latter are relaxing, of the former invigorating; the warmth imparted to the body by the one is transient, that conveyed by the other is, comparatively speaking, permanent. As these effects cannot be wholly attributed to their temperature, the explanation of the differences must be sought in the mineral ingredients which enter into their composition.

As regards their effects in rheumatism and gout, it is probable that the sulphate of lime and lithia, exercise some special influence over such cases, inasmuch as all mineral springs which contain these ingredients are efficacious in calculous, gouty, and rheumatic disorders. The carbonates of soda, lime, and magnesia, by their ready union with acids, combine to soothe the irritable condition of the digestive organs, and promote the formation and elimination of the biliary secretion, as well as remove those depraved conditions of the stomach which attend on gout and rheumatism. To these results, the chlorides of sodium and magnesium in all probability contribute.

Small as is the proportion of iron in these waters, it is presented in the best possible form for producing its special effects. So remarkable are these effects, that it has been frequently suspected, that much of this ingredient has eluded detection by the reagents of the analyst, and led to the belief that some portion must have escaped in a volatile form. This supposition, though since repeated, was disproved more than a century ago, and recent observations have confirmed this conclusion. The stimulating effects of carbonic acid are well known, while the influence of nitrogen—

to the presence of which in some springs their good effects are said to belong—is not as yet explained.

Any attempts, however, which may be made to explain the physiological or therapeutic action of these, or other mineral waters, by reference to their particular ingredients, can, in their conclusions, be regarded as only approaching to what is true. It has been very justly observed that, "the physician ought to take into consideration the fact that any table of analysis only presents to him an approximative view of the true composition"—of mineral waters. "The chemist, when he presents such an analysis, does not offer even the actual results of his own investigations. He writes down the names of a number of compounds, as if they were things which he discovered in the liquid; he says, so much carbonate of soda, so much carbonate of lime, so much sulphate of soda, phosphate of soda, chloride of sodium, sulphate of lime, etc. But this is all hypothetical. What he actually found by means of his reagents, were such and such acids, and such and such bases; and then, according to the supposed energies of their mutual affinities, he mentally combines them into the salts displayed on the face of the analysis. It is plain therefore, that the physician cannot judge of the effect of any given compound said to enter into such a mixture, from experience drawn from its employment *by itself*, or under different circumstances." (Aldridge, *German Spas*, p. 185, *et seq.*)

The small amount of mineral ingredients contained in the Bath waters, has been alleged as a sufficient indication of their inefficacy, *whatever experience may have taught to the contrary.* But here a question presents itself, what is the effect of dilution in facilitating the operations of such, or indeed of all therapeutic agents? There are numerous mineral springs which have maintained, like those of Bath, during a prolonged period, a high reputation in the treatment of disease, which upon analysis are shewn to contain so small an amount of mineral ingredients, that it is difficult to explain their efficacy if our attention is confined to those constituents. At the same time, it is reasonable to suppose that a much smaller quantity of a mineral will be required to produce a given effect, when it is exhibited in a very dilute condition, and under circumstances by which its complete absorption into the circulation is secured. The chemist has ascertained what a very minute proportion of iron enters into the formation of red blood; and the physiologist has shown what a very small quantity of this metal is absorbed even when large quantities are given as an ordinary medicine. If, then, the mere fractional parts contained in some mineral waters be taken under such circumstances that the whole is utilised by the system, it will be quite equal to a very much larger dose, the greater part of which escapes in an inert form.

Notwithstanding what has been said, there are still remaining questions relating to the operation of these and all other mineral waters, which have as yet received only a partial solution. I refer to their effects, on the excretions, on the circulation and the respiration, as well as on the temperature and weight of the body before and subsequent to their employment. Until such inquiries carefully made have been satisfactorily completed, we must be content to be guided by evidence of concurrent testimony as to their beneficial effects. To refuse the attention due to the latter on account of the deficiency of information on the former point is as unreasonable as it would be to deny the existence of a moral sentiment because we are unable to explain the principles upon which mankind adjudge the preference of characters, and upon which they indulge such vehement emotions of admiration or contempt.

If such knowledge on this subject, and it may be added on many others also, within the domain of medicine, come but tardily or not at all in our time, we may rest contented with the anticipation expressed in the words of Seneca: "*Veniet tempus, quo ista quæ nunc latent, in lucem dies extrahat, et longioris ævi diligentia; ad inquisitionem tantorum ætas una non sufficit. Veniet tempus, quo posteri nostri tam aperta nos necisse mirentur.*" (Seneca, *Naturales Quæstiones*, lib. vii., cap. xxv.)

It now only remains, gentlemen, that I should thank you, with great sincerity, for your kind attention, and for the honour you have conferred upon me, in selecting me as your president for the ensuing year. I trust that you will extend to me the same generous and cordial assistance which you have ever accorded to my predecessors, and that my own endeavours, thus sustained, may contribute to the welfare and prosperity of our Branch Association.

British Medical Journal.

SATURDAY, AUGUST 27TH, 1864.

THE MEDICAL PROVIDENT FUND.

We adverted recently to the formation of a Medical Provident Fund, as a new and integral part of the British Medical Association. If we are to judge from the enthusiasm with which this measure was received at Cambridge, and from the unanimity with which it was passed by one of the largest meetings of our body, and if we are further to judge from the anxiety which is expressed respecting it by members within and without the Association, we may fairly assume that the Provident Fund is destined to become one of our most important departments, and one of the most powerful agents that has of late been advanced for improving the condition and standing of the profession at large.

We need not dwell at any length on the necessity that exists for this bond of strength and mutual support. The necessity is admitted on all hands, and even by those who are not altogether friendly to the work of the Association. There is not, in fact, a city, town, nor scarcely a village, in the kingdom, which does not cry out for the union. In every locality, some of our brethren are to be found, on whom, in mid career, and long before plenty has made them independent of the world, sickness has laid its grasp, and arrested the active and benevolent Æsculapian hand in the fulness of its power. Then has come a time when, after a long struggle to meet the foe, effort has destroyed itself in the very attempt to hold on; and the man who is moving amongst his fellow-men, attempting to relieve their sorrows, has succumbed at last, to find no means of existence except the assistance of friends or of those societies which, necessarily limited in their action, have risen among us for the purposes of benevolence. The Pro-

vident Fund steps in, then, to meet the men circumstanced as we have depicted them. It invites them, not to ask a favour, but to claim a right. It says to them, "In days when work can be done, pay into a common fund a small sum which is within your reach: balance the chances of your own ill health individually against the health of the body at large: and secure straightway such an income that for two years, at all events, you may live, and gain time to recover from the ill fate that has befallen you." We say there can be no doubt as to the soundness of this principle; and we add nothing further on that score.

It remains, therefore, for us only to ask whether the British Medical Association affords the means by which the mutual aid, so much demanded, can be promptly and effectually secured. We have no hesitation in giving a decidedly affirmative answer on this point. The Association, as it is constructed, is, to use a common phrase, a ready-made instrument for the attainment of the object specified. In its ranks are men of all classes. There are men who have borne the toil and heat of the day, who have won their rewards, who are ready to help others, and are prepared to call back on themselves that loving-kindness which always returns freshly and bountifully on those who have the courage and the will to send it forth. There are others, who have so far won their way, that they do not see the absolute necessity of joining such a fund for their own sakes, but who yet think it may be wise so far to set the wheel of fortune at nought as to make precaution doubly sure, and who feel that, any way, their expended money cannot be lost. Lastly, there are men who are conscious that this fund will be to them a safe investment, and that, backed by it, they may go on their way rejoicing; feeling that, come what will, they have something to fall back upon, and that, even if they be removed from the possibility of performing their labours, the wolf is kept from their door.

We may rest assured, from the indications already manifested, that all these classes of members in the Association may be relied on. It was natural, that the promoters of the Fund should turn first to their wealthier friends, and ask from them such guarantee of their good will as should give to the undertaking a satisfactory and firm basis. Nor are the expectations unrealised. Already, with scarcely any appeal, the Chairman of the Provident Fund is able to announce through our columns a guarantee of £200; and we doubt not that, in a few weeks, his return will be infinitely more interesting. Already, large numbers of the members have undertaken to join the Fund as ordinary subscribers; while numerous inquiries have been made, tending to the same object. Thus, as regards what may be considered the feeling of the Association, all is sound.

But, again, the organisation of our body is in every respect favourable for the full development of the project. The Association possesses eighteen Branches in different parts of the kingdom; the majority of which are so strong, that each could singly carry out a local fund capable of meeting the necessities of the district in which it is situated, and each of which admits of extension to any degree. Of course, such local associations would labour under disadvantages; disadvantages, however, not unsurmountable. But, if Branches acting independently, and labouring under many difficulties, such as pertain to all local provident societies, can work, how much more readily can they succeed when the whole of them act in unison, and when the days of sickness pertaining to each are distributed over the whole! Nothing, in fact, could be more fortunate for a provident effort, than the existence of these numerous and active centres. They are so many local associations *de facto;* and as, in regard to what may be called the federal unity, they are in perfect harmony, and as, by the constitution of the Association, they are on perfect equality, they constitute a basis on which, in our opinion, an useful project could not more safely rest.

The establishment of the Fund, on the plan suggested by the Committee appointed at Bristol, is a further promise of the success that awaits the measure. Nothing could be fairer—nothing more catholic in sentiment. Each Branch is to elect its own representatives in the Directorate; and it will naturally elect those men on whom it relies with most respect and confidence. The Committee of Council—the executive of the Association—is to make the election on behalf of members not belonging to branches; but its powers of election are properly limited, so that its representatives can exercise no overwhelming influence on the management; while the Association, as a body, nominates the Chairman, who may be considered as uniting together the whole organisation. We do not think the most critical of our readers will complain of a policy so liberal, fair, and comprehensive.

There are numerous matters of detail connected with the Fund, some of which were very ably discussed at Cambridge, and upon which we might dwell. We prefer not to follow this course, but to leave those details to the consideration and decision of the body of Directors, when they shall have assembled. That body will be locally and generally trusted by the Association; and we doubt not that it will be equally trusted by the profession at large. It will be open to every medical man to offer to the directors such suggestions as he may think likely to be of service; and we may be sure that every important suggestion will receive due consideration.

It remains for us only to urge upon our fellow-associates to give to the Fund their earnest support. Every member, whether a director or not, can do

something towards this great undertaking. If the members generally become subscribers, they will establish a fund for mutual relief, such as at the present time belongs to no profession and no calling; and they will shew to the world, that those who bear so many burdens of the community with calmness and equanimity, can share their own in a manner worthy of imitation by the highest and the lowliest of the land.

ITERUM CRISPINUS.

When we last week explained the manner in which the *Lancet* had obtained possession of Dr. Humphry's Address, and had published the same, we made use of the expressions of Dr. Humphry himself.

The "agent or reporter for the *Lancet*" (we quote from Dr. Humphry's own account of the transaction) called on and asked Dr. Humphry for his Address for the *Lancet* on Wednesday. Dr. Humphry gave the man the MS.; but told him that he must call again in the evening before he used it. In the evening (after due inquiry), Dr. Humphry told the man "that it must not appear in the *Lancet* of this week, because it would not be in the Journal"; and he felt quite assured that it would not do so. We stated, in our comments, what was the simple fact, as given to us by Dr. Humphry.

But the *Lancet* is, also, very indignant with us for stating that it attempted to obtain illicit possession of addresses and papers at the London and the Bristol meetings of the British Medical Association. It says the charge is a *falsehood;* or, to give its own words, it accuses us of

"Reiteration of falsehoods, which it" (the British Medical Journal) "has never attempted to prove, and which we have repeatedly and flatly contradicted. No application was made to any one at the London meeting for his MS.; far less for sole possession of it. Certain gentlemen who were asked by us for abstracts—notably Dr. Walshe—offered their MSS. spontaneously."

Now, the mere "flat contradiction" of a statement does not disprove its truth; and in this case the *Lancet's* contradiction is proved by itself to be untrue. It knew, as well as we do, that it had no business with Dr. Walshe's Address; yet it goes to the author begging for an abstract, and then gets an offer of the MS. Why, this is just the very charge of attempt at illicit possession which we made against the *Lancet*.

To ask gentlemen for abstracts of their papers; to take advantage of the ignorance of those gentlemen as to the rules of the Association, and then quietly to pocket and publish the papers—this is what the *Lancet* does; and then has the impudence to add, it is a falsehood to say that application was made to any one at the London meeting for their papers.

In further answer to this charge of falsehood, we will add, if further reply be needed, that both at the London and Bristol meetings, we received numerous letters from gentlemen who had promised papers to the Association meetings, stating that they had been applied to by the *Lancet* for them, and asking what they were to do. Oh! says the *Lancet*, we only asked them for an "abstract"; but, of course, if any of them choose to offer us their MSS., all the better. "Reiteration of falsehoods it has never attempted to prove," indeed!

Perhaps, the *Lancet* will (as it asks for a specific charge) tell the profession how it came possessed of the first half of Dr. Handfield Jones's paper, read at the London meeting, which it published, and of which it never published the second part—the *to be continued* part?

The *Lancet* is quite wrong in supposing that we have any hysterical affection for its attentions, or any dread of its enmity. We wish to show into what hands the profession would fall, if it had no other literary representative than the *Lancet*. We wish to point out the commercial character which it has exhibited in connection with the British Medical Association. At the London meeting, it gives a full account of the transactions of the Association—and simply to show that it (the *Lancet*) was the Press of the medical profession. At Bristol, again, because its London attempt to injure us failed, it tries the other tack, and actually ignores the existence of the whole meeting. This model representative of the profession devotes ten lines to an account of the splendid meeting, and the first rate addresses which were read at that meeting. And now at Cambridge it prints the Address of Dr. Humphry, obtained as stated above.

Is this the conduct of a model representative of the medical press, or is it not rather the demonstration of a spirit of rivalry worthy of Moses and Co.?

The Commander-in-Chief and the Director-General have completely beaten the doctors. Seventy-seven candidates have passed their examination for the army; and what will still more delight the authorities above-named, is the fact that not one of them, we believe, has found his way into the first class. The *Army and Navy Gazette* crows over "the doctors" in the following terms.

"There are over three hundred vacancies, and the supply amounts to seventy-seven! Notwithstanding the disfavour with which the Army Medical Department is regarded by the influential medical men, and in spite of the apparent resolve to stick to their military brethren come to by the civilian physicians and surgeons, a number of candidates sufficient to fill existing vacancies passed the examination which has just concluded. It appears that eighty-eight candidates presented themselves, of whom seventy-seven passed the ordeal satisfactorily. So far as we can

learn, one of the principal reasons for the backwardness of young surgeons in seeking employment in the army is an exaggerated estimate which they had formed of the severity of the examination; and several of those who have now passed had their anticipations pleasantly dissipated, when they found that the ordeal is really one which no competent man need fear. The seventy-seven who were successful will now enter on their probation, and be available for the service in February next; and they will be amply sufficient to provide for the probable vacancies for some time! That there is no dearth of physicians and surgeons seeking for employment may be gathered from the fact that there were over three hundred applications for the appointment of acting assistant-surgeons."

Our friends, the waiters on Horse Guards' providence—the acting assistants—will be in a still worse case than they have hitherto been. Only twenty-four of them have, as yet, we hear, been gazetted. However, something to their perspective advantage has lately turned up. They are not expected to wear her Majesty's uniform. This is a bonus; they will not have to fit themselves out in regimental costume. It is useless speculating on the causes of this rush of candidates for army honours. Some say the young gentlemen were in hopes of great things from the deputations medical to the army authorities; some say, they hoped to get through easily on account of the army being short of medical officers. The great fact is, that these are landed fit for service—at least, in the eye of the Medical Director. All that we can do in face of the fact is, to offer our congratulations to the Horse Guards on their success; and to the Director-General in particular for the victory which he has gained over the opinion of his medical brethren.

The best friend of the medical profession in the general press is *Punch*—the most true and orthodox of them all in matters medical. An excellent hit he has just given us, "About the Netley Monument; a chat between a Swell and a Surgeon in a Railway Carriage." The Swell agrees that the doctors are shamefully treated, and offers a suggestion or two. The Swell calls rescinding the warrant "an awful swindle." Of the advertising for acting assistants, the Swell says:

"Certainly, the cleverest way to get the compound of surgeon and snob which they appear to want. Only I'm afraid it doesn't answer. Have an idea! As they are resolved that medical officers in the army shall be snobs, they should head their advertisements, 'Wanted, Snobs for Surgeons.'"

Notwithstanding all that has been said to the contrary, there is, we believe, no doubt that army medical officers have the power of arrest, like all other commissioned officers. An army surgeon assures us that he has confined soldiers and non-commissioned officers, and has no doubt that he has the right to put under arrest officers junior to himself. It was only the other day, in India, that a native apothecary put a sergeant under arrest. His right to do so was contested, but was upheld by the Judge Advocate General. Statements on matters military, made even by the Commander-in-Chief, must not be altogether accepted as positive. The Duke of Cambridge, for instance, told the medical deputation that the commanding officer of a regiment presides over boards in his regiment; but it turns out, as we learn, that he never does so; he merely orders them to assemble. As regards the *branding* business, which Dr. Wood assured the meeting at Cambridge was satisfactorily disposed of, we have not yet heard that any order has been issued; and, of course, until such general order is issued, modifying the position of the surgeon in reference to that disreputable operation, we shall conclude that the old order is still in force. We have been asked what the present order is; and therefore give a *verbatim* copy of it, issued by order of the Adjutant-General.

"His Royal Highness the General Commanding-in-chief, with the Secretary of State for War, is pleased to direct that soldiers sentenced to be discharged with ignominy, and marked with the letters B. C., shall be so marked by the hospital sergeant of the regiment or depôt to which the offender belongs, under the directions of a medical officer; the marking to be effected prior to the man's committal to a civil prison, and to be carried out after the present mode of marking with the letter."

We were much surprised to read, in Dr. Gibson's address to the Prince of Wales on the occasion of laying the first stone of the memorial to medical officers who perished in the Crimea, that it was stated generally by Dr. Gibson they died from disease brought on by overwork, and that not a word was stated as to any of these sixty-two gentlemen having been *killed*. We are now informed that the very first officer *killed* in the trenches was a medical officer. It is much to be regretted that this statement, and all other instances of a similar kind, were not more specifically alluded to on the occasion, and especially at the present time, when every effort is being made to keep the medical officer in the position of a "non-combatant". Certainly, as the statement made by the Director-General went before the public, it would lead all the world to think that the whole of these gentlemen perished from disease; that none of them were killed by the enemy. We shall be very glad to supply the deficiency, if any gentleman can give us the facts; and to tell the profession how many of our medical brethren died in the Crimea from actual wounds.

M. Perrin, who has lately experimented on himself to test the action of alcohol, has ascertained that by its use the quantity of carbonic acid exhaled from the body is diminished. It appears to exercise but little influence on the constitution of the urine.

M. Kœberlé of Strasburg relates twelve cases of ovariotomy, nine of which were successful.

M. Davaine some time ago pointed out the presence of *bacteria* in the blood in cases of malignant pustule. In the blood of typhoid fever, similar animals were afterwards found. Then came MM. Tigri and Signol, who generalised on the influence of these animals. Now come MM. Leplat and Jaillard, who tell us that these vibriones have nothing to do with the disease. When introduced into the blood by themselves, they do not cause the diseases referred to. It is the diseased fluid which is injected with them which produces disease.

M. Brillat-Savarin had in May and June under his charge about fifty cases of severe colica pictonum. He discovered at last that lead was contained in the bread eaten by his patients. On further inquiry, it was found that the miller, in order to regulate the movement of his mill-wheels, had filled up the cavities in them with melted lead.

The French papers announce the death of Madame Orfila, the widow of the famous Dean of the Paris Faculty of Medicine.

Tarbes has resolved to raise a statue to Larrey, who was born at Baudéau in the Pyrenees.

M. Claude Bernard tells the Academy that the inoculation of *penicillium glaucum* and *oidium Tuckerii* on a healthy man is followed with no inconvenience.

THE INDIAN MEDICAL WARRANT.

THERE appears to be but one opinion in India as to the character of the new Indian Medical Warrant.

The *Hurkaru* of June 25th says: "Considering its clauses, there is very little in this bantling of six years incubation. It does a little good to some, a little harm to others, and leaves a large number exactly where they were before. The condition of the assistant-surgeons is improved by a trifling addition to their pay, but the surgeons in charge of British regiments are damaged, their allowance for medical charge of their corps and their head money being taken away. . . . We do not think this Warrant will serve to make the Indian service more popular than it has been during the last six years. If Sir C. Wood had given any temptation, in the way of increased pension, to retire, the whole medical service would have exodised in a body; and we expect that now the generosity of Sir C. Wood is known, the senior medical officers will retire in large numbers. They have now seen the thing out; they have not been favoured as others have been, and they will leave the Warrant men and the Horse Guards to try if they can reconstitute such a medical service as once existed in India, and is now shrinking to decay."

The *Delhi Gazette* writes: "Facts are stubborn things, and we cannot disguise from ourselves the truth that the more we examine the Warrant, the more it appears to us to have been framed with a view to the degradation of that service which it professes to support and uphold. Sir John Lawrence himself has marked his disapproval of the scheme in some of its minor details by giving addenda to the new Medical Warrant immediately on its promulgation. During his protracted career in India he had, no doubt, many opportunities of learning the value and sterling worth of the army medical service in this country. The scheme is in detail the most illiberal and unfair that could have been prepared. Sir Charles Wood has clearly been 'robbing Peter to pay Paul,' and has by every means in his power debarred Her Majesty's medical officers, with the exception of those assistant-surgeons who might, by good fortune, obtain the temporary charge of British regiments or brigades, from receiving extra emolument. The Secretary of State for India has increased the regular pay of assistant-surgeons from the clippings of staff allowances formerly granted to surgeons and assistant-surgeons while in separate charges; and if the truth were known, he has solved his difficulties by the two simple rules of subtraction and addition. The new medical scheme is nothing more nor less than a bait to tempt young men to enter the medical branch of the army. Sir Charles Wood's promise, that a final decision connected with the future provision of the medical officers in India will be communicated hereafter, must be valued at the same rate as all his other promises; and we would urge upon young graduates who may be tempted to enter the medical department of the army to pause before they take the fatal step. They will do well to remember that every one looks forward to enjoying in his old age rest and a competency, but should they expect that this will be their fate, judging from affairs as they at present stand, they will without doubt be sorely disappointed."

The *Times of India*, after showing in figures the complete farce which has been played upon the service, adds: "The change which was required, and which the service had every right to expect, was, that its members should draw pay in the same way as officers of all other branches of the service. If such a principle of payment is bad, why adopt it with reference to such an overwhelming majority of officers? Why make such an invidious distinction as to exclude the medical branch, and it alone, from what is only considered a *right* by the rest of the army? Are the medical officers' duties less onerous, less responsible, or less satisfactorily performed than those of the other officers forming the regimental or other staff? Is he worse educated, or drawn (if properly treated) from a lower rank in life? Does he not share the dangers and privations of war equally with all combatant officers?—and does he not undergo far more anxiety, responsibility, and fatigue, in times of pestilence? Why, then, should he be put upon a lower level in any one item? Of one thing the Government may be very certain, viz., that until the Medical Department of the army is put upon a proper footing as regards their relative position with the other departments, few, if any, well-educated gentlemen will be found to seek admission to it. Experience has already too well proved of how slight security is Her Majesty's sign manual held in the hands of an all but irresponsible minister; and we strongly urge upon the professors and other members of the medical profession in England, to recommend all their students who may wish to become candidates for employment in the army, whether of England or India, not to do so until not only shall all their rights in regard to position and pay be ceded to them, but until they are placed beyond the arbitrary diction of the Horse Guards, or the caprice of a minister, by being guaranteed by a special act of Parliament. Medical men, though almost altogether unrepresented in the House of Commons, have it, nevertheless, in their power to enforce this; and until they do so, there will be no security to those who are beguiled by the fair promises held out to them when the nation is in trouble, and their aid cannot well be dispensed with."

Association Intelligence.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

The Committee of Council will meet at the Queen's Hotel, Birmingham, on Thursday, the 1st of September, at One o'clock precisely.

Business.—To consider the subject of International Correspondence between the Society for the Promotion of Medical Science in the Netherlands and the British Medical Association.

To consider the amount of increase in the Salary of the General Secretary.

To appoint the Readers of the Addresses in 1865.

To consider the propriety of applying for a Royal Charter for the British Medical Association.

To elect the Representatives of the Council on the Directorate of the Provident Fund.

To agree to instructions to be issued to the different Branches as to the Election of their respective Representatives in the Directorate.

Any other business which may be brought forward.

T. Watkin Williams, *General Secretary.*

13, Newhall Street, Birmingham, August 23rd, 1864.

THE ANNUAL MEETING.

The following name was accidentally omitted from the list of members present at the Annual Meeting in Cambridge.

Davies, Thomas, M.D., Chester

THE MEDICAL PROVIDENT FUND.

Dr. Richardson begs to announce the following contributions to the Guarantee Fund—

	£.	s.	d.
Amount already subscribed	115	10	0
Dr. Burrows, F.R.S. (London)	21	0	0
T. Spencer Wells, Esq. (London)	5	5	0
C. J. F. Lord, Esq. (Hampstead)	10	10	0
Dr. Markham (London)	10	10	0
Dr. Barker (Bedford)	5	5	0
H. D. Carden, Esq. (Worcester)	31	10	0

Further contributions will be announced.

It is expected that the first meeting of Directors will be held early in October.

12, Hinde Street, Manchester Square, W.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, July 6th, 1864.

H. Oldham, M.D., President, in the Chair.

Two gentlemen were elected Fellows of the Society.

Specimens. Mr. Harper exhibited an Ovarian (?) Tumour removed by Mr. Baker Brown. The nature of the tumour being a matter of doubt, the specimen was referred to Dr. Greenhalgh and Dr. Braxton Hicks, in conjunction with Mr. Harper, for special examination.

Dr. Snow Beck exhibited an Uterus removed from the body of a woman who died on the ninth day after a natural labour, and who presented all the symptoms of a severe form of puerperal fever. The peritoneum was found inflamed after death, and about two pints of turbid fluid existed in the cavity of the abdomen. After a minute and careful examination of the organ, the sinuses, the pelvic veins, the lymphatics, as well as every other tissue, were found perfectly healthy, and the internal cavity everywhere covered by a soft membrane, containing the usual microscopic elements of the mucous membrane. A decided negative was thus given to many of the supposed causes of puerperal fever. But it was shown that the sinuses and pelvic veins permitted air to flow along their cavities, and that a ready means thus existed for the purulent infection of the general system. This open state of the sinuses was further traced to an imperfect contraction of the uterus after the birth of the child, which thus allowed fluid to pass along these canals.

Dr. Murray showed a specimen of Fibrous Tumour of the Uterus. It was interesting from the fact of its growing entirely in the posterior wall of the cervix uteri, without involving in the least degree the body or fundus of that organ. The internal os could be distinctly felt, and sharply separated the sound from the diseased tissue. The patient was in too weak a state to admit of any operation, or that of enucleation might possibly have removed the mass, which was larger than an orange.

Dr. Marion Sims, who was present, in reply to a question, stated that he had practised in certain cases incision of the os uteri for the purpose of restraining the hæmorrhage often present in cases of fibroid tumour of the uterus. His results had been satisfactory; but he had not practised it sufficiently often to be in a position to speak decisively as to its absolute value. He disclaimed originality as to the operation itself.

Dr. Greenhalgh exhibited a Pelvimeter made by Mr. Ferguson during the year 1859, which so closely resembled the instrument lately described as a "New Pelvimeter," the invention of Drs. Earle and Murphy, that he felt it due to his colleague, Dr. Harris, to state that this instrument was devised by and manufactured for him nearly five years ago.

ON PLACENTA PRÆVIA.

BY ROBERT GREENHALGH, M.D.

The author first alluded to the large mortality both to mothers and children (one in four and a quarter of the former, and about two-thirds of the latter), which he attributed mainly to the severe and repeated losses of blood, to the delay in effecting the delivery, and the method of turning usually had recourse to in these cases. He then gave the details of twenty-four cases which had occurred in his own private and consulting practice between the years 1842 and 1864. He placed before the Society several statistical tables, chiefly taken from Dr. Read's work, to show, in addition to other facts, that the expulsion of the child generally takes place before the full period of utero-gestation—premature labour being the rule and not the exception; that nature, unaided, frequently terminates the delivery with safety both to mother and child; that complete and partial artificial separation of the placenta before the birth of the child has failed in numerous cases to arrest the hæmorrhage; and that these methods and turning had proved most unsatisfactory in their results. Having dwelt at some length upon these several points, he strongly advocated a close observance of the way in which nature terminates these cases with safety to mother and child. Having specified the result of his observations on that head, he confidently recommended the following plan of treatment, which had proved, as far as the limited number of cases could prove, in his hands and in those of others, far more successful both to mothers and children than any other method hitherto devised. It was as follows:—1st. That in any case of hæmorrhage, whether profuse or otherwise, occurring after the commencement of the seventh month

of utero-gestation, ascertained to be due to placenta prævia, artificial premature labour should be induced at once, or as soon as the condition of the patient will admit of it. 2ndly. That in order to effect that end without loss of blood, an air-ball, covered with spongio-piline, be passed, collapsed, into the vagina, and then inflated so as effectually to fill that canal, while a bandage is placed firmly round the abdomen; at the same time the ergot of rye and borax are to be administered in repeated doses. He further recommended as aids, stimulating enemata, with tincture of nux vomica, galvanism, and friction over the abdomen. The author concluded by condemning, in the strongest terms, the use of general hygienic means and hæmostatic remedies over days and weeks in these cases, which course, he was firmly convinced, was the cause of many valuable lives being lost.

Dr. Barnes observed that, agreeing generally in the principle that labour should be brought on in cases of severe hæmorrhage from placenta prævia—a principle, he believed, commonly acted upon in London—he could not assent to much of Dr. Greenhalgh's reasoning, or concur in approving his plug. His statistical reasoning was open to criticism. He assumed two postulates: first, that the mortality of placenta prævia was 1 in 4¼; secondly, that the mortality from inducing premature labour was 1 in 53; and he drew the extraordinary conclusion that by always inducing labour we might substitute the low mortality of premature labour induced under selected circumstances for the assumed heavy mortality of 1 in 4¼. Now both the postulates were false, and the conclusion was manifestly illogical. The mortality of 1 in 4¼ drawn from Dr. Read's tables was a most unfair representation of the results of modern obstetricy. He (Dr. Barnes) had analysed his own cases. Since the publication of his Lettsomian Lectures 59 cases had come under his own observation; and he drew 24 from other sources, most of these last being treated upon his (Dr. Barnes's) principles. The deaths were six only, or 1 in 14. And if he were to follow Dr. Greenhalgh in striking out the fatal cases on the ground that treatment was too late, he might show statistical results very far superior. He should have, not 10 successful cases, but 77. Two of his cases died of pyæmia, having been treated by forced delivery—that is, in direct opposition to his principles; 2 were moribund when seen, and 2 were hopelessly anæmic. He had taken all cases as they occurred in his books without selection or arrangement, yet 26 cases fell as an uninterrupted series of recoveries, which he might fairly place against Dr. Greenhalgh's selected 10. Then as to the mortality in premature labour. Premature labour was induced under selected circumstances to avoid dangerous complications. Such cases were not to be compared with labours forced upon us by the flooding of placenta prævia. This Dr. Greenhalgh disregarded. But surely placenta prævia went for something. Then the children. Dr. Greenhalgh had been fortunate. In his small series of 10 cases, he had 8 living children. He (Dr. Barnes) ventured to say that a larger experience would modify this result. Many dangers surrounded the child in placenta prævia: cross births, funis presentations, immaturity, and asphyxia *in utero;* some were born putrid. His (Dr. Barnes's) plan was eminently adapted to secure the child. But his mortality was ·63. The very method of Dr. Greenhalgh of bringing on premature labour must of itself often destroy the child, for the floodings would come on at six and seven months. And in some cases flooding did not occur until the end of gestation. These were often the most dangerous. Yet here Dr. Greenhalgh's plan was not available. And what was Dr. Greenhalgh's plan? The use of a *vaginal* plug, not differing essentially from the colpeurynter of Braun. It acted like all other vaginal plugs, by exciting uterine contraction, if the uterus was excitable. But unfortunately in the worst cases the uterus was paralysed. In these, where art was most necessary, the plug was useless. He was surprised to hear Dr. Greenhalgh undervalue rupturing the membranes. This simple method was in many cases quite sufficient, and no method was long serviceable without it. If in combination with rupturing the membranes, the placenta was detached from the cervical zone, so freeing the cervix, the cervix then artificially expanded by his *cervical* dilators, and the bimanual method of turning resorted to, he was confident, from large experience, that a greater measure of success would be obtained than by any other especial method. He took that opportunity of stating that the first published case of the use of the intrauterine dilator in placenta prævia which attracted his attention, belonged to Mr. Jardine Murray, of Brighton.

Dr. Hall Davis had little faith in statistics of placenta prævia representing a mortality of one in three or four from that complication, knowing that former statistics to that effect had included cases originally published, not to show the average mortality, but as selected instances for the most part hopeless when first brought under medical observation, and intended to prove the fatal tendency of this complication of pregnancy if not timely seen to. He would also observe that we are not left without authority, laid down in lectures and works of reputation, to convince us of the dangers of delay in placenta prævia, and guide us to efficient treatment. He might refer, for example, to the lectures of the late Dr. D. D. Davis at University College from 1828 to 1841, and to his esteemed System of Obstetric Medicine, which taught no temporising treatment, but, on the contrary, the necessity of early and active interference, while at the same time pointing out the hazards of a forced delivery through a rigid os uteri. As to his own experience, he might state that in the Royal Maternity Charity alone he had had, from 1842 to 1862, as physician of the western district, twenty-four cases of placenta prævia. In that number twenty-two mothers were saved, and the two deaths would have been averted had the injunctions given been observed. His treatment had varied with the case. Thus in *partial* placenta prævia he had found the simple discharge of the waters usually sufficient. When the flooding has not been thus arrested, and delivery has been impracticable by reason of the small size of the uterine orifice, he has plugged the vagina impactedly with sponge, or with a sufficient quantity of other suitable material at hand. He has then waited in security for the first opportunity of acting if necessary. In many cases, on withdrawing the plug the head was found descending, and the birth was quickly completed without further aid. In cases of *entire* placenta prævia, when the os uteri would not admit of delivery, he also resorted to the plug, of similar materials as before, believing such a plug, from its solidity, when efficiently applied, to be far superior to any elastic dilator. After from two to six hours he was generally enabled to remove the plug and deliver by turning. In this operation he preferred to pass his fingers in by the side of the placenta, where it might already be detached, to perforating its centre, as some have recommended, as this latter mode necessitates a more considerable injury of the placental vessels and further hæmorrhage. In the operation of turning, it had been his usual practice to fix the uterus by the right hand applied externally on the abdomen while turning with his left hand. To Dr. Hicks, however, (*Obstet. Trans.*, vol. v) were we indebted for a definitely combined mode of *external* and

ternal version by acting on the opposite poles of the hild, the breech above being depressed by the exteral hand, while at the same time the presenting ead is pressed upwards and to its own side. Then he feet are lowered to the os uteri and one or both rought through; the risk, so especially great in ooding, of passing the hand into the cavity of the terus being in this way avoided. In conclusion, he ight say that, while he differed from the author on ne points to which he had referred, he fully concurred ith him, as all judicious practitioners must do, that delay efficient interference in this complication is ost hazardous.

Dr. J. Braxton Hicks quite agreed with Dr. Greenalgh as to the necessity of inducing labour in plaenta prævia as soon as arrangements could be made, hich he believed to be the plan adopted by all who w much midwifery in this city; it was the practice e had always adopted. With regard to the statistics oted from Dr. Reade's work, he quite agreed with r. Barnes as to their want of value. All large oups of statistics were utterly useless as a guide of y particular practice. It was absolutely essential at the details of the cases should be known. In e tables presented to the Society it was impossible say what were the surroundings of the patients; hether, in fact, they had died from the operation, om the hæmorrhage, or from the subsequent calamies to which it was known cases of placenta prævia ere exposed. How, therefore, could we tell the lue of any particular plan of treatment without is information? He considered that when it was id the death-rate was 1 in 4¼, there must be some istake as regards present practice. In the Guy's ospital Charity it was for nine years at 1 in 7½. He so was obliged to differ from the assertion that the e of the child was not influenced by placenta prævia. at it was so he had no doubt; for in half of the cases had seen where it was made out clearly, the child as known to be dead before any operation was atmpted. He hoped the author would have alluded the plan which he (Dr. Hicks) had recommended in recent paper on "Combined Version," because he t sure that it was a very useful one, and not diffilt to anyone who would take the trouble to learn it. had known at least nineteen cases, many of them ry severe, in which it had been used, with only one ath, and that arising from extreme hæmorrhage be- seen, and which could not be put down to ver-n. In all his cases there had been immediate ces-tion of bleeding as soon as the breech was in the os, d he had found that almost in every case labour ins expelled the child within two or three hours m the commencement of the operation. This int it was important to know in order that we ght make our arrangements accordingly. The ld was a most efficient plug, and it could be ought down as soon as the os would admit a finger two. With regard to the small size of the os preting turning in the above-mentioned mode, he ld say it must occur but seldom; when it did so, detachment of placenta round by one finger genely liberated it considerably, enough at least to induce two fingers; if not, the elastic bags could be d with much advantage. We must judge of treatnt by its practical application; our hands we have ays with us, whereas if called to a case at a distance m home, or in great hurry, it would be impossible metimes to obtain the plug now shown. The effect version upon the life of the child he could not com-e. Doubtless cephalic was the best presentation; he had not found in his cases any great mortality. important point was not to hurry the case after breech was in the os. The child was generally troyed by drawing it down before the os uteri was open sufficiently. When the breech was in the os, the case in almost every instance might be left to nature, adopting the rule as in breech cases.

Dr. Graily Hewitt considered the principle enunciated in the paper now read, of the necessity of interference in cases of placenta prævia, to be one of great value. This principle had never been sufficiently insisted on, and although admitted by men of experience, it had not been laid down as a principle in the obstetric text-books. He might mention that two years ago a gentleman in practice in Yorkshire had, in conversation with him, alluded to this very subject, having lost a patient from a suddenly recurring hæmorrhage, due to placenta prævia. The gentleman in question had hesitated, on the occurrence of the first hæmorrhage, to induce premature labour, not finding such practice sanctioned by the text-books, and the patient, living at some distance, had perished when the hæmorrhage recurred two or three weeks later, before assistance could reach her. Doubtless there were cases of this kind occurring from time to time, and which would have been saved by interference. He considered, therefore, that the expression of the opinion of the Society on this subject would have a most beneficial influence, and that patients known to have placenta prævia would not be left liable to perish at any moment from hæmorrhage. With reference to the particular plan of treatment advocated by Dr. Greenhalgh, which was a modification of the "plugging" system, he had some remarks to make. It was to be recollected that in cases of placenta prævia we have two lives to consider—that of the mother and that of the child. What is best for the one is not always the best—nay, it is frequently the worst—for the child. The safety of the child lay in speedy delivery; the safety of the mother in preventing hæmorrhage. Plugging the vagina, artificial or partial separation of the placenta, were measures calculated to stop hæmorrhage; but such treatment, unless accompanied with speedy delivery, was prejudicial to the child, whose vitality was necessarily destroyed by separation of the placenta, to any considerable extent, with or without concurrent external loss of blood. On referring to Dr. Greenhalgh's statistics, it would be seen that although the mortality to the mother was, on his system of treatment, low, yet that the percentage of still-births was high, and the plan in question was, therefore, open to this serious objection. He (Dr. Hewitt) was quite aware that it was impossible to legislate equally well for all cases, the circumstances of each case being, to a great extent, peculiar; but any generally accepted system of treatment must have in view the preservation of the lives of both mother and child. Rapid natural delivery best fulfilled all the indications, and this should be the object sought to be attained in the treatment of these dangerous cases. In a certain number of instances rapid natural delivery was not possible, and under these circumstances the operation of turning offered the best alternative. The extraction of the child should not be performed too soon after the version, unless the bleeding still continued; for until the os was tolerably dilated, the neck of the child was likely to be so tightly caught by the os as to prevent extraction. When the fœtal heart was beating very slowly, rapid extraction of course afforded the only chance of preserving its life. In conclusion, he considered the Society under obligation to Dr. Greenhalgh for his very practical and able paper.

Dr. Beatty (of Dublin), in reply to an invitation from the President to address the Society on the subject, said that he addressed the Society under very serious difficulty; for, not having had the advantage of hearing the paper now under discussion read at the former meeting, he did not well understand its

bearings; but, as well as he could collect from the speakers who had preceded him, he inferred that there were two points particularly dwelt upon by the author. The first was the *time* at which we should interfere in cases of placenta prævia; and the second, the *kind* of assistance most proper to be given. It appeared to him (Dr. Beatty) that the author of the paper recommends delivery as soon as possible after the case was fully made out. In this respect, there was not much difference between his and the practice very usual in Dublin. We wish to finish the case as soon as possible; but it must be recollected that in many cases speedy delivery was impossible, for occurring as the hæmorrhage most usually does for the first time in the eighth month, or even earlier, when the os uteri was little disposed to relax, it not unfrequently happened that the os uteri was so rigid that delivery could not be attempted. We must then temporise, and, by means of position, plug, cold, etc., endeavour to gain time, and save the patient from loss of blood as much as possible. He had spoken now of cases in which there was complete covering of the os uteri by the placenta; but in cases of partial covering, where we could feel any portion of the transparent membranes, the practice was to rupture them at once, and discharge the liquor amnii. When this could be accomplished, we feel pretty easy about the case. The head of the child comes down, and, by pressure on the placenta, prevents any further loss of blood. If the uterus was not disposed to act vigorously, its action was quickened by the ergot of rye. He always depended upon the infusion of the powder made on the spot. It was a medicine that required great care for its safe preservation. He never went out without a drachm of the powder in his pocket-case. It was put up in metallic paper, so as to prevent the absorption of the oil by ordinary paper. It should not be kept more than two months in the case. If not used before then it should be replaced by another drachm. When used it was infused in four ounces of boiling water, and half of it, powder and all, given at once, and the other half in a quarter of an hour. When treated in this way the medicine had never failed him. If the case was one of complete covering of the os uteri, we watch the earliest moment at which the os uteri was dilatable, and then proceed to deliver the patient by turning the child. From these few hurried observations, it appeared that the practice in Dublin does not much differ from that laid down by the speakers who had preceded him (Dr. Beatty) in this debate.

Dr. Woodman mentioned some cases in which he had observed the good effects of the treatment recommended by Dr. Barnes.

Dr. Gervis remarked that the observations of Dr. Beatty relative to the frequent necessity of "temporising" in cases of hæmorrhage from placenta prævia, where there existed a rigid condition of the os and cervix, illustrated the main point at issue between Dr. Greenhalgh and Dr. Barnes. Dr. Greenhalgh in such cases advised the use of the vaginal plug, an abdominal bandage with which to maintain pressure on the uterus externally, and the administration of ergot; while Dr. Barnes maintained that his cervical dilators by themselves efficiently superseded the use of the plug, the bandage, and the ergot, inasmuch as while they were dilating the os and cervix, they simultaneously prevented hæmorrhage and excited uterine action. In this estimate of their utility, Dr. Gervis entirely concurred. Instead of temporising in any manner, or trusting for the accession of labour to the use of ergot, by these bags you obtained full control of the case from beginning to end; and after adequate dilatation of the os, you could either separate the placenta from the orificial zone, rupture the membranes, and then, if that sufficed to check the hæmorrhage, leave the case to nature, or by the bimanual method of version complete it at will. It was not, of course, meant that the dilators were always needed; but their particular value appeared in those cases where but for their use mere temporary measures had to be adopted until the os had sufficiently dilated to permit of operative procedure, and so possibly lead to a delay that might prove fatal.

Dr. Oldham also agreed that it was important to take steps at once in any case of placenta prævia to accomplish delivery—a plan, he thought, admitted by most practitioners in London, and one upon which he had always acted. However, to effect this object, he believed that nothing was more easy or satisfactory than to turn by the plan recommended by Dr. Braxton Hicks, and to bring down the child into the os. He (Dr. Oldham) had only the night before a case where its application was most satisfactory. He considered the plug, which had been recommended for many years, might be used where the cervix was very rigid, and preventing the introduction of the finger; but its chief advantage was as a provocative of labour, and he doubted if it would be equal to stop hæmorrhage.

Dr. Greenhalgh stated, in reply, that he was very pleased to learn from the several speakers that in these cases they had, one and all, adopted the plan of early delivery advocated in his paper, and mostly with satisfactory results to the mothers, which he maintained was not the course recommended in the standard treatises on midwifery or pursued by practitioners in general. He believed that the great success to the children in his cases was mainly due to not separating either a part or the whole of the placenta from the uterus, to retaining the membranes intact until dilatation of the parts had been effected by the pains and plug, and by avoiding version in cases of head presentation, which entailed more or less risk upon mother and child. He was quite convinced that with these precautions a premature child, whose head was small and easily compressible, stood as good, if not a better, chance of being born alive than a child at term. In allusion to the plug, he stated that some years ago, as mentioned in his paper, he had used an inflated India-rubber bag, but had found it ineffectual in arresting the flow of blood from the vagina, which he had never failed to control, no matter how severe with the spongio-piline plug. He considered the effects of the plug to be as follows:—1, to prevent the escape of blood from the vagina; 2, to favour its coagulation in the upper part of that canal; 3, to excite uterine action; and, 4, to dilate the passages. The author approved and adopted the practice of rupturing the membranes in slight cases of partial placental presentation, and of turning in certain malpositions of the child; but he said that he had not alluded to this class of cases in his paper. Dr. Barnes having stated that the statistics of Dr. Read were not trustworthy, and that the author of the paper had estimated the mortality to the mothers too high, Dr. Greenhalgh urged in confirmation the results of the practice of the Dublin Lying-in Hospital, and of his own early experience in cases of placenta prævia. In conclusion, he trusted that after the expression of opinion of so many eminent accoucheurs, there could be no doubt whatever as to the propriety of early delivery in these cases, upon which the ultimate safety of the mother mainly depends.

Sunderland Medico-Chirurgical Society. Dr. Joseph Brown has been elected president; Mr. William Dixon and Dr. Thomas P. Parker, have been elected vice-presidents; and Dr. Henry John Y... honorary secretary and treasurer,

Correspondence.

THE MEDICAL PROVIDENT FUND.

Letter from William Webb, M.D.

Sir,—The scheme submitted to the Annual Meeting at Cambridge by our distinguished associate, Dr. W. Richardson, with a view to the formation of a Provident Fund", in connection with the British Medical Association, deserves the careful consideration of every medical man.

The necessity for such a Fund, must be patent to all who have perused the lists of the Royal Medical College and the Benevolent Fund.

It is a painful fact, that medical men, however large their practice, or extensive their acquaintance, seldom—in the country, at least—realise a competency for their families; and with the knowledge of this distressing truism, and of the necessity as we advance in practice of increased expenditure to maintain our position, ought we not, one and all, at this crisis, to reflect, whether we would not rather than contemplate the idea of those nearest and dearest to us being dependent upon the charity and benevolence of others, to make a little sacrifice in health, to provide (as does the working man by his friendly society) for the contingencies of sickness, disease, accident, and old age? I say "old age", sir; because I am satisfied that no scheme can be thoroughly accepted by the large body of the profession which proposes to give no sick pay after the age of sixty.

Mr. Carter's protest against confining the provident fund to members of the Association, is a reasonable one; for if it be beneficial to the few, why circumscribe the area of its professional influence?

Let us hope, therefore, that Dr. Richardson and his coadjutors (amongst whom, if I mistake not, is the benevolent Mr. Daniell, who may fairly be considered as the originator of this movement) will be induced to reconsider this scheme, and so to alter and amend it as to make it generally acceptable to the medical profession of this country.

I am, etc., Wm. Webb, M.D., F.R.C.S.(exam.)

Durksworth, August 16th, 1864.

Letter from Thomas Martin, Esq.

Sir,—Having read with great satisfaction the report of proceedings at the meeting at Cambridge, I wish, with permission, to offer a few observations on what was said and done in respect of a Provident Fund as an appendage to the Association; and this I do with the more confidence from having had great experience in the operation of friendly societies or benefit clubs, as they are called, having assisted in the management of various societies in and out of the profession, and from my knowledge of the medical profession itself in the course of a long life.

All societies may be supposed to be friendly; but the legislature has always designated one form of society only as being friendly.

Throughout the country, these have been got up, professedly for the benefit of the members, but really all in effect for the benefit of the public-house; and they do more harm than good to the members. From bad management and all sorts of blunders, they sooner or later fail and go to wreck.

Disgusted with these pot-house clubs, seventeen years ago, I started a club that should be unexceptionable and never go near the public-house. Its organisation and administration are so complete, that it stands among the highest in Mr. Tidd Pratt's estimation; and he is himself an honorary member, as denoting his high approbation.

That society contemplates several forms of benefit; and permit me to observe that the word *relief* is inappropriate as respects your Provident Fund, which is not a charity—the subscribers having a right to demand that which they have paid for. In the whole period of seventeen years, during which I have officiated as the honorary secretary and medical referee of the Reigate Victoria Club, I have never once made use of the word *relief*.

From my experience, therefore, in these matters, and from my knowledge of the proceedings of our Surrey Benevolent Medical Society with which I have been connected from its origin, fifty-two years ago, I would beg to submit:

1. That the Provident Fund should provide for benefit in sickness only; excepting that it might perhaps include an endowment for children.

2. That it should be constituted and governed by a code of well considered rules and tables, and administered by a board of directors of professional gentlemen, to whom may safely be confided the necessary powers, having allegiance to a general meeting, annual or occasional.

3. That, as in other societies for life-assurance, there is nothing humiliating in submitting to a proper investigation as to the state of health of candidates for admission.

4. That the fund should not be encumbered with a charter.

5. That it should not provide for a deferred annuity, nor any other form of benefit than payment in sickness, excepting, as I have already stated, perhaps an endowment for children.

Permit me to conclude by observing, that the Provident Fund, prudently and judiciously managed, as it will be, will realise the best hopes and expectations of those who engage in it. I am, etc.,

Thomas Martin.

Reigate, August, 1861.

ARMY MEDICAL DEPARTMENT.

Sir,—I have just seen the report of the annual meeting of the Association at Cambridge, and think it necessary to say a few words regarding what was said about the army medical service. I see that Dr. Wood (London) expressed an opinion that the grievances of the army medical officers are exaggerated; and he seems to have great confidence in the disposition of the authorities to do what is right. But, sir, that gentleman does not appear to have much knowledge of the subject. He gave a very absurd account of a medical officer's relative position, altogether fancied.

The medical officers have never made any complaint of the relative rank assigned them; but, on the contrary, have at all times expressed their entire satisfaction on that subject. What they complain of is, that the authorities do not respect their rank; that the privileges attaching to their relative rank are systematically withheld; and that, in fact, their relative rank exists only on paper. Now all the disadvantages (or nearly all) result from the fact of the names of medical officers being placed in the *Army List*, and other official documents, *after* those of all other officers without respect to rank, and the effect of this arrangement is to render the true position of the medical officer, at best, a matter of doubt, and to bring relative rank into contempt. There can be no reasonable objection to the names being so arranged, as to plainly indicate the precedence to which each individual officer is entitled. This may appear trifling at first sight, but it really is not so. It is not

merely the order in which the names appear which is important, but it is the *consequences* which *result* from that order. At present, the medical officer suffers very serious disadvantages from his name appearing last in the list instead of according to his relative rank. I may instance the matter of quarters, and invitations on public occasions. I have frequently seen a medical officer obliged either to occupy an inferior quarter, or else *assert* his true position, and enter into an argument with a junior officer, in order to prove his right to that which the junior has taken possession of in consequence of this faulty arrangement of names. *That* is not a sentimental grievance. Again, it frequently happens that invitations are given in accordance with the rotation of names in the *Army List*. I have seen subaltern officers receive invitations before surgeons, although the surgeons hold relatively the rank of major. *That* is not a sentimental grievance. Now, I maintain that measures should be taken by the authorities to render the true relative position and precedence so evident, that such evils could not *possibly* occur.

Before I conclude, I wish to say a few words about the "power of arrest." I find that Dr. Sibson stated that it was not desired that the medical officer should have that power; and he evidently believes that at present he has not got it—indeed, I think the Director-General stated that he had not. Now that is an erroneous idea. Whether or not the possession of that power is an advantage, may be matter of opinion; but it is conferred by act of Parliament. Turning to the "Articles of War," under the head of "Maintenance of good order," we read the following paragraph.

"*All officers, of what condition soever*, have power to quell all quarrels, frays, and disorders, though the persons concerned should be of superior rank, or belong to another corps, and either to order officers into arrest, or soldiers into confinement, until their proper superior officers shall be acquainted therewith." From that "article," I think it is clear that medical officers have the "power of arrest." I know that, were certain circumstances to occur necessitating the exercise of that power, they would most probably be severely blamed if they failed to exercise it. The want of that power is felt in the army as a degradation, and a manifest proof of inferiority of position; and therefore it is that we now hear it gently insinuated (for it has never been openly and officially announced) that medical officers are excepted when the expression "*All officers, of what condition soever*" is made use of. I think, myself, that although the power is very rarely exercised, and should be exercised with very considerable caution, it is decidedly necessary, and for the advantage of the public interests, that the power of arrest should not be withdrawn from medical officers. We cannot imagine that they are more likely to abuse that power than other officers.

I would especially commend the matter of precedence of names to the serious consideration of the Association. I am, etc.,

"Fortis est Veritas."

RESPONSIBILITY ATTACHING TO CHLOROFORM ADMINISTRATION.

Letter from Thomas Skinner, M.D.

Sir,—I perfectly concur with the justice of the remarks on the above important subject in a leader in last week's number of the Journal; only, I think I should be inclined to go a little further, and look upon the surgeon or operator as the only responsible party in the matter; the chloroformist being neither more nor less than one of the staff of assistants now found to be absolutely necessary for the safe conduct of a surgical operation. In amputation of the thigh or at the hip-joint, would not the operator be held in the fullest sense responsible, if the patient died from an inefficient assistant having been trusted with the control of the femoral artery? Undoubtedly, he would; and I hold that all surgeons or operators in surgery are the only parties responsible for their assistants, either in public or in private practice.

Unless the operating surgeon himself thoroughly understands the physical and physiological properties of chloroform, and the best means of administering it, so far as is known; and unless he watches his assistant, and corrects him when wrong, or otherwise shows him the best way under a multitude of varying circumstances—how are we ever to have reliable chloroformists bred in our hospitals or elsewhere?

I have seen a great deal of hospital practice and surgical operations under chloroform since 1847; and I must confess that I have in general been struck with the all but total indifference on the part of the most distinguished operators to the induction of the anæsthesia, as if it were a part of the operation in which they had little or no concern. I have actually seen one most imprudently talking to his audience as to the nature of the operation he was about to perform, whilst the anæsthesia was in process of induction.

Now, I have no hesitation in stating that, if the surgeons knew the best method or methods of administering chloroform, they ought certainly to have better instructed and trained their chloroform assistant on the occasion to which I refer, and thereby have given the patients, themselves, and their most patient admirers on the benches, the benefit of it. If they did not know better than their assistant, then I hold that they are as bound to inform themselves of this part of their duty, as of the all-important and skilful part which they themselves are specially called upon to perform during surgical operations.

In the cases I have stated that I saw in London the chloroform was administered on lint, in half drachm doses, and held over the face of the patient whilst lying on his back. Under these conditions, very much question if one-half of the chloroform ever penetrates to the patient's lungs. The vapour of chloroform being much heavier than common air, a portion of it gravitates over the cheeks and chin, and otherwise escapes the air-passages; some is driven out by the patient during expiration; and a still greater quantity is lost in another way, of which the chloroformist on this occasion seemed perfectly unaware, namely, by putting so small a dose on the lint as half a drachm, say that nearly one-half is lost as I have stated, the anæsthesia already induced is almost dissipated before the dose is renewed. The chloroformist withdrew the lint each time from the patient's face and extended it towards the "bottle-holder", to have the dose carefully measured and poured on the lint. Need any one wonder that, by such a method, twenty minutes were consumed in inducing insensibility, and need we wonder that, even after ten minutes' inhalation in one case, the patient "was complaining of pain during most part of the operation"? I should positively feel ashamed of myself, if I failed to induce with average safety, the deepest anæsthesia in ten minutes.

I lately saw a series of brilliant operations performed at a first-rate metropolitan hospital; and no case was the induction of the anæsthesia produced in less than ten minutes; in one case it was only twenty minutes.

Let me repeat: 1, that I hold there is no pers

ponsible for an accident attending the administration of chloroform during a surgical operation, except e surgeon who has undertaken the responsibility the operation; 2, that it is the duty of every surn to perfect his knowledge of the safest and most ectual as well as economical methods of adminising all anæsthetic agents; 3, that, knowing that the responsibility must of necessity rest with himf alone, the operating surgeon cannot be too carein the selection of his assistants, particularly of chloroformist.

Apologising for the length of this epistle,

I am, etc., THOS. SKINNER, M.D.

Liverpool, August 20th, 1864.

PUNCTURE OF THE BLADDER.

LETTER FROM EDWIN MORRIS, M.D.

SIR,—Mr. T. Paget's high position as a practical geon, and his long standing and great experience, itle any opinion or suggestion of his to be reved with the greatest respect; and no one is more dy to do this than myself. I do not, however, ee with him relative to his treatment of retention rine from impracticable stricture. Mr. Paget, in ommunication in your last number, gives a prefere to puncture of the bladder above the pubes to perinæal section; stating, "I am convinced that ping above the pubes, and micturition afterwards a short tube regulated by a plug or screw stopper, or a patient past sixty years of age, and perhaps others, a far better course of treatment than perial section, though certainly not so glorious for an iring operator."

The paper upon this subject, to which Mr. Paget ides as having read at the Midland meeting in 9, I had the pleasure of listening to; and at the e thought his remarks very pertinent and feasible. ving some experience in the matter, I can no ger agree with Mr. Paget in considering puncture the bladder above the pubes is "far better" than inæal section, and, although the latter may be a e "*glorious* operation", the former is nevertheless easy and ready way of getting out of a difficulty. ely great annoyance and inconvenience must be erienced by a person having an elastic gum catheter stantly protruding through the walls of the abdon, and with no attempt at relief of his impracble stricture. This is a gloomy and disheartening dition for any man, even an aged one, to be ed in; considering, too, the many appliances we e for the permanent cure of impracticable stric, first and foremost of which stands Syme's perial section. The following two cases, briefly given, bear me out in this opinion.

ASE I. Frederick Smith, aged 63 years, was adted May 24th, 1864, into the Spalding Union Inary, suffering from retention of urine from imticable stricture. He stated that he had had a cture for many years, and for a long time his er only "came away in drops". Upon examining abdomen, it was much enlarged; and the disled bladder could be distinctly felt. The man in great agony, and would submit to anything t would "pass his water". I tried in vain to pass atheter down the urethra; and, as something must done at once for the man's relief, I determined n dividing the stricture according to Syme's hod. I did this most freely, and without much culty passed a No. 8 silver catheter into the bladd and relieved it of a quantity of most offensive ne. After a few days, I replaced the silver by an tic gum catheter; and this he has worn ever since, changing it every fourth or fifth day. The wound in the perinæum has healed over. He occasionally passes his urine *per vias naturales*, without the aid of a catheter; but at present prefers wearing it. He has a free passage now, and can take out the catheter, clean it, and pass it again himself. He has improved in health, gained flesh; and is, to use his own expression, "a better man than ever".

CASE II. John Whyley, aged 72, was admitted July 26th, labouring under a distended bladder from impracticable stricture. He had had difficulty in passing his urine for years. He said he had not passed water for the past three days. His body was much swollen and tender. I failed to pass a catheter. His penis was much distended and discoloured. I divided the perinæum freely; laid bare the strictured part of the urethra; divided it; and passed the catheter into the bladder, and emptied it of its offensive urine. The man became very ill, with typhoid symptoms. I gave him bark, ten ounces of port wine daily, beef-tea, etc. He soon recovered. The wound is looking healthy, the urine passing through the catheter, and the bowels acting regularly. I replace the catheter every fourth day with a new one, as they become furred up and useless.

Both men are still in hospital, and under treatment.

With due deference to Mr. Paget, I must claim for my patients a better state of things than his, for the following reasons. They were at once relieved from a dangerous condition; and at the same time, by the same operative surgical procedure, cured of their stricture, and left to do at their pleasure what Nature intended they should do—pass their urine through the penis.

I hope Mr. Paget will receive the above remarks in the same spirit in which they are written. I trust he knows me too well, to suppose otherwise than that the only object I have in replying to his remarks is simply to contrast one method of treating a most dangerous disease with another, and thus enable us to judge of that which is best for the patient—the great object we all have in view.

I am, etc., EDWIN MORRIS.

Spalding, August 23rd, 1864.

A TRUE CURE FOR THE ARMY DISEASE. The order relating to the new system of regimental workshops, published by the Commander-in-Chief at Simla, has been printed. It sets forth, with just congratulations, the success of the new system which has been introduced among the regiments serving in India. The system was set on foot by a general order in September 1861, and has now become established with success in five regiments of cavalry and thirty-two battalions of infantry. The occupation of gardening has been very successful. Soldiers, it is found, take great pleasure in small gardens. This system of barrack gardens in their regiments is to be promoted to the utmost. The Commander-in-Chief also commends the industrial system for children, which has been carried out with good effect in several regiments. Generally speaking, throughout the army in Bengal manly exercises and out-door recreations are practised, and there is a number of cricket clubs, etc. Every regiment has its reading and recreation room, well furnished and fitted, and the increasing popularity and success of regimental libraries is evidenced by the growing number of subscribers. To this system has been traced a considerable decrease in the consumption of ardent spirits by the army. Englishmen at home will all join in the congratulations which the Commander-in-Chief expresses at the success of a system such as this.

Medical News.

UNIVERSITY OF LONDON. The following candidates have passed the first M.B. Examination.—Entire Examination.

First Division.

Bateman, Francis, St. Bartholomew's Hospital
Bushell, Stephen Wootton, Guy's Hospital
Cole, Thomas, St. Bartholomew's Hospital
Howse, Henry Greenway, Guy's Hospital
Irvine, James Pearson, B.A., University College
Nunneley, Frederic Barham, University College
Philpot, Charles William, King's College
Shaw, Thomas Claye, B.A., King's College
Tayler, George Christopher, St. Bartholomew's Hospital
Welch, John Burges, King's College

Second Division.

Adams, Arthur Bayley, London Hospital
Ball, John Augustus, Guy's Hospital
Beck, Marcus, University College
Berrell, Charles, King's College
Berry, Other Windsor, Charing Cross Hospital
Buckell, Francis John, University College
Clothier, Henry, University College
Eastes, George, Guy's Hospital
Kelly, Charles, King's College
Lloyd, John, Queen's College, Birmingham
Smith, Charles James Hardy, University College
Spencer, George Owthwaite, University College
Taylor, Arthur, Guy's Hospital
Warren, Thomas Pickard, Guy's Hospital
Williams, John, University College

Excluding Physiology.

First Division.

Hughes, John Pearson, University College

Second Division.

Birtwell, Henry Hargreaves, St. Thomas's Hospital
Evans, Julian Augustus Michael, University College
Ferris, John Spencer, King's College
Gooding, Ralph (B.A.), King's College
Grimes, John, King's College
Legg, John Wickham, University College
Orton, George Hunt, St. Bartholomew's Hospital

Physiology only.

First Division.

Glynn, Thomas Robinson, St. Bartholomew's Hospital
Hilliard, Henry Charles, Guy's Hospital
Hooper, John Harward, St. Thomas's Hospital
Mickley, Arthur George, Guy's Hospital
Turner, Ebenezer Fulham, Guy's Hospital
Woodhouse, Thomas James, St. Thomas's Hospital

Second Division.

Aldersey, William Hugh, Guy's Hospital
Harvey, Walter Anstice, St. Bartholomew's Hospital
Norton, Arthur Trehern, St. Mary's Hospital
Read, Charles, University College

UNIVERSITY OF EDINBURGH. The following candidates received the degree of Doctor of Medicine on August 1st. The mark *a* indicates those who have obtained prizes for their dissertations; *b*, those deemed worthy of competing for the dissertation prizes; and *c*, those commended for their dissertations.

Anderson, Robert, Scotland
Baker, Robert, England
Banks, William Mitchell, Scotland (*a*)
Barnes, Henry, England (*c*)
Barss, Andrew de Wolf, Nova Scotia
Belgrave, Thomas Bowerman, England
Bentham, Thomas, England
Bottle, Alexander, England
Brims, James, Scotland
Bruce, William, Scotland
Carmichael, James, Scotland
Carter, William, England
Chastellier, Evenor, France
Clifton, Herbert, England
Conyers, James Saltus, Bermuda
Cornish, George Bishop, England
Crawford, William Thomson, Scotland
Crichton, James Smith, Scotland (*c*)
Cunningham, Robert Oliver, Scotland (*b*)
Dalton, Thomas, England (*c*)
Dixon, George, England
Drummond, Edward, England
Eddison, John Edwin, England (*c*)
Elmslie, William Jackson, M.A.Aberdeen, Scotland
Fox, Cornelius Benjamin, England (*b*)
Grosvenor, Alfred Octavius, England
Gunn, Robert, Scotland
Hamilton, David, Scotland
Harrison, Thomas Laurence, Shetland
Henderson, Edward, Scotland
Hope, James Johnstone Hyslop, Scotland
Howes, Frank Charles Plumptre, England
Hughes, David Erskine, Scotland
Irvine, William Skipton, Ireland
James, Henry Northage Land, England
Jones, Andrew Pugsley, New Brunswick
Joyce, Thomas, England
Laing, Alexander, Scotland
Livingstone, Robert Hamilton, New Brunswick
Lorraine, Walter, Scotland
M'Andrew, Andrew Watson, Orkney
M'Closkey, Joseph Richard, Ireland
M'Donald, Angus, M.A.Aberdeen, Scotland (*c*)
Mackenzie, Stephen Coull, Calcutta (*b*)
M'Neill, William, Scotland
Meiklejohn, Robert Morris, East Indies (*c*)
Messer, Thomas John Fordyce, Scotland
Miller, Alexander Gordon, Scotland
Moffat, John, Isle of Man
Montizambert, Frederick, Canada
Morson, Alexander Kinnear, England (*c*)
Mouat, George Bridges, Scotland
Munro, Alexander Donald Neil, Scotland (*b*)
Nankivell, Herbert, England (*c*)
Nash, Edmund, England (*c*)
Nivison, Thomas Renny Strachan, Scotland (*c*)
Oliphant, John, Scotland (*c*)
Parsons, Charles, England (*a*)
Purves, William Laidlaw, Scotland
Renton, William Matthew, England
Rigg, Thomas, England
Roberts, John, Wales (*b*)
Roberts, Thomas Edward, Gibraltar
Robertson, Schoedde, Ireland
Semple, William Henry, Scotland
Sewell, Colin Charles, Canada
Shears, Arthur, England
Shedden, Arthur William, East Indies
Sheldon, William, England
Sinclair, William, Scotland
Skimming, Robert, Scotland
Smith, James Taylor, England
Squires, William Westbrooke, France
Taylor, Herbert, Darmstadt (*b*)
Taylor, John William, Scotland
Thomas, David, Wales
Thomson, James Clements, East Indies
Thomson, Robert Bremner, Scotland (*a*)
Thorburn, David Arno Smet, Scotland
Turnbull, George Hogarth, Scotland
Veitch, Andrew, Scotland
Walford William, England
Warter, John Southey, England (*c*)
Watson, Alfred Marchmont, Jamaica (*a*)
Watson, James, Scotland
White, Francis Buchanan White, Scotland (*c*)
White, John Gregory, England
Wickwire, William Nathan, Nova Scotia
Williams, Eyton Owen, England
Wood, Joseph, England
Workman, Charles John, England (*c*)
Wright, Joseph Brampton, England (*b*)
Wright, Robert, Scotland

APOTHECARIES' HALL. On August 18th, the following Licentiates were admitted:—

Cropp, Frederick John, Clapham
Green, Thomas Henry, Saffron Walden
Lightbody, John, Kirby Moorside, Yorkshire
Spooner, Edward Monro, Blandford, Dorset
Taylor, Francis Henry Wickham, Camberwell

At the same Court, the following passed the first examination:—

Butler, William Harris, Guy's Hospital

APPOINTMENTS.

BATEMAN, Frederic, M.D., appointed Physician to the Norfolk and Norwich Hospital, in the room of *W. H. Ranking, M.D.

COOMBS, William G., M.D., appointed Assistant Medical Officer to the Dorset County Lunatic Asylum.

DAVIES, J., Esq., appointed Assistant House-Surgeon to the Stockport Infirmary.

MOWAT, George, Esq., elected House-Surgeon and Apothecary to the Swansea Infirmary.

RICHARDS, Joseph P., Esq., appointed House-Surgeon to the Stockport Infirmary.

THOMAS, Griffith R., Esq., elected Surgeon for Out-patients to the Swansea Infirmary.

OR-LAW MEDICAL SERVICE.

KINSON, F. H., Esq., to the Benington District of the Boston nion.

VIDSON, Frederick, M.D., L.R.C.P.Ed., to No. 4 District of the Vest Ham Union. Essex.

RRIS, James S., Esq., to the Workhouse and District No. 1 of the lything Union, Suffolk.

NTHORN, John, Esq., to District No. 4 of the Newcastle-on-Tyne nion.

ANCE, Richard, Esq., to the Conwil District of the Carmarthen nion.

KEIL, William, M.D., to the Parochial Board of Port Patrick, igtonshire.

YTON, Henry W., Esq., to District No. 2 of the Newcastle-on-Tyne nion.

RSE, John S., M.D., to District No. 1 of the Newcastle-on-Tyne nion.

MY.

NKLIN, Surgeon H. B., M.D., 10th Foot, to be Staff-Surgeon, *vice* . Sinclair.

G, Surgeon G. S., M.D., 14th Foot, to be Surgeon 96th Foot, *vice* Swift, M D.

KENZIE, Assistant-Surgeon J., 10th Foot, to be Staff-Assistant-rgeon, *vice* F. E. Scanlan.

NLAN, Staff-Assistant-Surgeon F. E., to be Assistant-Surgeon th Foot, *vice* J. Mackenzie, M.D.

LAIR, Staff-Surgeon W., to be Surgeon 10th Foot, *vice* H. B. anklin, M.D.

T, Surgeon-Major B., M.D., 96th Foot, to be Surgeon 14th Foot, e G. S. King, M.D.

UNTEERS, (A.V.=Artillery Volunteers; R.V.= Rifle Volunteers):—

CKTON, D. H., M.D., to be Honorary Assistant-Surgeon 21st affordshire R.V.

DEATHS.

H, Michael A., M.D., at Highwoods, Writtle, Essex, on Aug. 18.

D, James, M.D., at Richmond, aged 81, on August 23.

CHINSON. On August 20th, at Herne Bay, Anne Sarah, widow John Hutchinson, M.D.

IS, James L., Esq., Surgeon, at Grove's End, Glamorganshire, d 53, on August 15.

NE, Thomas Arthur, Esq., at 30, Grosvenor Street, aged 67, on gust 20.

SON, Robert Dundas, M.D., F.R.S., at Richmond, aged 53, on gust 17.

HE MEDICAL BENEVOLENT COLLEGE. Lord Gran- has accepted the presidency of the medical col- at Epsom.

UCHAN MEDICAL SOCIETY. Mr. William A. Gavin been elected president for 1864-65; and Dr. Wil- Bruce has been re-elected secretary.

HE INTERNATIONAL CONGRESS held its second ting the week before last at Geneva. Professor gmore, and Dr. Rutherford, Inspector-General re- ented England on the occasion.

LEGAL RECEPTION OF A LUNATIC. Mr. Henry kins of Ealing Green, has been admitted to bail trial at the instance of the Commissioners of acy, charging him with having received a lunatic out being properly licensed to do so.

. BARTHOLOMEW'S HOSPITAL AND COLLEGE. The wing scholarships have been awarded at the close he Summer Session of 1864: W. J. Garrett, W. are, and W. J. Tattersall; C. D. Batt *proxime sit.*

HE POISONING OF SEAMEN. The inspector of meat underland has recently died at that place, of , produced by the effluvium from some casks of isions which he seized before they could be got oard a vessel.

QUESTS. The following amongst other bequests been left by the late Mr. Thomas Robinson, of lford House, Bootle, to the hospitals, etc., con- ed with Liverpool: Royal Infirmary, £1,000; h Dispensary, £600; South Dispensary, £600; d Asylum, £500; Blue Coat Hospital, £500; hern Hospital, £500; Southern Hospital, £500. late Mr. Martin Thackeray has left £500 to the ord Hospital.

DEPOSIT OF THE NILE. Dr. Muspratt gives the following as the principal constituents of the *mud* of the Nile: silicic acid, alumina, proto-and sesquioxide of iron, with traces of phosphate of alumina, and organic matter containing ammonia.

DIAGNOSIS BY BALLOT. At a meeting of the Illinois State Medical Society, the members balloted on a case presented. "The result of the vote was a follows:—Psoriasis inveterata, 5; skin disease, 1; eczema rubra, 5; tetter, 1; rara avis in terra, 1; leprosy, 3; natrum muriaticum, 1; psora, 1; blank, 3; Persian leprosy, 2." (*Chicago Journal.*)

THE FEDERAL ARMY. From May 9th, 1864, to June 10th, the medical department sent to Belle Plain, Fredericksburg, Port Royal, and White House, surgeons (volunteer, contract, and regimental), nurses, medical students, and attendants, to the number of one thousand, viz.: surgeons 580; volunteer aid corps, 194; contract physicians, 42; regimental, 19; number of nurses, medical students, etc., 165.

THE LEGION OF HONOUR. At this season of the year all France is divided into two classes—those who are already members of the Legion of Honour, and those who hope to become so. Pages of the medical journals are filled with the names of medical men who have been this year added to the long list of those who are already entitled to wear a bit of red ribbon in their button-hole.

DR. SIEVEKING will accompany the Prince and Princess of Wales to Copenhagen. The Royal party will leave Scotland (*viâ* Dundee) for that city in the first week of September. Dr. Sieveking at the end of September will give up the charge of the Prince and Princess to Dr. Minter, and return to England—the Prince considerately not wishing Dr. Sieveking to remain too long away from London. The Royal infant will, we believe, return to England with Dr. Sieveking.

TEA, COFFEE, AND SUGAR. The consumption of sugar per head throughout the United Kingdom is 37lbs. That of coffee has decreased in England; in 1841 nearly 1 lb. 8oz. was consumed, but now it is scarcely 1 lb. 5oz. per head. Of tea in 1841, we consumed in the United Kingdom 36,675,667 lbs. or 1 lb. 6oz. per head; in 1861, 77,927,750 lbs. or 2 lbs. 11oz. per head.

DAMAGES FOR POISONING BY MISADVENTURE. At the recent Liverpool assizes, an action was brought by a widow, who sought to recover from a chemist £3,000 for the loss of her husband, who had died in consequence of taking poison, supplied by mistake for medicine by one of the defendant's assistants. Before the case was opened, however, a verdict for £1,500 was taken by consent—£500 being given to the widow, and £500 to each of her two younger children.

WAR. A ride of four hours brought us to Fredericksburgh, where we reported to Surgeon E. B. Dalton, Medical Director. There were at that time not far from four thousand wounded in the city, scattered throughout all the available buildings, as churches, hotels, stores, warehouses, etc., etc. On first entering these suddenly extemporised hospitals, we were struck with the utter destitution of all medical and hospital supplies. The patients lay thickly upon the floors, with only their dirty, tattered, blood- and pus-besmeared garments under and around them, and neither bandage, lint, nor old linen could be obtained to dress their offensive wounds. There was also great destitution of food, especially such as the severely wounded require. There can, however, be no blame attached to the medical department for this absence of hospital supplies. (*American Medical Times.*)

Dr. Brown-Séquard and the Harvard University It will be gratifying to all interested in medical education and the college, to learn that a professorship of the Physiology and Pathology of the Nervous System has been established by the corporation, and that the greatest teacher in this branch of medicine of the day, Dr. E. Brown-Séquard, has been appointed to fill the chair. This distinguished physiologist has fixed his residence permanently among us. (*Boston Journal.*)

Prison Dietary. The commissioners, in their report, speaks as follows of the present gaol diet. "In accordance with your directions, a board of medical officers was assembled to examine and report on the whole question of the dietary of the separate prisons. The board has since made its report, and the dietary recommended by it has been adopted at Millbank and Pentonville, Brixton, and Parkhurst. It differs considerably from the old diet, and contains only 284oz. of solid food per week as against 306oz per week in the dietary formerly in use, but it is more varied, and there seems no reason to doubt it is a very sufficient dietary. The dietary of the public works prisons has also been carefully considered by a board of medical officers, and an amended uniform diet recommended, which has been approved and ordered to be gradually adopted. It involves a very large reduction in the old scale of diet, viz., a reduction from 352oz. per week to to 299oz. per week of solid food, or nearly one day's food in the week."

Death of Dr. R. Dundas Thomson. On the 17th inst., Dr. Robert Dundas Thomson expired at Richmond, where he was on a visit to his brother. In the medical world Dr. Thomson occupied a high rank, both as an author and professor, while the many public offices in which he practised, and the honorary positions which he filled, brought him prominently into connection with the public. He was in the 54th year of his age. His first degrees were taken in Glasgow, in which university he afterwards held the chair of chemistry. In 1859, he became a member of the Royal College of Physicians, and was elected a Fellow of the College during the present year. He filled the chair of chemistry at St. Thomas's Hospital for many sessions, and was physician to the Scottish Hospital and to the Blenheim Free Dispensary, of which he was one of the founders. He was a Fellow of the Royal Society, and of several medical societies in London and Edinburgh, also of the Chemical Society; and was president of the British Meteorological Association. He also occupied the position of medical officer of health to the parish of Marylebone.

The Hôtel Dieu is said to have been founded in the twelfth century by St. Landry, Bishop of Paris. It was enlarged during the reigns of St. Louis, Henry IV, and Louis XIV. Two fires caused great destruction in the Hôtel Dieu between the years 1737 and 1772; and a great number of patients were burnt to death during the second fire. During the reign of Terror the Hôtel Dieu was called "Maison de l'Humanité." The Minister of the Interior laid the first stone of the present portico on the 1st Vendemiare, year 12. On entering the Hôtel Dieu a statue of St. Vincent de Paul is to be seen on the left, and of Montyon on the right. The grand staircase is decorated with portraits of the most celebrated physicians and surgeons attached to the hospital. Several inscriptions on tablets record the various *ordonnances* relative to endowments. One inscription contains the celebrated ode, composed by Gilbert at the Hôtel Dieu, entitled *Au Banquet de la Vie.* Underneath is written "Gilbert, eight days before his death; 22 years of age."

Tetanus in the American Federal Army. Te tanus has prevailed among the wounded of the Arm of the Potomac to an unusual extent. Upwards fifty cases occurred within a short period at Freder icksburg and in the hospitals at Washington. Nearl every case proved rapidly fatal. We are glad to lear that Dr. Brown-Séquard, of London, now in th country, has consented to give a lecture on this di ease, at Washington, where it is now most prevalen (*American Medical Times.*)

Inquests in 1863. In the year 1863 as many a 22,757 coroner's inquests were held in England an Wales. The juries brought in 207 verdicts of murde 203 verdicts of manslaughter; 1,385 of suicide—a increase of nearly 8 per cent.; 323 of death from e cessive drinking—more than double the number 1862; 140 of death from want, cold, and exposur The verdicts of suicide were on 1,048 men and 3 women. 3,664 of the inquests—a proportion as o in every six—were upon infants not more than a ye old, more than a fourth of them illegitimate; a verdicts of murder were recorded in 166 of these cas No less than 79 of those verdicts of murder were Middlesex.

The Federal Army Medical Service. In a v ume containing a collection of tourists' tales, et entitled *Vacation Tourists and Notes of Travel* 1862-3, there is an account of the Federal army me cal service. Mr. Charles Mayo, who was in the medi service of the Federal army, recounts what a reckle and ill-organised service it was, and how much wo it might have been but for the sanitary commissione there. He acknowledges his debt of information the South for one or two pieces of knowledge whi he did not possess previously. "One of these is, th the stories about the cruelty, brutality, sensuali ignorance, and ferocity of the slave-owners, on whi we have formerly been fed, are mere inventions in t greater number of cases; I believed this to be before, but I never knew it for certain until I h been in the South."

Tortures of War. A medical member of the Sa tary Commission writes from Washington. "In 20, wounds, 749 were compound fractures of femur; a of this number 480 were transported unamputat Again, of the knee there were 242 wounds, and these 138 were transported unamputated. Of the l there were 948 gunshot fractures, of which 650 mained unamputated. There were at the same ti 566 gunshot-wounds in the lungs and thorax. It been found that any one of the transported fractu must be moved, off and on (unless the bunk or goes with the sufferer), at least fourteen times bet resting in a general hospital. Often the numbe movements is much more! Very few of the woun thighs and knees now and recently brought to Wa ington have any supporting appliances."

Medical Fees. The *American Medical Times* c out for a revision of the Fee-list. Medical men the most meagrely paid of any class of any comm nity. They are supposed to be liberally educated, yet they are called upon to perform the most me services. They have no repose either night or They are the common drudges to do all the h labour, and that gratuitously, of every charitable stitution. They expose themselves freely to e form of contagion, and meet death on every h And yet the reward for all this toil and self-sacri is little more than an "approving conscience." truth is, medical men have never properly estim the importance of their services, and have co quently placed a degrading pecuniary value u them.

OPERATION DAYS AT THE HOSPITALS.

ONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. -Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

UESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

EDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

HURSDAY..... St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

RIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

ATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

DISEASE IN MANCHESTER AND PRESTON.

ETURN of diseases occurring in public practice in ıe week ending August 13th, 1864. Manchester, ontributed by Manchester and Salford Sanitary Asociation; Preston, by R. C. Brown, Esq.

	Manchester.	Preston.
Small-Pox	9	—
Chicken Pox	1	2
Measles	12	4
Scarlatina	19	6
Diphtheria	1	—
Hooping-Cough	4	—
Croup	1	—
Diarrhœa and Dysentery	160	38
Continued Fever	47	17
Erysipelas	6	3
Rheumatism	57	5
Neuralgic Affections	11	2
Constitutional Syphilis	26	2
Phthisis	52	6
Insanity	13	2
Bronchitis, Inflammation, and Catarrh	121	16
Pleurisy and Pneumonia	15	1
Skin Diseases	67	3
Dyspepsia	80	12
Other diseases not classed	714	70
Totals	1416	189

TO CORRESPONDENTS.

* *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

ORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

RRATUM.—In Mr. Paget's paper published in last number, at page 213, column II, line 10, for "pubes", read "umbilicus".

HE governors of the Samaritan Free Hospital have decided that operations for diseases incidental to women may be performed either by the physicians or the surgeons of the hospital. This seems to us a very natural resolution. Physician-accoucheurs have taken upon themselves the right of operating, and (as far as we can understand the rights and wrongs of a matter) they have a perfect right to do so. Practice, we suppose, makes etiquette; and there is no etiquette which forbids the accoucheur to perform an operation. If a physician choose to operate, most assuredly the College of Physicians would never contest his right to do so. It would be hard, indeed, if any college attempted to interfere in such a way with its members, so long as there is nothing to prevent any man in the country, from the Archbishop of Canterbury (who confers degrees in medicine) down to the crossing-sweeper, from performing operations or treating diseases. Etiquette has decided that pure physicians must not amputate legs; but it has not decided that physician-accoucheurs shall not operate on female diseases; and therefore physician-accoucheurs do operate in such diseases; and we really see no reason why they should not, if they are pleased to do so.

M. S.—You need be in no anxiety respecting the limitation of the Provident Fund to members under sixty. The Committee was quite right in taking the actuarial average; but the Chairman of the Directorate promised at Cambridge that the whole subject should be reconsidered by the directors, who will, we doubt not, find a means of meeting the difficulty, to the satisfaction of all associates.

STRUMOUS OPHTHALMIA.—SIR: Your number for August 6th, contains an appeal from a correspondent, "M.D.", who finds a difficulty in dealing with certain cases of so-called "strumous" ophthalmia, of a persistent and contagious character, in children who are workhouse residents. I beg to direct his attention to page 398 and context of the *British and Foreign Medical Review*, April 1863. He will probably, on minute inspection of his patients, find the affection not different from the granular ophthalmia of barracks; notices are to be found in the last Army Reports, and which is proved to exist in workhouses, in a somewhat recent number of Beale's *Archives*. This complaint is so little amenable to treatment, that it is likely to constitute a standing imperfection in our in-door workhouse system. I am, etc., G. G.

Paddington, August 1864.

CERTIFICATES IN CASES OF MISCARRIAGE.—SIR: I am reported at a late inquest to have said, "It was a common practice for medical men to let the bodies of still-born children be buried in back gardens." I referred to miscarriages. Dr. Hanks said, "That the medical profession wished particularly to know if, in cases of miscarriage, certificates were required?" It seems that all medical men are not yet convinced of the absolute necessity of supplying certificates in cases of miscarriage and abortions; as some are still awaiting the unanimous decision of the members of the medical profession; many wishing "particularly to know if certificates are required in cases of miscarriage." They do not echo my remark: "That after that verdict, the medical profession would know what to do in cases of miscarriage." For, in spite of the "opinion of blame", fearless of its dire consequences, detraction from their reputation, and interruption to their success, some of my brethren propose resolutely to conform with the custom transmitted from their forefathers, positively refusing to certify to cases of abortions and miscarriage. They join with myself in boldly calling for a reply, careless of the indignation and protest of the insignificant few; satisfied that, by so doing, they are not casting a slur nor bringing dishonour on the profession.

I am, etc., HENRY HANKS.

146, Mile End Road, August 1864.

GRATUITOUS MEDICAL SERVICES.—A correspondent writes: "You may perhaps remember that about four years ago, the Committee of the Nottingham Dispensary agreed to make some pecuniary acknowledgment of the services of the consulting medical officers. This act of liberality (which, I believe, was noticed and commended by the BRITISH MEDICAL JOURNAL) has been repeated every year up to the present time; but, unfortunately, some of the Committee have managed to get up a strong opposition to it; and in revising the rules a short time ago, left out any mention of payment. A special general meeting of the governors was called last Monday, and though the Committee were defeated on a question of form, yet there was a manifest indisposition on the part of the meeting to admit the propriety of paying the medical staff, and therefore I addressed a letter (enclosed) to one of our daily papers, setting forth the opinions which, in common with yourself, I hold on the subject of gratuitous medical labour; and I acknowledge myself under much obligation to you for your powerful advocacy of the same principles which I have endeavoured, but feebly, to espouse."

COMMUNICATIONS have been received from:—Mr. GEORGE LAWSON; Dr. MONCKTON; Mr. GASKOIN; Mr. RHODES; Mr. C. HARRISON; Mr. LAWSON; Dr. G. H. PHILIPSON; Mr. JONATHAN HUTCHINSON; Mr. T. M. STONE; Mr. T. P. TEALE; Dr. THOMAS SKINNER; Mr. T. PAGET; Mr. W. M. BAKER; Mr. S. W. FEARN; Dr. H. J. ALFORD; Mr. T. W. WILLIAMS; Dr. MORRIS; Dr. JAMES RUSSELL; Dr. A. RANSOME; Mr. THOMAS MARTIN; and Dr. C. B. NANKIVELL.

ADVERTISEMENTS.

Resident Clinical Assistants.—A VACANCY having occurred in the HOSPITAL for CONSUMPTION and Diseases of the Chest, those Gentlemen who are desirous of becoming Candidates for the vacant office are requested to send in their applications, with testimonials, on or before SATURDAY, the 3rd of September, and to attend the Medical Committee on the following Monday, at 4 o'Clock. Testimonials as to moral character as well as to medical qualifications are required. Further particulars may be obtained at the Hospital.

PHILIP ROSE, Hon. Sec.
HENRY DOBBIN, Sec.

Brompton, August 17th, 1864.

Everyone has marked the un-

pleasant dirty appearance of a GLASS EYE, which can always be detected by the disagreeable expression on the physiognomy. But it is now known that M. BOISSONNEAU Senior, Oculist to the French Army and Hospitals, of No. 11 Rue de Monceau, Paris, has invented a little chef-d'œuvre in Enamel, which combines the attributes of lightness, solidity, and comfort, with the expressive motion of the visual organs. The injured eye required no previous operation; the new invention can be inserted without disturbing the patient; children even bear it without a murmur.





M. BOISSONNEAU will be in London (Symond's Hotel, Brook Street, Grosvenor Square) on the 15th and 16th of September.

Any person desirous of communicating with him by correspondence will be solicited to send the colour of the eye required, and a photograph of the face not coloured.

For Varicose Veins and Weak-

—NESS. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and *inexpensive*, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.



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Clinical Commentaries

ON

CERTAIN RARE FORMS OF DISEASE CONNECTED WITH SYPHILIS.

Delivered at the London Hospital.

BY

JONATHAN HUTCHINSON, F.R.C.S.,

SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY AT THE MEDICAL SCHOOL.

GENTLEMEN,—I sometimes feel almost annoyed at being compelled so very frequently to prescribe iodide of potassium. We go from bed to bed, and to cases apparently of the most different kind, and for almost one in every three I am obliged to dictate the same prescription.* Iodide of potassium in large doses, generally in combination with ammonia, and sometimes with the bichloride of mercury, seems to be the panacea for almost a majority of our cases of chronic disease. Here is a man with convergent squint and double vision: he has come up from Cornwall to be treated, and he looks perfectly healthy. We investigate his case, and pronounce the diagnosis of syphilitic paralysis of his right sixth nerve. A man, a few beds lower down, came in on account of a pain in his heel, which had resisted all treatment for months, and prevented him from either working in the day or sleeping at night. He, too, looked quite healthy; but, on probing his symptoms and history, I gave a syphilitic diagnosis, and, what is more, confirmed it by quickly curing him. A woman was admitted six weeks ago with numerous large ulcers on the legs, and some also on her arms. She had scars of former ulcers about her knees; and the multiplicity of the sores and the worm-eaten character of their edges confirmed the suspicion formed at first glance. She, like the former patient, had had much previous treatment without result, and got well most rapidly under our favourite prescription. There is a boy in Talbot Ward with ascites, and with a liver which reaches below his navel, and with hard periosteal nodes on almost every long bone in his body. His sister was also here not long ago, suffering from nodes; and his mother I have repeatedly had under care during the last fifteen years, for various forms of constitutional syphilis. We have also in the same ward two men suffering from chronic enlargement of the testis, which we attribute to the same almost ubiquitous taint. One of them is already nearly well; and the other, I have no doubt, will soon be so.

If we go down stairs to the women's ward, we shall find some most interesting cases. There is Mrs. G., the unfortunate wife of a very dissolute sea-captain. She came into the hospital in order to have her sight improved by an artificial pupil, in consequence of adhesions, etc. One of her eyes is shrunk, soft, and collapsed; and she has, or rather had, the pupil of the other eye almost wholly closed by lymph. I have made her an artificial pupil, and she sees as much better as we could expect. You will notice that she speaks thickly; uses her limbs awkwardly; and, although not yet even middle-aged, looks as if she were entering on second childhood. Her history is that of a case of subacute syphilitic inflammation of the pia mater. She first came under my observation more than a year ago, at the Moorfields Hospital, for most acute double iritis, and covered with syphilitic rash. The pupils were already closed with lymph, and she was already salivated. We adopted the treatment which seemed best; but, as you see, only with very partial results as regards her eyesight. In her right eye, choroiditis and inflammation of the vitreous body afterwards set in; and the eye ultimately became soft, and then shrunken, as it now is. After this, she became exceedingly nervous, could not sleep at nights, and was at length laid up at home with delirium. She was now for some weeks under private care with a form of mania; all her limbs became weak and tremulous; and, when she recovered, those of her left side were weaker than the others. As syphilitic inflammation often attacks the choroid coat of the eye, there is no reason why it should not affect the vascular membrane of the brain; and to suppose that it did so in this instance would well account for all her symptoms.

In the same ward is a girl aged 15, whom we admitted a week ago with large, ragged-edged, very deep ulcers on the back of one leg. They are ulcers of a character which, if seen in an adult, you would at once pronounce to be those of tertiary syphilis. And, in confirmation of that view, she has an induration in front of one tibia. The girl is, however, only fifteen; and she has had these ulcers for several years. The disease in her is congenital; and she shows, in order to help us to this opinion, one of the most typical sets of teeth that I have ever seen. You will note that her physiognomy would not have led us to suspect her, for there is nothing very peculiar in it. The bridge of her nose is not flattened; her forehead is not protuberant; nor are there any scars of fissures about her mouth. Her teeth, however, tell the tale, and are so characteristically malformed that I should venture a positive opinion without other evidence. You will watch the effect of specific treatment upon her ulcers. I will ask you to observe that the ulcers are clearly not due to mere ordinary cachexia, for the girl looks healthy; and, should they be well under iodide of potassium in a few weeks, I shall then ask you to remember that they had existed for several years before she came here.

I have only mentioned about a third of the curious forms of constitutional syphilis at present under our care. You will observe that I omit all primary and secondary forms of disease. Those which we shall at present consider are such only as occur at long periods after the original disease, and come into the category of late tertiary affections. Our knowledge of this latter class has of late years very much improved, and we are now able to recognise many as such which formerly we did not know; and, I am glad to add, we are able to exclude some from suspicion which were formerly much suspected.

The feeling of annoyance to which I adverted, as sometimes arising when one is obliged over and over again to prescribe the same specific, has its origin in

* In mentioning this proportion, I of course allude only to our wards for chronic disease, and do not include those for accidents.

a doubt and a fear—a doubt of one's own accuracy of judgment; and, secondly, a fear of the criticisms of others. A sort of fear arises as to whether, after all, the suggestions now and then made, "Oh, he is riding his hobby—he sees syphilis in everything," may not have some foundation in truth. Now, this self-mistrust is very natural and very useful in its proper place, but let me warn you not to let it go too far; and, as regards the criticisms of others, let me beg you not to allow them to influence your judgment one iota. There is not the shadow of a doubt that the syphilitic virus is capable of producing effects at extremely remote periods, and after long intervals of apparently good health. There is not the least doubt, further, that this virus is very widely diffused amongst all classes of the community. We must, therefore, expect to encounter its results very frequently, and under very varied circumstances. Our duty in this matter is to find out with accuracy, amongst the great variety of chronic maladies which come before us, which are syphilitic and which are not. Upon our success in diagnosis will depend our success in treatment. There is no room for joking scepticism. It is a simple question of fact. My patient presents a form of disease which we know must have had some cause. We know, further, that the syphilitic taint is a cause quite capable, in some instances, of producing a similar result; and we want to find out by collateral evidence whether that cause is in operation here. And, if it should so turn out that we are obliged, after painstaking investigation, to believe in the presence and efficiency of that special cause in five out of every twenty patients, it cannot be helped. We want truth; and, if that is the truth, we must take it and act on it. A good means of checking our own conclusions is always at hand. I allude to the results of treatment. In most cases of tertiary syphilis, the consequence of acquired disease, the effects of specific treatment are most prompt and definite. Unfortunately, it is not so in a few, especially in those which concern the nervous system; and it is not so in many which are consequent on inherited taint. In these, the efficacy of specific treatment is often but ill marked.

Before proceeding to relate cases in detail, there are three or four doctrines regarding syphilis which have of late years fought their way to general belief, to which I must ask your especial attention.

The first of these is, that tertiary syphilis may, and often does, last through a person's life. By tertiary syphilis we mean all forms of specific disease occurring subsequently to the primary and exanthematic stages; practically, everything that comes later than two years after the infecting sore. The exanthematic stage usually occurs within two months of the original sore, and is rarely protracted beyond the year. We will, however, to give good margin, say two years. After this, the disease appears to have no stages; periods of entire latency, of the most variable lengths, may occur. The symptoms which show themselves are irregular, and subject to repeated relapses after cure by treatment. Between the secondary and tertiary symptoms, an interval of health, often of several years, and it may be of many, supervenes.

The second cardinal doctrine, as regards tertiary disease, is what I have just adverted to: that it may be *latent*. By latent, I mean that it may be entirely concealed. The patient may appear to be in robust health; may not show the slightest trace of a symptom; may even marry and beget healthy children; and yet the disease may reappear. In a recent lecture, I brought forward a case in which the period of latency had been twenty years; and I shall have to mention several others, in which it has been nearly as long. The phenomena of latency are even more wonderful in respect to inherited than they are in regard to acquired disease.

Thirdly, I wish to insist that it is very common for married women to acquire a constitutional taint, without having ever had primary or secondary disease, and, therefore, without either themselves or their husbands having the slightest suspicion as to what has happened. This occurs in women who have borne children to syphilitic husbands, and who have imbibed from the fluids of the fœtus the poisonous material. We will call this "Syphilis by conception".

Lastly, we must remark, that it is very possible for a patient to have primary syphilis, and never be aware of it. In a woman, this may easily be. A small indurated chancre causes very little irritation, and is perhaps never suspected to be of any consequence. It so happens, that the sore most likely to infect gives the least local annoyance; and many an inexperienced man will allow a sore of this kind to go on without treatment, and afterwards, in good faith, assure his surgeon that he has "never had a chancre". But there are cases even yet more difficult to explain, in which even a practised eye never finds the infecting sore. I have more than once or twice known it to happen, that surgeons or medical students, who came under treatment for secondary forms of disease, and who made not the slightest attempt at secresy, assured me that they had never been aware that they had primary sores.

The chief lesson to be drawn from these various sources of fallacy in the histories we receive is, that the surgeon must learn, by widely extended practice, to trust to his own eyes for a diagnosis. The importance of being independent of what our patients may tell us can scarcely be exaggerated in this matter. Not only will it save us from being misled by erroneous statements, but it will in some cases save the necessity for asking annoying and painful questions.

We will now proceed with some clinical illustrations of our remarks.

Latent Syphilis. An Interval of Eight Years without Symptoms, the Patient enjoying Robust Health. Ulcerative Destruction of the Palate, with Psoriasis of the Backs of the Hands. Wendon Dawson, aged 30, a dark complexioned man, looking much older.

Nine years ago, he had a sore. He was then in the navy; went into Chatham Hospital; "took mercury pills, and was salivated freely." He had a bubo in one groin, which suppurated and remained open for two months. He left the hospital after six weeks, and took no more medicine. He recollects that he had a sore-throat; but does not remember any rash.

On leaving the hospital, he went on board ship again; and had good health and remained quite well. Three years later, he married. His wife has never conceived, and has remained in perfect health. Very soon after he married, he had "yellow jaundice," and was very ill for a week or more; he was at home a month.

About a year ago, his throat began to be sore; and

six months after this, sore patches shewed themselves on the backs of his hands. He has only been under treatment for these affections for about two months. During the interval since his discharge from the Chatham Hospital, with the exception of the attack of jaundice, he has enjoyed good health; and has been wholly free from symptoms; "never lost a single day's work." We questioned him most closely, and could not make out that he had had any suspicious symptoms whatever.

January 13th, 1864. The subject of the above notes was sent to me by Mr. Swales of Sheerness. He is now cachetic, and speaks in a hoarse whisper. His soft palate is extensively destroyed by ulceration, which is still spreading; his breath has the fœtor of diseased bone. The backs of his hands and wrists are covered by patches of psoriasis, with fissures and peeling of epidermis, just like the common psoriasis palmaris. There is not a single patch in either palm. There are two or three similar patches on each cheek.

The man states that he has never had any venereal disease since the one described nine years ago, and there is not the least reason to doubt his statement. Let us note, also, that, although salivated in the first instance, he has never needed any medicine since, except during the last few months.

Under about two months' treatment, this patient got quite well as regards his throat; and his psoriasis, although not cured, was much benefited.

In the next case, we have again phagedæna of the throat; but its chief interest attaches to the fact that the man has entirely lost his hearing. With regard to the throat, I may, however, here ask your attention to the difference between the secondary and tertiary forms of disease as they occur in it. In the secondary stage, the inflammation is always superficial, and always ends in cicatrisation, without noticeable loss. Indeed, excepting in the tonsil itself, there is rarely any ulceration. On the velum palati and pharynx, it is rather inflammatory swelling than ulceration. All the deeply ulcerative or phagedænic affections of the throat occur years after the primary disease, and are tertiary. Of this, both the cases before us are examples.

Case of Syphilitic Cerebral Deafness. We have, in a man now in Talbot Ward, an interesting example of deafness in connection with constitutional syphilis. The man is utterly deaf, so that we have to communicate with him by writing. He was admitted a few weeks ago for syphilitic ulceration of the soft palate, which, under the influence of iodide of potassium, is rapidly getting well.

His history is briefly this. He had chancres six years ago, and again three years ago; on the latter occasion, with suppurated buboes. He has been salivated for various symptoms two or three times. About twenty months ago, his hearing began to fail, and he had singing noises in his ears. There was no pain in his ears, nor any discharge from them. He had, however, a good deal of pain in his head. In the course of a month from the beginning, he tells us, that he had got as deaf as he is now. Mark the very rapid progress of the affection. Both ears were involved from the beginning; but one more than the other; indeed, he still pretends to be able to hear a little in one, though which it is might puzzle you to find out. He had no sore-throat at the time. He was salivated on account of the deafness; but it did him no good. Nearly a year later, he had a severe illness, in which some of the chief symptoms were giddiness and great pain in his head. He had, also, swellings in his scalp. Double vision, with dilatation of the pupil of the right eye, followed (paresis of right third nerve). For this he was again salivated, and his eye, or rather his third nerve, quite recovered. Lastly, about three months ago, he was attacked with syphilitic phagedæna of the velum palati, for the remains of which he now comes under our care. You may observe that the velum is very extensively destroyed; but it is now rapidly healing. In other respects, he seems tolerably well; but his complexion is pale and earthy.

It is a point of great interest and importance to determine, if we can, upon what his deafness depends. Although diseases of the eye, leading to greater or less of damage to the function of sight, are common enough in syphilis, yet with the ear it is quite different. Cases like the present are, I believe, exceedingly rare. Now, in respect to the organ of sight, we have syphilitic disease of very different parts. Inflammation of the iris is the most common; next to it come inflammations of the choroid and retina; and, lastly, disease either of the optic nerves themselves, or of the centres from which they arise in the brain. The former may greatly damage the function, but they rarely quite destroy it; the latter not unfrequently lead to complete blindness. The fact that the poor fellow before us is almost absolutely deaf, is sufficient, therefore, in itself, to excite a suspicion that his disease involves either the nerve-trunks or the nerve-centres. If it depended upon disease of the tympanum or external ear, or even of the internal ear itself, it is improbable that it would be complete on both sides. The speculum, also, gives us great help; for it shows us that, in each of our patient's ears, the membrana tympani is not in the least damaged. The external ear is, on each side, remarkably clean; not a vestige of wax or of epidermic accumulation obstructs our view, and the dry bluish-white membrana tympani, with the handle of the malleus attached, can be inspected without the slightest difficulty. His history quite fits with this state of things; for he never had either pain or discharge from the ears. It is possible that there might be some obstruction of the Eustachian tubes; but this is improbable, since it would not explain utter and symmetrical deafness; and we have the fact, that his throat did not begin to be sore till long after the loss of hearing.

Thus, then, we are brought, by the method of exclusion, to our original conjecture, that the nerve of hearing must be the part damaged. Now, it is possible that the auditory nerve might be pressed upon by effusion from the periosteum in the auditory canal; but this hypothesis, in the present instance, I reject, for two reasons: first, that the disorder is so symmetrical; and, secondly, that if the portio mollis were so compressed, the portio dura would, in all probability, suffer likewise; whereas, as you see, it has wholly escaped. My belief is, therefore, that the real cause of the lesion is syphilitic disease of those portions of the brain, medulla oblongata, and cerebellum, from which the auditory nerve arises. It is probably analogous to amaurosis, with white atrophy of the optic nerves, consequent on changes in the corpora quadrigemina. You will note that other symptoms from which the man has suffered favour this opinion. He has had a prolonged illness, attended by giddiness; and he has suffered much from pain in his head and noises in his ears. He has even had

paralysis of a special nerve (right third), from which he has recovered.

Now, although syphilitic deafness from cerebral disease is very rare in the acquired form of the disease, it is far from being so in that which is inherited. In my little work on *Syphilitic Diseases of the Eye and Ear*, I have described a form of deafness almost the exact counterpart of that from which our present patient has suffered; and ending, as in him, after a short course, in utter extinction of the special sense. Of this I have adduced numerous instances; but all were in the subjects of inherited syphilis. I had not then seen a single well-marked example in acquired syphilis. A similar remark may be made in reference to cerebral amaurosis, which we not very unfrequently meet with in the subjects of inherited disease, but only rarely in those who have acquired the taint *de novo*..

It may, perhaps, not be without its interest, if I read to you the notes of the last case I have seen of syphilitic cerebral amaurosis. It was one of the best marked that I have ever had an opportunity of investigating. You will notice some points of close analogy between what we may designate syphilitic cerebral deafness and syphilitic cerebral blindness. In both the progress is rapid and usually symmetrical, and in both the extinction of function is mostly complete. In both, a few other slight cerebral symptoms are usually present, such as ringing in the ears, giddiness, etc.; and in both, there is a remarkable absence of any symptoms referable to the external organ of the special sense. Let me add, that both are most intractable under treatment. You will notice that each of our patients had been salivated, the one for impending blindness due to inherited syphilis, the other for impending deafness due to acquired syphilis; and in neither did this measure retard the course of the disease. I have witnessed a similar failure in many other cases; cases, too, in which there was no doubt whatever as to the diagnosis. Iodide of potassium, in these affections, is a far more reliable remedy than is mercury.

Professional Indiscretion. Owing to the appearance of a most injudicious and ill-advised paragraph in the *Kentish Gazette*, an inquest was held on the body of Thomas Bedwell, a labourer, living at St. Dunstan's, who died somewhat suddenly, while under the care of Mr. Rigden. It appears that the poor man was subject to epileptic fits, for which Mr. Rigden treated him. He had seen the man on Sunday morning, and sent him some medicine. In the afternoon he became worse; and, Mr. Rigden being away from home, Mr. A. B. Andrews was called in. From some utterly inexplicable cause, this gentleman thought fit to hand over the medicine supplied by Mr. Rigden to the care of the police; and hence arose a rumour to which our cotemporary, with a most reprehensible want of caution, gave circulation that Mr. Rigden had administered to the patient opium in such a manner as to cause his death. At an inquest held to clear up the affair, it was shown that the rumours were completely groundless. Mr. Andrews himself stated at the inquest that the deceased had "had three epileptic fits in his presence, which fits were the cause of his death." The coroner said, that but for the paragraph in the newspaper no inquest would have been necessary. The evidence was very plain, and Mr. Rigden was entirely clear of all blame. (*Kent Paper.*)

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

CLINICAL REPORTS ON THE PAPULAR DISEASES OF THE SKIN.

By George Nayler, F.R.C.S., Assistant-Surgeon to the Royal Orthopædic Hospital; Pathological Curator of the Museum of St. Mary's Medical School.

[*Continued from page 583 of last volume.*]

Lichen Pilaris, so called from its involving the hairs which pierce the papules in their centre, is a rare variety. The hair-follicle becomes filled with epithelium and its *débris;* and a number of small acuminated papulæ are observed in place of the papillæ, having each on its apex a single hair. It is chiefly developed on those parts which are covered with soft fine hair, as the neck or chest. I had the opportunity of seeing, some months ago, a remarkable instance of this kind among the out-patients in Mr. Startin's practice, in a boy, where the disease was mostly seen on the back of the neck, and appeared not unlike the small rough eminences on the surface of an echinus. In this case, the loins and shoulders were also covered with lichen in its ordinary form.

Lichen lividus, like the preceding, is also uncommon. Mr. Startin has noticed its occurrence about once in 1800 cases; and Rayer relates having only seen it twice. It is almost always united with broken-down or feeble health, and is generally seated on the extremities. The spots are of a purple colour, intermingled with petechiæ.

J. G. (No. 99,449), aged 52 years, applied for relief, on October 13th, 1862, at the Skin Hospital, with the eruption chiefly seen on the inner side of the legs. It was like a number of purple dots, each of an average diameter of a pea; some were distinct, others more or less fused. To the hand, the surface appeared slightly raised. He was in delicate health, and complained of the least exertion being attended with fatigue. When in bed, the spots assumed a brighter colour, and occasioned some degree of irritation. For several years, he had been subject to rheumatism. He was ordered to take a mixture of steel with colchicum twice a day, and to sponge the parts with a mixture of nitric acid lotion and red lotion (two ounces of each, with eight ounces of water). (The first of these contains half a drachm of dilute nitric acid to an ounce of water; and the second, two grains of the bichloride and one of the bisulphuret of mercury to an ounce of water.) He rapidly improved under this treatment; and on the 1st of November he was nearly well. Anxious to know how he was getting on, I heard from him some months afterwards, when he informed me that he since had another slight attack, from getting wet through. He then took the same remedies, and soon recovered.

Lichen circumscriptus is the name given to the disease when it forms a circumscribed patch, having a defined border, or is represented by several small patches. It is not unfrequent on the hands, or the popliteal space, or the nape of the neck. Its colour is of a dark red. In some instances, it is prolonged

for years by the outbreak of fresh patches, which, like those of lepra, enlarge at the expense of their circumference, and decline at their centre. As an example of its truly chronic nature, I may quote the case of C. B., a tailor, aged 60, in whom the disease had existed as a patch on the back of neck, and of the size of the palm of the hand, for twelve years. The papules were large, closely aggregated, and in colour of a purplish red. It caused much irritation, if he became heated. On April 3rd, 1862, he was ordered to take the tenth of a grain of bichloride of mercury, and the fortieth of a grain of arsenious acid twice a day; and to apply at night an ointment containing six minims of creasote, half a drachm of mercurial ointment, ten grains of levigated nitric oxide of mercury, and an ounce of cerate. April 17th. He was much better; only a few spots were left, and those of a lighter colour. May 22nd. He was nearly cured. June 22nd. He returned a letter of thanks to the hospital.

Syphilitic lichen is of frequent occurrence. The disease is recognised by the coppery colour of the papules; the small amount of pain by which it is commonly attended; its tendency to become tubercular; and, lastly, by its seat, which, in addition to other parts, will generally appear on the forehead, and not seldom on the soles of the feet. The tongue also is sometimes fissured; and what may commonly be seen, characteristic of syphilitic lichen, are a number of small superficial pits or cicatrices, in most cases on the face only, the result of ulcerations following the eruption, and not unlike those produced by variola. Syphilitic lichen, like other skin affections of this class, has no special characters; and the eruptions that succeed to, or are dependent upon, syphilis, as Dr. Jenner has observed, always deviate from the original disease in its true type, whatever it may be.

Treatment. The treatment of simple lichen may be summed up in a few words. The same will also apply to tropical or any less severe kind of lichen. It consists in proper attention to the bowels, and in the avoidance of any exciting cause. In early life, it is too often the practice of the mother to cram the child with milk or indigestible food, or to overload it with clothes. Flannel will sometimes irritate the skin, and so even will soap; or the child may be insufficiently dried after washing. I need not enter into further detail, or suggest the obvious mode of dealing with these cases. As far as the medical treatment is concerned, it will be enough to administer a few grains of rhubarb and soda in the first instance, followed afterwards by a light tonic. When lichen occurs in the acute stage, the use of purgatives should not be neglected; as the mistura magnesiæ cum colchico of the *Pharmacopœia*, to which antimony may be added; and, as an external application, either goulard lotion, or one holding in weak solution creasote and the bichloride of mercury, one grain of the latter to an ounce of water. The lotio carbonis is also of considerable benefit in these cases. After the irritation has subsided, or in chronic lichen, as lichen agrius, small doses of mercury should be given; and, indeed, in the greater number of papular complaints, this mineral will generally be required, the amount not exceeding one-sixth of a grain of the biniodide, or the eighth of that of the bichloride. Before going to bed, some mercurial ointment should be rubbed into the affected surface. That in use at the hospital is the unguentum rubrum, or the compound mercurial ointment. In the lichen urticatus of children, the same means may be adopted, regard being had to the age. Thus, to a patient of three years old, the carbon lotion should be diluted with an equal amount of water, and the mercury diminished by two-thirds for a dose. Where the eruption is confined to a few spots, or takes place in a weakly subject, quinine or iron may be prescribed with advantage; the local treatment remaining the same. The tincture of aconite, in certain cases, is highly spoken of by Neligan; and, as a local measure, the same author recommends conium, given thus: one drachm of succus conii, half a drachm of glycerine, and five grains of soda, to an ounce of water. Baths are highly serviceable in the papular eruptions; they lessen the irritability so frequent in this class of diseases. The patient should, however, be warned not to take one of too high a temperature; indeed, in all cases a tepid bath is to be preferred at the commencement; and, as he becomes accustomed to its use, he may remain in it for a longer period. If the irritation be very great, and in the later stages of the disease, where the skin is still rough and dry, a starch or gelatinous bath will be attended with considerable comfort. An alkaline bath is occasionally beneficial; and, in confirmed cases, the sulphur springs of St. Sauveur, Louesche, or Aix-la-Chapelle, may be tried.

I have now to draw attention to the two varieties of lichen specially mentioned by Hebra, and described by him with much precision and minuteness. The first, or lichen scrofulosus, is a constant companion of caries, lupus, and tuberculosis. It is characterised by pimples of the size of ordinary lichen, and of the same colour as the epidermis, or pale yellow, or brownish red. Some degree of desquamation is often met with in this variety, which, as it is unaccompanied by pruritus, does not, therefore, show those little scabs of dry blood produced by excoriation. The papules, in short, remain unaltered. Unlike any other species of lichen, this variety is mostly seen on the trunk, abdomen, breast, and loins, and seldom on the extremities. In progress, it is very slow, and generally remains unheeded by the patient until the disease reaches the limbs or the face, or unless other symptoms occur in the papules, as their attaining the size of a lentil, and assuming a bluish red colour; or containing, like acne, a small quantity of pus; or drying up, leaving a circular dark stain. The skin between the papules is generally scurfy, or covered with incipient scabs like bran, and dull-looking.

The disease is always connected with enlargement of the lymphatic glands. Hebra further states it to be peculiar to the male sex. Not one instance does he record of its affecting the female; nor, in so far as his observations extend, is the complaint influenced by season or occupation.

Still more remarkable in its symptoms, progress, and termination, is lichen ruber, noticed, I believe, by Hebra alone, and distinguished by the dark red colour of its papules, whence the name. Observing throughout their course the usual size, the papules are at first scattered or separated, and covered with small thin scales, which cause slight itching, but not such as to lead to excoriation or scabbing. The intervals left unoccupied by the former pimples are soon dotted with a new group; and, as these become more thickly sown, large red plots are seen covered, as I have just said, with numerous fine scales. The movements of the muscles become considerably impeded; those in particular of the hands and feet. The fingers are kept in a semiflexed position, and present painful cracks. The nails of these, as well as of the toes, also suffer. They are thickened, do not reach their usual length, and are apt to break. In colour, they approach a yellowish brown. The course of lichen ruber is from bad to worse in the greater number of instances. As the disease advances, which it generally does, the patient becomes emaciated, and at length falls into a state of marasmus, and sinks.

Fourteen cases form the entire number mentioned by Hebra, of which one occurred in a woman; and in one instance only was the disease arrested in its course. In the treatment of scrofulous lichen, which appears between the ages of fifteen and twenty-five years, cod-liver has proved an excellent agent, and the only one in Hebra's hands. It is given, however, in half-ounce doses twice a day, a less quantity proving of no benefit. He also advises its external application, and directs the patient in the meantime to wear flannel or woollen clothes. For the relief of the other, or red lichen, Hebra places the most reliance on arsenic. The reader is referred, for further information, to Hebra's article in Virchow's *Handbuch der Speciellen Pathologie und Therapie*, Bd. iii, Lief 2.

[*To be continued.*]

Original Communications.

PRACTICAL REMARKS ON THE TREATMENT OF CONGENITAL CATARACT.

By George Lawson, Esq., Assistant-Surgeon to the Royal London Ophthalmic and the Middlesex Hospitals.

[*Concluded from page* 33.]

As a rule, no urgent symptoms follow the first stage of the operation of linear extraction. Frequently, some little irritation exists for a few days; but oftentimes the eye continues so quiet, that one can hardly imagine that any operation has been performed. Still, on the other hand, grave symptoms occasionally arise, and require to be actively dealt with; for an eye with a congenital cataract is usually below the standard of strength, and succumbs quickly to sharp inflammatory action.

Supposing the operation to have been well conducted, and the case apparently a good one, the great cause of untoward symptoms arising, is pressure of the swollen lens itself, or of some of its particles on the posterior surface of the iris. Large pieces of lens matter may float freely in the anterior chamber—may even apparently almost fill it—and fragments may lie on the anterior surface of the iris, without producing any unpleasant symptoms, but the pressure of a portion on the posterior surface may act as such an irritant, as to kindle an amount of inflammatory action sufficient to destroy the eye.

To avoid, as far as possible, the chance of such a contingency, the pupil should be kept widely dilated with atropine, so that the particles of lens matter as they swell and detach themselves from within the capsule, may float through the widely dilated pupil into the anterior chamber. Sometimes, although the capsule has been freely broken on its anterior surface, yet the matter within has not been sufficiently comminuted, so that the lens, swollen by the action of the aqueous on its substance, and unable to discharge itself by fragments into the anterior chamber, presses by its entire surface on the posterior or uveal surface of the iris, and so becomes the source of great irritation. The reverse of this may, however, take place. The lenticular matter may have been freely broken up, but the aperture in the lens capsule may not have been made sufficiently large to allow of the ready escape of the particles after they have become swollen from the action of the aqueous on them, and so the enlarged lens presses on the back of the iris.

The symptoms which would be present would be those of great irritation; severe neuralgia over the brow, around the orbit and in the eye itself, with a considerable amount of photophobia; the eye more red than normal, and the ciliary zone manifest; the aqueous muddy, and the pupil at first sluggish, then quite inactive and incapable of being dilated with atropine. Such symptoms as these call for immediate treatment. If they commence a few hours after the operation, or on the following day, it will be well to apply one or two leeches to the temple, and repeat one night and morning for two or three times. This local abstraction of blood often affords a most speedy relief, and at once arrests all excessive action. Act freely on the bowels with some moderate purgative, and keep the eye cool with a piece of linen moistened with cold water applied over it, and let the room in which the patient resides be darkened.

If no abatement follows the treatment, and the symptoms of irritation continue, the cause is very probably the swollen lens pressing on the iris, and it is advisable to get rid of this source of irritation by removing it, or as much of it as possible, and at once to perform the second part of the operation of linear extraction.

The second stage of linear extraction consists in removing the broken-down lens through a small linear opening in the cornea. Before it is attempted, if all has gone well, and nothing has happened since the first operation to necessitate its immediate performance, sufficient time should be allowed to elapse to allow all the transparent portion of the lens to become opaque and somewhat macerated by the aqueous. From three to six days will be about the time required for the desired changes to take place, but much depends on the condition of the cataract at the time of the operation, and upon the extent to which the capsule has been torn and the lenticular matter broken up. This stage of the operation requires great caution.

1. As to the part at which the broad needle should be introduced, and the mode in which the opening should be made in the cornea.

2. In allowing the lens, which is now diffluent, to run off on a curette, taking care not to bruise or in any way to injure the iris, or the posterior layer of the lens capsule.

The patient lying on his back with the face to the light, the eye is to be kept open with a spring speculum, and steadied by being held by the operator with a pair of forceps. The broad needle is used in his right hand for the right eye, and in his left hand for the left eye, to make the linear opening in the cornea. The outer portion of the cornea is the most convenient, and the part usually selected in each eye for this operation.

1. *With reference to the opening to be made in the cornea.* The pupil being widely dilated with atropine, the needle should be made to perforate the cornea at the point just external to where the pupillary margin of the iris is seen, and instead of penetrating it directly from before backwards it should be made, as Mr. Bowman has suggested, to pass obliquely inwards through the laminæ of the cornea, and then by a slight cutting motion in its withdrawal, to enlarge the opening to its necessary length. The aperture thus made will be valve shaped, the external opening in the cornea being nearer to the circumferential margin than the internal, the object being, that the curette in and after its introduction, shall not press at all upon the iris, but in making the many movements which are required, shall rest solely on the inner lip of the valve-shaped orifice in the cornea. Frequently before withdrawing the broad needle it may be well to dip it towards the lens, and break up more completely any large fragments which may remain. Another advantage in thus making the opening well within the margin of the cornea is, that

prolapse of the iris does not occur, whereas when the linear incision is made close to the corneal margin, a protrusion of the iris is very apt to follow the aqueous with the soft lens as it runs off on the curette. A sufficient opening having been made, the curette is next to be introduced, and this should be done with a gentle lateral motion. The eye being still held by the surgeon with a pair of forceps, in the most convenient position, the curette is moved gently from side to side, pressing slightly on the mouth of the wound to permit the aqueous with the softened lens to flow down its groove. When the largest portion of the lenticular matter has escaped, here and there small opaque pieces will occasionally be seen which have not flowed away in the stream; these may be followed with the curette, and on the point of it being dipped as it were beneath them, they will also escape along its groove.

When the pupillary space is clear, it is advisable not to be too eager to catch every little opaque patch of soft matter, as oftentimes some little fragments will lie in front of the iris, difficult to get at, and more harm may be done by seeking for them than their presence can produce. All the movements of the curette should be conducted with the utmost caution, as it is highly essential that the posterior capsule should not be broken, for should such an accident occur, the vitreous will immediately come forward, as the hyaloid must be ruptured at the same time. One of the great troubles occasioned by the flowing forward of the vitreous is, that mixing with the opaque portions of the lens, which have evaded the curette, it becomes often next to impossible to remove them, as coated with the tenacious vitreous, they elude the point of the curette, and instead of falling into its groove and escaping by it, they are pushed about the anterior chamber in front of it.

The lens having been removed, or as much of it as will readily flow away, the patient is to be sent to bed in a darkened room, and the pupil is to be kept under the influence of atropine. This is generally necessary, as it is very common to leave behind some soft matter, which not having been acted on by the aqueous, remained transparent at the time of the operation, and so escaped the notice of the operator. If towards evening there is pain, one or two leeches should be applied to the temple, which may be repeated if it continues. The frequent small abstraction of blood has a most beneficial effect in arresting any untoward symptoms which may present themselves at this early period after the operation. The pain in the eye increasing, will call for warm and soothing applications, and of these the belladonna fomentation will afford the most comfort. If the eye should become hard, its tension increased, a simple puncture of the cornea with a fine needle, and allowing the aqueous to escape will give great ease. This operation is very simple, and may be repeated several times if necessary.

Iritis is the affection most to be dreaded after this operation. Its presence is suspected by a continuance of pain in and around the eye, but an examination of the eye itself will at once confirm or refute the suspicion. The serous aqueous, the muddy iris, and the ciliary zone of vessels around the cornea, give evidence of internal inflammation. With this form of iritis, there is always intolerance of light and considerable lacrymation. There is an acute and a chronic form of iritis which occasionally follows the operation of linear extraction. The acute may run its course in a few days and destroy the eye, or it may gradually subside to a certain point, and then become chronic. The chronic form commences from one to three weeks after the operation, and is the cause of great trouble to both the surgeon and patient. It is always accompanied with photophobia and lachrymation, and the edges of the lids often become puffy, thickened, and excoriated. The aqueous continues serous, and the striation of the iris indistinct. The pupil is but slightly and irregularly acted on by atropine, and there is a slow dull pain in the eye. This chronic condition will last frequently many weeks. It yields but slowly to treatment. Counterirritants behind the ear repeated from time to time sometimes do good; but as a rule, all applications to the eye should be soothing, and the treatment tonic. Belladonna in one form or another should be applied to the eye to relieve pain and keep the pupil dilated, and occasionally a moderate mercurial inunction may be necessary.

Extraction of the Lens by Suction. This mode of treating congenital cataract has been lately reintroduced into practice, and the success which has attended it, makes it probable that it will be largely adopted. In the last number of the *Moorfields Ophthalmic Hospital Reports*, Mr. Pridgin Teale of Leeds has given an account of several cases which he has operated on successfully with a suction curette designed by himself. In his instrument, the suction power is applied by the mouth through the medium of a flexible tube attached to a tubular curette fixed in a handle. The hand which holds the curette is able to act independently of the suction, and is quite free and unfettered in its movements.

Mr. Bowman has tried this mode of treatment in many cases with very favourable results, and has used an ingenious syringe made at his suggestion by Messrs. Weiss. The suction power is obtained through a delicate metal syringe placed at one extremity of a glass tube, which is furnished at the other end with a tubular curette. The syringe is so contrived that its piston can be worked by the hand which both holds the instrument and guides its movements within the eye, leaving the other hand free to steady the eye with forceps.

Mr. Bader of Guy's Hospital has also had a suction tube made by Khrone of Whitechapel. The suction power is a small hollow India-rubber ball, placed at the extremity of a tube which terminates in a glass tubular curette. Pressure is made on the ball with the hand, to expel the air from the tube, and its readmission is regulated by a well contrived stop apparatus placed close to the curette. After the air from the ball has been expelled and its readmission prevented by closing the stop, the curette is introduced into the eye, and the amount of suction is regulated by a little trigger connected with the stop apparatus within.

The extraction of the lens by suction may be performed in one operation, but my own feeling is, that it is better at the first operation to thoroughly open the anterior capsule of the lens, and break up the lenticular matter, and allow it to be well acted on by the aqueous before using suction to extract it. Should the lens be very soft and the cataract complete, one operation will suffice. The pupil having been first fully dilated with atropine, a fine needle is introduced through the cornea and the capsule freely torn, and the lenticular matter broken up. A larger opening is then made in the cornea with a broad needle, immediately within or on a level with the pupillary margin of the dilated pupil, sufficient in size to allow of the easy entrance of the tubular curette of the instrument to be employed for suction. A delicate manipulation of the instrument is required to move it from point to point, so as to place the open mouth of the curette in the most favourable position for sucking in the lens matter. The suction power must be carefully regulated by the operator, who is able to arrest it instantly when required.

If, however, the cataract is not complete, but a considerable portion of the lens is transparent, then I believe it is advisable to divide the operation into two stages, and first to perform the preliminary part of the operation for linear extraction, tear up the anterior capsule of the lens, and comminute the lenticular matter within, so that it may be exposed to the action of the aqueous. Two, three, or four days having elapsed, the suction part of the operation may be performed, and the whole lens, now opaque and diffluent, will be readily drawn through the tubular curette of the instrument. The attempt to remove a lens which is not completely opaque, is met by two difficulties.

1. The transparent circumferential portion of the lens is always sticky and adheres to the inner surface of the capsule, and it is difficult, if not impossible, to remove the whole of it.

2. From a portion of the lens being transparent it is impossible to say when the whole of it has been removed, as the opaque portion only is visible to the operator. By first allowing the aqueous humour to act on the lens matter, the transparent portion becomes opaque, loses its tenacity, and is readily sucked up into the tube.

5, Harley Street, Cavendish Square.

Transactions of Branches.

SOUTH WESTERN BRANCH.

PRESIDENT'S ADDRESS.

By C. B. Nankivell, M.D., Torquay.

[*Delivered July 20th*, 1864.]

Gentlemen,—The position in which you have done me the honour to place me, forcibly impresses me with the truth of the ancient allegory—that "Pleasure and Pain are twin sisters." The pleasure of receiving the members of the Branch Association here to-day, is strongly mingled with the fear that I shall utterly fail in my efforts to render their visit either useful or agreeable; and this would certainly have been the case, had not medical friends in this place come forward with the greatest readiness and cordiality to aid my endeavours. I am sure that in their names, as well as in my own, I may offer you a hearty welcome to Torquay.

It so happens that I was one of those who, in 1832, met at Worcester, for the purpose of forming a Provincial Medical and Surgical Association; and well do I remember the observation of a friend, with whom I had gone to that meeting, that it would be "interesting to watch the further progress of the profession and the future career of those then assembled." Before three short years had passed, the career of this friend had ceased, and he had become the subject of one of the first biographical memoirs published in our *Transactions* In him the twin sisters had indeed, *pari passu*, run a rapid course. Very few of the fifty who met on that occasion now remain.

But if it was interesting then to look forward to the probable future of our profession, how much more so, and how much more satisfactory, is it now to look back on what the profession has accomplished since that day. Time will only permit of my glancing at a few of the most important events in this period of our history.

It is satisfactory to see that the small body of associated medical men, who met at Worcester, has gone on augmenting by yearly additions to its numbers until it has amounted to thousands, and until it has spread its branches over the whole of Great Britain, so as to earn and merit for our society the title of the British Medical Association; and, although more might perhaps have been done, and more certainly may be accomplished by the Association, no one can peruse the reports of its proceedings, not excepting its early *Transactions*, without advantage; and for myself, I may truly say that I never attend its meetings without gaining some information, and without being drawn by closer ties of friendship towards many of its members. It must be allowed, too, that the British Medical Journal has much improved in character under the direction of its present zealous and spirited editor; though, while acknowledging the value of the Journal, and the talent with which it is conducted, one cannot but regret that it should absorb almost the whole of our funds, leaving so small an amount to be applied to other useful objects.

Still more gratifying is it to reflect on what has been achieved by the profession generally since the origin of our Association—just to recall, for one moment, a few of the great and striking conquests, since then, of our body militant, ever combating disease and pain.

At that time, Sir Charles Bell had not long promulgated his great discoveries, and scarcely anything was known of the minute structure and functions of the several parts of the nervous system; the observations of Laennec had only just been brought before the British medical public; Hope had not published his work on *Diseases of the Heart*; Bright's researches were little known, and not at all appreciated, though preceded by the observations of Blackall, of whom our Branch of the Association may be so justly proud. The microscope had scarcely been applied to physiological, and still less to pathological investigations; and animal chemistry had done little or nothing for either of these departments of medical knowledge. Uterine pathology, the distinction and pathology of fevers, and the pathology of various other blood-diseases, was vague and uncertain.

How vast has been the flood of light thrown on these several departments of medicine since then! But to one engaged in the daily practical work of medical treatment, scarcely anything appears of more daily practical value than the great advantage afforded in the present day, as compared with the past, by the employment of physical signs in the discovery and diagnosis of disease. It is hardly necessary for me to say how much we are indebted in this way to the microscope, to animal chemistry, the stethoscope, mensuration, percussion, palpation, the use of various specula, the uterine sound, the ophthalmoscope, and the laryngoscope; and latterly, the thermometer placed in the axilla has been usefully employed on the same principle. The origin, too, of our Association was at the time of the terrible epidemic which almost inaugurated the study of preventive medicine in this country, and rendered the great body of medical men the leaders of sanitary reforms.

Surgery has likewise undergone great changes and improvements since 1832; and long since then has rejoiced in the birth of what has been called the handmaid of operative surgery, the use of anæsthetics, so invaluable in the facility it affords in performing some of the great operations of the present day.

Not less remarkable have been the changes in the treatment of disease; and in nothing is this more exemplified than in the use of the lancet. We all know how seldom this instrument now pierces the veins of our patients; but in the fourth volume of our *Transactions* you will find, amongst others, a case described by Dr. Barlow, the leading physician of Bath at that day, to be one of ovarian disease, in which the patient was bled forty-five times to the extent of 384 ounces,

was cupped twelve times to 102 ounces, had 408 leeches applied, 16 blisters, and 6 caustic issues; besides having been salivated several times. It is only fair to Dr. Barlow to say that the patient recovered, that she married, and on November 8th, 1834, was safely delivered of three female children, who were baptised by the names of Faith, Hope, and Charity.

Now there can be no doubt that the great change amongst medical men in the employment of venesection, and various other remedies, arises from no caprice, from no change of fashion in medicine, from no change, in any great degree, of type in disease, but from the existence, in the present day, of a sounder and more enlightened pathology—from the reception in fact, by the great bulk of the profession, of every discovery in medical science and practice which is founded on truth. And this, gentlemen, appears to me to place our profession in the highest position to which any body of men can attain. We can, without any bias, worship at the pure and sacred shrine of TRUTH. Unlike some other professions, unlike the statesmen of almost every country, unlike almost every great earthly power, we have no vested interest in error. If, therefore, we receive with open arms, the investigations of science, and turn a deaf ear to the bold and ignorant assertions of the empiric, it is not because we have more interest in the one than the other, but because the one is founded on *truth*, and the other on falsehood and imposture.

I have glanced at a few of the progressive incidents in our history of the last two-and-thirty years. How much more may we not expect from the future? It is true that the Medical Council, from which so much was expected, has not accomplished all that was desired. It has not been able to lay down any decided educational course; it has hitherto failed to influence all the examining bodies; whilst the new national *Pharmacopœia*, from the endeavour to appease the prejudices of the representatives of pharmacy in the three pharmaceutical divisions of the United Kingdom, seems likely to share the fate of the old man in the celebrated fable who tried to please everybody. At the same time, we must admit, that a great object has been attained in the requirement of a general educational test previously to the commencement of medical study, and of a definite duration over which that study must extend. At all events, it is obvious, that a great change for the better is taking place in the education, and will take place, I trust, in the character and position of future medical men. There can be no doubt that a more liberal general education, and a more prolonged and higher course of professional study, will raise the status and character of the whole body of the profession; and even if they do not augment the cultivators of medical science, will, most assuredly, render the profession generally the more ready and enlightened recipients of every discovery in the progress of medicine.

It may be hoped, too, that the whole tone and demeanour of the body medical will thus be raised; so that we shall have no more low rivalry amongst us for Poor-law appointments, and other offices of little honour and no emolument; that no member of the profession will be found so base as to lend himself to those malicious prosecutions of his medical brethren which have lately been so frequent, and so disgraceful to those concerned in them; and that the public medical services of the country will be filled by men to whom it will be impossible to refuse their just award of merit and honour.

But in this raised character and position of the profession, one great danger and difficulty constantly presents itself before me, to which I do not think the attention of the profession is sufficiently directed.

In 1834, I was examined by a committee of the House of Commons, appointed to investigate the subject of medical education and reform. At that committee, it was the constant fear amongst the representatives of the different medical educational bodies, and still more so amongst the statesmen placed on the committee itself, that, if the standard and position of the whole profession were raised too high, "the poor man would be deprived of his doctor."

Now, this is a most important consideration, both for the profession and the public. It is obvious that, between the pauper and those capable of paying for medical advice in the usual way, there is a large mass of industrious poor, who are, even now, most inadequately provided with efficient medical attendance. It is true, that every large town abounds with medical charities; but there is a strong feeling growing up amongst medical men, that these institutions are most detrimental to the interests of the profession. For my own part, after having paid especial attention to this question for more than thirty years, I have not the slightest hesitation in expressing my entire concurrence with the views of the editor and correspondents of the BRITISH MEDICAL JOURNAL, and my full conviction that most of our eleemosynary medical institutions are a great evil to our own profession, and to the very class of persons for whose benefit they were intended.

To the profession, they are an evil in many ways. The grounds on which the medical appointments are made to most medical charities are unsound in principle, and not honourable to the officers appointed. Ostensibly, they are sought from motives of charity and benevolence; in reality, they are taken for the sake of the indirect and individual advantages they promote. On the part of the governors, they are made as a favour to the successful candidates, for gratuitous services largely supplied, but which are not appreciated as they ought to be, because those services are given apparently for nothing. There is reason to believe, too, notwithstanding the great majority of bright examples to the contrary, that services thus rendered and thus accepted are not always performed with the high sense of duty and responsibility which should ever characterise the practice of medicine. All this is obviously lowering to the character and public estimation of medical men; while their material interests are seriously injured by the medical attendance which these institutions extend to a large class of persons far above the necessity of any kind of charitable assistance.

To the poor themselves, out-door hospital attendance and charitable dispensaries are fraught with evils of still greater magnitude. It is only necessary to consider, for one moment, the immense number of the poor between the pauper and those capable of paying for ordinary medical advice, to be convinced that these establishments can relieve but a very small portion of those who require such relief. The consequence is a very large amount of unattended, neglected, or badly treated disease; and even those who are deemed fortunate in having secured the benefit desired, often only obtain it after such impediments and delays as to have allowed the most tractable, and perhaps the only curable, stage of their maladies to have passed by.

Great as these evils are to the poor in a sanitary point of view, it is perfectly clear to one who has devoted much attention to the subject, that they are trifling in comparison with the moral and social injury caused by the excess and injudicious application of this system of gratuitous medical charity. The poor industrious man is generally independent of charity as long as he is in health, and it is only when sickness unprovided for overtakes him, that he is led, as a dispensary patient, to seek charitable aid, and

thus to take the first step on that downward path which leads to mendicity and pauperism.

The injury to society thus induced, by tempting the working classes to rely upon charity, instead of inciting them to provide for their own wants by their own means, in a spirit of independence and mutual help, is too large a subject to be fully discussed in this address; but I hope I have said enough to show that eleemosynary institutions are not an adequate, or the best, mode of supplying the sick poor with medical advice; and yet, if a higher position of the profession place ordinary medical attendance beyond the reach of the poor, they will be inevitably driven to this resource, or to the care of the chemist and druggist, or to the tender mercies of every quack and pretender to skill in medicine who may attempt to prey on the credulity of the ignorant.

This, then, is the danger to be apprehended from a higher position, and diminished numbers, of our profession; and it is one against which it is no less the duty than the interest of the profession and the public to provide. How to do so is the question.

Some years ago, when I was in the habit of meeting Professor Canstatt at Pisa, he informed me that, in several of the states of Germany, in one of the Universities of which he was a Professor, this object was effected by a rate on the working poor themselves; that every employer of working men was obliged to deduct from their weekly wages a certain proportion towards the support of the hospital and dispensary of the town and neighbourhood in which they resided; and that the rate thus raised entitled the rate-paying poor to medical attendance by the paid officers of the hospital or dispensary, according to the requirements of each case. In this country, a compulsory rate to meet this domestic and social want, would probably be deemed contrary to the spirit of our legislation; but the same object can be, and has been, accomplished in England by a voluntary co-operation of the poor, the more wealthy, and the profession.

The principle of self-provision and association was first applied to dispensaries by my late friend, Mr. Smith of Southam; but the plan upon which he attempted to carry out these institutions was so complicated, that the first establishments of the kind met with but partial success. It was subsequently simplified and improved by myself at Coventry; and I can now point to the complete success of the Coventry Provident Dispensary, after a most prosperous career of thirty-three years, as an indisputable proof of the practicability and advantage of this system in supplying the medical wants of the poor.

I may briefly mention that between 3000 and 4000 poor persons now provide themselves, by this institution, with prompt and efficient medical attendance, by their small weekly payments; that the committee, which includes the medical officers, carefully prevent the admission of persons capable of paying for medical advice in the usual way; and that the medical officers receive for the performance of their duties, on an average, about £150 a year each. There are now in this country several similar successful institutions. It is obvious that the advantages they extend to the working classes in a sanitary, moral, social, and material point of view are immense, while to the profession they are an act of justice; and, if extensively established, they would enable well educated medical men to supply the poor with efficient medical aid, and thus prevent the danger and difficulty to which I have alluded, as otherwise sure to arise from a more exalted state of the profession.

I will only add a very few words on the medical charities of Torquay. We have an excellent Infirmary, which supplies within its walls medical skill, and all the appliances and requisites of sickness and accidents, of a kind and in a way which the poor could not possibly obtain for themselves in their own homes. Attached to the Infirmary is a fever-ward, into which, thanks to the St. Patrick of Torquay for banishing everything poisonous from its soil, there has been only one case admitted since it was opened. We have a Consumption Hospital, which receives about fifty cases of pulmonary disease for eight months of the year; and I think I may say, for my colleagues in this institution, as well as for myself, that we do not find any specific treatment applicable to cases of tubercular phthisis; but that we do find amongst these patients great benefit derived from good food, a comfortable and airy abode in a climate admitting of much out-door exercise, and from a constant and careful medical supervision, so as to meet and correct, *in limine*, the many incidental and intercurrent complications of phthisis, in the form of bronchitis, pneumonia, pleurisy, pulmonary congestion and hæmorrhage, diarrhœa, and the derangements of digestion so constantly attendant on this malady. Thus, and under the use of cod-liver oil in most of the patients, many cases are conducted to an improved state, and some, we have reason to hope, to permanent recovery.

We have, also, an admirable medical establishment, founded by the late Lady Culling Eardley, where ladies of restricted means, chiefly suffering from affections of the chest, are received and medically treated during the winter, on the payment of a very moderate weekly sum. This institution is evidently formed, in some degree, on the principle I have been advocating; but its medical officers have no other reward than the consciousness of doing great good. Any other reward than this, I feel assured, the medical officers of Erith House, or of any of the other charities of Torquay, would not desire until those "good times" which we hope "are coming", when there will prevail a sounder sense of what is due to our profession, and best for the interests of the public.

LANCASHIRE AND CHESHIRE BRANCH.

CASE OF ENCEPHALOID CANCER, CHIEFLY AFFECTING THE BONES.

By Arthur Ransome, M.B., Bowdon, Cheshire.

[*Read June 20th*, 1864.]

J. M. G., aged 37, came under treatment in the third week of July 1863, suffering chiefly from severe pain in the left arm and shoulder-blade. In general appearance, he was delicate and thin; his complexion was sallow; eyes often rather bloodshot; conjunctiva thickened and yellowish. He had been in the habit of taking active exercise, including long pedestrian excursions.

His family history was generally good. His parents and uncles and aunts were long-lived, except that an aunt died of cancer of the breast, and several cousins had died young, of doubtful internal complaints.

The patient was delicate as a boy, and suffered much from glandular swellings in the neck and axilla, and from occasional attacks of excessive prostration and debility. Both before and since he commenced business in Manchester as manufacturer of engraved rollers, he had been much troubled with (so called) nervous headaches.

In July 1862, not feeling well, he worked rather hard at a hydraulic pump, by way of exercise; and soon afterwards was seized with sharp pains in the

intercostal muscles; which, however, gave way to anodyne treatment in two or three weeks. He continued in business during the attack; but, throughout the following winter and spring, he was generally out of sorts. His eyes were suffused; he looked "bilious"; he had frequent headache; and his urine was thick.

Early in June 1863, he again tried gymnastic exercise with Indian clubs, and soon afterwards went a walking tour in Wales, walking twenty miles a day for about three days, and bathing once or twice in the sea. At this time, he perceived a soreness in the scalp, and also felt pain in the back from using some of the muscles.

In the second week of July, he complained of severe pain in the left shoulder-blade, and began to lose his rest at night from both restlessness and pain. This pain increased, and spread gradually down the arm; and, in the fourth week of July, it extended into the back and thighs to such an extent as to resemble incipient sciatica and impede walking. It came on worse always towards evening, when he felt great "weakness and stiffness" after his day's work in town. It kept him awake at night. He was still suffering from headaches; and about this time he noticed the appearance of several small tumours upon the head, a little posterior to the vertex, fluctuating slightly, and apparently connected with the bone, but not attached to the skin. When he came under my care, they had the characters of commencing "nodes"; but there was not the slightest suspicion of any syphilitic taint. They were at first referred to a rheumatic or scrofulous origin.

In the first instance, he was treated by alkalies and muriate of ammonia; and then with quinine and iron and local anodynes; but without success.

In the second week of August, the pains in the back and limbs became so severe that he was confined to his bed. During the following fortnight, it was observed that the left hand lost power rapidly, and the muscles of the hand and forearm wasted considerably. At this time, also, several other periosteal tumours appeared on each side of the forehead, and on the left side of the head. The bowels had been regular throughout. The urine was loaded with lithates, but was not albuminous, and did not contain sugar. He was now taking two grains of iodide of potassium and ten drops of colchicum wine three times a day, but without effect. Galvanism was also used several times, but was not continued.

On the 2nd of September, when I saw him again, after a fortnight's interval, he was much altered. He was cachectic-looking, generally thinner; and the muscles of the left forearm, hand, and scapular region were much wasted, and almost paralysed. He could not appose the thumb and third finger, and yet the biceps and triceps still retained considerable vigour. The case now presented a striking resemblance to some forms of wasting palsy. Dr. Roberts saw him with me on September 5th; and Donovan's solution of arsenic, ten drops three times a day, and regular frictions of the affected muscles, were ordered. An opiate was also given at night. A slight increase of power had been gained in the hand before this treatment was commenced; but it continued to improve steadily for some weeks.

Whilst the left arm and hand were improving, the general health seemed very good. His appetite was better; he had less pain; his sleep was much sounder, and lasted five hours instead of two or three. Yet the lower limbs steadily lost strength; he became thinner; the urine was still loaded with lithates; and several other tumours appeared, one on the right side of the sternum, and one about the angle of the ninth rib on the right side; and in this last a peculiar grating was felt, as if the bone were broken; yet the swelling was, and had been formed, entirely without pain. At the same time, it was remarked that several of the cranial tumours were diminishing in size.

On October 8th, on examining the liver carefully, it was found enlarged. It extended three finger-breadths below the ribs; and a rounded hard tumour, of about the size of a hen's egg, was felt in the middle of the right lobe. The conjunctiva had been tinged with yellow a fortnight before; but his complexion, though pale and sallow, was not jaundiced. No affection of the absorbent glands could be found, except a slight enlargement of one gland in the right axilla, which he believed to have existed since youth. The opinion was now first hazarded by Dr. Roberts, that the case was one of cancer; basing it upon the previous history, the presence of the hardness in the liver, and the colour of the skin. The patient took the Donovan's solution for a fortnight longer, and then began to take iodide of iron and liquor arsenicalis. It need not be said that all possible nourishment had been provided for him, including cod-liver oil; and he had, on the whole, partaken very fairly of food. He was also regularly rubbed every night with warm olive oil. Still the weakness of the lower limbs increased.

Towards the beginning of November, the right arm began to waste rapidly, and lost power, especially in the humeral and scapular regions; whilst he could still grasp with tolerable firmness.

By the middle of November, the lower limbs also almost completely failed him, and he was lifted out of and into bed.

At this date he was seen by Dr. Gull of London; and, from the absence of pain during the growth of the tumours, the disappearance of several on the head, and the state of the tumour on the rib, which had now broken the bone across, the opinion was given that the case might possibly be one of myeloid disease; although the number of the formations rather bore against this view.

He was ordered ten grains of iodide of potassium and half an ounce of compound decoction of sarsaparilla twice daily.

Shortly after this, on December 7th, after he had been suffering intense pain in the right leg upon any movement, it was found that the right leg was considerably shorter than the other; and, although crepitation could not at first be felt, it was soon evident that the femur was broken through in its upper third.

On December 10th, a tumour was found, apparently based upon the left sterno-clavicular articulation. This rapidly increased in size, without pain; and in a few days the clavicle was completely separated from the sternum, and drawn upwards. The tumour on the right side of the frontal bone, and several of the smaller ones near the vertex, had now completely disappeared; but another rose gradually near the anterior margin of the right parietal bone; and the largest tumour on the vertex steadily increased in size, but became softer. A small swelling now appeared about the middle of the ninth rib on the left side, almost symmetrical with that on the right.

About December 25th, he complained of great pain in the left thigh on being moved in the slightest degree; and an enlargement of the femur near the trochanter could be felt through the wasted muscles. In a week's time, the bone was completely broken through at this point.

During all this time, his general health was wonderfully good, considering his complete inaction, and that he lay on his back day and night, only occasionally raised. He ate well; his voice was firm; his

spirits were good; and he could not himself realise the danger of his condition. His bowels required the assistance of enemata; his urine was loaded with lithates, and presented numerous crystals of oxalate of lime. Bed-sores were with difficulty prevented from spreading.

On the evening of December 31st, he was suddenly seized with violent cough; and after this he gradually became worse, seemed drowsy, and talked incoherently at times. The right eyelid drooped; the right pupil was contracted; and the tongue, when protruded, was pushed to the right side, pointing to some pressure within the skull, probably from the perforation of the bone by one or both of the chief tumours on the right parietal bone. In a few days, these tumours became softer; and the jagged edges of an opening through the bone could be detected around the anterior swelling. About this time, also, another of the periosteal tumours on the right parietal bone, which for some weeks had been as large as a pigeon's egg, now gradually subsided, and in a few days almost entirely disappeared. The left pupil and eyelid now became less affected, but his mental powers remained much obscured.

On January 16th, 1864, the swelling on the sternum had quite disappeared, and that on the left ninth rib was much smaller. From this date he gradually sank, and died quietly on January 17th, at 9 P.M., retaining partial consciousness to within two hours of his death.

AUTOPSY, forty-six hours after death. The body was excessively emaciated. The right anterior parietal tumour had disappeared, leaving a sunken irregular depression. On dissecting back the scalp, the posterior parietal tumour was found external to the skull, attached to the periosteum. The anterior tumour had perforated the bone, and was firmly adherent to the underlying dura mater. The dura mater was roughened; and the bone appeared granular wherever, during life, tumours had been noticed externally; but there was no corresponding solid enlargement, and all the fluid had disappeared. Near the internal occipital protuberance, a tumour of the size of a walnut was attached to the dura mater; and on the inner surface of this membrane, in a position corresponding to the junction of the anterior and middle lobes of the brain, and near the median fissure, was found a small conical tumour, of the size of half a filbert, which had formed a corresponding depression in the substance of the brain. No other affection of the brain could be found.

An irregular mass of morbid consolidated material, of about the size of a duck's egg, was found in the posterior portion of the upper lobe of the right lung; and the lower lobe was infiltrated with similar matter.

The heart was small and very pale; and the glands at its base were all hardened with morbid substance, and slightly enlarged.

The kidneys were healthy. The intestinal glands were almost universally hardened, and permeated by the disease.

The liver contained, in the left margin of the right lobe, a large nodule of whitish material, of about the size of a duck's egg; and three or four smaller ones in other parts.

The right hip was examined. A large tumour, of the size of a fist, occupied the position of the trochanters; and the bone was there broken through. The tumour was light in colour, of about the consistence of healthy liver; but contained calcareous granules, as of degenerated bone.

Under the microscope, these growths showed numerous cancer-cells, and granular and fibrous material.

REMARKS. The extent of the malignant disease in this case was not its only remarkable feature. The degree to which the cancerous material had infected the blood was shown also by an attempt at symmetry in its distribution; by the affection of both femurs at the trochanters, of the ninth rib on each side, of both arms, and of both parietal bones.

The increasing rapidity with which the disease did its work of destruction in those parts which it successively attacked also proved the gradual extension of the contamination of the blood. Those parts of the skull first seized upon showed nothing but a slight roughening of the bone; but the left femur was eaten through in one week from its first invasion.

The disease chiefly attacked, and apparently commenced in, the osseous system. The morbid action began in or near the periosteum; but there were no osseous processes resembling stalactites, such as Lebert assigns to periosteal cancer; in fact, the course of the disease was throughout rather that ascribed to the central variety of osseous cancer, the bony tissue being gradually eaten away, until the bones were either perforated or broken.

It affected the greater part of the tissues which it attacked, by infiltration rather than by the superposition of a malignant growth. The chief *tumours* were those of the trochanters, of the liver and lungs, and of the dura mater.

Those portions of the skull first attacked by the disease were very slightly affected; the scalp-tumours which formed over them were probably due to irritation of the periosteum by the morbid material in its neighbourhood. When the fluid which they contained was absorbed, the erroneous impression was produced, that the disease was subsiding in these parts.

There was nothing peculiar in the nature of the morbid material itself. Dr. Roberts assures me that, microscopically, it presented the usual characters of medullary cancer.

The difficulty of diagnosis in the early stages of the complaint was very great. The wasting of particular groups of muscles may now be ascribed to cancerous action in the neighbourhood of the nerves by which they were supplied, either taking place in the spinal canal, or at some point in their course; but, at the outset of the case, the cause was hidden.

Again, the previous scrofulous taint, the absence of pain in the tumours themselves, their apparent subsidence, and the difficulty of estimating any change from his ordinary delicate appearance to a truly cachectic look—all these circumstances combined to confuse the judgment and to disguise the terrible import of the malady.

EAST ANGLIAN BRANCH.

CIRCUMSCRIBED OR SUPPURATIVE INFLAMMATION OF THE LIVER.

By J. W. GOODWIN, M.D., Bury St. Edmunds.

[*Read June 17th*, 1864.]

CIRCUMSCRIBED or suppurative inflammation of the liver can certainly not be considered a common disease, or one which the physician often meets with in temperate climates. When such a case comes under one's notice, it is not always possible to determine the cause; but we know that hepatic abscess may arise from mechanical injury, from suppurative inflammation of the portal or other veins and consequent contamination of the blood by pus, and also from ulceration of the large intestine or of the intestines generally, of the stomach, the gall-bladder, and its ducts, parts which return the blood to the portal vein, whence it

is transmitted through the hepatic capillaries. Of these causes the latter was considered by most writers as the most common; and the first cause, viz., mechanical injury, is on all hands admitted to be the most infrequent. Upon looking into the subject, it is really remarkable how few cases of abscess of the liver from mechanical injury are on record; showing that that organ has no great tendency to traumatic inflammation, and also that the external violence must be particularly severe, or occur under very unfavourable conditions, if the ribs be not a sufficient defence. Andral mentions one case of hepatic abscess from traumatic injury. Budd gives two only out of sixty-two cases tabulated by him, and I think he includes this case of Andral. Morehead, out of the large number of 318 observations, mentions only four cases of abscess from mechanical injury. Frerichs does not mention one. Ronis, Waring, and Ranald Martin have also written valuable works on the subject of hepatic disease, but I have not been able to refer to them.

The following case, which I am about to read to the meeting, is one of acute suppurative inflammation of the liver in a delicate woman, arising from a severe kick. She was admitted into the Suffolk General Hospital, June 30th, 1863. Her history is as follows. She was a married woman, aged 39, and about three and a half months previously to admission, her husband, in a quarrel, gave her a kick on the right side just over the region of the liver. This was followed by very severe symptoms, great pain, fever, and violent delirium (brain-fever, as she called it). She was attended by a medical man in this town, who applied leeches, and considered it necessary to give her very large quantities of stimulants. Her side enlarged, and she had a great deal of sickness, and was no doubt in a most critical position. After a great amount of retching, one day she vomited about half a pint of matter—very fœtid, and continued to vomit small quantities daily for about three weeks, and her side decreased in size considerably. When I first saw her on June 30th, she was in a most exhausted state, and could scarcely move. Her countenance was anxious; face generally pale, with the exception of a slight flush on each cheek. She was very much emaciated. She complained of great thirst; a feeling of sickness was constantly present, causing her to retch frequently, but no actual vomiting. She had a severe pain of a burning and throbbing character in the right side, and a feeling of heavy weight there. The tongue was dry and brown; pulse very feeble, and about 130; the respirations were hurried; and she had a constant dry short cough; no expectoration. The catamenia were absent; the bowels constipated; the urine was loaded with pink lithates, and scanty; no albumen. She lay on her back as the only position in which she could get any ease, and had her knees drawn up. She said she felt hungry and sinking at the epigastrium, but had no real appetite. She could not sleep, except in short dozes, when profuse perspirations occurred. On examining her, I found the right side very much enlarged; and the region corresponding to the contour of the liver was uniformly more bulging than natural. The right hypochondrium was prominent and tense, and indistinctly fluctuating; below this the liver might be felt extending low into the right iliac region, and also into the epigastrium, and downwards below the umbilicus. Percussion gave universal dulness, and the edge of the liver could be plainly felt in different parts. Corresponding to the prominence in the right hypochondrium, the integuments were discoloured over a space of about four inches from side to side, and three inches in a vertical direction; the discoloured parts had a reddish blue colour. Handling and percussing this region caused a great deal of pain. The urgent symptoms seemed to be the severe pain, the debility, retching, and cough; and as the bowels were confined, I ordered her drachm doses of sulphate of magnesia in an effervescing draught with hydrocyanic acid, and excess of carbonate of ammonia. Spongio-piline soaked in hot decoction of poppies was ordered to be applied to the region of the tumour, and to be frequently renewed. A night-draught of two drachms of tincture of hyoscyamus was also ordered; and beef-tea in small quantities constantly, and eggs beat up with wine to the amount of eight ounces daily.

The elastic swelling below the ribs increased in extent, and made its way in a transverse direction towards the epigastrium, at which point there soon appeared a distinct prominence, at which fluctuation could be plainly felt. The discoloration of the integuments increased in extent, but was not circumscribed, and at the prominent position in the epigastrium almost disappeared. At this point the abscess burst on the morning of July 13th, just a fortnight after admission. The opening then appeared about two and a half inches above the umbilicus, about an inch on the right of the median line, and about an inch and three quarters below the ensiform cartilage. About half a pint of yellowish bad-smelling pus was discharged, and great relief from the pain was obtained. Poultices were now applied; and the purulent discharged continued in smaller quantities daily. She now had occasional rigors, followed by heat of skin and perspirations; her sleep, however, became better, and she was able to take more nourishment, and had solid meat.

Five days after this bursting, another collection of matter had formed, and made its way out by an opening just below the ribs to the outer side of the abdomen; the first opening continues to discharge. Nine days afterwards, a third opening occurred midway between these other two; and upon each of these occasions nearly half a pint of pus was discharged, and the fœtor was very great.

These three openings continued to discharge for nearly two months, when the two later ones had healed up; but the first continued. Her health slowly improved, and she gradually gained strength; and in December, she was able to walk about the ward. The discharge from the opening was variable in quality and quantity; at times very slght, only brownish serum, not giving the reactions of bile, and varying from this to a thick purulent fluid, the occurence of which is even now preceded by slight rigors, tension, and pain of a burning character, and febrile symptoms. After the discharge comes out great relief is obtained.

I had feared that there was necrosis of one of the ribs; for at times the smell is very fœtid, and precisely similar to what we meet with in necrosis of bones. Mr. Image passed a probe in at this opening the other day, and it went downwards apparently for a space of two or three inches, but no dead bone could be detected. I imagine that the sac of the abscess is large and still secretes, and probably will do so for some time to come.

Her medicines were occasional aperients, quinine and acids, and opium, or henbane at night. The bowels have been costive at times, but there has always been plenty of bile in the stools, and she has never been jaundiced in the least.

About eight weeks ago, the patient unfortunately took variola from another patient in the ward. The attack was ushered in with rather severe symptoms, great fever and rather violent delirium, which, however, subsided on the full appearance of the eruption; and she has now been convalescent for two or three weeks. At the present time, she walks out; and,

though not very strong, is in very fair health. Her back pains her a good deal, and the fœtid discharge is very troublesome; but I believe that time will remove all these inconveniences. The liver may be still felt much larger than natural. The area of dulness extends into the epigastrium and to the umbilicus, and the edge of the liver may be plainly felt both in the epigastrium just beneath the umbilicus and extending round to the right side. The integuments are adherent to the ribs in different places.

In this interesting case, upon first seeing it, I had no difficulty, both from the history and examination of the case itself, in diagnosing the existence of active inflammation of the liver, going on to suppuration. The great pain was no doubt due to the particular situation of the purulent collection and the stretching of the capsule consequent thereon. That there was no jaundice, was due to so large a portion of the liver being free from inflammation; and in all cases that I can refer to I find that jaundice is by no means a common symptom. Pain in the right shoulder was absent—a symptom noticed by Hippocrates as symptomatic of hepatic disease. Louis and Andral both consider it as by no means a constant symptom. Budd noticed it in five out of fifteen cases occurring in the *Dreadnought*. Annesley considered it as diagnostic of an affection of the convex surface of the liver. As regards the cough and retching and vomiting, I looked upon them as sympathetic and analogous to the pain in the knee from hip-joint disease. I think there were unquestionably three distinct abscesses or collections of matter formed whilst the patient was in the hospital, as they all burst by different openings. With regard to the treatment adopted, it was very simple; and the only grave question which occurred was for me to decide whether an opening should be made by the lancet or leave the matter to nature. The evidence of the adhesion of the integuments to the surface of the liver was very plain; but the discoloration was diffuse, and I was by no means certain that universal adhesion had taken place; and at the point where the first opening occurred, the discoloration was very slight indeed. As I am a great advocate for leaving things to Nature whenever possible, seeing that she had already caused the safe evacuation, by means of the stomach, of a collection of matter, after careful consideration, I determined not to interfere. I, therefore, supported the patient's strength in every possible way, by a free allowance of food, as soon as the stomach would bear it, and a liberal, but by no means excessive, allowance of stimulants, wine at first, a little brandy occasionally, and later she has had porter. I gave her sedatives and procured sleep; quinine and acids, to check the perspirations, improve the appetite, and give a tone to the system, and left the rest to nature.

CASES SELECTED FROM PRACTICE.

By William Cooper, M.D., Bury St. Edmunds.

[*Read June 17th*, 1864.]

Case 1. *Retention of Urine of Some Years' Duration.* A gentleman, aged 50, of nervous temperament, had been, for several years, frequently under my care for dyspeptic ailments. In the spring of 1863, he became more than usually indisposed, and gave evidence of increasing debility. He still, however, continued an active life, taking his daily exercise, principally on horseback, and following his pursuits as an agriculturist. The especial features of his case were the following.

His general aspect was unhealthy; complexion sallow; he was somewhat emaciated; his skin was dry and harsh; tongue always coated with a creamy fur, deeply fissured all over. He had considerable thirst, oppression after food, and nausea. His bowels were much constipated; the stools were unhealthy, pale in colour. His urine was of specific gravity 1015, natural in appearance and quantity; it gave slight traces of sugar occasionally, which led to its frequent examination; but without finding any further departure from the healthy condition. He had been, when young, in the habit of retaining his urine in the bladder for an unusual length of time; and when travelling, or in company, had frequently done so for twelve or fourteen hours.

Occasional alteratives, with pepsine, lime water, bismuth, and strychnine, constituted the principal treatment, and with some benefit. He continued, however, to manifest these symptoms for years, in a greater or less degree; taking but little heed of them, and riding constantly on horseback without inconvenience. On one day examining the abdomen, a peculiar pyriform enlargement, in the hypogastric region, was discovered, eliciting a dull sound on percussion, and giving the idea of a largely distended bladder. From forty to fifty ounces of perfectly healthy urine were passed daily.

He was now seen by my friend, Dr. G. Johnson of London; and the introduction of the catheter was proposed, but was not acceded to for some time. Subsequently, however, he submitted; and the result of its use was the evacuation of five pints and a half of healthy urine. The operation was followed by a severe rigor, sickness, and prostration; uneasiness in the region of the bladder, and a frequent desire to pass urine. These symptoms soon subsided; but it was some days before I could again persuade him to the further use of the catheter. The second operation was followed by symptoms still more serious; and further interference was most positively refused.

As soon as he was sufficiently recovered, he went to Lowestoft; and, after his arrival there, was suddenly seized with severe pain in the bladder and retention of urine. The catheter was introduced by Mr. Worthington, and about five pints of bloody and highly ammoniacal urine were drawn off. I saw him some short time afterwards; and he was then suffering with pain in the bladder of a severely spasmodic character, and a constant desire to evacuate its contents, without the ability to do so. He had tenderness all over the hypogastric region, vomiting, hiccough, and delirium. These serious symptoms continued for more than a week, and his life was in considerable jeopardy. The urine remained bloody, ammoniacal, and muco-purulent, for some time. At the end of a month, he was able to be removed home, and is now in better health.

On reviewing the history of this case, we must, I think, arrive at the conclusion, that this condition of retention was of many years' duration; that it was produced by the habit of the patient, from his youth, of allowing his bladder to become unduly distended; and that its slow and gradual arrival at this condition of dilatation accounted for the absence of the usual symptoms connected with it. Does it not, then, become a question of practical interest to inquire, whether the previous ailments were really due to this retention? and whether, under the circumstances, the surgical interference was judicious? We may infer that, through the distention of the bladder, the ureter might have become dilated, and the kidneys chronically diseased, as in a case of prostatic retention; and thus the previous condition of illness might have been produced; still the ailments were trivial, and but little interfered with the comfort of the patient, or with his usually active pursuits.

Previously to the use of the catheter, the urine was perfectly normal, and the bladder apparently healthy, save its condition of dilatation. Its first introduction produced considerable inconvenience; the second still more so. The urine at once became unhealthy; and, after a time, complete retention, inflammation of the vesical mucous membrane, dangerous constitutional symptoms, and paralysis of the bladder, resulted. That all these grave symptoms were due to the use of the instrument, there is but little doubt; and the result proves that, although it was fully justified by the recognised rules of surgery, yet its delay, until more urgent symptoms manifested themselves, would certainly have been more prudent.

Case II. *Impacted Gall-Bladder and Ducts.* The subject of the *post mortem* specimen which I have here was a female, who came under my care in January last. She was married, 51 years of age, had borne several children, and had been in good health until within a few months of the date of my attendance. Her family history was unfavourable; her father had died of cancer, and her sister of cancer of the liver. She was emaciated, and unhealthy in appearance; complained of pain and a sense of fulness and weight in the right hypochondrium, extending over the epigastrium, nausea, loss of appetite, flatulence, pain in the right shoulder and right groin, slight œdema of the right leg, and tenderness over the surface of the liver. Her bowels were much constipated; the stools were dark and offensive; but at this period there was no appearance of jaundice. After a time, the pain became more paroxysmal preceded by rigors and faintness. The urine contained a large quantity of bile-pigment and some albumen.

On examination of the abdomen, the liver was found to be considerably enlarged, extending across the epigastrium, and reaching as low down as the umbilicus. At its lower margin, a distinct prominence was felt, resembling a nodule. There was no previous evidence of any attack of hepatic colic.

The symptoms continued to increase in severity; the pain occurring in more frequent paroxysms, accompanied by rigors, vomiting, and great prostration. About two months from the date of my first visit, she had an unusually severe attack of pain; and she then became suddenly jaundiced, and the stools from that time were without bile. Her cerebral functions became much disturbed; the bladder ceased to act. She gradually sank, and died comatose on May 8th.

A *post mortem* examination was made twelve hours after death. The body was much emaciated; the skin was deeply bronzed; the abdomen was large. On opening it, the liver was found to be considerably enlarged, firmly adherent to the surrounding parts, much altered in structure, soft, friable, easily giving way under pressure, of a peculiar green colour, and oily in its nature. The gall-bladder was much enlarged, thickened, and hypertrophied, overlapping the lower margin of the liver; and so firmly adherent to the opposing surface of the liver, as to be with difficulty separated. It was completely filled with calculi of various sizes and character. The common duct was also closely and entirely packed with them. The mucous surface of the gall-bladder was entire; but presented, under the microscope, evidences of fatty degeneration. The spleen and other organs were healthy. The calculi were much too numerous to count, and were various in their appearance and composition. The larger ones were composed principally of cholesterine, with a central nucleus of biliary colouring matter; the smaller were without a nucleus, and consisted of crystals of pure cholesterine. There were, also, a considerable number of minute black calculi, resembling grains of black pepper, which seemed to be composed of carbonate and phosphate of lime.

The family history of the patient, her age, her general aspect, the large size of the liver, the presence of the nodule (which, at the *post mortem* examination, was proved to be the egg-shaped gall-bladder projecting from the margin of the liver), the absence of any evidence of previous attacks of hepatic colic, and the tardy appearance of the jaundice, were strongly in favour of the diagnosis of cancer; and this opinion which I gave was confirmed by my friend Dr. Goodwin, who saw the case with me.

The paroxysmal nature of the pain, the vomiting, the frequent rigors, the subscapular pain, the sudden occurrence of the jaundice, certainly pointed to obstruction of the gall-ducts; and the appearances at the *post mortem* examination gave positive evidence of death from the latter cause.

Case III. *Severe Hæmorrhage of Doubtful Source.* John Holden, a dealer, aged 37, was attended by me, nine years since, with hepatic abscess, which burst into the right lung. He expectorated for some months a large quantity of fœtid pus, frequently tinged with bile. He recovered from this attack, and remained in tolerable health until about four years from this date, when he was again seen by me, and was then suffering from a large strumous abscess in the left side of the neck. This has been continually discharging since. About the same time, he had slight cough, with a sensation of weight and uneasiness, under the left clavicle, and suddenly raised a large quantity of blood. The hæmorrhage continued for some days, but gradually subsided. There was no dyspnœa; and, with the exception of a slight bronchial *râle* at the very apex of the left lung, there were, at this time, no physical signs of any abnormal condition, save some consolidation of the posterior lobe of the right lung, which had remained since the bursting of the abscess. The heart-sounds were natural; pulse good. He did not lose flesh; had no night perspirations; and there was no history of phthisis in his family.

The hæmorrhage has recurred at intervals of three or four months for some time; and latterly as frequently as every three weeks. During the bleeding, blood gushes freely from the fistulous opening in the neck. The quantity is considerable; frequently exceeding half a pint. The cough has been more troublesome of late, is of a peculiar loud ringing character, and he has expectorated large masses of fibrine; some are slightly pink in colour, others perfectly white; when floated on water and unfolded, they present a very pretty appearance, shewing a complete cast of the minute ramifications of the bronchi. As many as eight and ten of these masses have been expectorated daily. He still retains his appetite, and does not lose flesh. The physical symptoms are now, slight dulness on percussion under the right clavicle, with feeble respiration and prolonged expiration. The posterior lobe of the right lung is also dull, with bronchial breathing at the lower part. The diagnosis of this case is certainly enveloped in considerable obscurity.

Thoracocentesis. The *Société Médicale des Hôpitaux* after discussing the *pros* and *cons* of this important sketch seem to have arrived at the following conclusions. 1. The operation of thoracocentesis is usually unsuccessful in chronic pleurisy. 2. There is urgent necessity of operating in cases of imminent asphyxia, excessive quantity of fluid causing the displacement of the viscera contained in the chest, and resistance of the purulent collection to ordinary treatment.

British Medical Journal.

SATURDAY, SEPTEMBER 3RD, 1864.

THE PROFESSION OF MEDICINE: ITS INNER LIFE.

As there is no evidence in the common concerns of life more dangerous than that of false analogy, so there is none more acceptable to the philosophical imagination than the true resemblance of relations which constitutes the basis of all sound analogical argument. A joint stock company may have nothing in its aggregate existence in common with the character of the persons who compose it; but it is not so with a learned profession. Every physician and every surgeon bears about him an outer and an inner life. There is the ordinary every-day work by which he is known in the world—which represents, if we may so speak, the crust of his existence; and there is a temper of mind which is withdrawn from the business of the world, and which, happily, is often known to light up the conduct of a man who has never possessed the only infallible criterion of wisdom to vulgar judgments, namely, success. The profession of medicine, too, has its exterior of activity and stirring interest, which an indiscriminating public is too apt to confound with the money-making deeds of commercial enterprise; but of this, the superficial phase of our history, we can say nothing at present. It is with the hidden things of the life of medicine we are now dealing; and it will be more particularly our object to show that the British Medical Association is, if not the best, at least one of the most trustworthy exponents of this inner life.

It is well known that our Association reckons among its members some of the most learned and scientific practitioners of the day; but this is not all. In every principal town throughout England, the leading physicians and surgeons will be found to belong to the British Medical Association. We do not mean by this to say that we exhaust all the science and erudition in every provincial town in the kingdom; this would be to arrogate to ourselves a power which society, as it at present exists, hardly admits of our wielding. But we may safely point to the fact, that our command over the sympathies of men of cultivation has its limits rather in the direction of science than in that of learning. It is on this account that our system operates with great energy, and to an indefinite extent, as a check on the delusive and insufficient generalisations of clever sciolists. There is a confidence necessary in all human intercourse, and without it men more often suffer from their own misgivings than they would from the silent reproof of their neighbour's example. The young practitioner, who directs his work by what he calls pure science, has no resource but in science; he has no other goods in his magazine. His principles admit of no virtue to which, where disappointed concerning the profitable effects of his practice, he can retreat. The wearing out of an old delusion serves only to put him upon the invention of a new one; but, if it be his privilege to live within the light of men who can teach him the value of the higher methods of investigation, and can show him that they have attained to the most honourable place in society by the influence of their general learning and the force of their example, he too will in time find that "it is the business of human intellect to adapt itself to the realities of things, and not to measure those realities by its own capacities of comprehension."

Now, it may be asked, why drag defective specimens of professional life before us? The answer is, that they too play a part in the secret economy of medicine; they are, as it were, the certain standard by which to estimate the character of the public bodies to which they attach themselves. Take the College of Surgeons, for example. This College, like our own Association, has a voice from within, and speaks a language and propounds a policy from the recesses of its organisation. We see before us the example of a corporate body gradually losing the disposition to preserve and the ability to improve its condition, and, in consequence, drifting into a state of feebleness. It has ever been the rule of this JOURNAL to protest against the downward tendencies of the College of Surgeons; and, although it may seem out of place to contrast our own working system with that of an establishment whose duties are principally educational, yet there is one purpose which both institutions are morally bound to keep steadily before them: both have at least an equal interest in maintaining the honour and dignity of the profession. The British Medical Association stands in no fear of sacrificing its political independence. No man of liberal views and habits can be excluded from a share in the government of such a combination; nor can the trustees of our liberties ever shrink into an ignoble oligarchy founded on the destruction of the rights of the members at large. Can the College of Surgeons say as much as this? Every form of civil society is the result of a convention in which men abdicate all right to be their own governors. It is of the first consideration, therefore, in building up a corporation, that the due distribution of its powers should be vested in men who can fathom its necessities and facilitate the various ends it proposes to carry out. It has been said, that the science of constructing a commonwealth, like every other experimental science, is not to be taught *à priori;* nor is it a limited experience that can give us this instruction. The root of our own success lies

n this, that, from the very nature of our organisation, we must always be directed by men who cannot push their opposition beyond the convenience of their constituents; and, as we reckon among our rights not only our liberties, but the very restraints we impose on ourselves, we take care to choose our leaders from a class of men whose character and position are a safe guarantee that we have not surrendered our freedom in trust without sufficient precaution.

It has often been asked, What has the British Medical Association done for the profession? The question is thoroughly a commercial one; for it means this, What has the Association done towards putting more fees into my pocket? To talk to such questioners of the tolerance of human weakness, of professional humility, of the value of moderation and reserve, or to attempt to explain the subtle properties of good taste, would, we fear, be to talk in vain.

It is true, that our Association was originally planned and moulded into shape by the energy and skill of one man; but its existence now, as a reflection of the inner life of the profession in Great Britain, is a stern necessity. The demand for the free exercise of gentle thought and scholarly communion, which is felt by the members generally, and finds its level at our anniversary meetings, is an acknowledged reality. We have entered into a contract with the household gods of social order—a contract which we have no power to dissolve at pleasure. We may tear asunder the links that bind a subordinate community, or abandon the shackles of science that oppress us in our holiday time; but we have no absolute command over the certain laws that have made us what we are. Deep-seated principles have been worked into our habits; and our world within, with all its defects, is the collective force of a silent evolution.

All this may sound like a piece of transcendental metaphysics, and may raise a cry against our bringing as evidence of a fact a state of things which is incapable of proof beyond what we feel by our instinctive conceptions. But let any one, who thinks we have no solid ground for maintaining that our Association is something more than a convenient establishment for our amusement, turn to the report of the late annual meeting at Cambridge; let him read attentively the address of the President; let him analyse the purpose, the style, and the matter of the other addresses and papers there delivered; above all, let him read the speeches that were delivered at the dinner—and then say if he can believe that these friends and partisans of the Association were merely engaged in giving lectures on the abstract principles of our science, or on the rewards and grievances of practice. When the Vice-Chancellor, in responding to the toast that Mr. Paget had given, said he had listened to a speech "which he had never heard surpassed in eloquence", we may be quite sure he meant that the purport of that speech was far deeper than the usual soundings of an after-dinner oration. The great moral lesson enforced by Mr. Paget's words is one which carries us beyond the limits of his fastidious and suggestive reasoning. We thank the University of Cambridge "that she has trained so large a body of our gentry and nobility, not only in fair learning, but in rectitude and mutual honour, in the love of order, in the love of freedom, in the love of home, and in all these on the foundation of the one true faith." But we of the profession of medicine owe her a deeper debt even than this. It is this very training which has given liberty and influence to the physician. The men of light and learning in England, whose wisdom is open and direct, have been taught to trust their honour and to identify their interests with those of the guardians of their health. Society throughout the land no longer separates the educated general practitioner from its councils; nor does it deny him a participation in those enjoyments to which the common patrimony of knowledge has entitled him. The people who form the better class of our patients defer to our opinions—help at least to feed the flame of that inner lamp which is for ever burning on the altar of our domestic life.

BOTANICAL KNOWLEDGE AT A DISCOUNT.

Works on the study of Botany abound, we are told by an authority in the *Natural History Review* of July last; but it is rare to meet a person who possesses even an elementary knowledge of any branch of the subject. There is only one scientific society in the United Kingdom devoted exclusively to botany; and not one in England. In the Royal Society's *Transactions*, there have not been six papers on Botany during the present century. In London, the Linnæan Society monopolises scientific botany. In the British Association, botany is rarely represented by even a small paper or treatise.

The same writer further laments that, even with regard to the men at present engaged in botanical pursuits, there are very few in the British Isles who have added anything important to our knowledge of physiological or structural botany. Cryptogamic botany, notwithstanding the improvement of the microscope, is completely neglected. The dearth of botanists, he adds, is remarkable. He naturally asks how this happens; and inquires into the system of botanical teaching in this country.

Till lately, botany was almost solely taught in medical schools. To the medical schools, we must, therefore, especially turn for information; and here a little insight into the methods

of instruction there pursued, readily explains the failure of a diffusion of botanical knowledge. The writer referred to then goes into the present system of instruction followed by botanical teachers, and lays a serious bill of indictment against it, "The schools turn out no botanists." The courses of lectures and the class-books in common use are unsuited for the medical student; the teacher aims through them to give in three months what it would take three years to learn. Botany is brought before the student in a way in which no other subject of his studies is. In botany, he is taught the abstruse and the abstract at the very beginning, instead of at the end. Our system, we are told, was borrowed from the German, "which is probably the worst in the world." In France, a better system prevails.

The writer in the journal referred to tells us that the proper method of instruction is the "Schedule system," as it was called by its proposer, Professor Henslow; and it is this system to which he especially would call attention. Its simplicity and practical character recommend it. It has been introduced into the examinations of the London University with success; and has been worked to its fullest extent by Professor Oliver. A full description of this system will be found in the *Natural History Review*.

Botany, if properly taught, is an excellent training for the medical student; it gives him habits of accurate observation; but no wonder that its abandonment, as a required course, should have been proposed, when we see the results of the present system of teaching; no wonder that the botanical class is the bugbear of the curriculum; and that it has been so for the last half century. It is very strange, the writer adds, that things are allowed to go on unchanged; that the present courses and examinations in botany are accepted as if they were the very best that could be.

"The only remedy for the existing state of matters is to make the botanical training objective and practical, at the same time that it is scientific and improving. Let the student be taught at first truths he can perceive and apply. Keep his eyes, hands, and brain, employed together, and they will find work for one another afterwards."

Such is the serious indictment brought against our present system of botanical instruction by one who appears to be an authority on the subject.

THE prosecution of Dr. Wilkins of Ealing, for the illegal detention in his house of an alleged lunatic, has given rise to much misapprehension as to the exact position, in relation to the Commissioners in Lunacy and the law, held by the numerous members of the medical profession, who have residing with them patients more or less of unsound mind. It is very essential this position should be clearly understood. It is not necessary, as one of our contemporaries (the *Lancet*) erroneously states, that a licence should be obtained for the reception of one patient; but the law imperatively requires, that any patient whose mind is unsound should be, if not in the immediate care of his relatives, placed under certificates of lunacy. The detention of a patient without such certificate, becomes a misdemeanour; and is punishable by fine, and even imprisonment. We would strongly advise any professional man, who has a doubtful case under his care, to be on the safe side in this matter. The forms of certificate are easily obtained from Messrs. Shaw of Fetter Lane, and other stationers. The fact of these certificates being filed, will involve only an annual private visit from one of the Commissioners in Lunacy. These visits are invariably conducted with much courtesy; and it is, on all accounts, desirable that the requirements of the law should be scrupulously complied with, in a case of so delicate a nature as those involving infringement of personal liberty. In the event of a second patient being received into the house of a private person, a formal licence must be taken out, and expense incurred; moreover, the visits of the Commissioners must then be official, four inspections being made during the year, by a medical and legal Commissioner together, and two visits in addition by a single Commissioner. In the case of a nervous or hysterical patient, not absolutely insane, a representation of the facts of the case to the Commissioner in Lunacy, would, in most instances, obviate the necessity of any certificate, the patient remaining under care as a "boarder." In all cases, our advice would be instant and straightforward communication with the Lunacy Commissioners.

THE *Globe* is, in matters military, supposed to be inspired by the Horse Guards. It evidently is, at all events, thoroughly Horse Guardish in sentiment. Of course, it has had its article singing *Gaudeamus igitur*, over the seventy-seven lately announced successful candidates for medical military honours. Especially it is wrath with the profession generally for taking up the case of the army surgeon, and for interfering with business which does not concern anybody but the Horse Guards. In fact, it threatens Professor Douglas Maclagan with a drum-head court-martial and the cat-o'-nine-tails, for having dared publicly to recommend young Edinburgh graduates to have nothing to do with the army until army surgeons were treated as other "officers and gentlemen" are treated in the army. Not a bad specimen of the spirit of insolence which still reigns up in the regions of red-tapism at the Horse Guards! It is suggested to Dr. Maclagan that he is liable to a prosecution, for attempting to injure her Majesty's army medical service! But these Horse Guards gentlemen forget

that we have a House of Parliament; and that this question will, in all probability, be ventilated, and thoroughly, in that House next session. They forget also the lesson which Sir C. Wood received (notwithstanding Government influence), for having tried to tamper with the competitive examinations in the Indian army medical service. And, yet, they do not altogether forget these things; for in the inspired article of the *Globe*, there is a remarkable admission. Well (says the *Globe*), now that the doctors, civil and military, are beaten into a proper state of subordination, we may perhaps look into the matter, and inquire if there be any real grievance of which these medical officers can complain; now that we are no longer subjected to pressure we can deal with it, and if there be any real cause of complaint we can remove it—but, of course, not under compulsion! So that the Horse Guards has, in truth, regarded all the petitions, deputations, and memorials, with which it has of late been assailed, as so many breaches of discipline, as acts of grave insubordination. It has been unable to treat the subject on its merits, because the profession has been acting the part of insubordination! It is something, however, at all events, that these high gentlemen should be brought to confess, that there may be some grievances affecting the army medical officer. Perhaps, with the prospect of the next session of Parliament before them, they may go a little further, and even discover and acknowledge that grievances do exist, and perhaps alleviate them—but, of course, not under any insubordinate pressure from without. And yet, after all, how can we blame authorities who err, through ignorance, it may be, as well as pride? How can we hope that authorities purely military can be properly advised in matters medical, if they are not properly advised by medical knowledge? It is here that our army medical system fails—here, in not being presided over by medical science, medical experience, and medical authority, such as would enforce upon Commanders-in-Chief the adoption of all its reasonable propositions. The go-between between the Army Medical Service and the Government, should be the representative at once of high medical knowledge, of large military experience, of deep professional sentiment, and then, of course, it would possess that full authority which such qualities give to men who occupy positions of mark, and who have in their hands the interests and welfare of others, their subordinates in office but their brethren in profession.

In a letter, written by Antoine Louis, Secretary of the French Royal Academy of Surgery, of date March 18th, 1757, the thanks of the Society are given to M. Sibelle, Surgeon of L'Abbaye Royale at Longport, for the observations he had sent them of a case of

"Cæsarean operation performed on a living woman. The necessity of the operation was evident; but you did not follow the rules of the art in performing it. No author prescribes the incision in the linea alba, and the suture you employed is different from all hitherto described. As regards the incision which you thought it necessary to make into the bladder above the pubes, on account of the difficulty of introducing a catheter into the bladder, we do not think the difficulty insurmountable; in fact, it is easily removed by putting the patient in a sitting position, and elevating the womb."

M. Sibelle does not appear to have been satisfied with this and some other criticisms of the Academy on his proceedings, and gave them a rejoinder. To his rejoinder, the Academy again replies:

"Your second observations have been carefully considered. But we have not accepted the reasons you offer in favour of making the Cæsarean section in the linea alba. The example of lithotomy above the pubes is not conclusive. You think that the mother and child would have perished in your hands, if you had made the lateral incision; but it appears that you would have quite as readily extracted the child, and have introduced two fingers into its mouth, as you say you were obliged to do. The sutures, you say, tore the wound in consequence of the movements of the woman; and you consequently thought it necessary to cut them in order to prevent further mischief. You conclude, from this case, that sutures are not applicable in wounds of the abdomen; and that the many tailed bandage, applied as in fractures, is best adapted for uniting the edges of the wound."

The usual results of a discussion in which all parties have made up their minds before commencing, were well exemplified in the late discussion at the Academy of Medicine touching the sounds of the heart. "As you were" are the last words uttered on such occasions. At the conclusion of the discussion, M. Gavarret observed:

"Thus, as we have seen, the opinion of M. Beau (that the second sound coincides with the ventricular systole) has been attacked on every side, and upset from its very base. One by one, all his arguments, on which he has expended so much energy and so much talent, have been overthrown; and all that remains of them is a confused mass of vain conceptions."

To which rejoins M. Beau:

"It is useless for me to reply; I have nothing to add to, and nothing to retract from, what I have said. I thank the Academy for having so kindly listened to me."

A discussion on Iridectomy has lately taken place at the French Surgical Society. M. Demarquay said that he had seen many operations of iridectomy performed in England in acute and chronic cases of glaucoma and in other eye-diseases. Every case he was shown was a success; but no doubt there must be some failures. M. Le Fort said that he had seen iridectomy performed in England and in Germany. "In those countries, the operation is practised with surprising readiness, in an off-hand way, and in the most unimportant diseases of the eye (*pour les*

moindres cas de maladies des yeux)." In Berlin, he had seen, under Von Gräfe, a large number of operations. In seven or eight of them, hæmorrhage had taken place into the anterior chamber; but the blood was squeezed out by gentle pressure, and no ill results were produced.

Dr. Caffe tells us that the "dry diet" is a capital curer of certain diseases. Obesity and syphilitic diseases, galactorrhœa and bronchorrhœa, etc., are arrested thereby. The way it is practised in the East is this. The patient is located in a place of moderate temperature; and his food consists exclusively of biscuits, dates, and raisins. A glass of water is "put at the disposition" of the patient—patient, indeed!—who is, however, only allowed to drink it *guttatim*, sucking it through a straw! This *regime* may be supported—we suppose Dr. Caffe means by the placid Oriental—for months!

Dr. Le Cœur recommends the cure of itch by the pleasant application of aromatic vinegar. He has for years employed this simple economic remedy, with constant success. The vinegar should be rubbed in with a roughish sponge. Four or five frictions generally effect a cure. A warm bath will remove any erythema which may arise. "I recommend my *confrères* to try the remedy," he says.

Dr. Eiselt of Prague has been appointed Clinical Professor at the Russian University of Chartkow.

The meeting of German naturalists and physicians takes place this year at Giessen, from the 17th to the 23rd of September.

Dr. Bonnejoy details in the *Gazette des Hôpitaux* a case of aphonia "instantaneously cured by electricity".

At the Society of Medical Sciences at Lyons, M. Ollier presented a specimen of an arterio-venous aneurism at the bend of the elbow, which had been cured by extirpation of the sac and ligature of the ends of the artery. Compression, applied before the operation, had prepared the way for a ready establishment of a collateral circulation.

M. Langier, of the Hôtel-Dieu, communicated to the Academy of Sciences a case of laceration of the soft parts of the arm, in which he had brought together and ligatured the torn ends of the median nerve. No bad consequences followed the operation. On the evening of the day of the operation, sensibility was partially restored; on the following day, it was much increased.

In 1863, at Milan, 123 persons (98 men and 25 women) presented themselves at the hospital, having been bitten, 113 of them by dogs, and 10 by other animals. The bites were by far the most frequent during the hot months of the year. Thus, between April and September there were 83 cases, and 40 in the other months. A complete statistical account of these cases is given in the *Annali Univ. di Medic.*

THIRTY-SECOND MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT CAMBRIDGE, AUGUST 1864.

Brother-Associates of the healing art,
From Cambridge now we are about to part,
And shall we part, nor faithfully confess
Our joy and pride and grateful thankfulness,
That at this seat of learning we should be
Received with such distinguished hospitality?

A kind and cordial invitation calls
Our body to assemble in these halls:
A compliment and honour, which, before
Long coveted, is valued now the more.
As proudly through these Colleges we roam
Such welcomed guests, we feel almost at home,
Such delicate attention 's shown to all
Who visit Chapel, College, Court, or Hall.

Medicine! at once a science and an art,
High avocation for the head and heart;
Man's noblest occupation through all time,
Honoured of mankind in each age and clime;
Noble profession! well may Science be
Proud of the sons whom she can claim of thee,
For in what sphere of knowledge but some son
Of medicine has the highest honours won?
And Cambridge stands preeminent in fame,
While Caius' College boasts of Harvey's name.

Cambridge! time honoured and unrivalled name,
Grand synonym for scientific fame,
Whose pride it is to train the mind of youth
In the strict school of mathematic truth;
Whose irrefragable and rigid rules
Transcend the subtlest logic of the schools,
However syllogistic or exact,
As Reasoning transcended is by Fact;
For Fact transcendeth ever argument,
An axiom from which there's no dissent;
Though facts, however numerous, are vain,
If left unlinked to reason's golden chain.

But now most satisfying facts appear,
Linked by concatenations of good cheer;
And ranged with such considerate prevision,
It looks like mathematical precision.
Each day, each hour, some hospitable board,
A breakfast or a luncheon will afford.
While private table or collegiate hall
Provides a sumptuous dinner, spread for all.

Science and Art their rarest stores display,
Nature her beauty adds, until the day
In some grand *conversazione* ends,
Where old friends meet, and strangers are made friends;
While woman's presence, with a sense of soul,
Sheds her refining influence o'er the whole.

Cambridge, ere from my enraptured vision fades
This far famed scene of gardens, lawns, and glades,
May I adventure in my verse to touch
Upon a scene which all admire so much,
And tell to those who here have never been,
What beauties on the banks of Cam are seen?

Smooth flows the Cam, most classical of streams,
Now dark in shade, now bright in sunniest beams,
While the quick fish from out the water rise
To snatch their dainty feast of summer flies.
Now underneath some bridge the river glides,
Whose graceful arch the stream, one moment, hides;
Still flowing by fair gardens and famed trees,
Beneath whose shade the student reads at ease;
Or should he raise his eyes and look around,
All he beholds is consecrated ground:

Courts, halls, spires, chapels, colleges, arise,
Boldly projected on the clear blue skies,
While thoughts come thronging of each famous name
That here once lived, or founded here its fame:
Such scenes of grandeur and of grace combined,
With noblest aspirations fill the mind,
And help to make each youth, what all should be,
An honour to his University.

But hearken! psalms, hymns, hallelujahs rise,
Swelling in fullest chorus to the skies;
While music's mightiest, sweetest powers combine
To lend to human accents tones divine,
In yon grand, glorious, ancient Chapel, where
Our brotherhood, assembled now in prayer,
Offer the soul's thanksgiving up to Heaven
For all the good that God to man has given.

R. T. E.

August 6th, 1864.

Progress of Medical Science.

SURGERY.

Extensive Wound of Face: Re-adhesion of Flap. A robust well-made Arab was admitted in November into the military hospital at Orléansville, under M. Vallin, with an extensive wound of the shoulder and also of the face. He had been struck by a yataghan on the face, obliquely from left to right. The wound passed from the lower lip to the upper, divided obliquely the left nostril and nasal cartilage, and lacerated the external two thirds of the lower eyelid; and the blade of the instrument had glided over the malar eminence and stopped in the upper lip, about a *centimètre* from the left commissure. Thus there was formed a large flap, comprising the nose with its cartilages, and the anterior part of the upper jaw-bone with the four upper incisor teeth; it was completely detached from the face, and hung down on the upper part of the chest by a pedicle formed from the upper lip, about six *millimètres* in length, but of the entire thickness of the lip. The parts, before the man's admission into hospital, had been brought together with ten points of suture and adhesive plasters. On the following day, the portion of the left cheek which formed nearly the whole fleshy part of the flap, had a temperature much lower than that of the other side of the face; the flap appeared withered; the four incisor teeth, fixed in their sockets, were adherent to it. These were fastened by silver wire to the two first molars (the canines being absent), and were further secured by two small bands of gutta-percha, one placed in front and the other behind. Under the use of warm vinous fomentations, the circulation became more active. But, partly from the restlessness of the patient, who constantly pushed the incisor teeth forward with his tongue, and partly from the weight of the flap dragging on the sutures, the latter gave way, and the flap slipped downwards. The parts were restored to their normal position, and twelve new twisted sutures were applied in small pins; the fragment of the maxillary bone, with the incisor teeth was removed by means of a bistoury, as it was not thought likely to reunite; and, to overcome the gravitation downwards of the flap, two soft hooks were introduced into the nostrils, and fastened to the forehead by bandages.

From this time, the wound commenced to cicatrise at the right ala nasi, near the external angle of the eye; the lower eyelid, however, had been so much injured that its free border sloughed, and ectropion was left after cicatrisation. It was found necessary to freshen with a bistoury the edges of the wound in the upper lip, as they had a tendency to cicatrise separately; they were brought together, and united by twisted sutures. In the middle of the following January, the patient was discharged cured, with the exception of the ectropion, on which he would not consent to have an operation performed. (*Gaz. Méd. de l'Algérie, et Bulletin Génér. de Thérap*, 30 Juillet, 1864.)

Syphilitic Disease of the Epididymis. M. Dron, of the Antiquaille Hospital at Lyons, describes syphilitic disease of the epididymis as not being rare, although it is scarcely described by writers. M. Dron has noticed sixteen cases in the course of six months; in fourteen the disease was confined to the epididymis, and in two there was also syphilitic orchitis. In none of the cases could the affection of the epididymis be referred to any other cause than syphilis, and the efficacy of the treatment employed confirmed the diagnosis.

Syphilitic tumour of the epididymis generally occupies the head of the organ; sometimes, but less commonly, the engorgement extends to the whole organ, but even then the head is the part most affected, and continues enlarged for a longer time. In one case only was the tumour situated on the tail. Both sides are commonly affected at once; but usually one epididymis more than the other. The tumour is generally not larger than an olive or hazelnut, sometimes even as small as a pea. In consistence it is always solid and resistant, but in various degrees; in old and indolent cases, it acquires a cartilaginous hardness. The surface is uuequal and nodulated. When the tumour has acquired a certain size, it lies against the testis without it, such as occurs in epididymitis. The testis can always be easily distinguished. Most commonly the epididymis and its tumour remain detached from the testis. The syphilitic engorgement of the epididymis may be completely painless, even on pressure; the patient frequently does not perceive the tumour until his attention is drawn to it. In some cases, however, pain is produced by compressing the tumour; and, in others, the tumour is spontaneously painful, especially at the commencement, and it is in such instances that it attains the largest size. Even in these cases, however, the patients have not been obliged to interrupt their occupations. The functions of the organ do not seem to be interfered with by the disease. As far as can be observed, syphilitic disease of the epididymis appears about three and a half months after chancre. It probably appears later in some cases; but even when it appears early, there are also severe and tedious secondary affections, such as papular or squamous skin affections. If left to itself, the tumour has an indeterminate duration; but, if properly treated, has always been removed in M. Dron's cases. Two months are generally necessary; but a cure may be effected earlier. In one case, the organ suppurated.

Syphilitic tumour of the epididymis cannot be confounded with acute blennorrhagic epididymitis; but there may be difficulty in diagnosis when chronic epididymitis occurs in a syphilitic patient. But, in the latter case, there will be a history of gonorrhœal discharge; and this may even be present. The patient also will have had symptoms denoting acute inflammation; while the development of the syphilitic epididymis is not attended by any such manifestations. If left to itself, the gonorrhœal engorgement tends to disappear; the syphilitic remains. The former, after invading the entire organ, becomes limited to the tail, where it remains for a considerable time; the syphilitic disease almost always commences in the head. Finally, blennorrhagic epididymitis is com-

monly single; while the syphilitic disease generally occupies the epididymis of each side.

Tuberculous disease of the testis, concurrent with syphilis, may at the commencement be confounded with syphilitic epididymitis; the disease appears in the head of the organ, is indolent at the commencement, and the tumour is hard and nodulated. In the tuberculous disease, however, the nodules grow and project, and at the same time become soft and painful. The skin becomes adherent to them, ulcerates, and allows the escape of a soft cheesy mass, mingled with pus. The vas deferens often becomes moniliform in consequence of the deposition of tuberculous matter in its interior; and this deposit also takes place in the vesiculæ seminales, prostate, etc.

M. Dron regards the presence of syphilitic epididymitis as being always indicative of a severe syphilitic affection of the system, especially when the local disease returns frequently and is very intense. In all the cases, however, which have come under his notice, the disease has been subdued by treatment.

The lesion of the epididymis rarely exists alone; and hence the treatment is generally guided by the concomitant symptoms. Thus, according as secondary or tertiary symptoms have been present, mercury, iodide of potassium, or a mixed treatment, has been used. The duration of the treatment requisite for the disappearance of the tumour has varied from a fortnight to nine months. (*Archiv. Génér. de Méd.*; and *Gaz. Méd. Paris*, 30 Juillet, 1864.)

Lymphatic Tumours. At the meeting of the Surgical Society of Paris on June 22nd, M. Trélat related the case of a young man who had come under his care with a rare disorder—tumours formed of dilatations of the lymphatic vessels. The patient was robust and of good muscular development. He was a native of the island Bourbon, which he had left for the first time in order to come to France. He had never had syphilis; there was no trace of scrofula, nor were there any enlarged glands in the neck or axillæ. When he was about fifteen years of age, a small enlargement appeared below the fold of the left groin; and soon afterwards, while performing gymnastic exercises, the patient was seized with severe pain on the right side, which was found to proceed from an inguinal hernia. This was reduced, and a truss was applied; but the region above the pad remained enlarged, especially after walking or exertion—there was, in fact, a tumour in the right groin also, independently of the hernia. The patient at first paid no attention to the malady; and could not inform M. Trélat whether the tumours grew rapidly or slowly. He stated, however, that they had remained nearly stationary during the last four years.

When M. Trélat first saw the patient, he had an inguinal hernia on the right side. In addition, Scarpa's triangle on each side was occupied by a tumour elongated from below upwards. The tumour on the right side was 12 *centimètres* long by 7 *centimètres* broad; that on the left side was 13 *centimètres* by 8. The former descended somewhat lower than the other; but that on the left reached as far upwards as the internal orifice of the inguinal canal. The tumour on the right side was a little more projecting, more regular, and softer. That on the left side presented several lobules, of about the size of an almond, formed by the lymphatic glands. With these slight differences, the tumours were alike on the two sides. The skin presented no change of colour; it had not that bluish tint which is observed in varix and some subcutaneous erectile tumours. The surface was regular, perfectly normal, without that orange-rind appearance of the skin which is observed in varix of the superficial lymphatic network. No lesion or alteration of any kind could be detected in the two lower limbs. The skin was perfectly moveable over the tumours, which could also be readily moved over the deeper parts. The swellings were soft, could be compressed in every direction, and felt like lipoma, from which, however, they differed in being reducible. Another diagnostic sign was furnished by the rarity with which symmetrical lipomata exist, without the presence of other similar tumours irregularly scattered elsewhere. During about four months, the patient had complained every three or four days of vertigo, accompanied by dyspepsia; the symptoms were removed by lying down and simple treatment. This reminded M. Trélat that a patient whose case was described in 1854 by MM. Desjardins and Gubler, and who had lymphatic fistulæ, was troubled by *malaise*, nausea, and vertigo, when she had lost a considerable quantity of lymph; and that a patient seen by Amussat had severe symptoms which ended fatally. M. Trélat's patient, however, had lately been very anxious about his disorder; and this alone might be sufficient to account for the dyspepsia and vertigo. Moreover, the vertigo had occurred only once during his voyage, and not since his arrival in France; since which his digestion had been very regular, and he had been able to bear exertion more easily than in Bourbon.

M. Trélat observes, that lymphatic varix appears especially frequent in warm countries. Thus, Amussat's patient was from the island of Bourbon; that of MM. Desjardins and Gubler from the Mauritius. Of four patients observed by M. Nélaton, two were originally from Brazil or the colonies; and Drs. Saint-Perne and Petit, who have practised in Bourbon, have informed M. Trélat that of several instances of lymphatic tumours in natives of that region, the patients were mostly young, the ages varying from 17 to 23; one only was 39 years of age.

M. Trélat did not entertain the idea of removing the tumours; and in this he was supported by the experience of M. Nélaton. Some years ago, M. Nélaton, at the urgent request of a young man, decided on excising one of these lymphatic tumours. The diagnosis being uncertain, an incision was made over the mass, when a considerable quantity of thickish milk-like fluid escaped, leaving only irregular flaps, and some beaded filaments which were removed. The patient, a young robust man, was soon seized with rigors and symptoms of purulent absorption, and died. The tumour on the opposite side, which had not been operated on, was injected with mercury by M. Sappey, and was shown to consist of a network of varicose lymphatic vessels.

Compression was applied in M. Trélat's case by one of Bourjeaurd's bandages; which was, however, obliged to be modified several times to meet the difficulty experienced in keeping up pressure. This was the only treatment that had been employed; and M. Trélat was desirous of learning from his colleagues in the Society, whether it would be justifiable to attempt to evacuate the contents of the swelling through an artificial fistulous opening. Some observations, principally bearing on the diagnosis of lipoma, were made by MM. Verneuil, Morel-Lavallée, Guyon, and Larrey; and the unanimous opinion was expressed, that operation was not advisable. (*Gaz. des Hôpitaux*, 5 Juillet, 1864.)

Strangulation of the Spermatic Cord as a Substitute for Castration. A man, aged 70, was admitted into the Orvieto Hospital, having had for twenty years an encephaloid tumour of the right testes. The tumour was large, uniformly soft and elastic; but non-fluctuating and opaque. The patient had lancinating pains extending along the cord into the abdominal cavity. Instead of excising the tumour

. Reali performed the following operation. Standg to the right of the patient, he seized the spermatic rd with the thumb and fingers of his left hand, and ised the part so as to make the skin tense. An insion an inch and a half long was then made, and ıe cord was laid bare. The operator then opened ıe sheath, and, by means of a needle, introduced a rong thread, by means of which he rapidly and cometely strangled the end. The thread was tied tightly, ıd the ends were left between the edges of the inci-on. The result of the operation was very satisfacry. The ligature was detached on the fifteenth y. Two months after the operation, the wound was ıtirely cicatrised, and the volume of the tumour had minished nearly one-half. The tumour continued decrease; and, ten months after the operation, the stis had returned to its normal size. The cure was rmanent. A second operation of the same kind rformed on a man 40 years of age, was less fortuıte; the patient died of the sequelæ of the operation. a third patient, a young man aged 23, who had an most stony enlargement of the testis with a slight rous collection, the result was as satisfactory as in e first case. The testis, which had been four times large as the other, was reduced almost to its norıl size. (*Annali Univers. di Medicina*, and *Gazette éd. de Paris*, 2 Juillet, 1864.)

Fistulæ Following Lithotomy in Children. A tula, says M. Guersant, is sometimes left after liotomy; it may be vesico-rectal or vesico-perineal. three cases of recto-vesical fistula which M. Guernt has seen, two were cured spontaneously; the ird resisted all treatment, and the fistula remains, e urine escaping involuntarily, sometimes with cal matters. M. Guersant has seen cases of perial fistula in children on whom lateral lithotomy d been performed months or even years previously. e has treated them by cauterisation with nitrate of ver, but always without success, from not being le to act on the entire course of the fistula. He s also tried a thread seton, introduced into the fisla and brought out through the urethra; but has rived most success from cauterising the whole urse of the fistula with a stylet at a white heat. *ulletin Génér. de Thér.*, 30 Juin.)

IIDWIFERY AND DISEASES OF WOMEN.

Obstinate Vomiting and Diarrhœa during regnancy: Artificial Premature Labour: Recovery. A woman aged 29, of extremely nervous nperament, had been much harassed by obstinate miting during her first pregnancy. On July 15th, 63, she had arrived at the eighth month of a pregncy still more disturbed than the first, inasmuch to the repeated vomiting there was added diarea, which could not be restrained by any remedies. om the third month to the sixth, the alvine flux d been moderately abundant each day; but from e sixth month to the commencement of the eighth, was excessive. Hence, the entire series of astrinnts and bitter tonics having been exhausted, and e mother being very weak and the fœtus scarcely ble, M. Ligé of Mans determined to induce preture delivery. He first applied nitrate of silver to e orifice of the cervix uteri, according to the plan ommended by Professor Giordano of Turin; but no ect was produced. Nine uterine douches were adnistered at intervals of twelve or fifteen minutes, l delivery was soon effected. The child, a male, s rather small and very feeble: it soon died. The ther, although much exhausted, gradually recovered her health under the influence of a tonic and reparative regimen. (*Union Méd.*, Dec. 1863; and *Bull. Génér. de Thér.*, 15 Jan., 1864.)

Source of Hæmorrhage in Cases of Uterine Tumours. At a meeting of the Edinburgh Medico-Chirurgical Society, Dr. Matthews Duncan exhibited a fibrous tumour removed from the uterus of a woman who had died after suffering from profuse monthly attacks of menorrhagia. The tumour, moderately hard, lay in the fundus of the uterus, and was permeated by venous sinuses capable of admitting a crow-quill. It was surrounded by uterine tissue; and in the layer between the tumour and the peritoneum there was a network of enormous uterine sinuses. At about the centre of the part where the tumour projected into the cavity of the uterus, was a small clot, partly filling a round opening about one-twelfth of an inch in diameter, through which a probe could be easily passed into the uterine sinuses. Dr. Duncan observes that the presence of these sinuses accounts sufficiently for the hæmorrhage; and that the bleeding occurred only at the menstrual periods, during the congestion of the organs, while, at other times, the sinuses were comparatively empty. The case appears to him to indicate the use of means to diminish the impetus of the blood or to moderate congestion in the pelvic viscera. It further points to the value of attempts to restrain the hæmorrhage by compression, in whatever way applied. (*Edin. Med. Journ.*, Jan. 1864.)

Association Intelligence.

THE MEDICAL PROVIDENT FUND.

Dr. Richardson begs to announce the following contributions to the Guarantee Fund—

	£.	s.	d.
Amount already contributed	199	10	0
R. Ceely, Esq. (Aylesbury)	5	5	0
W. Adams, Esq. (London)	5	5	0
Dr. Johnstone (Birmingham)	3	3	0
G. May, jun., Esq. (Reading)	5	5	0
J. H. James, Esq. (Exeter)	10	10	0
Dr. D. L. Thorp (Cheltenham)	21	0	0

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

WEST SOMERSET BRANCH.

A Quarterly Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 p.m.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. Kelly, M.D., *Hon. Sec.*

Taunton, September 1864.

Thanks to the Accoucheur. At the late annual meeting of the Ohio State Medical Society Professor Weber offered the following resolution, which was adopted amid tremendous applause: "*Resolved*, That the thanks of this Society, as well as the good wishes of all the good citizens in the land, are eminently due to our venerable fellow-member, J. G. Rogers, M.D., of New Richmond, Ohio, for the skilful manner in which, on the morning of April 2nd, 1822, he assisted into this world Ulysses Simpson Grant, the commander of the American armies, the hero of Vicksburg, and the predestined destroyer of the great rebellion."

Special Correspondence.

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

From the nature of the combatants during the recent riots, it is impossible to ascertain the exact number of killed and wounded; but it is supposed that about three hundred persons have been more or less injured. Of these, about sixty suffered from gunshot wounds, and seven have died. The gunshot wounds have been chiefly in the lower extremities and the abdomen. This is worthy of remark; and it might be inferred therefrom, that the shots were not only intended to take effect, but were fired by persons skilled in the use of firearms.

The General Hospital affords, at present, an ample and excellent field for the study of gunshot wounds. In one case which has just proved fatal, the bullet, after smashing both ulna and radius (the arm hanging down at the moment), passed through the posterior inferior spinous process of the ilium, through the gut, and lodged in the sacrum. Amongst the cases under treatment, is one in which the bullet passed superficially across the inside of one thigh, destroyed one testis, and passed through the second thigh behind the femur. Several persons were severely wounded in the lower extremities, some of which had to be amputated. There is one bad case of depressed fracture of the side of the skull, in which there has been some loss of brain-substance, and in which Dr. Browne removed portions of a felt hat and a newspaper and depressed bone from the wound. The opposite side is entirely paralysed. Another man was shot below the clavicle, and the bullet passed through the lung and scapula, and lodged beneath the integuments, whence Professor Gordon removed it. Several have had bullets passed through the soft parts about the shoulder-joint. There are a couple of cases where the bullet has lodged, and in which its position has not been ascertained. Some eyes have, also, been destroyed by gunshot wounds; and the scalp has, in some instances, been very severely injured by blows. The difference of appearance of the entrance and exit of the bullet is well marked in many of these cases; and the different effect of a spent ball to one in full speed may be well studied.

Since writing the foregoing, three cases have proved fatal in the General Hospital; viz., one man who was shot through the chest; another in whom the left parietal bone was smashed in, the brain protruding; and a third who died from tetanus, resulting from a gunshot wound in the front of the thigh. An immense number of persons—about 5,000—followed the remains of one of the deceased to the graveyard; but there was no disturbance of the peace. About 150 persons were injured during the riots, and in nine cases fatally.

The Medical Congress at Lyons opens proceedings on September 26th.

Correspondence.

THE TESTIMONIAL TO MR. GRIFFIN.

Letter from D. Graham Niven, Esq.

Sir,—I have observed with pleasure that the long and persevering efforts of our fellow associate, Mr. Griffin, to improve the position of the Poor-law medical officers, are at last about to be recognised by his fellow practitioners.

Although no longer a working member of the profession, I have as vivid and feeling a recollection of the "troubled waters" which beset the path of the "parish doctor", as a twenty years' experience can give—a recollection which will always command my ready and willing support to any movement which has for its object the ameliorating the position, both socially and financially, of that hard-worked and ill-paid public officer.

Having resided last winter at Weymouth, I had the pleasure of becoming personally acquainted with Mr. Griffin; and also an opportunity of forming some idea of the amount of labour he has for so many years and so generously undergone in the good cause. The result was a feeling of surprise that so great an amount of really hard work should have been allowed, for so long a time, to pass unrewarded. I felt assured, however, that, sooner or later, that reward must follow; and it affords me much pleasure to give the movement my humble but hearty support.

I have forwarded my subscription to Dr. Fowler; and I hope the present comparatively small amount subscribed will be largely increased; that the name not only of every Poor-law medical officer, but of all who wish well either to him or to the sick poor who are placed under his care, will be found in the list of subscribers.

I am, etc.,

D. Graham Niven.

26, York Crescent, Clifton, Bristol, Aug. 26th, 1864.

THE INDIAN ARMY MEDICAL WARRANT.

[The following extract from a letter, not written for publication, is from the pen of a gentleman who has served upwards of twenty years in India.]

"You will be anxious to know what I think of the new Medical Warrant for India. I can only say, as far as I am personally concerned, that though it has not given me all I should have asked for, or have liked, I feel it is a very great improvement. But, though I am a gainer in every way, still, I am sorry to say, there are others whom it will in a short time injure severely. Upon the whole, it must be looked upon as a great boon to the service. Whether it will induce good men to enter the service is another question, of which I can give no opinion. It certainly will not induce me to remain in it one day longer than I can help. I inclose a rough draft of the rates of pay, according to the new and old scales. It is difficult to make the old scale exact; for every branch of the service had a different scale of pay. Now, a man will be paid according to his rank or standing—no matter with what branch of the service he is engaged. From this draft (see below), you will see the surgeons with Europeans, and senior assistant-surgeons in charge of native corps, are the losers. It comes hard upon them; but then all assistant-surgeons now in the service will gain a year's promotion by it. If you calculate it in this way, and see what a man would receive in thirty years according to

ch scale, say he was promoted to the rank of sur-
on after thirteen years' service—

	By old scale.	By new.	Balance.
With European Infantry....	Rs. 234156	251448	16292
With Native Infantry	Rs. 211800	251448	39648

o he would gain £1,600 in the one case, and £3,965
the other, besides the advantages given in fur-
ugh pay, which is all gain. Still, after all that has
en done, we are not put in a position of equality
ith the military. The lieutenant-colonel or major,
hen in command of the regiment, the adjutant, the
aymaster and quarter-master, all draw staff-allow-
nces, besides the pay of their rank; and the captain
lieutenant draws allowance for charge of his com-
ny; and I fancy this will be still a subject to
umble about; as, in giving us *the pay of our rank*,
ey have withdrawn the staff-allowance for medical
harge of a regiment, which used to be 300 rupees, or
30, a month. Nay, they have withdrawn this from
e surgeon, but given to the assistant-surgeon 150
pees, if he should chance to be in charge; on what
inciple of justice, I cannot understand. It appears
nother Warrant is to come out shortly. Whether it
to upset this one, or to settle a number of vexed
estions, it is difficult to say. But you see the pre-
nt Warrant says nothing about our medical regi-
ental fund, the number of deputy inspectors-
neral we are to have, and several other subjects of
tal importance to the service. However, I am alto-
ther rather agreeably disappointed; for I never
pected to gain much. What I did expect I have
t got—an increase to the rate of our pensions,
hich is still much below the rate of our more fortu-
te brethren belonging to the Horse Guards. Not
at I would accept the increase, if I had to serve
der such men as regulate matters at the Horse
uards."

	Old scale of allowances. £.	s.	d.		New scale of pay. £	s.	d.
Surgeon-Major of 25 years' service.							
ropean Cavalry and Horse Artillery..	1013	0	4	....	1183	2	0
ropean Infantry	935	6	0	....	1093	2	0
tive Infantry	715	6	0	....	1093	2	0
Surgeon-Major of 20 years' service.							
ropean Cavalry and Horse Artillery..	1013	0	4	....	1143	9	7
ropean Infantry	935	6	0	....	1056	9	7
tive Infantry	715	6	0	....	1056	9	7
Surgeons of 15 years' service.							
ropean Cavalry and Horse Artillery..	1013	0	4	....	915	11	5
ropean Infantry	935	6	0	....	825	11	5
tive Infantry	715	6	0	....	825	11	5
Surgeons of 10 years' service.							
ropean Cavalry and Horse Artillery..	1013	0	4	....	879	3	0
ropean Infantry	935	6	0	....	789	3	0
tive Infantry	715	6	0	....	789	3	0
Assistant-Surgeons of 10 years' service.							
ropean Cavalry and Horse Artillery..	395	4	0	....	541	14	5
ropean Infantry	286	10	0	....	451	14	5
tive Infantry	565	12	0	....	451	14	5
tive Cavalry	655	4	0	....	451	14	5
Assistant-Surgeons of 6 years' service.							
ropean Cavalry and Horse Artillery..	395	4	0	....	523	10	2
ropean Infantry	286	10	0	....	433	10	0
tive Cavalry	530	4	0	....	433	10	0
tive Infantry	421	10	0	....	433	10	0
Assistant-Surgeons of 5 years' service.							
ropean Cavalry and Horse Artillery..	395	4	0	....	395	12	2
ropean Infantry	286	10	0	....	336	12	0
tive Infantry	421	10	0	....	336	12	2
tive Cavalry	530	4	0	....	336	12	2
Assistant-Surgeons under 5 years.							
ropean Cavalry and Horse Artillery..	395	4	0	....	377	8	0
ropean Infantry	286	10	0	....	317	8	0
tive Infantry	421	10	0	....	317	8	0
ithout change or on leave	256	10	0	....	317	8	0

THE DRIED-UP HYDROPATHISTS. Hydropathy is in hard case at Malvern. The old women are forced to take to brandy, on account of the great scarcity of water everywhere. The celebrated springs on the Malvern Hills are almost dried up, and water-drinkers find their pure beverage almost as costly as alcoholic drinks.

Medical News.

APOTHECARIES' HALL. On August 25th, the following Licentiates were admitted:—

Colborne, Anthony Charles, Tachbrook Street, Belgrave Road
Johnson, Joseph, Hogsthorpe, Lincolnshire
Taylor, Shepherd Thomas, Argyle Square, St. Pancras
Turner, Edwin, Hampstead

At the same Court, the following passed the first examination:—

Treves, William Knight, St. Thomas's Hospital
Williams, John, University College Hospital

As an Assistant:—

Mildren, William Williams, Hayle, Cornwall

APPOINTMENTS.

BRODIE, George, M.D., appointed Physician-Accoucheur to the St. George's and St. James's Dispensary.

ELLIS, Edward, M.D., elected Assistant-Physician to the North London Consumption Hospital.

*FOSTER, Balthazar W., L.K. & Q.C.P.I., appointed Professor of Anatomy in Queen's College, Birmingham.

HARRIS, Samuel, Esq, appointed Honorary Surgeon to the Loughborough Dispensary.

KNOWLES, Henry, Esq., appointed Resident Surgeon to the Birmingham Lying-in Hospital.

MACGOWAN, Alexander T., L.R.C.P., elected Assistant-Physician to the North London Consumption Hospital.

ARMY.

BAILEY, Staff-Assistant-Surgeon H. J., to be Assistant-Surgeon 53th Foot, *vice* W. Barry.

O'LOUGHLIN, Staff-Assistant-Surgeon J. E., to be Assistant-Surgeon 63rd Foot, *vice* A. T. M'Gowan.

ROYAL NAVY.

BUTLER, Edward J., Esq., Assistant-Surgeon, to the *Caradoc*.
CRUICKSHANK, John, Esq., Assistant-Surgeon, to the *Brisk*.
IRELAND, Arthur J., Esq., Assistant-Surgeon, to the *Caradoc*.
JACKSON, Gordon, Esq., Assistant-Surg., to the *Duke of Wellington*.
MOORE, George B., M.D., Surgeon, to the *Brisk*.
REDMOND, William, Esq., Assist.-Surgeon, to the *Royal Adelaide*.

INDIAN ARMY.

CORBYN, Assistant-Surg. J. C., M.B., Bengal Army, to be Surgeon.
GOVAN, Assistant-Surgeon C. Moncrieff, M.D., Bengal Army, to be Surgeon.
TOWNSEND, Assistant-Surgeon S. C., Bengal Army, to be Surgeon.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

ALLAN, R. L., Esq., to be Assistant-Surgeon 1st Renfrewshire A.V.
FOWLER, J., Esq., to be Assistant-Surgeon 5th West Riding R.V.
PATON, J. F., M.D., to be Surgeon 1st Administrative Brigade Renfrewshire A.V.

BIRTH.

SPINKS. On August 23rd, at Warrington, the wife of *C. N. Spinks, Esq., of a daughter.

DEATHS.

*BERNARD, Charles Edward, M.D., at Weston-super-Mare, aged 54, on August 21.

COCKIN. On August 28th, at Dartmouth, the wife of John Cockin, Esq., Surgeon, R.N.

MARSH. On August 23rd, at Coed Cefn, near Monmouth, aged 53, Emma Catherine, wife of Thomas P. P. Marsh, M.D.

PERRIN, John W., Esq., Surgeon, at Walworth, on August 28.

SAUNDERS. On August 26th, in Queen Street, Cheapside, aged 8 months, Herbert W., youngest child of William S. Saunders, M.D.

ST. THOMAS'S HOSPITAL. Mr. Francis Hicks has been unanimously elected to the office of Treasurer of this hospital.

THE CROWN PRINCESS OF PRUSSIA. Sir Charles Locock has gone to Potsdam to attend the Princess, who is near the term of her confinement.

OVARIOTOMY. Dr. Tracy, Physician to the Lying-in Hospital at Melbourne, has successfully performed ovariotomy. This is, we believe, the first time the operation has been performed in Australia

The New Hôtel Dieu is to be built to the north of Nôtre Dame. It will contain about eight hundred beds; each ward containing about thirty-six beds.

Worcestershire Natural History Society. The annual meeting of this society was held on the 24th ult., at Worcester. On the motion of Sir Charles Hastings, president, the Bishop of Worcester took the chair. A lecture on the study of natural history, was delivered by Dr. Lankester. The Bishop of Worcester spoke of the connection between revealed religion and the natural sciences.

American Items. Professor Flint is about to publish a work on practical medicine. Professor Weber, of Cleveland, Ohio, is about to sail for Europe on business connected with the opening of a new school in that city. Professor Pope, of St. Louis, recently removed a fœtal skeleton of extrauterine formation through the rectum, and the patient recovered. (*American Medical Times.*)

Gunshot-Wound of the Penis. In the number of the *American Medical Times* of March 19th, 1864, Surgeon S. W. Gross reports the case of a conical ball encysted in the right cavernous body of the penis. The ball was received at the battle of Shiloh, April 7th, 1862, and was found by Surgeon Gross lying about one inch from the pubes. A good deal of inflammation followed the injury, but at the end of two years it gave him no pain, and he could not be persuaded to have it removed.

The Army Medical Service. No career ever so promising could be accepted unless the medical officer from the day of his joining his regiment, was in every respect in a position to which he was entitled by his superior education, his membership of a most honourable profession, and the very responsible and important duties of his post. The military element in the army has been permitted to assume quasi superiority over the "non-combatants"—an assumption ridiculously offensive and unjustifiable, especially in reference to the medical officers, whose personal courage is constantly taxed, and who frequently have to face death in the most loathsome forms of disease, when "combatants" are philandering about the streets of some idle garrison town. If we talk of bravery, few examples can be more admirable than the surgeon, with clear head and steady hand in the midst of the storm of fire, intent only on saving the lives of the men under his charge. (*Daily News.*)

Baron Larrey. A correspondent writes to a daily paper. The sum bequeathed to this illustrious surgeon by Napoleon was 100,000 *francs*, the largest legacy, I believe, contained in the Emperor's will. The monument at Tarbes, Larrey's birthplace, is not the only one erected to him by his country; a statue in bronze, by David d'Angers, the famous sculptor of those of Ambroise Paré and Bichat, cast from the cannon taken in the different great battles in which this heroic surgeon immortalised himself, was raised to his memory in Paris, by subscription; and Marshal Soult, Duke of Dalmatia, then Minister of War, decided upon its being erected in the *cour d'honneur*, the grand square, of the Hôpital du Val-de-Grâce. Larrey is represented in his uniform, pressing to his heart the will of Napoleon, on which is inscribed the high eulogium of the Emperor, "C'est le plus vertueux et le plus honnête homme que j'aie connu." Whilst attending the service at the Military Hospital during the three glorious days of July 1830, amongst other interesting incidents connected with those events, M. Larrey himself told me, when assisting him in dressing the wounds of one of the grenadiers of the Garde Royale, over whom he delighted at that moment to throw the protection of his popularity, that on the eve of some of the battles during the Empire, in which many of these very wounded had been engaged, he had frequently slept in the tent, wrapped in the same cloak, with Napoleon.

Indian Medical Warrant. The new Medical Warrant sent out by Sir Charles Wood has given great dissatisfaction throughout the service. It benefits all except surgeon-majors of twenty years' standing in this way—it makes their small pay smaller. It cuts down what was too little for the purposes of life before. The Indian medical service has been a very fine one; it will never reach the same standard again till it is fairly treated, and it may be well for Sir Charles Wood to look that fact fairly in the face. (*Times.*)

Dr. Brown-Séquard. Tetanus is prevailing among the wounded of the Army of the Potomac to an unusual extent. Upwards of fifty cases occurred within a short period at Fredericksburg and in the hospitals at Washington; nearly every one of which proved rapidly fatal. We are glad to learn that Dr. Brown-Séquard of London, now in this country, has consented to give a lecture on this disease, at Washington, where it is most prevalent. The great experience of this eminent physiologist in the treatment of nervous affections will thus be made available to the army surgeons in the management of this obscure and fatal complication of gunshot wounds. The lecture will be immediately published for circulation in the army. (*American Medical Times.*)

Health of Scotland. The Registrar-General of Scotland in his report for the second qnarter of 1864, states that the death-rate in Scotland is on the increase, especially in the towns. It does not seem to depend on the prevalence of any particular epidemic, but there is an increased mortality from all diseases. It is not confined to the second quarter of this year, but has extended over several years. In his sixth annual report recently issued, he suggests a doubt whether the introduction of sinks and water-closets into the immediate vicinity of the apartments in which families live, and even into these apartments themselves, may not tend to vitiate the air by their emanations, and be a cause of disease and increased mortality.

Causes of Death in England. Dr. W. Farr has just presented us with a statement on the causes of death in England for 1862. We learn from it that the continued fevers killed 18,721 of the people in the year. Upon the authority of the Fever Hospital, it may be taken that more than 17,000 of the people of England were destroyed every year in the ten years —1848-1857—by fever; and above 135,000 were severely wounded, but recovered. The whole 152,000 probably averaged about a month's sickness, so that the average fever population was about 12,700. They would fill 127 hospitals with 100 beds each, and require in every year about 4,600,000 days' subsistence. Scarlatina was fatal in the year to 14,834 persons, which is nearly the average. The deaths by diphtheria were 9,587 in 1859, which was the centre of the epidemic, but had declined to 4,903 in 1862. Together these diseases—scarlatina, sore-throat, and diphtheria—destroyed above 19,000 lives annually in the eight years 1855-62. The deaths from small-pox were 6,460 in 1858, and fell progressively to 1,628 in 1862; 12,272 persons died from hooping-cough in 1862; 11,112 died of diarrhœa. The deaths from ague and remittent fever are few, only 21 in a million living in 1862. Seventy-three people died of privation (starvation), 471 of delirium tremens, and 246 of intemperance in other forms. Parasitic diseases diminish with the progress of cleanliness. One hundred

fifty-six persons, chiefly children, died of worms. e was only one death from hydrophobia in the . In 1862 zymotic diseases carried off 4.551 in y thousand of the population. The second great of diseases—constitutional diseases—were not ehind. Allowing for the increase of population, proportion of deaths by cancer has steadily in- sed, while dropsy and mortification have declined, this is partly due to improvements in medical nosis. Deaths which would have been returned r the head of dropsy are now traced to organic ges of the heart and kidneys. A common se- ce is rheumatic fever, heart membranes injured, lation obstructed, dropsy. But in the constitu- l class of diseases phthisis (consumption) is the . The mortality by phthisis has fallen from a year per thousand living in 1850-54, to 2.586 58-62; but the deaths by bronchitis, with which he chronic state phthisis is liable to be con- ded, have increased more than the deaths by isis fell. Uniting the respiratory diseases with isis to get rid of any ambiguities of nomencla- the mortality from the two gronps of chest- se is found increasing from 5.580 in a thousand e population *per annum* in 1850-54 to 5.895 *per m* in 1858-62, more than a quarter of all the hs in England. It is a question of great interest, has led to this recent increase of mortality from se of the lungs. Of the 55,692 deaths in 1862 by ses of the nervous system, 25,286 were from the ulsion of infancy. Bright's disease has increased tly in the last ten years; but, perhaps, only in arance, arising from a change due to the diffu- of pathological knowledge. Fatal stone-cases decreased; but diseases arising from inflamma- or irritation of the mucous membranes involved grown more fatal; these are the evils to be ted in using crushing instruments. A bold tion is now practised for ovarian dropsy, and Spencer Wells considers that 185 of the women died in the year might have been saved by sur- . Six deaths in 1862 were ascribed to fright, grief, 1 to rage, and 44 to melancholy. In the h class of diseases—the developmental—the dis- incident to the birth, development, nutrition, decay of man, were 68,842 deaths. The great rity of them were from debility and old age; but the 429,000 deaths in 1862, the causes of which pecified, only 26,780 were from old age. The s of women in becoming mothers (including me- were 3,077 in 1862. In a series of these deaths 1847 to 1862, the numbers commence with 60 s of mothers to 10,000 children born alive, and with only 43. The violent deaths of the year 14,944 in number, or 7.43 in every 10,000 per- About one death in every 29 was by violence; he bulk of them was the results of accident gligence. The deaths by burns and scalds fell 67. The accidental deaths by poison fell to 262. uicides were 1,317, 611 of them by the rope; 17 ns were executed; 12 were killed by lightning.

DICAL BIOGRAPHY. Biographical sketches of guished living New York surgeons are now the of the day in the *Philadelphia Medical Reporter*. history of J. M. Carnochan is just given. He ars to be a wonderful operator. Amongst many great things told of him we read: "In 1856 arnochan performed his great, original, and truly erful operation. A patient, suffering from the excruciating neuralgia, applied for relief. Death promised a respite from the full sized tortures ically borne. Dr. Carnochan thought and acted. ut down and removed the entire trunk of the d branch of the fifth pair of cranial nerves, mak- ing slow and sure-footed progress from the infraorbi- tal foramen to the foramen rotundum at the very base of the skull. I may venture to say that this has never been done by any other man, and many years will elapse ere another surgeon, though surcharged with an apoplexy of anatomical theories, will dare to leave the practical details of an earthly sphere and enter willingly the tufted chamber of the human mind. His manner is easy, affable, and courteous; while his personal appearance is intellectual, dignified, and eminently prepossessing. There is, however, an air of perfect self-possession on the eve of serious operations, which greatly inspires confidence.

HIPPOPHAGY. The hippophagists of Paris, headed by Baron Larrey and Geoffroy de St. Hilaire, have long desired to establish in this city butchers' shops where their favourite meat might be sold; but certain obstacles have hitherto prevented it. There are hopes, however, now that not only shall we have a horse butcher's shop in full operation, but also a horse *restaurant*. How much better you manage these things in England, where, for a few pence, you can obtain, both raw and cooked, sufficient horseflesh to satisfy the most inveterate horse-eater. By the way, what would be the proper English word for horse-meat? According to the rule enunciated by the famous Saxon etymologist, Wamba, it should be *cheval*, or some word derived from it. However, joking apart, I can personally testify that young horse is quite as succulent as young bull, and that old horse is infinitely more palatable and tender than old cow. (*Chemical News.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Entomological Society.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

F. T.—We doubt whether medical officers in India had the right of presiding at Boards before the Warrant came out. An army medical officer, who was a long time in India, says: "We certainly had the right for a long time after the Warrant came out; but I don't know that we had before. While our right lasted, no one ever found any evil arise from it; and everything in my experience (and I was often President) worked smoothly."

STATISTICS OF OVARIOTOMY.—SIR: My attention has been drawn to a statement of Mr. T. S. Wells, which appeared in No. 181, p. 167, of your JOURNAL, to the effect that he has performed the operation of ovariotomy 100 times, with 34 deaths. I presume this includes *private* as well as *hospital* cases.

The last summary of these cases conjointly, appeared in the *Medical Times and Gazette* of December 2nd, 1862. From the above date to that of July 16th, 1864, no cases of Mr. Wells, except hospital cases, have, so far as I know, been fully reported. As it is a matter of the greatest interest to the profession, that it should be able to judge of the relative mortality of the operation in private as well as in hospital practice, the cases being necessarily very differently selected, I would wish to ask Mr. Wells, through the pages of your JOURNAL, to favour us, with histories also of these private cases, as full as those he has thought well to give us of his hospital cases.

It was the want of these details, not formerly fully given by other and very eminent practitioners, which brought the operation, until within the last few years, both in these realms and on the continent, into such undeserved disrepute.

In these days, when ovariotomy is so commonly performed, it is very desirable that those who operate should fully record *all* their cases. In this manner the profession, now become so eminently practical, will be enabled to come to conclusions on the merits of the operation, which, because both incontrovertible and philosophical, must command the respect of the entire scientific world.

I am, etc., C. H. F. ROUTH, M.D.

52, Montagu Square, August 1864.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—R. Bryden, Esq. (Tiverton), 5s.; H. Stear, Esq. (Saffron Walden), 10s.; F. F. Walsh, Esq. (Saffron Walden), 10s.; G. D. Niven, Esq. (Clifton), £2:2; E. Richardson, Esq. (Whitechapel), 10s.

Amount previously announced, £53:3:6. Received at the *Lancet* office, £3:11. I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 31st, 1864.

COMMUNICATIONS have been received from:—Mr. JONATHAN HUTCHINSON; Mr. H. WILSON; Mr. R. ALFORD; Mr. GEORGE NAYLER; Mr. E. BISHOP; Mr. S. WHITFORD; Dr. G. H. PHILIPSON; Mr. T. M. EVANS; Dr. THOMPSON; Dr. EVANSON; Dr. HENRY GOODE; Mr. BINDLOSS; Dr. RANSOME; Dr. FOWLER; Mr. J. VOSE SOLOMON; Dr. J. W. GOODWIN; Dr. S. MARTYN; A PROVINCIAL HOUSE-SURGEON; and Mr. L. HOLLAND.

BOOKS RECEIVED.

1. Exanthematous Diseases: their Rational Pathology and Successful Treatment. By John Pursell, M.D. London and Brighton: 1864.
2. Lunacy and Law: together with Hints on the Treatment of Idiots. By T. E. D. Byrne. London: 1864.
3. A Short Description of the Thermæ Romano-Britannicæ, or the Roman Baths found in Italy, Britain, France, Switzerland, etc. By R. Wollaston, M.D. London: 1864.
4. Photographs of the Diseases of the Skin. By A. B. Squire, M.B. No. I. London: 1864.
5. Jenäische Zeitschrift für Medicin, etc. 1st and 2nd Heft. 1864.
6. Lehrbuch der Hebammenkunst. Von Dr. B. Schultze. 1864.
7. Hooper's Physician's Vade-Mecum. Seventh edition. By W. A. Guy, M.B., and J. Harley, M.D. London: 1864.
8. Address on the Origin and Early History of the Faculty of Physicians and Surgeons of Glasgow. By W. Weir, M.D. Glasgow: 1864.

ADVERTISEMENTS.

Just published, Seventh Edition, price 12s. 6d. in cloth,

Hooper's Physician's Vade MECUM: A Manual of the Principles and Practice of Physic; with an Outline of General Pathology, Therapeutics and Hygiene. Seventh Edition, greatly enlarged and improved, with many Wood Engravings. By W. A. GUY, F.R.C.P., Physician to King's College Hospital, and JOHN HARLEY, M.R.C.P., Assistant Physician to King's College Hospital.
London: HENRY RENSHAW; WHITTAKER & Co.; SIMPKIN & Co.; CHURCHILL & SONS; HOULSTON & Co. Edinburgh: A. and C. BLACK; MACLACHLAN & Co. Dublin: FANNIN & Co.

Dr. Hunter's Letters on the LUNGS. Specially intended for those suffering from Pulmonary Complaints. A series of plain practical letters on affections of the mucous membrane of the nose, throat, larynx, and lungs, embracing the nature, causes, and treatment of the Catarrh, Sore Throat, Laryngitis, Bronchitis, Consumption, and Asthma. By ROBERT HUNTER, M.D., late Editor of the New York Journal of Diseases of the Chest, &c. &c. With a Preface by J. J. MACGREGOR, M.D., M.R.C.S.E. Just published, price 2s. 6d., by post, 2s. 8d.—MITCHELL and Co., Red Lion-court, Fleet-street.

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Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON THE ACTION OF ANÆSTHETICS; AND ON THE ADMINISTRATION OF CHLOROFORM.

By Arthur Ernest Sansom, M.B.

Mr. President and Gentlemen,—In justice to you and to myself, I cannot commence this without endeavouring to guard you from a certain amount of disappointment. Every step in the investigation of this subject opens up such new ground, every point gained has so much to be confirmed and strengthened by collective and individual experience, that one dare not deal with the positive in the matter. Therefore, I must urge that you receive these observations, with all sins of omission, as links in a chain of evidence which has led me, for my part, to such and such conclusions; and, wherein I use what may seem to be dogmatical assertions, consider them only as possible lights towards a more certain Truth.

How much value attaches to the investigations of the Committee of the Royal Medical and Chirurgical Society on this subject, is evident to all. That they should be pushed forward by individual investigators is the expressed wish of the Committee; and it is to be believed that their labour will have its reward in a greatly increased enthusiasm in individual research.

In directing your attention to the action of chloroform and other anæsthetics, I wish to go to the farthest limit, and inquire, Upon what element of the organism is their operation first directed?

The early notions on the subject—and these are now the generally received ideas—were, that chloroform, ether, and the volatile anæsthetics exerted a primary action upon the brain and central nervous system. "It has been supposed that the anæsthetic is absorbed; that the general insensibility is the result of its contact with the nervous system. It exercises a sort of stupefying action on this system, for which it seems to have an affinity of election." So it determines the suspension of cerebral action. (*Arch. de Méd.*, 1858.) Flourens first showed this in the case of ether—how the centres of nerve-force lost their attributes in regular succession: first, the cerebral hemispheres theirs—the intellect; next, the cerebellum its power of coordination; thirdly, the spinal cord its conduction of sensation and motion; finally, if the action were continued, the medulla oblongata its power of continuing the functions of organic life.

This doctrine of the elective affinity of anæsthetics for the cerebro-spinal system is entirely embraced by MM. Lallemand, Perrin, and Duroy. They have established the fact that, after death from inhalation of the anæsthetic, a superabundant proportion of ether or chloroform is found in the brain and spinal cord; and therefore they argue, that (1) these accumulate therein, in virtue of a particular elective affinity; and (2) thus, and thus only, are they capable of abrogating the functions of these organs.

The last writer on this subject (Dr. Anstie) thus expresses himself on the active influence of chloroform: "Like alcohol, chloroform rapidly *attacks* the cerebral hemispheres."

Now, all these observations point to one assertion—one fact unquestioned by these observers: that the anæsthetic is absorbed; that (supposing it to be chloroform) it circulates as chloroform; that it chooses out the central nervous system in which to store itself up, and on which to exert its power.

A primary difficulty has been advanced to this theory by the observations of Messrs. Faure and Gosselin. The first of these experimenters exposed the brain of a dog, and poured chloroform thereupon; no diminution of sensibility followed. He divided the organ, and applied chloroform; still there was no symptom of narcosis. He removed portions of the brain of a narcotised animal; recovery from the somnolence occurred as in ordinary cases. M. Gosselin injected chloroform into the carotids, and failed to produce anæsthesia.

These experiments tended to show that chloroform, applied to, or circulating in, the brain *merely as chloroform*, fails to produce anæsthesia.

To some, therefore, this paradox of elective affinity has been the occasion of a deeper investigation. Snow, Nunneley, Richardson, Faure, Gosselin, and others, have advanced arguments which dispute the dictum, and point to a more universal cause for the phenomena of etherisation—a cause that acts,

"Not by partial, but by general laws."

The element of the organism to which these observers point, as the first acted upon by etherisation, is the blood.

It may be well to consider what first occurs in the production of anæsthesia by a volatile agent. First, a quantity of the vapour, commingled with atmospheric air, is breathed; that is to say, it is brought into contact with the six hundred million air-cells of the human lung. It is thus exposed to a vascular surface, the superficial extent of which has been estimated by Lindenau at not less than 2,642 square feet. In the process of inducing anæsthesia, fifteen or twenty cubic inches of the anæsthetic mixture, fifty or sixty times over, is brought into contact with this surface.

Obviously, it may do one of two things. It may be absorbed into the fluid part of the blood, be projected throughout the body, and manifest its effects by its direct action on the central parts of the nervous system; or it may act upon the blood, modifying its vitalisation—modifying that interchange of elements necessary to perfect life. It is not doubted that there are certain gaseous bodies capable of thus influencing hæmatosis, the action of which is precisely analogous to the other anæsthetic agents.

Inhalation of dilute carbonic acid gas causes all the phenomena of anæsthesia which are produced by inhalation of chloroform. The only differences observable are, that the effects are more fugitive, and the pulse and respiration are uninfluenced throughout the progress of the inhalation. (See Lallemand, Perrin, and Duroy, p. 406; Ozanam, *Arch. de Médecine*, 1858, p. 497; Herpin de Metz, *id.*, p. 627.)

Inhalation of *carbonic oxide* produces a similar train of symptoms, *plus* a greater degree of muscular agitation.

It is not doubted that the inspiration of these gases causes a direct influence upon hæmatosis, and thus produces the physiological effects due to them. Carbonic acid induces a degree of direct asphyxia, by loading the blood with that which, in the nature of things, it is its function to eliminate. Carbonic oxide acts directly upon the blood-globules. It poisons, says M. Claude Bernard, by preventing arterial

blood from becoming venous. Under its influence, the altered globules no longer absorb the gas in the midst of which they lie, nor yield up the gas which they inclose. One is led, then, to the question, Wherein are the differences of action between these and other volatile anæsthetics, such as ether, chloroform, etc.? Can a more unsatisfactory answer be made to this question than that of Lallemand, Perrin, and Duroy? (See p. 418.) These anæsthetics, they say, abolish, by their direct influence, the functions of the cerebro-spinal axis. Say they: "We have shown that they accumulate in the nervous centres in considerable proportion. It is, therefore, natural to admit that the impregnation of the nervous matter by these anæsthetics is the determining material cause of the progressive disturbances in the functions of the nervous system." Natural? It is very unnatural, that these bodies should have an ultimate action altogether different from those bodies with which they have so direct an analogy; that they should exert an affinity of choice, and store themselves up in the nervous system to produce their effects; that in their case the brain-poisoning should be primary, and the blood-poisoning secondary; whereas, in the cases of the other bodies, their conditions should be reversed. And all on what grounds? Merely because the liquid vaporisable anæsthetics are found in greater quantity in the brain after death than in other parts of the body —in the brain, whose soft substance gives the best conditions for the storing up of the fluid, wherein the conditions favourable to exosmose are in their highest degree. Even this can be carried to a *reductio ad absurdum*; for in the liver is found the next large proportion of chloroform (a very considerable quantity). Changing the premises, would MM. Lallemand, Perrin, and Duroy attribute nervous power to the liver? Moreover, if it is by this soaking of the brain, as it were, with chloroform, that anæsthesia is accomplished, how is it that the effects of chloroform-narcosis so readily pass off?

Further analogy will show the insufficiency of reasoning whereby these gaseous agents have been forbidden the very name of anæsthetics—whereby these, whose action of abolishing sensation is so complete, have been said to be no anæsthetic agents, properly so called, but only pseudo-anæsthetics.

The similitude of the symptoms of induced anæsthesia with those of asphyxia is remarkable. Flourens, who was the first to trace the gradual action of ether upon the nervous centres, and who was very prominent in urging the affinity-to-cerebral-matter theory, gave it as his opinion, that it was impossible to see chloroform administered *in a single instance* without being struck with the resemblance of the phenomena to those of asphyxia. There is scarcely any scientific phenomenon mere common than the production of anæsthesia under the causes of asphyxia. (Conf. Faure, *Arch. de Méd.*, 1858, p. 585.)

Anæsthesia and asphyxia are both phases in which the being is deprived of the special attributes of animal life, and left only with those of organic life. Going from effects to causes, we first take asphyxia. The primary cause is mal-oxygenation of the blood; the secondary effects reacting as causes of depression of the circulation and of the various energies of the body.

Accordingly, many labourers, who have the most patient investigations on their side, hold that the primary cause of the phenomena of narcosis is mal-oxygenation of the blood.

Nunneley believed that anæsthetics thus acted in virtue of the carbon which they contain; and their action was more powerful as their carbon was more abundant. But it must not be forgotten that nitrous oxide and certain non-carbonised bodies are anæsthetic agents. Robin considered that chloroform and ether impeded the entrance of oxygen into the blood. Snow, in lectures published in the *London Medical Gazette* (1848-51), held this view; and the researches of Faure, Jackson, Richardson, and Harley, point to the same.

Both analogy, therefore, and observation show that the phenomena of narcosis are due, not to an especial influence exerted in the nervous system, but to the suppression of that action which the blood has normally upon the system. M. Faure says: "It is not an active phenomenon corresponding to a new state, but an altogether passive condition, resulting essentially from the suppression of the normal state."

Given, then, that anæsthetics, such as ether and chloroform, act by suspending the due oxygenation of blood, how do they effect this suspension? Obviously, either by acting upon the blood itself, or upon the structures through which oxygen passes into the blood. M. Faure adopted the view that the latter is the part acted on; that the alteration of hæmatose was due to the effect of the anæsthetic—an ecchymosing effect upon the mucous membrane of the lung. It is not my purpose to linger over any refutation of this theory. The abundant proofs of the absorption of chloroform, and the production of anæsthesia when injected under the skin or into the peritoneal cavity; the commonly observed fact that the lungs, after death from chloroform, do not show any congestion, but frequently a pallor; the consideration of how much these ecchymoses, if they occurred, would permanently compromise life—these and many other circumstances prove that the theory will not hold water.

The hypothesis that remains, and, in my estimation, the true one, is, that the action of chloroform, ether, and volatile narcotics is directly upon the blood.

No sign is more common in *post mortem* examinations after death from chloroform than darkness and fluidity of the blood. Dr. Taylor says, in his book on *Poisons*, "Probably the blood is directly poisoned by it."

When we have so many reasons for holding this view of the action of chloroform, etc., on the blood—reasons derived both from observation and from analogy—it does not invalidate our theory to be unable to prove the fact by physical demonstration. In a subject so near to the mysteries of life, the difficulties are immense.

Chloroform has the physical property of diminishing the power of the organic constituents of the blood to unite with oxygen, and to give off carbonic acid, even in the case of blood removed from the body. This has been proved by Dr. George Harley (*British and Foreign Med.-Chir. Review*, 1856, p. 429), who has shown that alcohol, ether, etc., do the same in different degrees.

Does the chloroform undergo a change in the blood? Dr. Jackson (*Boston Medical Journal*, March 28, 1861) has cited a case of death from chloroform, in the *post mortem* examination of which he found formic acid and chlorine, but no undecomposed chloroform. Here the chloroform had robbed the blood of its oxygen, and had become formic acid. On the other hand, there have been many cases in which chloroform has been to very large extent recovered from the blood. Hence, if there be this change, it must be a partial one.

I dare only give my impression of this ultimate fact, so difficult of proof; but, not without much observation, my conclusion is, that the main action of these volatile anæsthetics is on the cell-wall of the blood-corpuscle, on the proteinous envelope—a cer-

tain, it may be corrugating, indurating effect, whereby its capability of allowing the endosmosis of oxygen is impeded.

There is a delicate balance in the organism in a state of induced anæsthesia. On the one side is being, robbed of many of its attributes; on the other side is death. Compensatory oxygenation maintains the one, and insufficient oxygenation induces the other.

The first effect manifested in narcosis is upon the heart—an irritation of it. All narcotics show, as a first sign, increase in the frequency and force of heart-pulsations. This then becomes a derived as well as a direct action, dependent on a cerebral as well as on a cardiac cause. Of course, the circulation in the brain of an altered blood disturbs its molecular conditions; and hence all the mental phenomena of narcosis. Hence also, in part, the depression of the circulation observed in a later stage of the course of narcosis; for Weber and Eckhardt have established that, while a slight irritation exalts the heart's action, a more intense irritation causes a more moderate action. The slowness and labour of the circulation in narcosis is probably due to two causes—1, the disturbed condition of the nutrition of the brain; 2, the congested state of the capillary system.

In conjunction with Dr. John Harley of King's College, I have been lately engaged in a series of experiments on the effect of various anæsthetic agents on the circulation, as evidenced in the appearances under the microscope of the web of a frog's foot.

I append a table containing a summary of the effects observed.

Carbonic Acid Gas.	Alcohol.	Ether.	Chloroform (dilute).	Chloroform (concentrated).
1. Increased flow of blood. 2. Contraction of artery to two-thirds of its original size; soon afterwards, to one-half its size. Pallor of contained blood. Circulation rapid.	1. Increase of flow. 2. Contraction of artery. When strong vapour was given, either by current of air blown through alcohol, or by boiling the alcohol each time there was *contraction* of the artery and increased rapidity of the circulation.	1. Increase of flow. 2. Contraction of the artery, persisting while frog is fully under the influence of the ether. On the injection of air into the mouth, dilatation to normal calibre.	1. Increase of flow. 2. Contraction of artery to two-thirds of original size.	1. Increase of flow. 2. Sudden enfeeblement of circulation. Contraction of artery transient; frequently does not occur at all.
3. Sluggishness of capillary circulation. Change in appearance of many corpuscles. Aggregations of white corpuscles. Imperfect red corpuscles and lining vein; a number of round corpuscles, apparently extruded nuclei. Capillaries apparently somewhat dilated.	3. Paralysis of motion now shown. Circulation in capillaries became slow; ending in almost stasis. First, in capillaries near vein; secondly, in vein.	3. Strong vapour being administered, dilatation of artery to nearly twice its normal size occurred.	3. Capillary system congested.	3. Threatened stasis.
	4. Complete anæsthesia. Artery contracted almost to obliteration.	4. Great retardation in capillary circulation. Capillaries dilated and loaded. Artery dilated to twice its normal size.	4. Dilatation of artery to normal size. Application of stronger chloroform vapour caused contraction of artery to two-thirds, afterwards to one-half. Afterwards dilatation as before.	4. Artery dilated one-quarter more than its normal size. This persisted, and was unaffected by injection of air and any restorative means. The circulation in the capillaries was resumed, the artery continuing dilated, but without further exhibition of chloroform. The signs of stasis recurred.
	5. Profound anæsthesia. Artery became dilated.	5. Stasis.	5. Full anæsthesia. Arterial and capillary flow enfeebled; but regular and of fair force.	

Briefly, therefore, the conclusions to which these experiments point are as follows.

First. In the case of all the anæsthetics employed—carbonic acid, ether, alcohol, and chloroform—there is at first increase of the flow of blood in the whole vascular system.

Secondly. The next sign is decided contraction of the arteries, the current maintaining its original force. In all cases, the capillary artery was measured, as to its breadth, by the micrometer.

In the case of carbonic acid, the artery may be reduced to half its original size; and, in the case of alcohol, the contraction may persist almost to obliteration. So, in the case of chloroform and ether, any re-exhibition of these vapours causes re-contraction: and only when concentrated chloroform vapour is employed, this contraction is reduced to a minimum, and often passes to the opposite extreme, dilatation. It is evident that contraction of the artery may persist throughout perfect anæsthesia; and dilatation of the artery is to be looked on as a sign of too profound an action.

These observations are wholly opposed to the view that Dr. Anstie takes in his book on the *Action of Stimulants and Narcotics*. He considers that *paralysis of the sympathetic* is an early sign of narcotism.

Thirdly. Next in order is observed sluggishness in the flow of blood in the capillaries. In the case of chloroform, the corpuscles frequently show a tendency to aggregate and toil along in an irregular manner. Under the influence of respired carbonic acid, the corpuscles become very pale; agglomerations of white corpuscles seem to choke many of the capillaries; and the returning vein is loaded with imperfect oval corpuscles, and in large number white corpuscles (or extruded nuclei).

Fourthly. There is dilatation of the artery, and increasing sluggishness in the capillary flow, and stasis.

These stages are constant in the case of the other anæsthetics; but, in chloroform narcotism, their duration and relation vary with the strength of the vapour employed. If a very weak atmosphere of chloroform be inhaled, the contraction of the artery is prolonged, as in the case of alcohol; and an uniform, though enfeebled capillary flow, occurs even in advanced anæsthesia. If the inhaled vapour be strong, the stage of contraction is of very short dura-

tion; frequently, dilatation rapidly supervenes; and there is great embarrassment in the capillary circulation.

The essential concomitant, therefore, of a state of anæsthesia is sluggishness of circulation; but it is not a condition of hyperæmia of any organ. As, in sleep, Mr. Durham has pointed out that the brain is comparatively anæmic, and that the blood in its vessels is not only diminished in quantity, but also flows with a decreased rapidity; so in chloroform narcotism. A most interesting case has been recorded in the *American Journal of Medical Science* for October 1860, p. 400. Chloroform having been administered in a case of extensive fracture in the cranium, it is stated that, during the full effect of the narcotic, the brain was remarkably pale; and wherever the anæsthetic influence began to subside, the surface of the brain became florid and injected.

This failure of the circulation is the cardinal sign of danger in the administration of chloroform. Looking over fifty-one cases of death from chloroform, I find that thirty-eight first declared their danger by sudden stoppage of the pulse. In twenty-one cases collected by Dr. Anstie, in which alarming symptoms impended, but were averted, all but two commenced with pallor of countenance, or failure of pulse, or both combined.

As to the controversy which has existed with regard to the nature of death from chloroform, it seems to me that the differences may be easily arranged; and that those who assert that death occurs from apnœa, and those who attribute it to syncope, can both be right. Almost all observers are now agreed that, in the case of animals, the heart is the *ultimum moriens*. But then there are variations in the scale, according to the nature of the animal. A dog's heart is easily paralysed by chloroform; it contracts but a short time after cessation of respiration. The heart of a guinea-pig, although temporarily paralysed, will more readily resume rhythmical contraction. Going lower in the scale, we find that the heart of reptiles resists to almost any length of time the paralysing effect of chloroform. Hence, if there are those variations in the mode of death of animals, it is obvious that it would be unfair to say that the death in case of man is to be governed by a strict analogy with these. In nearly all the cases of death in the human subject, it is distinctly stated that the heart was the first to fail—a fact in direct variance with what is observed in the case of animals. Reverting to our first considerations, we may explain their apparent discrepancies.

The whole system is traversed by an imperfectly vitalised blood. What link in the chain of vital organs is the first to be snapped asunder, is determined by subtle causes—chiefly by the extent of automatic power of the heart. In animals whose heart beats with least dependence on the central nervous system, the heart is the last to succumb. In man, on the contrary, the heart, possessing little automatic power, yields first. This, too, in my mind, explains with a great deal of probability the comparative immunity of children from the fatal effects of chloroform narcosis. The inherent irritability of their heart is a resistance to the paralysing power of chloroform. In man, therefore, the most common cause of death is stoppage of the heart's action: not the universal cause, however, as in some cases (a very small proportion) respiration has been noticed to cease first. In these, then, have been found, in *post mortem* examination, engorgement of the lungs, and distension of the right chambers of the heart. In one marked case, occurring in France, the signs of death being evident signs of apnœa, the *post mortem* examination showed extensive tubercular disease of the lung and engorgement. Here, evidently, the chloroform caused death primarily in the lungs.

Too much reliance cannot be placed on the results of *post mortem* examinations, especially in the human subject. The great cause militating against certainty is the fluidity of the blood. This fluidity is almost constant, and explains the tendency to hypostasis, and the appearance of congestion in any organ that may happen to be dependent.

There is not that constancy of signs after death in the case of man that we see in cases of the lower animals. Of forty-one cases wherein good reports of *post mortem* examinations were made, the right side was found containing dark blood in twenty-six instances. In eight cases, on the contrary, it was empty.

These facts, taken with the observed clinical fact that the pulse usually ceases first in cases of death from chloroform, tend to show—1. That death occurs in the human subject in a manner different from that in which it occurs in animals; 2. That it does not occur in the human subject in all instances in the same unvarying way.

In animals, death occurs by apnœa, and death begins in the brain.

In man, death occurs by syncope in most cases, by apnœa in a few; and death may commence in the brain, in the heart, or in the lungs.

In approaching the consideration of the means which should be employed to administer the vapour of chloroform, I must beg to revert to a few observations.

1. In all cases of experiment upon animals, the symptoms of narcosis have been induced in the most regular, uniform, and safe manner, wherein a freely diluted vapour has been administered.

2. In our experiments upon the condition of the circulation in narcosis, we have always found highly charged atmospheres cause great trouble of the capillary circulation; while diluted atmospheres have allowed, as it were, the gradual accommodation of the system to the new state.

3. When we have passed from a dilute to a concentrated atmosphere, the circulation has been carried on with far less irregularity than if the concentrated atmosphere had been breathed at the first.

4. We know, by practical experience, that an atmosphere strong in chloroform vapour causes in the human subject phenomena of resistance and the most transparent signs of danger; and we know, by an analogy with animals, that an atmosphere containing more than six per cent. of chloroform vapour is fatal.

5. But we know that, at the later stages of an inhalation, a proportion of chloroform can be breathed with ease, which proportion, in the early stages would be irrespirable.

6. Every fact and every analogy tell us that we have to deal with a dangerous drug; and that, in our dealing with it, we cannot use too much caution.

I am constrained, on these grounds, though I do so with all respect, to express my antagonism with certain of the conclusions of that Committee which has just completed its labours.

First, I must express my variance with that expression which makes the use of positive means for the dilution of chloroform a matter of convenience only. Who can ensure the inspiration of an equable and certain atmosphere, when a napkin is used as means for the administration of chloroform?

One cannot but be struck, at looking over a list of deaths of chloroform, with the few that occurred in cases wherein due mechanical means for the dilution of chloroform were employed. I have several times quoted Dr. Anstie in this paper; and, in quoting this instance, I must cordially endorse his observ

ions. In a total of 3,058 administrations, mechanical means for providing a due dilution of the chloroform vapour were employed in 2,200 cases. In the aggregate, twenty-one cases showed signs of impending danger. Only five of them were in cases in which the inhalers were employed. "But," says Dr. Anstie, "this significance is much increased in an analysis of the five cases in which alarming symptoms occurred during the use of an inhaler." In all these five cases, there was either a defective arrangement of the valve of an inhaler; or the symptoms of narcotism were pushed farther than was intended; or, though the inhalation of the chloroform vapour was commenced by means of the inhaler, it was continued by means of folded lint. The assurances of personal confidence in the anæsthetic are of little use here. "I have given chloroform ten thousand times," people say, "and have never had a case of death." The answer is, that your just proportions, judging from recorded cases, would be only about one death in twenty thousand cases. And this is far too much. Chloroform ought, in the nature of things, to be rendered absolutely safe.

It has seemed to me that the adage, "Familiarity breeds contempt," has never been more fairly applied than in the cases of chloroform. Our acquaintance with chloroform commenced with familiarity. It was so easily applied, and so perfectly accomplished the end in view—the mitigation of suffering. Confidence grew and grew, despite of the signs of its danger; and I fear that there are some cases of life sacrificed on the altar of convenience—convenience as to the means at hand to be employed, and as to the rapidity of accomplishing a purpose.

Having stated what I conceive to be danger, I must now state what I consider to be the best methods for insuring safety.

The inhalation of a definite weak atmosphere I have shown to be unproductive of danger. This can only be accomplished by means of Mr. Clover's or similar apparatus—a reservoir containing a mixture of about 2½ per cent. of chloroform with atmospheric air. Experience shows that by these means the advent of anæsthesia is rendered most regular; and alarming symptoms, the accidents of chloroform maladministration, do not appear.

A second conclusion of the Committee I am disposed to call in question. They say that the danger of chloroform is in direct proportion to the quantity absorbed into the system. Now, as I have investigated this subject, I have found that a very great proportion of the deaths from chloroform occurred before complete anæsthesia was established—very many before the commencement of the operation for the performance of which the anæsthetic was administered. Quite the minority have been cases wherein deep anæsthesia has been induced. Patients do not die of a profound coma; the onset of fatal symptoms is rapid and early. The deaths have not been in cases where large quantities of chloroform have been inhaled; quite the contrary. Fifteen or twenty drops have proved fatal. (Dr. Warren, U. S.) In a case in which the vapour from thirty drops had been inhaled, the patient died in one minute. These things, with our own personal experience, have led us to the belief that the sudden influence of the chloroform vapour produces, as it were, a repudiation of it in this early state; and that our first object should be to induce a tolerance of the vapour. Reassurance, and the accustoming the patient to the peculiarity of the vapour, are first to be accomplished; and the early symptoms should be induced without the strugglings and resistance which ensue when chloroform is given by the ready method. A gradual increase in the proportion of chloroform should then be effected, until at last that proportion reaches 5 per cent., when this atmosphere will be as easily respired as the weaker.

There is thus no shock, no revulsion, but the gradual subdual of the vital forces—a gradual accommodation to the new state.

Hence I believe there are two principles of safety in the administration of chloroform. The first provides a constant inhalation of a definite and weak atmosphere; the second establishes by degrees a tolerance of the anæsthetic.

To provide for the gradual administration of chloroform, I constructed an inhaler which I now constantly use, and which I now submit to you—one which I believe to be portable and convenient, and which certainly provides for the gradual administration of chloroform. In the use of it I find the greatest apparent advantage; for there is no difficulty in persuading the patient to inhale. The symptoms occur quietly and uniformly; there is scarcely ever any muscular excitement at all, a mere tremor only indicating the muscular stage. Moreover, the little instrument is adapted to any position of the operator or patient.

To save the inconvenience of a long tube, the receptacle containing the chloroform is made capable of revolving; and the whole is made to revolve upon the face-piece; so that an universal joint is provided.

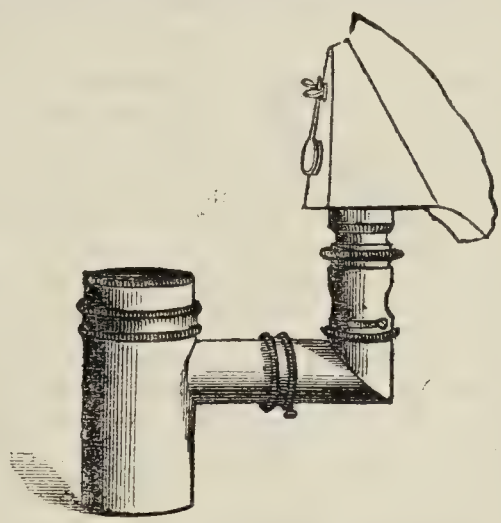


Fig. 1.—Inhaler: for use in Sitting Position.

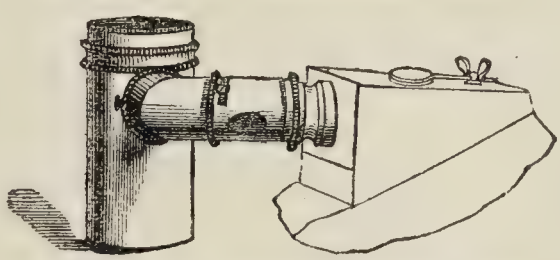


Fig. 2.—Inhaler: for use in Recumbent Position.

The chloroform is received in the cylinder, which is well supplied with blotting-paper. Previous to inhalation, the efferent tube is so arranged as to present two large apertures for the admission of air; and the aperture of the face-piece is uncovered by the valve. After a few inspirations in this condition, there being such free and direct dilution with air that the discomfort of the presence of chloroform is scarcely perceived, the apertures for the admission of air into the tube proceeding from the chloroform-chamber are partially closed; this being accomplished by turning the outer tube of the two which constitute the channel. This outer is again turned, till the side-current of air is quite cut off. Then

the valve of the face-piece is used still further to cut off the admission; and the air passes only over the chloroform-impregnated surface.*

The rest, Mr. President and gentlemen, I leave to the opinions which these observations shall evolve from you. I have brought before you little that is new; but all faults of want of originality and insufficiency of reasoning will, I hope, be atoned for by the importance of the subject, and by the opportunity of eliciting the opinions of this great chloroform committee—the British Medical Association.

ON THE PHYSIOLOGICAL MEANING OF INFRAMAMMARY PAIN.

By S. Martyn, M.D., M.R.C.P., Physician to the General Hospital; Physiological Lecturer in the School of Medicine, Bristol.

If we recall to our minds what has of late been done for the *Physiology of the Nervous System*, and the labours represented by the voluminous essays of our friends and contemporaries (I need not mention names), how evident does it become that a revolution is taking place in many of our prevalent ideas; new groups of symptoms must be connected with well known lesions, and *vice versâ*; while a revision of all remedial treatment must follow in the wake of newly demonstrated causal connections. But life is short; and the registration of nervous manifestations for inductive reasoning necessarily very long. Till some hypothesis has been set up, this registration cannot even begin; and thus it is that, while time flies, vast opportunities of noting these diseases afforded by our hospitals and infirmaries are apt to be lost.

It is with a view to contribute something to this developing insight, that I have thrown together the following brief remarks.

I wish to advance a theory for one of the most frequent, intractable, and mysterious nervous affections with which we have to do: that particular pain in the side, known as "inframammary pain." The disease is distinct enough in its leading symptoms, and its literature is extensive; so much so, that time would not allow me to attempt a *resumé* of it in this place. I have, however, gone carefully over what has been said, and taken into account the arguments on various sides, besides retaining notes of very numerous cases in my own practice.

My definition of the affection to which I am alluding would be this: *Pain*, very common, either continuous or intermitting irregularly, and brought on by movement. *Sex*, more frequent in women (as 20 : 5). *Locality*, superficial, and confined to spots in the sixth, seventh, and eighth intercostal spaces, those oftenest affected being inframammary, the next in frequency near the spinal or sternal end of those intercostal spaces. *Side affected*, mostly the left (13 : 7, Valleix), sometimes both. *Temperament*, the nervous. *Duration*, indeterminate, according to Hasse, often through other diseases till death.

It is *not* a rheumatic pleurodynia; for the pain is not so violent nor so diffuse, nor is there a febrile state. It is not dry pleurisy nor angina; for the breathing is free, and the lung-sounds are normal. It is not meningitis of the cord, nor softening, nor caries of vertebræ; for from all these a diagnosis may readily be made. It is a *true intercostal neuralgia*. Not to go further into detailed description of a state which these points will suffice to identify, it was the entire absence of a satisfactory proximate cause assigned for this pain that led me to look over my cases, and review the subject more closely.

I may here allude to what I think is the most recent discussion of this topic, and which is contained in the volume of the British Medical Journal for 1858. The controversy lasted through the year, and the variety of new theories proposed, or old ones defended, shows clearly enough the difficulty surrounding the subject. In this discussion, the opinion first in point of time was Dr. Inman's, that the pain is a true "myalgia," the exponent of fatigue or malnutrition, and successfully treated by a generous diet. Next comes a paper by the late Dr. Charles Coote, read before the Harveian Society, in which he divides the affection into classes, combats the myalgic theory on the ground that it affords no explanation of the localisation, throws over "spinal irritation" as meaningless, "uterine irritation" as illogical, because this pain occurs in men, and finally reverts, himself, to Henle's *pressure* theory. This theory is, that the left inframammary region must be specially liable to venous congestion, from the anatomical fact that its veins run into the azygos; so that, if the azygos happen to be obstructed, the veins would be over-filled. On this Dr. Coote very aptly remarks that there is one link wanting, viz., "some proof that in these cases vascular disturbance exists." He might have added that there is no proof or even likelihood that simple venous congestion could produce the acute pain of intercostal neuralgia.

Dr. Coote's own theory was very ingenious; he held that the vaso-motor nerves of the whole body were disordered, causing irregular contraction and dilatation of the minute arteries; this occasioned various mischief, and, in the left inframammary region, being combined *there* with the tendency to congestion (of Henle), produced intercostal neuralgia. I regret that amongst so much that is valuable in the admirable paper by Dr. C. Coote, this, the last link, should be so weak, that I think he would himself scarcely have continued to maintain it. It would not be difficult to show that such a theory is improbable; but what we ask for, first, is *some* proof in its support, or some explanation of the formula that systemic vaso-motor derangement, *plus* this hypothetical venous congestion, are equal to the production of circumscribed neuralgia! To return to the discussion of 1858, no *new* theory besides these was advanced, except that Mr. Holmes Coote pointed out the frequency of inframammary pain as a sign of commencing lateral curvature.

Dr. Fuller, however, after pointing out the errors of various explanations, gave so graphic an account of an attack he himself experienced, that I cannot forbear quoting it. "It first attacked me in the month of June, when I was thoroughly exhausted by incessant work at my profession, and enervated from want of active out-door exercise. At that time it did not annoy me much, and I felt it chiefly after I had been sitting long in one posture, as in writing; but gradually it increased in intensity, and was rarely absent, except when I was in a recumbent position. I was unable to stoop without much pain, and quite unable to lie on my left side, so acute did the pain become when I attempted to do so.... It was accompanied, when severe, by superficial tenderness, so acute as to be aggravated by the slightest pressure, and though the pain seemed to pervade a considerable portion of the inframammary region, the tenderness rarely covered, at any one time, a space much larger than a shilling. On August 26th, being thoroughly 'out of condition,' I went for three weeks to Scotland, where I hoped to walk off my troublesome enemy; but the fatigue of walking the moors and carrying my gun increased the pain rather than diminished it. My

* The instrument is made by Matthews of Portugal Street.

health, however, improved vastly, and to my great joy, the pain disappeared within a week after my return to town life and bodily repose. In common with every other member of our profession, I have met with numberless instances of this form of inframammary pain. . . . I felt then, as I do now, an inability to account for its attacking the left inframammary region in preference to any other part of the body." This is Dr. Fuller's account, as a pendant to which I may add, that I have myself suffered from this pain so severely as to be unable to move in the morning, for many successive days, before the use of a mustard plaster.

Now, in the cases under my own observation, I have found two conditions which seem never to be absent: the one, a state of general muscular weakness; the other, increased rapidity of the heart's action, except when the lowest amount of propulsive force is required, as in perfect repose of body and mind, when the pulse is often abnormally slow. Of these two points, the disordered action of the heart was the one which attracted my attention; and though I am aware that Professor Valleix, in his essay on dorso-intercostal neuralgia, does not allow any peculiarity of the pulse, I have satisfied myself by all subsequent observation of my correctness on this point. In cases of intercostal neuralgia, it will be found that there is palpitation on any exertion, and that in most cases the pain and the palpitation have a distinct connection. The question was this: Why is pain almost invariably confined to the sixth, seventh, and eighth intercostal spaces of the left side? The answer seemed to be—*a relation to the heart.*

Reflected or radiated pain is now recognised as extremely common. In cases of sensory nerves entering a great centre at the same spot, if the peripheral end of one be irritated, we feel pain in, or refer it also to, the periphery of the other. The irritation brought by the phrenic from the diaphragmatic pleura is referred to the end of the supra-acromial branches of the cervical plexus; uterine irritation is referred to the cutaneous region of the sacrum; and so on in other instances. The question thus arose, are there any nerves supplied to the heart and to the sixth, seventh, and eighth intercostal spaces from the same central region? and then there appeared a most important anatomical relation to be taken into account. The aortic arch impinges on the left side of the third dorsal vertebra; and opposite the fourth, fifth, and sixth, it receives contributions to its plexus from the corresponding ganglia of the sympathetic, while its plexus again contributes to the heart. These sympathetic ganglia have, however, just received branches from the intercostal nerves themselves; and so it is that the heart and the intercostal spaces (four, five, six) are supplied by branches of the same nerves. Moreover, this is on the left side and above only, for on the other side, most of these branches go to the œsophagus, while below, those from the sixth ganglion chiefly go to form the splanchnic nerves. Now the fourth, fifth, and sixth intercostal nerves are those which give off large lateral cutaneous branches, descending over two ribs before they terminate in the skin over the sixth, seventh, and eighth intercostal spaces, or the site of inframammary pain. Smaller twigs of the same nerves supply the ends of the same intercostal spaces, where the pain may also be perceived.

I had made up my mind as to this nervous circuit, but felt the great difficulty in attaching any particular importance to the first few dorsal spinal fibres supplied to the heart, when the researches of Von Bezold, in 1862, seemed to throw light upon this point. I have not repeated his vivisections, but he has done so himself a great number of times, and I think some importance may be attached to his conclusions. Von Bezold poisoned rabbits with *curare* to get rid of irritability of voluntary muscles; then, the sympathetic and pneumogastric nerves in the neck having been all carefully divided, artificial respiration was kept up. When the spinal cord had been divided at the seventh cervical vertebra, irritation of its distal cut end produced violent increase of the heart's movements, while irritation of its proximal end did not. This was one of a series of experiments which led him to the conclusion that the chief motor centre for the heart in relation to sensation and psychical impression, and one which contributes three-fourths of the motor impulse, is in the medulla oblongata. From this centre the fibres do not pass down to the heart through the vagi or sympathetics in the neck, but through the cord. Emerging from the cord near the upper part of the dorsal region, these nerves pass to the base of the heart, through the sympathetics, and with contributions possibly from ganglia below.

Thus the anatomical nervous connection between the heart and the region of inframammary pain became endowed with a great significance, and it seemed more than ever probable that the sensorium received the impression of *some distress* in the heart through nerves which enter the grey posterior columns of the cord at the same point as those from the sixth, seventh, and eighth intercostal spaces. The central impression is radiated, and referred by the mind to the sensitive skin, according to the laws of reflection.

In the case of aneurism of the descending portion of the aortic arch, the same nervous circuit accounts for the pain in the side, which is indeed a more aggravated form of inframammary pain. In severe instances of intercostal neuralgia, painful spots are also to be found near the sternum and spine, at peripheral ends of cutaneous nerves, and even in the arm, which, through intercosto-humeral branches, receives also sensory nerves from the same source. In these and other ways, I think the theory here laid down explains the actual phenomena. For instance, the pain may be (though always to a much less extent) felt on the right side also. Now, although the first internal dorsal branches of the sympathetic on the right side go to the œsophagus, some of them do run on from it, and under it, to the aortic arch. Again, though the sixth, seventh, and eighth intercostal spaces form the habitat of this pain, it *may* be felt in the fifth and in the ninth also, this being readily accounted for by the delicate and very irregular filaments which run from the first and second dorsal ganglia, as well as from the great variations in the mode by which the dorsal sympathetics form the great splanchnic. So far, then I believe there is some reason, on anatomical, physiological, experimental, and pathological grounds, for adopting this theory: that *inframammary pain is a reflex neuralgia expressive of some distress in the heart.*

In our present extremely limited knowledge of cardiac innervation, I am scarcely prepared to support strongly any further conjectures as to what the exact nature of this cardiac distress may be. My own view is that it belongs to the cases of partial reflex paralysis, and that this is the reason why general muscular debility is its concomitant. Although the heart possesses nerve-centres of its own, we have seen that there is some ground for thinking that its action is regulated by the vaso-motor system through the cervical sympathetic and the vagi, while the great direct motor stimulus of mental and sensational acts, goes to it from the medulla oblongata. If the proposition be true, that (as Brown-Séquard tersely puts it), "almost all parts of the body may be affected with paralysis in consequence of an outside excitation", why should not the heart be placed under a list which includes

the "arm, hand, face, eyes, neck, trunk, pharynx, œsophagus, bladder, etc."?

Let me illustrate this hypothesis by an example. Nothing is more common than inframammary pain on exertion, in cases of leucorrhœa. Now, no one denies the great influence on the nervous system of irritation in the cervix uteri or neighbouring parts, these effects extending to the encephalon itself. There is nervo-muscular fatigue of the whole system, and the pulse becomes irregular as well as quick, especially when inframammary pain is, or has been present. But a quick pulse here means a weak heart, unable to produce sufficient propulsion in the normal time. This weakness is not defective nutrition, for it occurs frequently in the well fed and luxurious. May it not be a neurosis expressing the exhaustion of a centre (in the medulla oblongata) by continued irritation (uterine nerves)? Dr. Fuller's case, as another type, would be explained by a similar temporary exhaustion of the nerve-centre for cardiac action by a worried brain, the muscular build of the heart perhaps predisposing it to be overworked.

In conclusion, as to the treatment which we should expect to answer if our theory be true; this must *remove the source of irritation, relieve the heart of its overwork, and allay the pain.* Now, to allay the pain for a time is not difficult; counterirritants or simple plasters will do so, blisters, small and numerous, have been much used, and I have been satisfied with aconite and belladonna, especially the admirable linimenta of the new *Pharmacopœia.* The next indication is to relieve the heart, for which, of course, repose in the horizontal position answers best, for the time causing the pain to disappear. The Turkish bath, for obvious reasons, acts in this direction. But the great point is to seek for a permanent cause; for though much may be done by direct spinal stimulants, as strychnia or cold bathing, etc., no ultimate good will result, except exhausting nerve-irritation be removed. Cure the gastric or uterine irritation, the leucorrhœa or the hæmorrhoids, give repose to the fatigued spinal cord or worried brain; and *pari passu,* as the heart's action improves, and is no longer too slow in repose, and too quick during muscular or mental exertion, so will there result a corresponding diminution of the inframammary pain.

An Apology. The absence of the editor from home for most of the time during the past month we trust will be accepted as an excuse for whatever has been lacking during that time, particularly in the editorial department. He is "lengthening his cords and strengthening his stakes" in view of the commencement of the new volume in July, when some important changes, much to the advantage of subscribers and the profession, will be announced. (*Philadelphia Med. and Surg. Reporter.*)

War Circulars. When prisoners are seriously ill, their nearest relatives, being loyal, may be permitted to make them short visits; but under no other circumstances will visitors be admitted without the authority of the Commissary General of Prisoners. Upon the death of a soldier in this military department (Ohio), whether in hospital or in the field, the chaplain, wherever one is on duty, and in all other cases the surgeon, is instructed, whenever practicable, to cause the *name, rank, company, regiment, age, date, and cause of death, last place of residence,* and any other items deemed of importance relating to the deceased, to be legibly written upon white paper, with ink, and to place this record in a bottle, to be well corked, and deposited in the coffin, at the foot of the body, before burial. (*American Medical Times.*)

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE CURE OF GLAUCOMA WITHOUT OPERATION.

Under the care of J. V. Solomon, F.R.C.S.

Case I. *Incipient Glaucoma cured by Medicines.* Mrs. H., aged 38, married, an artificial flower (black crape) maker, was admitted March 8th, 1864.

For the last six months, she had noticed a red ring round the flame of a candle. When at work, her sight sometimes gave way, and returned after closing the eyelids. If she read, the lines of print (not the letters) almost immediately ran into one another. The smallest type she could read was small pica (Jaeger's No. 8). There was almost constant dull heavy pain in the forehead. There was no photopsy. The pupils were not dilated, but sluggish. The iris presented a normal plane. The choroid veins on the surface of each sclerotic were numerous and much enlarged. The tension of the right eye, which was the worst, was augmented (T + 1); that of the left T + ? The temporal and nasal field of vision was contracted; the vertical field being normal. There was no cupping of the optic nerve-entrances (discs); the venous systems of the retina and choroid were much gorged.

℞ Liquor. hydrargyri bichloridi ʒiss; tincturæ ferri sesquichlor. ʒij; tincturæ conii ʒiv; infusi quassiæ ad ʒviij. M. Sumat ʒj ter die statim post pastum.

Sumat pil. aloës cum myrrhâ ℈ss alternis noctibus. Mitte doses iii.

The eyes were ordered to be rested.

On the eighteenth day of this treatment, the tension in both eyes was normal. It had been distinctly augmented in the left, as well as the right, after the first visit. The zone around the candle-flame had disappeared. The field of vision was enlarged. She could read five or six lines of No. 8 without apparent coalescence of the lines. The mercury was now discontinued, and a mild aperient and alkaline bitter mixture taken by the patient.

On the thirty-third day of the treatment (April 15th), the patient could read pearl type (No. 2), and forty-eight lines of small pica without experiencing confusion. The veins on the sclerotica were diminished much in size and number. Tension was normal, and the field of vision nearly so.

May 4th. She considered her eye to be quite well; the scleroticæ were of good colour and bright in both eyes. They were free from vascularity, except at two or three limited points in the right, in which were some old varicosities (muscular veins), which had a flattened appearance. Tension was normal.

This patient is *embonpoint,* of florid complexion, good general health, and of hopeful disposition. So soon as her complexion began to pale, the bichloride was discontinued. She has never worn spectacles, nor been affected with presbyopia or intercurrent obscurations.

I claim this case to be of the nature which I have designated it, because there were present, increased tension; contraction of the field of vision; a halo around a candle-flame; congestion of the anterior

ciliary and muscular veins; and impaired vision; with a dull heavy pain in the forehead.

Under a treatment purely medical and hygienic, the whole of the symptoms have been subdued.

Case II. *Glaucoma; Complete Loss of Sight of the Right Eye; Reduction of Tension and Recovery of Vision from a purely Medical Treatment; Iridescent Vision in the Left, with Normal Field, and Acuteness of Vision.* A young lady, single, aged 19, of excellent general health, who had recently experienced some anxiety of mind, was seized with aching pain in the right brow and side of the head, accompanied by dimness of vision of the right eye, which gradually ended in blindness.

In seven days from the commencement of the disease (Oct. 6th, 1863), I was consulted. The vision at this time was abolished, so that the brightest light failed to impress the retina. The pupil was slightly dilated and motionless. The globe, which was devoid of congestion, was very tense (T 2). The fundus of the eye was clouded; the retinal vessels were not enlarged, and could be traced only a very short distance over the choroid; they were curved abruptly at the margin of the optic disc. The patient, a very intelligent girl, had never experienced iridescent vision. The tension of the left eye was slightly augmented (T 1—1½); but, with this exception, and the presence of iridescent vision, which commenced at the onset of the attack in the right, the organ was perfectly normal in all respects. Its accommodation for brilliant type, its field of vision, and ability to bear fatigue, and the condition of the fundus, were healthy.

I directed four leeches to be applied to the right lower eyelid; and a blister to the nape of the neck, which was to be kept open; also perfect rest of the eyes, in a moderated light. Internally, mercury was given in two forms. The bichloride of mercury, with tincture of sesquichloride of iron, in a mixture, and grey powder in combination with henbane, as a pill, and a diet of milk and beef-tea, were ordered.

On the 8th, shadows were perceptible.

On the 10th, the retinal artery, where it lies on the optic disc, appeared to be empty, without any pressure by the finger.

On the 12th, features could be discerned, but not with anything like distinctness. The mouth became more, and the depression which commonly attends that state manifest; for the relief of which, sherry negus was added to the diet, and the quantity of mercury diminished.

On October 31st, the twenty-fifth day of the treatment, the patient read two-line great primer (Jaeger's No. 16).

On November 6th, great primer (No. 12) was read.

On December 16th, the sixth week of treatment, the pupil was more dilated than normal. I therefore applied a small bit of Calabar bean paper; the contraction from which being excessive (myosis), I placed a concave glass of 48″ positive focus before the eye, and the patient read brilliant type (Jaeger's No. 1) with facility.

This young lady resided nine miles from Birmingham; consequently, I saw her only two or three times in eight or nine days. The family practitioner, Mr. Haden of Sedgley, most kindly carried out my views in the intervals. On two or three occasions previously to the vision becoming distinct, I found the progress of the case arrested, and the tension greater than at my last visit. This condition was met by the application of a single leech to the lower lid, which had the effect of putting in motion the powers of repair.

As the vision and tension gradually improved, the patient became sensible of the presence of iridisation in the *right* as well as in the left eye. For a time, the nasal field of vision was abolished, there being good perception of large objects on the temporal side.

The group of symptoms upon which I based my opinion, that the preceding case was one of glaucoma, were, the blindness, the augmented tension, and the cupping of the optic nerve-entrance. The presence of iridisation in the companion organ from the first onset of the disease, and its occurrence in the one first affected so soon as the retina began to recover its power of receiving impressions from external objects, together with the abolition of the nasal field of vision, afforded confirmatory evidence, had such been needed, in order to make the diagnosis clear. In proportion as we obtain our information from clinical sources—from the book of nature—so do we find how comparatively rare are typical portraits of disease, as given in our manuals and handbooks, to be met with in practice. In this instance, for example, the disorder was not preceded by farsightedness (presbyopia). The external veins of the choroid were not congested, and the retinal veins were not gorged; nor did the artery present that rare and beautiful phenomenon—spontaneous pulsation. Moreover, iridisation, or the appearance of a rainbow or halo round the flame of a candle, instead of preceding, followed the blindness.

[*To be continued.*]

Transactions of Branches.

BENGAL BRANCH.

A CASE OF AMYLOID DEGENERATION.

Under the care of S. G. Chuckerbutty, M.D.

[*Read by his Assistant*, Baboo Omesh Chunder Dutt, *May 10th*, 1864.]

Bucktoo, a Mohammedan, aged 25 years, was admitted into the Calcutta Medical College Hospital, on April 19th, 1864, in a state of great prostration, with a pulse feeble and frequent; tongue moist, but covered with a thin fur in the centre; skin cool; conjunctivæ pale; abdomen distended with fluid, fluctuating; lower extremities anasarcous; upper swollen to a less extent; hepatic dulness smaller than natural; splenic slightly increased; respiration difficult; pain on pressure over the spleen.

On inquiry, he stated that he had been suffering from fever, off and on, for the last eight months; the present attack having commenced about a month ago. The fever came on about midday, and did not go off till about midnight.

April 20th. He had had only one stool since admission. There was no fever; his appetite was bad; he was thirsty; tongue moist. There was marked fluctuation in the abdominal cavity. The dulness of the percussion-note over the heart was increased in area; but there was no visible fluctuation, though the heart-sounds were weak. The tongue was pale, and its papillæ enlarged; the sclerotic conjunctiva was slightly yellow.

April 21st. He had no stool during the last twenty-four hours. The urine was said to be scanty. (The clinical clerk had failed to examine its character.) He did not sleep in the night, and complained of much pain in the epigastric region. There was no fever; pulse feeble and frequent.

April 22nd. He had one stool without a purgative, and some more from a dose of castor-oil. The pain in the abdomen had diminished. His urine was passed in the bed-clothes.

April 23rd. He had two stools. Debility was increasing. He passed his urine in the bed-clothes.

April 24th. He felt very weak; had two stools this morning.

April 25th. He had no stool. There was no fever. He vomited once in the morning, a thin greenish-yellow fluid: pulse exceedingly feeble, being barely perceptible at the wrist.

In a few minutes after this, he expired quietly.

Post Mortem Examination, two hours after death. On opening the chest, the right lung was found to adhere to the ribs by old cellular membrane. On opening the sac of the pericardium, it was found to contain about two ounces of a reddish fluid; and its inner surface was marked with red points. The heart itself was rather small; but its walls were muscular and of a good colour. On opening the abdomen, it was found filled with a very large amount of fluid, measuring about nine imperial pints, of muddy colour and opaque, and containing a quantity of whitish flakes swimming about the bottom of the pelvis. The peritoneum, both parietal and intestinal, was covered with punctiform injection. There was no agglutination of the coils of the intestines, no adhesion of any organs; but a mass of enlarged lymphatic glands, as large as a hen's egg, was seen projecting into the abdominal cavity about the right inguinal region, which, on being followed downwards, appeared to be only the upper part of a much larger mass passing down to the cribriform fascia, and composed of many enlarged and agglutinated glands. On cutting into one of these glands, the divided surface looked granular, with transparent waxy patches scattered pretty densely over it. On the application of a solution of iodine to one of these waxy patches, they become of a deep yellowish brown colour; whereas, the surrounding substance and the capsule turned only yellow. On the application of sulphuric acid immediately after the iodine, the patches assumed a temporary violet or bluish colour. With the sulphuric acid alone, they underwent no change. Similar masses of lymphatic glands were found at the left groin; and the left thigh, below Poupart's ligament, was affected in the same manner. The liver was only eight inches in length and four in breadth; its colour, as seen through the capsule, was mottled, livid, and light yellow, in irregular patches. Its section was translucent and dull, with waxy patches of varying sizes scattered through the surface. The substance was tough; little or no blood issued from its vessels, except when the larger ones near the transverse fissure were cut. On submitting the section to inspection with a magnifying glass, patches were observed, some of which were uniformly waxy, with a yellow border; but the majority were pink in the centre, enclosed within a broad waxy zone, external to which there was a yellow zone. On touching these waxy patches with the solution of iodine, they assumed a yellowish-brown colour, which changed into bluish on the application of sulphuric acid. The mesentery of the small intestines, more opaque than usual, and thick, was dotted on the surface with roundish opaque waxy spots, of the size of white mustard-seeds, which stopped suddenly at its junction with the intestine, where there was a broad transparent bluish line separating the one from the other. Iodine added alone to these waxy patches made them slightly yellowish. Sulphuric acid alone only charred; but, added where the iodine was previously applied, immediately caused a violet tint. The kidneys were of about the usual size, rather indurated, and granular on section. The granules were of a light colour, as seen through a magnifying-glass; but not all over. The lungs were healthy. The spleen was a little larger than usual, tough, with the tubercular unusually distinct and hypertrophied; the surface, on section, was dotted with waxy spots. A bit of the waxy matter of the lymphatic glands, under the microscope, presented cells of different sizes, enclosing several nuclei and nucleoli; and having an irregular appearance of striation in some cases, in others looking like almond-seeds. A bit from one of the kidneys presented one or two cells with concentric layers and ordinary epithelial cells. On further examining the bodies under the microscope in the chemical laboratory, Kanny Loll Dey found objects which closely resembled the arrow-root starch-corpuscles; but this was after the morbid products had been kept in spirit and water for some days.

British Medical Journal.

SATURDAY, SEPTEMBER 10th, 1864.

MR. CARTER AND THE MEDICAL PROVIDENT FUND.

Mr. Robert Brudenell Carter has issued a most indiscreet document concerning the *Medical Provident Fund*. The last person to publish such a paper should have been Mr. Carter, he having been elected, at the Bristol meeting, a member of the preliminary Committee; having had his opinions on a point in which he differed from his colleagues fairly placed, along with the Report, before the Association at the Cambridge meeting; and being finally, by what every one must acknowledge as a graceful and honourable act, elected by the Committee of Council a Director of the Fund—and this on the very day on which he issued his manifesto! To throw, or attempt to throw, an apple of discord into the Society, at the moment of its projection, is clearly, to use a mild term, an act of indiscretion; and this Mr. Carter has done. We have nothing whatever to say as to the merits or demerits of his proposal; but we are satisfied that every man of business and common sense will agree with us that it is not right for any Director publicly to pledge himself, before discussion with his brother Directors, to any particular line of conduct; and that nothing can be more injudicious than to attempt to exercise pressure from without upon a body of gentlemen who are just elected to office, and whose only desire naturally and necessarily is, how best they may further the interests of the Society. The proper place for the discussion of all matters affecting the interests of the Society, is manifestly the board-room of the Direction. The Directors are elected by those who have a firm faith in their ability and trustworthiness; and common sense and courtesy dictate that to them should be left the management of the Society. Mr. Carter seems to have forgotten what we pointed out a fortnight ago—that there is no doubt that all suggestions made will be freely discussed at the meeting of the Directors. If the

Director of any ordinary board of management had done what Mr. Carter has in this case, he would doubtless be advised by his brother Directors to retire from the office of Director; and we certainly should recommend Mr. Carter, in the interests of the Society, at once to retire from the office to which he was last week elected.

The Committee of Council last week elected Directors; and when we state that those Directors are Dr. Burrows, Dr. Symonds, Mr. Carden, Mr. Heckstall Smith, as well as Mr. Carter, we have said enough to show that the affairs of the Society, so far as the Committee of Council is concerned, are in the hands of men of honour and of business: and there can be no question that the Branches will elect men of like repute and capability. We may add, that Dr. Westall, who had an equal number of votes with Mr. Carter, gave way on purpose to allow that gentleman to ventilate his opinions at the Board. Before, however, even the Board has met, or any acts have been done, or discussion held, Mr. Carter's vanity leads him to rush into print, and ask gentlemen to put a pressure on the Branches, in order to force them to elect Directors pledged to carry out his (Mr. Carter's) ideas! He actually *defies* the Board to act differently from his opinion: "I should like the Directors to consider the question of limitation, under the pressure of 200 or more applications from gentlemen who are not members of the Association, and who are prepared, in the event of being refused, to establish a separate fund of their own." Not only this; but Mr. Carter has the impertinence to publish a gratuitous misstatement and insult; viz., that the majority of the Committee have supported the Provident Fund, "*because they think it will strengthen the Association; and they, therefore, welcome it for the sake of the Association, rather than for the sake of the men who will chiefly need it.*" Mr. Carter wishes the profession to believe that he is the only person who has any real charity in the matter; and that, unless his views are received as laws absolutely and without discussion, the Society is of no use.

We think we have said enough to show that, the sooner Mr. Carter resigns the office of Director, the better it will be. If he had been the bitterest enemy of the Society, instead of its *soi-disant* friend, he could not have devised a more ingenious means of doing it an injury than the document which he has just published and circulated. We have no doubt, however, that his own indiscretion, with the aid of our remarks, will render his actions harmless.

THE ADVERTISING TRIBE.

We have thought it well to bring together the following advertisements, which blacken the pages of almost every newspaper in every part of the country. The attention of the Medical Council should, at all events, be directed to the fact. What amount of accumulated misery is represented by these things we need not stop to calculate.

A local newspaper—the journal of one of our distressed cotton district towns—presents us with a remarkable side of advertisements. The London professionals, who perform in the "silent friend" line, would seem still to gather a harvest out of the distresses of the people, if we may judge from the advertisements lying before us. We certainly had no idea that the field of human credulity was so richly worked in this direction. Let us just follow down this sheet of advertisements, which the *Blackburn Times* dishes up for the benefit of the distressed people of Blackburn.

"A physician", who hails from Maddox Street, leads off the ball. He supplies a *Lecture on Marriage*, "free by post, two stamps; sealed, 12." Next, Dr. Bright guarantees in fourteen days to restore masculine power. His remedy is a lozenge; the price per packet, 12*s.*, free by post. Dr. Thompson next presents us with "Neurotone", "a most certain remedy" for all sorts of diseases. Messrs. Perry, the celebrated, offer "The Silent Friend", "Cordial Balm", and "Copaiba and Cubeb Globules". John Kaye, Esq., of Prospect Hall, Essex, offers us "Worsdell's Pills", which prevent disease, and also cure it; are "everybody's medicine, equally suited to age and infancy, male and female". Let the *British Pharmacopœia* beat that, if it can! The next goods offered us are Brummagem wares, and Mons. Duval the agent—"The New French Remedy", a lozenge, the discovery of an eminent French physician. It "can be taken without the least fear of detection, and speedily restores tone and manly", etc.; 11*s.* per post. "Help for all" is at the service of any one who will forward a stamped envelope to Dr. Russell of Kentish Town; it is the production of "a physician upwards of forty years in practice". Messrs. Smith also give advice gratis upon the usual style of diseases. Mr. Beecham, for 9½*d.*, supplies pills "worth a guinea a box"; it takes half a column to detail their virtues, which, by the way, are certified to by James Burnside and Mary Blandon. Triesmar No. 1, No. 2, and No. 3 stand next on the list. No. 1 cures spermatorrhœa, etc.; No. 2 eradicates gonorrhœa, etc.; and No. 3 "is the great continental remedy for syphilis". The price is 11*s*, or 33*s.*, or £5; by taking £5 worth, you save £1:12. Dr. De Roos of Bedford Square offers £50 reward for information as to any of those impostors who "assume the doctor's name and title". Dr. De Roos elsewhere appears to indicate the nature of his wares. He is "M.D. of the Ecole de Médecine, Graduate in Medicine, Surgery, and Midwifery". He, therefore, very properly demands none of your penny postage-stamps, but a good honest guinea,

with a detail of the case; and promises advice and physic by return of post. He warns the public against the low tricks of rascally quacks.

"By the present law, none but the real physician dare attach M.D. to his name, as heavy penalties would thereby be incurred. The public should, therefore, guard against impostors who style themselves 'Dr.', 'Professor', 'M.R.A.S.', 'F.R.A.S.', 'M.A.', etc., in order to mislead the unwary as to their true character."

It takes nearly a column to detail all the doctor's wonderful remedies: *Guttæ Vitæ*, which cure in four weeks; *Therapion*, "the three days *cure*"; and the "Compound Renal Pills". "Keep your blood pure, and defy the doctor!" This you may effectually do by the purchase of Buchan's "Sarsaparilla Pills". If you are wretched, you may be made happy by purchasing *Marriage*, etc., post free for six stamps, from Dr. Marston, Principal of the Royal Institute of Anatomy and Science, Oxford Street; admission, 1*s*. Dr. Kahn's *Philosophy of Marriage* is gratis. Our old friend Holloway's ointment and pills are, of course, there. Mr. Laurie of Montague Street, out of mere gratitude, for a couple of postage-stamps, will impart valuable information. A physician will send "the free edition of his large work (120 pages)", on receipt of four penny stamps.

"*Medical Review.* The shoals and quicksands against which this little work is well calculated to guard the reader render its careful perusal especially worthy the attention of all young men."

Many more promising advertisements there are, of a like kind; and all wound up by *The Friend in Need* of Dr. Thompson, who gives boldly the contents of the work—

"Institutions of Marriage—Obligations of Wedlock—Causes of Interruption to Conjugal Happiness—Domestic Bliss—Healthy Offspring—Description of the Organs in both Sexes, their uses, powers, etc.—Masturbation, its consequences—Sensuality and Remorse—Male and Female Disorders, induced by Onanism—Barrenness, its Causes and Removal—Domestic Happiness—Parental Bliss—Turn of Life—Hope and Comfort—Secret Diseases, their Variety and Symptoms in various Subjects; their Remedy—Matrimony, its Trials, Joys, and Responsibilities—Deficiency of Natural Strength—How to Strengthen the Sexual System—Instruction to Sufferers—General Suggestions, of value to every person."

Such is the bill of fare dished up, at an enormous expense of advertisements, in one paper, for the benefit of the people of Blackburn! Cannot the Medical Council take the subject into their serious consideration?

ITERUM, ITERUMQUE CRISPINUS.

The *Lancet* has had its usual annual outburst against the British Medical Journal. As on former occasions, it strongly recommends the members of the British Medical Association to give up their "sickly bantling" of a journal, and (we suppose we may add as a corollary) to become subscribers to the immaculate and complete *Lancet*. The article of this year is an exact parallel of former effusions; only as our successes increase so do the violence and dirt of its language. In it we note the following specimens of vernacular applied to the editor of the Journal. "Utter falsehoods"; "Billingsgate abuse"; "falsification of terms"; "perversion of language for the purpose of excusing imbecility and venting abuse"; "utterly disgraceful"; "old falsehoods"; "fabricate false charges and shuffle out of them"; "transparent perversion of facts"; "renewal of maledictions"; etc. So much for the editor. Now for the Journal itself. "Valueless as a representative of medical science"; "eked out with fourth-class matter, which only inspires tedium and contempt"; "one private friend of the *Lancet* never cuts it open"; "utterly worthless"; "disgraces the Association"; "drags on a sapless life by sucking the life-blood of the Association, and keeps it in a state of perpetual bankruptcy"; "destitute of influence on professional or public opinion"; "sucks up all the revenue"; "lacrymose and abusive"; "extremely imbecile"; "sickly bantling"; "a burthen and a grief."

Such is the language (*on one page*) used by a journal which, all the while, boasts itself to be the representative of the honour and science of the medical profession. Even the innocent authors of papers do not escape compliment; "The papers read at the annual meeting are, with few exceptions, utterly third-rate"; and are read only to be "buried amongst rubbish in the Journal." The literary and scientific labours of all the leading practitioners in this country, recorded in these pages, are *rubbish!*—the papers read at our annual meetings "*utterly third-rate!*"

But why, ye gentlemen of the *Lancet*, all this *rabies insana?* these violent outpourings? The only crime of which we are conscious, is that of being very successful. Of course, the *Lancet* knows (and if it do not, we will give its gentlemen the information gratis) that, three or four years ago, when the present editor undertook the management of the Journal, the number of members of the Association was about 1900; that the present number of members is above 2400; and that it is continually and steadily increasing. Are we uncharitable, in face of such a fact, in suggesting—merely suggesting—*hinc illæ lacrymæ?*

The progressive increase of the Association is, indeed, well worthy the consideration of those gentlemen who, as a correspondent says, seem to take delight in fouling their own nest, whilst innocently or knowingly playing the cards of the *Lancet*. Is there nothing significant to them in the fact, that the list of the members of the Association given in this day's Journal contains very nearly a page more of names than the list of last year did?

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Williams, Joseph, Esq. Helston
Worth, Edward J. Esq. Millbrook

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Windsor, Thomas, Esq. Surgeon to the Salford and Pendleton Royal Hospital, and to the Eye Hospital, Manchester
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Eddowes, William, Esq. Pontesbury
Eddowes, William, jun. Esq. House-Surgeon to the Infirmary, Shrewsbury
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Eyeley, Joseph F. Esq. Llanymynech
Fenton, Henry, Esq. Surgeon to the Dispensary, Shrewsbury
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Gwynn, Samuel T. M.D. Whitchurch
Harries, John D. Esq. Surgeon to the Salop Infirmary, Shrewsbury
Hartshorne, F. H. L.R.C.P.Ed. Surgeon to the Ironbridge Dispensary, Broseley

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Fox, Francis K. M.D. Brislington
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Cooper, Richard, Esq. Leek
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Day, Henry, M.D. Physician to the County Infirmary, Stafford
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Downes, W. Esq. Handsworth
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Moore, Thomas, Esq. Cradley Heath
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Proctor, Herbert E. L.R.C.P. Ed. Wednesbury
Thomson, Spencer, M.D. Burton-on-Trent
Thornhill, J. H. Esq. Willenhall
Underhill, Thomas, Esq. Great Bridge, Tipton
Underhill, William L. Esq. Tipton
Wades, John W. B. M.D. Hanley
Welchman, C. E. E. Esq. Lichfield
Wollaston, R. M.R.C.P. Physician to the General Infirmary, Stafford

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Beck, Henry, Esq. Needham Market
Blackett, Edward R. M.D. Physician and Surgeon to the Dispensary, Southwold
Bullen, George, Esq. Senior Surgeon to the East Suffolk Hospital, Ipswich
Bullen, George, jun. Esq. Ipswich
Chevallier, Barrington, M.D. Physician to the East Suffolk Hospital, The Grove, Ipswich
Cooper, William, M.D. Bury St. Edmund's
Cooper, H. R. Esq. Ixworth (dead)
Crowfoot, William Edward, Esq. Surgeon to the Dispensary, Beccles
Day, William H. M.D. Newmarket
Durrant, Christopher Mercer, M.D. Physician to the East Suffolk Hospital, Ipswich
Ebden, W. H. Esq. Haughley
Edwards, George C. Esq. Ipswich
Elliston, William, Esq. Ipswich
Faircloth, Richard, Esq. Newmarket
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Fyson, Robert, Esq. Newmarket
Gardner, James, L.R.C.P.Ed. Bungay
Gissing, John Stearn, Esq. Woodbridge
Goodwin, John W. M.D. Physician to the Suffolk General Hospital, Bury St. Edmund's
Gorham, Richard V. Esq. Yoxford
Gramshaw, H. Esq. Laxfield, Framlingham
Growse, Robert, Esq. Bildestone
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Jones, Robert Edwards, Esq. Long Melford, Sudbury
Kilner, John, Esq. Surgeon to the Suffolk General Hospital, Bury St. Edmund's
Kirkman, John, M.D. Resident Physician to the Suffolk Lunatic Asylum, Melton
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Marshall, Charles G. Esq. Woodbridge
Martin, Robert, Esq. Ipswich
Matthews, Benjamin F. Esq. Norton
Mead, George B. M.D. Newmarket
Miller, Walter W. M.D. Eye
Muriel, John Thomas, Esq. Hadleigh
Pennington, J. Esq. Needham Market (dead)
Pretty, George Wilson, Esq. Fressingfield
Read, Charles G. Esq. Stradbroke
Rendle, Charles B. Esq. Saxmundham
Sampson, George G. Esq. Surgeon to the East Suffolk Hospital, Ipswich
Simpson, E. Esq. Long Melford, Sudbury
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Taylor, Henry, Esq. Ixworth
Tench, E. B. Esq. Wickham Market
Thompson, Robert, Esq. Brandon
Williams, John, M.D. Bury St. Edmund's

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Number of Members..68.
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Barlow, George H. M.D. Physician to Guy's Hospital, Union Street, Southwark
Berney, Edward, Esq. Croydon
Bottomley, George, Esq. Croydon
Bush, John, Esq. The Retreat, Clapham
Carpenter, Alfred, M.D. Croydon
Chaldecott, Charles William, Esq. Dorking
Chapman, George, Esq. Lingfield
Clapton, Edw. M.D. Assistant-Physician to St. Thomas's Hospital, St. Thomas's Street
Clark, Frederick Le Gros, Esq. Surgeon to St. Thomas's Hospital, St. Thomas's Street
Clark, Willington, Esq. Sutton
Cleaver, Henry A. Esq. Croydon
Coles, William F. M.D. Croydon
Cox, Abram, M.D. Kingston-on-Thames (dead)
Cooke, William R. Esq. Lower Norwood
Davies, W. Esq. York Town, near Bagshot
Forster, J. Cooper, Esq. Assistant-Surgeon to Guy's Hospital, St. Thomas's Street
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Martin, Thomas, Esq. Reigate
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Palmer, F. W. Esq. Old Kent Road
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Pollock, Robert J. Esq. Wimbledon Park
Ray, Edward, M.D. Dulwich
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Wisden, William, Esq. Oxted
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SUSSEX.

Number of Members..63.
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Boxall, H. Esq. Wisborough Green, Horsham
Bull, John Henry, Esq. Lindfield
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Byass, Thomas Spry, M.D. Cuckfield
Caudle, Adolphus W. W. Esq. Henfield
Collet, Henry, M.D. Surgeon to the Dispensary, Worthing
Cunningham, J. M. M.D. Hailsham
Davies, Robert C. N. Esq. Rye
Dill, Richard, M.D. Brighton
Eden, Thomas E. Esq. Brighton
Elliott, Robert, Esq. Senior Surgeon to the Infirmary, Chichester
Foreman, Robert C. M.D. Brighton
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Kent, Octavius J. Esq. Eastbourne
King, William, M.D. Consulting Physician to the Sussex County Hospital, Brighton
Leslie, Percy, M.D. Eastbourne
Lowdell, George, Esq. Surgeon to the Sussex County Hospital, Brighton
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Moore, W. Withers, M.D. Physician to the Dispensary, Brighton
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Bucknill, S. Birch, M.D. Rugby
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Chavasse, Samuel, Esq. Birmingham
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Griffith, E. T. Esq. Birmingham
Hadley, John Joseph, Esq. Birmingham
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Jordan, John, Esq. Birmingham
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Smith, Jos. Esq. Lozell's Lane, Birmingham
Smith, Thomas L. L.R.C.P.Ed. Alcester
Solomon, James Vose, Esq. Surgeon to the Birmingham and Midland Counties Eye Infirmary, Birmingham
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Fitzgerald, E. A. M.D. Morar, Gwalior
Hinder, J. Esq. Chadni Hospital, Calcutta
Kastogree, Baboo Unnoda Churn, Burrisal, Bengal
Kendall, Bernard, Esq. Ranchee, Chota Nagpore
Kur, Baboo Doorgo Doss, Medical College, Calcutta
Macpherson, Hugh, Esq. Bengal Medical Service, Calcutta
Naylor, G. R. M.D. Chitpore Dispensary, Calcutta
O'Conor, Roderic, Esq. Nowgong, Upper Assam
Partridge, S. B. Esq. Medical College, Calcutta
Sen, Baboo Jogun Nath, Calcutta
Sen, Baboo Ram Chunder, Mitford Hospital, Dacca
Sircar, Mohendro Loll, M.D. Calcutta
Thring, R. S. O. M.D. Bengal Medical Service, Roorkie
Tyler, J. W. M.D. Etwah, North-Western Provinces

MALTA.

Sammut, Joseph Balthazar, M.D. Valetta

HONORARY MEMBER.

Newnham, William, Esq. Tunbridge Wells

Association Intelligence.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held at Birmingham, September 1st, 1864.

PRESENT—Sir Charles Hastings, M.D., D.C.L. (in the Chair); Dr. Bryan; Mr. Cartwright; Mr. Clayton; Dr. Holman; Dr. Paget; Dr. Richardson; Mr. Southam; Dr. Stewart; Dr. Waters; Dr. Westall; Dr. Wilkinson; and Mr. Watkin Williams (General Secretary).

The following resolutions were adopted.

1. That the Editor of the JOURNAL be authorised to forward the publications of the British Medical Association to the Society for the Promotion of Medical Science in the Netherlands.

2. That the following gentlemen, elected by ballot, be the representatives of the Committee in the Directorate of the Medical Relief Fund:—H. D. Carden, Esq. (Worcester); Dr. Symonds (Clifton); Dr. Burrows (London); T. Heckstall Smith, Esq. (St. Mary's Cray); and R. B. Carter, Esq. (Stroud).

T. WATKIN WILLIAMS, *Gen. Sec.*

13, Newhall Street, Birmingham, September 5th, 1864.

THE MEDICAL PROVIDENT FUND.

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

	£.	s.	d.
Amount already contributed	249	18	0
H. Veasey, Esq. (Woburn)	5	5	0
Dr. E. Westall (Caterham)	5	5	0
M. H. Clayton, Esq. (Birmingham)	5	5	0
Dr. A. P. Stewart (London)	5	5	0
G. Southam, Esq. (Manchester)	5	5	0
Dr. Eason Wilkinson (Manchester)	5	5	0
T. Taylor Griffith, Esq. (Wrexham)	21	0	0
Richard F. George, Esq. (Bath)	5	0	0
Richard Dunn, Esq. (London)	5	5	0

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

BENGAL BRANCH: ORDINARY MEETING.

AT the meeting of this Branch held on May 10, 1864, Baboo OMESH CHUNDER DUTT read an account of three cases which occurred in Dr. Chuckerbutty's wards in the Medical College Hospital within the last few days; viz.:

1. A case of Amyloid Degeneration, in which deposit was found at the *post mortem* examination in the lymphatic glands of the groins, the kidneys, the spleen, the liver, and the mesentery Specimens, preserved in spirit, were placed on the table. [The case is reported at p. 299.)

2. Case of Chronic Ulceration of the Stomach; in which an ulcer of the size of a quarter of a rupee was found in the greater curvature, at the pyloric end of the organ.

3. A Case of General Paralysis from Cerebral Apoplexy; in which during life the whole of the body was paralysed, and after death a large effusion of blood was discovered in the lateral and the third ventricles extending to the base, the outer aspect of the left anterior cerebral lobe and left cerebellar hemisphere being likewise congested and stained red.

With reference to the last case, Dr. CHEVERS wished to know why the paralysis was called general; and with reference to the first case,

Dr. FAYRER wished Dr. Chuckerbutty would explain the nature of the amyloid degeneration, and its symptoms during life.

In reply to Dr. Chevers's question, Dr. CHUCKERBUTTY said that the paralysis involved the entire body, and was not confined to one side or to the lower half; and in reply to Dr. Fayrer, he observed that "amyloid degeneration" is a term which has been applied by Professor Virchow to the waxy degeneration of the Edinburgh school, because the affected parts become brownish red by iodine, and then, on the addition of sulphuric acid, bluish or violet. The sulphuric acid alone has little or no action on it; and iodine applied to the healthy textures around turns them simply yellow. The application of these tests is said to require delicate management, more especially the sulphuric acid, which presents great difficulty in being duly portioned so as to yield the desired result. On account of its behaviour with iodine and sulphuric acid, Virchow thinks the amyloid matter resembles starch in some measure, though not to the same extent as the corpora amylacea found in the healthy ependyma of the brain, which readily become blue from iodine without sulphuric acid. It is, therefore, amyloid, not amylaceous, probably from its being enclosed in cells which resist the action of iodine alone. The amyloid matter is a morbid deposit which, according to Virchow, occurs primarily in the minute arteries, and then extends to the surrounding textures in advanced cases. Thus, in the kidneys, the minute arteries entering the Malpighian capsules are first affected when the deposit is found only in the cortical substance, though afterwards it may extend even to the pyramids; in the spleen the same thing takes place; in the liver the intermediate zone in the lobules formed by the minute branches of the hepatic artery is the first seat of it, when this alone is waxy, while the outer zone formed by the portal branches is yellow, and the central zone formed by the hepatic vein is pink; in advanced cases, however, the whole lobule becomes uniformly waxy. Both these conditions existed in the case under consideration. In the lymphatic glands, the deposit also occurs in the minute arteries which enter them along the tubercular, and pass down to the follicles containing the gland-cells. The symptoms during life are said to be similar to those of Bright's disease, only the prostration is more marked. The urine becomes albuminous, and scanty or suppressed. There is generally dropsy; the bowels are irregular, sometimes confined, at other times loose, and so on. It is so much like Bright's disease during life, that the present case was regarded as such until its true nature was revealed in the dead-house. There was an European patient then in the hospital who was suspected by Dr. Goodeve to be suffering from the amyloid disease. In him, also, the lymphatic glands of the groin were enlarged, the urine was slightly albuminous, and sometimes suppressed for twenty-four, nay forty-eight hours, and then again flowed freely. There were great prostration of strength, much emaciation, and some œdema of the feet. Professor Virchow says the amyloid degeneration unfits organs for the performance of their functions by cutting off the supply of blood, in consequence of the filling up and obliteration of their arteries. That was the only *post mortem* examination

of this affection Dr. Chuckerbutty had seen; and, although the disease was suspected in the other case, yet, without a *post mortem* examination, they could not positively say that it existed there. Therefore, he must plead ignorance as to the earliest symptoms of the disease. It will require much experience and comparison of the symptoms during life and the appearances after death, before anything trustworthy can be accurately laid down on that subject.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 28TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

THE ORIGIN, STRUCTURE, AND MODE OF DEVELOPMENT OF THE MULTILOCULAR CYSTS OF THE OVARIES.

BY WILSON FOX, M.D.

The first division of the paper consists of a *résumé* of the views hitherto held with regard to the origin of these cysts. The author considered that the opinions hitherto expressed on this point might be divided into two chief classes.

1. Those which attributed the cysts of the ovary either to morbidly affected Graafian vesicles, or to secondary formations from these structures.

2. Those which ascribed the multilocular forms to a morbid process arising in the stroma of the ovary, independently of the Graafian vesicles.

Under the second category there was a great variety and discrepancy of opinions.

With regard to the former, it had long been doubted whether the number of the Graafian follicles normally existing in the ovary was sufficient to account for the whole of the cysts sometimes found in these tumours; while the proof of any fresh formation of Graafian vesicles taking place in the adult had hitherto been of a very dubious kind, nor had any account been furnished of the mode in which secondary cyst formations proceed from them.

The author had studied these conditions in fifteen of the so-called "colloid cysts" of the ovary, for the opportunities of examining most of which he had been indebted to the kindness of Mr. Spencer Wells. He believed that all primary cysts of the ovary originate in the destruction of the ovum and subsequent accumulations of fluid in the follicle, the membrana granulosa acting as a secreting structure. From these cysts secondary cysts may originate in various ways, all of which, however, may be referred to one common type.

Class A. Cysts give off long tubular processes, lined by an epithelium similar to that of the cyst whence they spring; one cyst may give off two or three such processes at various parts of its circumference. These undergo constrictions in their course, and thus form secondary cysts. These processes and the cysts from which they spring are most easily found in the more dense parts of the stroma.

Class B. Thin-walled cysts give off diverticula analogous to those by which the lungs, the thyroid, and some other glandular organs, both of the gastro-pulmonary and genito-urinary system, originate in the embryo. These diverticula, which open by a narrow neck into the cavity of the parent cyst, expand as large pouches on its external surface, protruding into other and adjacent cysts. The neck may either expand into a large opening, or may become constricted, in which latter case the original communication is destroyed. One cyst may in this manner give off numerous diverticula.

These varieties (A and B) usually coexist in different parts of the same tumour. They were found by the author in three out of the fifteen tumours examined by him. They give rise to very compound structures, but not to the dense masses to which the names of "alveolar degeneration," "cystoid disease," and "adenoid tumours" of the ovary have been given. This variety (or Class C) results from the formation, on the inner surface of the cyst wall, of a series of tubular glands, analogous to those of the uterus, or the crypts of Lieberkühn, or the glands of the stomach. They are formed by the (1) epithelium lining the parent cyst becoming stratified, and its superficial layers assuming a columnar character. (2) Into this stratified epithelium, papillæ formed of connective tissue spring from the stroma of the ovary, in each of which a loop of vessels is formed. A series of densely clustered villi is thus produced, which are converted into tubular glands by the growth upwards around these bases of the stroma of the ovary. The glands may become compound at their bases by secondary villi arising in them. They may be converted into simple cysts by the closure of their orifices; but more commonly the upward growth of the stroma surpasses that of the villi in which their summits end, and the glands become completely shut off and enclosed in the stroma, forming groups of a very compound form, of tubular structure, lined by a secreting epithelium embedded in the wall of the parent cyst. When distended by further secretion they form the smaller and larger multilocular cysts scattered on the inner wall of the parent cyst. Other modes of cyst formation resulting in dense cystoid masses were traced by the author to these structures.

Class D refers to the cyst found in the cauliflower papillary or dendritic growths which spring from the interior of parent cysts. These growths originate in a number of delicate papillæ growing from a common basis, and uniting to form large masses. They consist of a delicate stroma, derived from that of the parent cyst-wall, a loop of vessels, and a covering of epithelium. The irregularity of their growth causes spaces to be enclosed by them, lined by a secreting epithelium, and which, when completely shut off, become cysts. Various illustrations were given of this process. The author considered that in no case are the secondary cysts in the cauliflower growths of the ovary derived from single epithelium-cells.

The author then referred to the observations of Drs. Pflüger and Billroth on the origin of the Graafian follicles from tubular structures found in the embryonic condition of the ovary; and though not able fully to corroborate all Dr. Pflüger's views from his own observations, he had convinced himself that the Graafian follicles originate in tubular structures. He regarded these cysts as resulting from a renewal in the adult of the early mode of development of the Graafian vesicle with various morbid aberrations from the type of embryonic growth; and thinks they must therefore be placed in the same category with other cystic tumours growing in structures having tubular glands and ducts, especially with those of the mamma, testicle, and thyroid gland. He regarded the cysts mentioned under Class D as presenting essentially the same type, inasmuch as the large papillary and cauliflower masses can only be regarded, similarly to the Haversian fringes of synovial membranes, as everted glandular structures. He had not had any opportunities of examining any multilocular cysts of the ovary containing dermoid structures; but, inasmuch as these had been shown to contain both normal hair follicles and sebaceous and sudoriparous glands,—all of which structures are the frequent seat of cyst for-

mations,—he believed that they will be proved to follow the same laws of growth as the colloid cysts. The author, from chemical examinations of the fluid contents of the cysts, had been led to regard the so-called colloid matter found in them, as the result of alterations depending on the varying conditions of pressure under which they are secreted from the inner surface; and he believed that this matter cannot be considered as the result of any special form of degeneration of the tissue of the ovary.

The method which the author had pursued in studying the development of the cysts of the Classes A C D, had been to make sections in the recent state with a Valentin's knife through various parts of the stroma. The glands of Class C were best displayed by sections made vertically to the inner surface of the cyst-wall. Observations on Classes C and D were much facilitated by hardening the tissues in chromic acid solution of two per cent., and subsequently treating sections made by a sharp razor with liquor of soda and glycerine.

Correspondence.

ON CHLOROFORM ADMINISTRATION IN CONNECTION WITH MEDICAL EDUCATION.

Sir,—As house-surgeon and chloroform administrator to a large provincial hospital, I beg the insertion of a few remarks in our most useful Journal.

Dr. Skinner, in his able letter of the 27th, has, I think, attached too great responsibility to the surgeon in operations under chloroform. I grant that the surgeon should assure himself that the patient is a fit subject to take chloroform; but after that, he must devote his entire energies to the performance of the operation; the rest must, of necessity, be left to the skill of the administrator.

Now, the questions arise: who are fit persons to administer? and how are they to receive the proper instruction? In London, unquestionably, a skilled administrator should be appointed to each hospital, whose *duty* it should be to give instruction to the students in the art of administration. In the provinces, the house-surgeons of the hospitals must necessarily administer chloroform, and a certificate of proficiency to perform that duty should be required before appointment.

At the hospital (one of the most famous in London), of which I was a student, the administration of chloroform was entrusted to a physician, a former student, not of the most amiable or communicative disposition: from him I never learned anything as to the mode or effects of its inhalation; in fact, not one student in a hundred ever had an opportunity of practical instruction in this all important province of medicine, involving the most fearful responsibility, and requiring often the keenest powers of observation and thought.

The education in our medical schools must be to the last degree faulty when, in order to pass examinations, it is considered essential to know botanical terms and microscopical chimeras (very pretty to quibble about), while, at the same time, except to a few in-patient dressers, the proper performance of operations on the living, the dressing of the wound, the administration of chloroform, are left to the eye of a special Providence to direct. Disaster, and its companions, disgrace and ruin, follow; and the anathemas of the public are heaped on the heads of victims to a false system of professional study. Mr. Syme has conferred great benefits on the profession by urging the necessity of a more practical education for students of medicine.

No man of sense would attempt to controvert the necessity of a classical and scientific training for the medical practitioner; at the same time, all must yield that this should oppose no impediment to the acquisition of practical knowledge. Yet it is a notorious fact that the present system of lectures and examinations makes it impossible for the student to pass much time in the wards, or *post mortem* rooms. The consequence is, that the student leaves his hospital full of book learning, but ignorant of that practical work which is not only necessary for his own success, but also for the benefit, nay even the existence, of his patients.

Although I had been a clerk and dresser in London, when appointed to my present post I found myself grossly ignorant of the real practice of the profession; and it was only by great caution and care that I was able to avoid the most shameful and deplorable mistakes. How those fare who have not had the advantages of a resident appointment in a hospital, the cases of professional incapacity that constantly present themselves at its doors sufficiently attest.

Finally, it should be made compulsory for every student to fill the office of in-patient dresser and clerk to a hospital before his diploma be granted; and I am of opinion, that the medical staffs of our schools of medicine neglect an imperative duty in not imparting a more practical knowledge to *all* their pupils.

I am, etc., A Provincial House-Surgeon.

August 31st, 1864.

Medical News.

Apothecaries' Hall. On September 1st, the following Licentiates were admitted:—

Bramhall, Sykes, Clifton
Britton, William Samuel, Acacia Road, St. John's Wood
Grellet, Charles Thomas, Lloyd Street, Lloyd Square
Hickenbotham, James, Birmingham
Hughes, David, Charing Cross Hospital
Powne, Benjamin Lamb, Billingsborough, Lincolnshire
Thursfield, Thomas Greville, Brosely, Salop
Vise, William Foster, Spalding, Lincolnshire

At the same Court, the following passed the first examination:—

Pitcher, Arthur Henry, St. Thomas's Hospital
Rogers, Henry Cripps, St. Bartholomew's Hospital

APPOINTMENTS.

Poor-Law Medical Service.

Barwis, Thomas L. B., Esq., to the Melton Mowbray No. 1, and the Ashfordby Districts of the Melton Mowbray Union.
Dodie, William, Esq., to the Kirkby Thore District of the East Ward Union, Westmoreland.
Foote, Gustavus, Esq., to the Pembridge District of the Kington Union, Herefordshire.
Harrison, R., Esq., to the Ambleside District of the Kendal Union.
Lewis, W. T., Esq., to the Loughton District of the Epping Union.
Lineker, E. H., Esq., to District No. 2 of the Ongar Union, Essex.
Lyster, C. E., M.D., to the Toxteth Park Township Workhouse.
Meacham, Edward, Esq., to the St. George's District of the Township of Manchester.
Morrish, Thomas Fox, Esq., Assistant Medical Officer to the Toxteth Park Township Workhouse.
Thomson, Henry, Esq., to the Bangor Dispensary District of the Newtownards Union, co. Down.
Walker, Robert, M.D., to the East Budleigh District of the St. Thomas's Union, Devon.
Wilkin, John F., Esq., to District No. 4 of the Maidstone Union.

Royal Navy.

Austen, Josiah, Esq., Surgeon, to the *Columbine*.
Bain, Alexander G., Esq., Acting Assistant-Surgeon (additional), to the *Duncan*.
Bradley, James, Esq., Assistant-Surgeon, to the *Caradoc*.
Carmichael, William, M.D., Assistant-Surgeon, to the *Asia*, for temporary service in the *Enchantress*.

CH, Jeremiah A., Esq., Assistant-Surgeon, to the *Indus*.
T, John S., M.D., Assistant-Surgeon, to the *Victory*, for service at aslar Hospital.
IS, William J., Esq., Surgeon (additional), to the *Duncan*.
RE, J. T., Esq., Assistant-Surgeon (additional), to the *Duncan*.
T, C. K., Esq., to be Deputy Inspector-General of Hospitals and sets on the retired list.

UNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—
CE, W., Esq., to be Surgeon 1st Administrative Brigade Caithss-shire A.V.
H, W., M.D., to be Surgeon 1st Aberdeenshire R.V.
LAIR, F. S., Esq., to be Assistant-Surgeon 1st Administrative igade Caithness-shire A.V.
H, J. W. F., M.D., to be Assistant-Surg. 1st Aberdeenshire R.V.

MARRIAGE.

E, William, Esq., Surgeon, Ilkeston, to Mary, eldest daughter of oseph John HORTON, Esq., Birmingham, at Aston, Birmingham, September 5th. No cards.

DEATH.

TIN. On September 4th, at Abingdon, Berks, the wife of *John Martin, Esq.

EQUEST. The late Mr. William Salt, banker, has by will to the Stafford Infirmary, and the Northern pensary, London, each £200.

R. ST. HILAIRE lately died at Rochefort, at 90 s of age. All his life he had been in the navy. ce he was made prisoner by the English, and was ent at Trafalgar as surgeon of the *Achille*.

R. BANTING, of the Obesity Movement notoriety, offered £500 towards erecting a "Middlesex nty Hospital." This donation is a thanksgiving his cure as effected by "Bantingism."

AVENDISH SOCIETY. The volume of Gmelin's *Chetry* is now being issued to the subscribers for 1862. rings the work down as far as bodies containing ty-four atoms of carbon; and it is said that one e volume will complete the work. (*Chem. News.*)

R. STEWART, an Edinburgh University graduate, been made surgeon-general to the Paraguay army er President Lopez. He has several Englishmen ady under him, and has lately been instructed to cure the services of three more English surgeons.

CTING ASSISTANT-SURGEONS. The Adjutant-Gene- informs general officers and officers commanding ôt battalions, that the Duke of Cambridge has de- d that it is not necessary for acting assistant- geons to wear uniform. Officers commanding depôt talions will therefore recognise these gentlemen in performance of their duties, without being in form.

ISMISSED WITH DISGRACE. The following disgrace fallen upon the United States army medical ser- . Brigadier-General W. A. Hammond, Surgeon- neral to the United States, has been dismissed the vice, and for ever disqualified from holding any e of profit or trust under the government of the ited States. The following were among the charges which he was found guilty. "That he corruptly uced the purveyor to buy, on government account, l at an exorbitant price, 7,677 pairs of blankets, ich he had before refused to buy. That the Sur- n-General, well knowing that Wyeth and Brothers l furnished medical supplies inferior in quality, did e the medical purveyor at Philadelphia an order in ting to have constantly on hand hospital supplies all kinds for 200,000 men for six months, and di- ted the medical purveyor to purchase a large ount thereof, including 273,000 dollars' worth, from eth and Brothers."

WESTWARD HO! The *Dublin Medical Press* speaks very irreverently of the "Westward Ho!" movement of the *Lancet*. In it we read: "Under the sensation clap-trap heading of 'Westward Ho!' the *soi-disant* 'leading journal' of the tooth-brush and pomatum interest in England leads a crusade, having for its object the establishment of a wholesome market in diplomas open to all buyers. Some gentlemen have repudiated their allegiance to the King Log at Blackfriars, and presented themselves at the palatial gates of King Stork in Pall Mall. Their demand is that all apothecaries shall become *de facto* and *ex officio* physicians and licentiates of the College without examination. And this is the scheme which the *Lancet* lends its editorial thunders to help! Will the Medical Council recognise and register physicians made wholesale, and qualifications conferred by a president's pen, should the College succumb to the vituperative powers of the *Lancet*."

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE. The eighth annual meeting will be held in York from Thursday the 22nd to the 29th inst. Lord Brougham will preside. Sir Charles Hastings will take the chair of the health department. Since the meeting last year in Edinburgh, an important change has been made by the Council in the arrangement of business at the annual meetings. Special questions have been fixed upon by the standing committees for each department. These questions are each to occupy one day, not more than half the day being given up to the reading of papers thereupon, and the remainder being occupied by discussion. The special questions in the health department are as follows:—1. What are the best means for disposing of the sewage of towns? 2. What are the causes, and what are the means for the prevention, of excessive infant mortality? 3. What is the influence on health of the overcrowding of dwelling houses and workshops? and by what means could such overcrowding be prevented? The two remaining days will be devoted to voluntary papers. The local committees have been for some time past actively engaged in making the necessary preparations, and are anticipating a most successful meeting. The railway companies have liberally offered to take members to York and back at a single fare. An opening sermon by the Archbishop, a working men's meeting, a *conversazione*, and a banquet are among the attractions of the meeting. It is hoped that many members of the medical profession will support Sir Charles Hastings, and take part in discussing the very important questions which will come before the health department.

UTILISATION OF SEWAGE. The select committee appointed by the House of Commons on sewage and its utilisation have published their report. The committee has come to the conclusion that it is not only possible to utilise the sewage of towns, by conveying it, in a liquid state, through mains and pipes to the country, but that such an undertaking may be made to result in pecuniary benefit to the ratepayers of the towns whose sewage is thus utilised. The committee are of opinion that the completion of the outfall sewerage of the metropolis ought to be followed by the adoption of a system which may convert that sewage from a nuisance into a permanent and increasing source of agricultural fertility. The practice of conducting the sewage into the rivers should be discontinued. No efficient artificial method has been discovered to purify, for drinking and culinary purposes, water which has been once infected by town sewage. By no known mechanical or chemical means can such water be more than partially cleansed; it is always liable to putrefy again. Soils, and the roots of grow-

ing plants, have a great and rapid power of abstracting impurities from sewage water, and rendering it again innocuous and free from contamination. They recommend that completely freeing the entire basins of rivers from pollution should be rendered possible by general legislative enactment, including a provision for compelling local boards to render the sewage of their districts innocuous by application to the land for agricultural purposes. The case of the valley of the Thames (where the purification of the river, which has been sought by the expenditure of enormous sums, is, to a considerable extent, counteracted by the increased discharge of sewage from towns higher up the stream) requires special and immediate attention.

THE HOSPITAL CONVENTION. The International Congress, which has been sitting at Geneva with a view to regulate the position of hospitals and wounded in time of war, has terminated its labours; and the following ten resolutions have been adopted and signed, under reserve of ratification, by the representatives of Belgium, Baden, Denmark, Spain, France, Hesse, Italy, the Netherlands, Portugal, Prussia, Switzerland, and Wurtemburg:—"Art. 1. Ambulances and military hospitals are regarded as neutral, and, as such, protected and respected by the belligerents (so long as they contain sick or wounded). The neutrality would cease, should such hospitals have a military guard. 2. All *employés* of the hospital, including the almoners, carriers of the wounded, etc., will enjoy the benefits of this neutrality as long as there are wounded to be attended to. 3. The persons designated in the above article may, even after occupation by the enemy, continue to perform their duties in the hospital or ambulance to which they may be attached, or withdraw to join the division to which they may belong. When their functions shall have ceased, they will be escorted to the enemy's outposts by the army in occupation. 4. As the *matériel* of military hospitals comes under martial law, the persons attached to those hospitals may not, on leaving, take away with them anything except what is their own personal property. Under the same circumstances, however, an ambulance preserves its *matériel*. 5. Inhabitants of the country, who give help to the wounded, are respected and remain free. The generals of the belligerent powers are called upon to forewarn the inhabitants of the call made upon their humanity, and of the neutrality consequent thereupon. Any wounded man taken into a house will be its safeguard. Any inhabitant who has taken in the wounded will not be billeted upon or submitted to war contributions. 6. The wounded or sick are taken care of, no matter to what nation they belong. Those will be sent back to their homes who, after being cured, are deemed incapable of further service. The others may also be sent home, but on the condition of not resuming arms during the war. The escorts on this service are to be respected as neutrals. The commanders-in-chief have the power to hand over to the enemy's outposts the wounded during the combat, when circumstance permit it, and with the consent of both parties. 7. A distinct flag and uniform is adopted for the hospitals, ambulances, and escorts. On all occasions, the national flag must accompany it. A badge may also be allowed to denote a neutral, to be granted only by the military authorities. The flag and badge will bear a red cross on a white ground. 8. The general detail of these regulations will be settled by the commanding officers of the belligerent powers, according to the instructions from their governments." Article 9 calls the attention of other governments to this convention, inviting them to join it. Article 10 states that the ratification of this convention is to take place at Berne within four months, or earlier if possible.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY. ..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE LANCET AND THE MSS.—The remark "breach of faith on the part of its agent or reporter", were the words of Dr. Humphry not ours.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—George May, Esq. (Reading), 5s.; W. H. Moxhay, Esq. (Reading), 5s.; J. Harrinson, Esq. (Reading), 10s.; J. W. Workman, Esq. (Reading), 10s.; T. L. Walford, Esq. (Reading), 5s.; F. Workman, Esq. (Reading), 5s.; W. B. Young, Esq. (Reading), £1:1; James Taylor, Esq. (Wargrave), 10s. 6d.: Joseph Hinton, Esq. (Bath), 10s.

Amount previously announced, £57:1. Received at the *Lancet* office, £3:11.

Erratum in last impression. Read "E. Richardson, Esq. 10s. 6d.", instead of 10s.

I am, etc., ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, September 7th, 1864.

STATISTICS OF OVARIOTOMY.—SIR: In reply to the note of Dr. Routh published at page 290 of your last number, I beg to send you the following statement of the results of *all* my cases of ovariotomy in hospital and private practice.

Hospital.—Cases, 57. Recovered, 40. Died, 17. Mortality per cent., 29.83.

Private.—Cases, 49. Recovered, 30. Died, 19. Mortality per cent., 38.77.

Total.—Cases, 106. Recovered, 70. Died, 36. Mortality per cent., 33.96.

Full details of *all* my hospital cases, except the last successful case, have been already published, and of *all* my private cases up to March 1863. Since then, I have not published any details of private cases (although I have given the results from time to time to different societies and inquirers), because I wished to give them more fully than can be done in the space easily obtained in the journals. But they are now nearly ready for the printer; and I have assured Mr. Churchill that it will not be my fault if my work on the *Diagnosis and Treatment of Diseases of the Ovaries* is not in the service of my professional brethren in November next.

I am, etc., T. SPENCER WELLS.

3, Upper Grosvenor Street, September 3rd, 1864.

COMMUNICATIONS have been received from:—Mr. J. Vose SOLOMON; Mr. J. BLACKBURN; Dr. A. E. SANSOM; Mr. JOHN F. MARTIN; Dr. J. FITZPATRICK; Dr. R. FOWLER; Mr. RICHARD GRIFFIN; Mr. EDDOWES; Dr. R. C. HOLLAND; Mr. T. SPENCER WELLS; Mr. CARTER; Mr. LAWSON; Dr. B. W. RICHARDSON; Dr. BASHAM; Dr. DOWN; and Mr. T. WATKIN WILLIAMS.

BOOKS RECEIVED.

1. Outlines of Surgical Diagnosis. By George H. B. Macleod, M.D. London: 1864.
2. Practical Observations on Diphtheria and Erysipelas. By [illegible] Bell, M.D. London: 1864.

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON TRACHEOTOMY IN DIPHTHERIA.

By George Buchanan, A.M., M.D., Surgeon and Lecturer on Clinical Surgery, Glasgow Royal Infirmary, etc.

The subject to which I desire to draw your attention for a little time is, the Surgical Treatment of Diphtheria in its later stages. The wide-spread prevalence of this disease in many districts, its great fatality, and the inefficacy of *medical* treatment after it has advanced to a certain point, are sufficient inducements for us to consider how far surgical interference is called for in cases which would otherwise end in death.

In the allied affection, attended with plastic exudation into the air-passages—croup—there can be no doubt that, in the suffocative stage, tracheotomy is the only resource, and has proved so valuable in the hands of most practitioners, that it is a recognised proceeding in surgery; the only question in reference to it being, whether the French surgeons do not resort to it too early as a means of treatment, or the British delay too long to afford its performance a fair chance of success. My own opinion is, that there is a median line, towards which our continental *confrères* should recede and we should advance, to place the operation on its proper footing.

While, however, this operation has been long resorted to in croup, it is only recently that it has been introduced and practised in the now more common disease, diphtheria. I do not wish to enter on the medical treatment of this affection at all; for, in truth, my experience is very limited. As I do not engage in general practice, I never see the disease at the outset; and it is only when the medical treatment has been unavailing, that my surgical opinion is called for by the family attendant. But one thing seems obvious to me; that, notwithstanding the most judicious management, many cases advance from bad to worse, until death appears imminent.

Diphtheria is often regarded as a general disease, manifesting itself locally by exudation of albuminous or fibrinous matter on the fauces, just as scarlatina is accompanied by tonsillitis and measles by catarrh. For practical purposes, it seems to me that this affection may be considered as presenting itself in the sthenic or in the asthenic form. In the sthenic variety, there is a certain amount of fever, rarely amounting to that of croup, but simulating an attack of ordinary tonsilitis. Soon a patch of tough white membrane appears on the tonsil, and rapidly spreads around over the whole fauces, and extends into the larynx and trachea. As soon as the exudation has extended into the larynx, the symptoms suddenly assume the character of those of an advanced stage of croup. The crowing respiration, the paroxysmal spasms, the agony of approaching suffocation, the violent tossing and gasping of the sufferer, bear a close resemblance to that most painful of sights to a medical man—a little child, which a few hours ago was in good health and strength, suffocated by a croupy effusion. Up till this time, the patient may have a good pulse, and, in the intervals of the spasm, may sit up and appear comparatively well; at least, in many cases it is so.

In the asthenic form, the constitutional predominate over the local symptoms. There is debility from the very outset—a general *malaise*, unwillingness and sometimes incapacity to swallow food; which latter symptom often is the first indication for the medical man to examine the throat, when he discovers the white patch which pronounces the disease diphtheria. Sometimes the disease proves fatal before the effusion has spread to any great extent; at others, the whole mouth and fauces become covered with exudation, which then spreads to the air-passages. When it does so, the symptoms of suffocation supervene, and the fatal result is hastened.

I have described two typical forms of diphtheria; but it is not often that we find cases so well marked as to be referred at once to either class. It is during the progress of the malady, which may run its course rapidly in a few hours, or may extend over several days or weeks, that one can observe in what way it is likely to prove fatal, if its progress be unchecked. In cases which resist medical treatment, then, death occurs from asthenia, or from apnœa; and it is most important to watch for indications of either result from the very first. But I do not hesitate to affirm that, in a great majority of instances, the immediate cause of death is suffocation by the false membrane. Under such circumstances, tracheotomy is the only resource; and in proof that it is not only warranted, but may be practised with a reasonable expectation of success, I may be permitted to adduce the following examples.

Case I. John M., aged 4, began to complain of sore-throat on the 11th of May, 1863; and on the 13th was visited by Dr. Gray, who at once pronounced the disease to be diphtheria. A white exudation coated the fauces and back of the tongue. Emetics of ipecacuanha were first administered; and subsequently bichromate of potash, and also a gargle of chlorate of potash. Under this treatment, the child got nearly well. On the 20th, however, he complained of pain in the throat, with some difficulty in breathing, which was not relieved by an emetic of ipecacuanha. On the morning of the 21st, there were distinct symptoms of exudation in the larynx and trachea; and the distress in breathing rapidly got worse towards evening. I was called at half-past 10 P.M., and found Drs. Gray and Burns in attendance. The little patient was in great distress, tossing in bed in the agony of obstructed respiration, which was accompanied with hoarse stridor. It was quite plain that suffocation was impending. The gentlemen in attendance had already told the parents that life could not be prolonged beyond an hour or two without surgical interference—a statement in which I fully agreed. I performed the operation with great caution, fearing hæmorrhage from the swollen state of the veins of the neck. One vein, which lay across the seat of incision, was cut and tied; and, when the bleeding had ceased, I opened the trachea, and inserted a double tube. Nothing could be more satisfactory than the instant relief to all the distressing symptoms. Presently the child swallowed a few spoonfuls of milk, and soon fell asleep, breathing quite quietly. A young medical friend took charge of the case during the night; and when I visited, at six next morning, I was rejoiced to find everything going on well. However, I was so anxious that the tube should be properly managed, that I told the case to my students, some of whom kindly volunteered their services; and from the date of the operation, for six days, a medical attendant was by the bedside day

and night. The inner tube became stopped up with a clear viscid secretion at intervals of an hour or two, but was readily extracted and cleaned. Milk and beef-tea in small quantities were given, and easily swallowed. On the sixth day, the secretion had become so scanty and thin, that I removed the tubes, and found that the breathing was quite free, going on through both wound and mouth. Next day, his voice was audible. For a few days, mucus was expelled, during coughing, through the tracheal wound; but by the fourteenth day it was filled up, and the little fellow rapidly regained strength.

Case II. J. A., aged 2 years and 3 months, was attacked with symptoms of diphtheria on the 24th of August, 1863. The family medical attendant treated it by the local application of nitrate of silver, and the administration of chlorate of potash. In two days the disease had subsided, and the patches had disappeared from the throat; whilst the child became quite lively. On the 27th, however, he became worse; and on the 28th the larynx was evidently invaded by the exudation. On the evening of the same day, when I was called, it was quite evident that the disease had made rapid progress. The dyspnœa was urgent, the child tossing about in great uneasiness, and occasionally gasping for breath. There was but one opinion, that, without operation, the patient had only an hour or two to live; and the parents at once consented. I performed tracheotomy, with a most satisfactory result; for in a few minutes the little sufferer was lying quiet, breathing easily, and much relieved in every way. The double cannula-tube was easily introduced and retained. During the night, milk and beef-tea were given, and readily swallowed. On the fifth day, the tube was removed; and breathing went on easily through the wound, and also by the nose and mouth. Nothing untoward occurred; the child made a rapid recovery.

Case III. T. Cleland, aged 6 years, was seized with symptoms of diphtheria on the 7th of February, 1864. Patches of white exudation were visible on the tonsils and fauces. He was treated by inhalation of steam and application of hot fomentations, and the administration of chlorate of potash. On the 11th, the disease had extended to the larynx; and he was then placed under my care. He was removed to a private room in the infirmary, in order that he might be under the immediate care of my assistant and dressers. On admission, at 2 P.M., the respiration was hurried, difficult, and stridulous; face flushed; pulse 120, full. As his strength was good, I ordered an emetic of ipecacuanha, to be followed by repeated doses of iodide of potassium. At 6 P.M., the breathing was more impeded, but pulse still good. The emetic was repeated. At 9 P.M., the dyspnœa was so urgent, and the spasmodic stridor so much increased, that his face became almost livid; and in a paroxysm he sprang out of bed, and appeared on the point of suffocation. I at once decided on performing tracheotomy. The operation was accomplished with great difficulty, owing to his struggles, and the occurrence of several spasms during the manipulation. The neck also was very vascular; and there was considerable hæmorrhage from a distended vein, which I secured before opening the trachea. The tube, however, was safely introduced, when the struggles at once ceased, and breathing became tranquil. A large quantity of tough exudation was coughed and pulled out of the wound, after which the air-passage seemed completely clear of obstruction. On the 12th and 13th, he was remarkably well; but, on the 14th, was feverish, with a white tongue and rapid pulse. On the 15th, the skin was covered with a bright eruption of scarlatina; but he was more comfortable since the eruption appeared. On the 17th, he was progressing favourably; and, as all uneasiness connected with the tube had gone off, it was removed without any bad consequences. On the 25th, the wound was nearly closed, and he could speak and whistle. Next day, he was allowed to go into the ward; but he caught cold, and general anasarca made its appearance. He was again confined to bed, and kept warm with plenty of blankets; and the heat of the room was raised. He got occasional doses of castor oil; and in a few days the anasarca began to disappear. On the 19th of March, he was dismissed cured.

This case is peculiarly interesting, from the occurrence of scarlatina, and then anasarca, to complicate the operation; and would lead me to believe that the existence of scarlatina, at least in a mild form, ought not to be considered a contraindication to tracheotomy, if it supervened on an attack of croup or diphtheria which threatened death by suffocation.

Case IV. W. R., aged 3 years, began to show signs of being ill for some days before medical assistance was called for. On the 18th of March, 1864, Dr. C. was asked to attend, when he found the whole back part of the mouth covered with diphtheritic exudation. The treatment consisted in supporting the system, and using chlorate of potash and dilute mineral acids. He continued to improve a little each day till the 22nd, when the larynx was evidently invaded. Treatment was continued for twenty-four hours longer; but, on the evening of the 23rd, the obstruction to respiration became so great that I was sent for. I found marked evidence of considerable laryngeal and tracheal effusion. The stridor was continuous, and the agony great; the face was cold, and lips bluish. I at once performed tracheotomy, with the most marked relief of all symptoms. The tube was introduced; and, as usual in these cases, the child fell asleep in half an hour after the operation. Everything went on satisfactorily; so that, on the evening of the 27th, I removed the tube, and left him breathing quietly through the wound and mouth. Next morning, he was quite well and lively, playing about the bed, and took breakfast with great relish. About midday, while running about the room, he suddenly felt a choking sensation, and became very pale. Dr. C., who happened to be in the vicinity, was called at once; and, on his arrival, found the child just on the point of death. Indeed, he died in a minute or two afterwards. The wound seemed free from obstruction, and the exudation had disappeared from the fauces altogether. The cause of death was not ascertained.

Case V. J. R., aged 5 years, became ill on the 21st of February, 1864. On the 24th, the medical attendant was called, and found her suffering from diphtheria. Treatment was continued till the 29th, when the larynx was invaded by the exudation. At this time I was asked to see her; and it was apparent from the dyspnœa, stridor, and often recurring spasm, that, without surgical interference, death was at hand. I therefore performed tracheotomy very carefully, when, on introducing the tube, instant relief was afforded to all the distressing symptoms. She continued to progress favourably till the 2nd of March, when the disease appeared to have attacked the lower part of the trachea. Respiration became more and more obstructed till the 4th, when she died.

I need not detain my hearers with accounts of cases. I have given examples of the operation, with favourable and unfavourable results. I have performed tracheotomy now twenty-one times. Seven of the patients recovered, and fourteen died. But it is improper to judge of its value from such limited statistics. In the hands of surgeons who have had larger experience, the mortality seems to be about three out of four operations. Even among the

French, who resort to it much earlier, the average success is one in four. So, then, in the view of numerical statistics, the results are not very encouraging. But I have all along held that this, of all surgical operations, is not to be tested by statistics. It is to be borne in mind, that the disease for which it is practised is a most dangerous one, and, at the stage of obstructed respiration, is almost certainly fatal. The question, then, is: When it has advanced beyond the control of medicine, can the surgeon hold out a hope of life? Has the operation saved the lives of any whose case has become hopeless? That it has done so is beyond doubt; and that it would be still more valuable I have no hesitation in believing, if it were firmly pressed on the parents at a suitable stage.

The operation for strangulated inguinal hernia is a very successful one, if resorted to immediately after a fair trial of the taxis has failed in reducing the tumour; but, if delayed for twelve or twenty-four hours, it becomes a vast deal more dangerous. Do we, therefore, hesitate to give the patient the benefit of our surgical operation, because he will not yield to our representation at the first? And would we be justified in collecting our statistics from those cases in which strangulation has existed longer than we desire?

In diphtheria, the average success of tracheotomy is not the question; but, Can we save lives which would otherwise be lost? When I first performed this operation in diphtheria, I was afraid that the general disease would be a contraindication to its performance; but experience has shown that it may be performed with safety and success, whether the primary disease has been croup or the other. I would not perform it in a case where the vital powers were completely prostrated by the pre-existing malady; in other words, where the patient was dying of asthenia. Approaching suffocation, with fair strength, is the proper indication.

Even in the cases which ultimately proved fatal, the relief to the urgent dyspnœa was sufficient to warrant the operation; and to show that, if performed at the proper time, there is a fair chance of success. It is a very remarkable thing, which I have observed in almost every instance, that as soon as the operation is safely concluded, and the tube lodged in the trachea, the child falls asleep, apparently worn out by the previous restlessness and want of sleep, which has been the most distressing symptom for the twenty-four or forty-eight hours preceding; the tranquillity of the respiration affording a rest to the exhausted powers of the sufferer. When the operation fails to afford permanent relief, death rarely occurs from suffocation, but usually the child dies from exhaustion—a much less painful and harassing mode of death than the fearful struggles which precede death from suffocation. In this lower view, I think the operation is warranted.

But the important question is, Could we not save more lives by performing the operation earlier in the disease? It seems undoubted that, when symptoms of laryngeal complication occur, the hope of recovery is but small. No doubt, isolated cases do occur; but I appeal to the experience of those who have seen a great deal of this disease, whether recovery is not a rare thing after we are satisfied that the exudation has spread into the air-passages. The great object of treatment is to subdue the disease before this has occurred; and in a great majority of cases, under proper management, the symptoms will yield and disappear; but in others it will advance, notwithstanding the most sedulous attention, and prove fatal in a very large number, as the returns of the Registrar-General will show. In an advanced stage, it is not very difficult to assert that the case will certainly prove fatal; and even then, if the tendency to death is by apnœa, more than asthenia, the operation ought to be had recourse to without delay.

But I believe that, in an earlier stage than this, the operation would be much more successful. When the medical treatment has been fairly tried, and failed to arrest the disease; when the respiration begins to be laboured and crowing—the result of exudation into the larynx—then, I think, is the time to operate. In almost all cases, the symptoms become aggravated; and the strength is worn out by the struggle before the relief is given, if not taken at that point. I am convinced that further experience will enable medical men to ascertain a stage at which the operation will be justifiable, with a fair prospect of success.

The operation is one that every practitioner ought to hold himself prepared to undertake on an emergency; still it is one difficult of execution, and to be gone about with great caution. In children, the trachea lies very deep; and the encroachment of the thymus gland from below, and the isthmus of the thyroid from above, leave a very small space in which the incision can with safety be made. The continual movements of the trachea, caused by the obstructed respiration, render it difficult to be reached with safety. The steps of the operation should be proceeded with, quietly, calmly, slowly, and with great regularity. The operator should dissect carefully down to the trachea. Layer after layer of tissue must be carefully divided, and held aside till the rings of the trachea can be seen clearly at the bottom of the wound. Any bleeding must be arrested before the opening is made. When the tracheal rings are fairly exposed, a sharp hook is to be placed at the upper part, and a bistoury plunged firmly into the tube, and made to cut a slit nearly a quarter of an inch long. After the spasm attending the opening has subsided, the tube can usually be easily introduced.

In the after management of the case, the points I have found most essential are, to keep the tube clear; to diffuse some steam through the apartment; and to give milk or beef-tea, and perhaps a little wine or some kind of fluid nourishment. The trachea soon becomes tolerant of the tube, which can be retained five or even seven days, if need be.

ON SOME POINTS IN THE TREATMENT OF DIABETES.

By Francis Edmund Anstie, M.D.

I wish to call the attention of the members of the Association to one or two practical matters in connection with diabetes.

The fact has long been recognised, that great good may be effected by the regular use of a diet in which the nitrogenous matters shall be represented, for the most part, by meat, and the hydrogen and carbon by some form of oily food. It is necessary to avoid the administration of the hydrates of carbon which enter into the composition of any ordinary diet; since, in the peculiar state of the system which distinguishes this disease, unchanged sugar would be left to circulate in such large proportions in the systemic blood, that the latter fluid would infallibly exert an irritant influence on the kidney, and provoke a saccharine diuresis. Hydrogen and carbon must, therefore, be administered in the form of oil or fat rather than of starch or sugar; and it has been stated that it is not only necessary to adopt this kind of regimen; but that the stomachs of diabetic patients easily ac-

cept oleaginous food. I have to notice a class of cases in which this does not take place.

During the last four or five years, I have met with several instances in which sufferers from diabetes not only did not readily accept, but positively loathed almost every kind of oleaginous food which could be proposed to them. This singular loathing of an aliment which is especially necessary for the patient's welfare, reminds us of the similar peculiarity which Dr. Edward Smith has noted in a large proportion of phthisical persons, and which Dr. Radcliffe has observed in the sufferers from neuralgia. It is to be met with firmness and perseverance on the part of the medical attendant, who must try one form of fatty food after another, till he does find one which the patient will take. In several instances, I have tried everything in vain; till, at last, pure cream, taken in pretty large quantity, has fulfilled the desired indication. In another case, the almond biscuits proposed by Dr. Pavy answered very well.

It may seem almost unnecessary to insist on the necessity of this particular portion of the dietary treatment; but, in truth, it is often neglected; and I am anxious to call attention to the evil consequences of such neglect. These are, of course, partly seen in the emaciation of the patient; but by far the most serious effect is the severe nervous distress which soon begins to afflict him. Nearly all these cases are distinguished by a persistent and most troublesome insomnia; and I have now attended several such patients in whom this condition had brought about the habit of opium-eating. The effect of this practice upon diabetic patients is so peculiar, that I think it worth while to relate some of the observations on this point which I have made.

The sufferer from diabetes quickly finds out that a small dose of opium is of no good to him; the fact being that, with the abnormal flow of urine which constantly goes on, a considerable proportion of each dose is quickly eliminated from the system. Accordingly, he quickly advances to the use of a quantity of opium equivalent, perhaps, to from four or five to twenty grains daily. Having found the level of opium-consumption which gives him comfort, he does not necessarily increase the dose any further; but remains, perhaps, stationary for many months, or even years, at the same dose.

Now, this is, doubtless, an unsatisfactory and undesirable condition for a patient to get into; but I wish to direct attention to the fact that where once the habit has been fully formed, and the daily *quantum* of opium is not being increased, the medical attendant incurs much risk if he suddenly cut it off. Under such circumstances, both the nervous distress and the excretion of sugar are apt to increase to an alarming extent.

On the other hand, there is no doubt in my mind that, where the patient has advanced to the use of truly narcotic doses of opium (a fact which may be known by his suffering distinct depression and languor, with great contraction of the pupils, about half an hour after taking a dose), he is putting himself in no little peril. True narcotic or paralysing action has always a tendency to aggravate diabetes; and opium, given in large doses, shares, in this respect, the properties of the anæsthetics, chloroform and ether. Whenever, therefore, the patient informs us that he has carried opium-eating to an extent which involves any depressive effects, we are bound to interfere at once.

The only true substitute for narcotic-stimulants, where a diabetic patient has got to rely upon them, is the speedy adoption of a dietary calculated to improve the special nutrition of the nervous system. It is here that we particularly need to insist upon the use of a high proportion of fatty ingredients in the daily food, and (where the stomach will bear it) the medicinal employment of cod-liver oil. There is one other ingredient of nervous tissue, which is, also, not improbably indicated in these cases—I mean phosphorus. Acting on this idea, I have several times administered this remedy, with decidedly good effect; the form which I have selected is that of the hypophosphite of soda or lime, which I agree with Dr. Radcliffe in believing to be by far the most efficient preparation of phosphorus, where we desire a food-tonic to the nervous system.

I stated that the habit of opium-eating, where the doses have not been carried to a large extent, and have remained stationary for some time, is not to be rashly interfered with; at least, till a greatly improved scale of dietary has been established. The truth appears to be that the instinct of opium-eating, dangerous as it may be, is one which has not unfrequently arrested disease at a critical moment when it was about to assume a new and more serious development. It is well known that this practice has a tendency to arrest commencing phthisis; and there is little doubt that, when not carried to excess, it has had this effect in the case of diabetic patients, who, from defective diet and other sources of depression, would almost infallibly have developed tubercle. The true moral of this observation should be an increased solicitude for that sort of improvement in the nutrition of the patient which would do away with the nervous distress, which is, after all, the central and most threatening feature in the clinical history of diabetes; and in comparison with which, the elimination of sugar and the waste of fatty tissues are but secondary and unimportant matters. If these brief observations have any effect in enforcing this important maxim, the frequent neglect of which has been exemplified by cases which have come under my notice, both in private and in hospital practice, the purpose of this paper will be answered. A considerable proportion of diabetic patients are, I imagine, practically starved; and this notwithstanding a nominally high standard of diet; simply from the need of a more plentiful supply of fat than is administered to them. Mere animal diet, or animal diet *plus* gluten bread and the less starchy vegetables, will not fill the place of this—nor will anything else.

Overcrowding. Dr. S. Gibbon, medical officer of health of the Holborn district, in his Eighth Annual Report just issued, makes the following remarks touching overcrowding in dwelling houses. "Patriots and philanthropists cannot, in my opinion, devote their superfluous means to a better purpose than the erection of suitable dwellings for their poor, and, in this respect, helpless neighbours. Charitable doles, even when given in the form of education and medical relief, are apt to undermine the independence, and, in a degree, demoralise the recipients. These and the like are matters in which the artisan, earning from 15*s.* to 30*s.* or 40*s.* a week can and will, in a measure, help himself; but it is quite out of the question to expect him, in London at least, to erect a suitable dwelling for himself and his family. When I go, as of late I frequently have done, into a small three-roomed house and see seven young families huddled together as closely, and almost as promiscuously as sheep in a fold, I ask myself, what can the church and its agencies, the school, the dispensary, or even the reformatory, do for the members of a household thus educated? The influence of these agencies, excellent as they are in themselves, are as mere palliatives and patchwork compared with the influence of giving to each young couple at least one room, with the appliances necessary for health and cleanliness."

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. Vose Solomon, F.R.C.S.

[*Continued from page* 299.]

Case III. *Chronic (non-inflammatory?) Glaucoma of Left Eye treated by Paracentesis of the Cornea: Vision much Improved. Enucleation of the Right Globe, which was staphylomatous, disorganised, and blind.* (From notes by Mr. Arthur Bracey, House-Surgeon.) Jas. Dixon, aged 42, a plumber, was admitted October 18th, 1863, suffering from chronic glaucoma; and cachexia, a result of asthma, which has been persistent for many years. The right eye has been disorganised by glaucomatous degeneration. It is blind, hard as a stone (T 3); the sclerotic is thin, and bulged in the centre. The disease commenced Christmas 1862, with dimness of vision and iridescent vision. The eye got gradually worse, and in six or eight months ("the following summer") all perception of light was lost. The left showed symptoms of disease soon after the first was affected. The vision was dull; a halo surrounded a candle-flame; and, on dark afternoons, he was practically blind, all objects appearing as shadows only. The tension was great (T 2½). The left optic disc was of a slate or grey colour; the sclero-choroid foramen was much widened out; cupping was not apparent; but there was a deep shadow on the disc. The retinal veins were large, more especially the upper branch; the arteries were very small. He could not see to read or write. The temporal field of vision was nine inches.

On October 24th and November 17th, paracentesis was performed; and on the 24th, the patient consented to the removal of the right globe. Neither chloroform nor ether was administered, in consequence of the general emphysema of the lungs.

Dec. 1st. He read minion type (Jaeger's No. 4). The patient attributed his improvement to the removal of the disorganised eye. He read and wrote for his amusement.

Dec. 18th. Paracentesis of the cornea was performed.

Dec. 20th. There was much tension.

Dec. 24th. He read pearl type (Jaeger's No. 2) with ease.

Jan. 15th, 1864. Tension was reduced to 1. He read No. 2, and, with a convex glass of 16″, brilliant type (or Jaeger's No. 1). The lateral field of vision on the temporal side was more than three feet; on the nasal side, it was eleven inches. He complained of a musca interfering with the field of vision.

Feb. 2nd. The tension had increased the last few days. The musca, which was of the size of a small fly, was now, he said, as big as a butterfly. He read No. 2, and No. 1 with a convex glass. When standing at a distance of eighteen inches from the patient's eye, the nasal field measured fourteen inches, and the temporal more than three feet.

Feb. 15th. He read, unaided by glasses, No. 1 imperfectly; No. 2 with facility.

May 13th. Tension is as on admission; viz., T 2½. The field of vision is the same as on February 2nd. With a thirty-inch double convex, he reads brilliant type (No. 1) without difficulty. Although considerable attention has been given to his asthma, and he has been taken into the hospital from time to time for the advantages of temperature and diet, etc., his general appearance is as shattered as on his first admission.

This man, with two cases in which iridectomy had been performed, was presented to the Midland Medical Society.

Case IV. *Sympathetic Internal Ophthalmia, with Glaucomoid Tension (T 2½). Intraocular Myotomy, followed by Cure.* T. B., a brass-founder, aged 58, had the left eye destroyed by a traumatic ophthalmitis, which excited a sympathetic choroido-iritis in the right. The disorganised globe was enucleated on July 9th, 1861.

July 23rd. The right eye was very tense (T 2½), but not of stony hardness. He could not distinguish features, or see to cut his own food. The iris responded freely to atropine. Under the ophthalmoscope, the lens-capsule exhibited a granular and speckled appearance from exudation into its intracapsular cells; the vitreous humour was too turbid to admit of the fundus being seen.

Intraocular myotomy was at once performed; and, in seven days afterwards (July 30th), the patient read small pica (Jaeger's No. 8) with a sixteen-inch convex glass. In two days later (August 2nd), he was submitted again to an ophthalmoscopic examination, when the vitreous humour was found clear, and the optic disc and retinal circulation were readily focused. The lens-capsule had still a granular aspect, although perhaps less so than before the operation. On the 9th of August, the patient, with the aid of the spectacles which it had been his habit to wear for the last twelve months, read bourgeois type (Jaeger's No. 4).

Among the early effects of the treatment was a restoration of the natural elasticity of the globe, which has, I believe, proved permanent. At the end of August, the man resumed his work.

It is curious that, after the intraocular myotomy, his old spectacles occasioned no inconvenience whatever, presenting, in this respect, one of the several paradoxes which meet investigators of optical accommodation.

In the following case, the state of the optical accommodation, before and after section of the ciliary structures, has been noted.

Case V. *Glaucomoid Tension (T 2½) of the Right Eye; Intraocular Myotomy; Cure. Synechia Posterior of the Left. Iridectomy; Cure. State of Accommodation and Vision before and after Operation.* Emma B., aged 39, was admitted with subacute corneitis and irido-choroiditis (specific) of the right eye, on February 28th, 1862. In the left were numerous and broad adhesions of the iris to the lens (synechia posterior), but no inflammation. She was suffering, at the time of her admission, from severe ptyalism and great physical weakness. The right eye had been diseased since two weeks after Christmas 1861; and the left, two weeks before. After the employment of tonics and chlorate of potash, with residence in a pure air, she could read, on May 23rd, Jaeger's No. 12, or great primer, with either eye; nothing smaller. She was highly presbyopic. The right globe was very tense (T 2½); and the ophthalmoscope showed the vitreous body to be diffusely turbid, and the vessels of the retina very minute. *Intraocular myotomy* was performed on May 31st, with a view to reduce tension, and to improve the state of the vitreous body, and the circulation of the choroid and retina. A small bit of the left iris was removed in an outward and downward direction, so as to restore the communication be-

tween the two chambers to a more physiological condition.

In six days (June 6th), the tension of the right was normal, and brilliant type (Jaeger's No. 1) read by it at seven inches. No. 4 (Jaeger's) was the smallest type read by the left. No. 12 (great primer) was now comfortably read at twelve inches instead of twenty-one, indicating an increase of the curve of the cornea.

June 18th. The limits of distinct vision were, for No. 1, six and eleven inches respectively; for small pica (Jaeger's No. 8), five inches and twenty-one respectively. With the right eye, which was the best, a fine needle could be threaded. Features were clear at a normal distance.

I have not heard of this patient since the end of 1862, at which date no deterioration had taken place in her visual power. There was no relapse of tension when she last was seen.

[*To be continued.*]

Transactions of Branches.

MIDLAND BRANCH.

PRESIDENT'S ADDRESS.

By W. H. Ransom, M.D., Nottingham.

[*Delivered at Nottingham, June 23rd, 1864.*]

Gentlemen,—Let me first express my thanks for the undeserved honour which has been conferred upon me by placing me here, and next entreat your forbearance with my shortcomings. When, in accordance with the custom on these occasions, I had to prepare an address, I soon found that a discursive *résumé* would be uncongenial; I, therefore, ventured to introduce an innovation, and now offer to you instead, a communication upon a subject of some interest in clinical medicine. I trust that, by so doing, I may give satisfaction to many of my hearers; but should any regret this change of a previous custom, I throw myself on their mercy.

The subject which I have selected to introduce to your notice is that of Diphtheria; a malady which, although not a new one to the world, has recently come upon us in an epidemic form, after so long an absence as to be new to the experience of the present generation of medical men in this country. I purpose to illustrate the malady by relating some of the cases which have come under my notice in this part of England; and to discuss some of the points of interest which those cases may raise, relative to its pathology and treatment.

The first case which I saw, and it was, I think, the first which occurred in this district, was in the spring of 1857. A young lady, of about 15 years of age, residing under conditions eminently conducive to health, in a detached house, and not having had any discoverable communication with persons who had had a similar affection, was attacked with tonsillitis. The disease was soon characterised by white patches, or false membrane, fœtor of breath, enlarged cervical glands, general subcutaneous swelling of the neck, and febrile disturbance of a grave kind. Swallowing was difficult, painful, and often followed by coughing. The breathing became impeded; the signs and symptoms of implication of the glottis and larynx became marked; and the danger of immediate death was so great, that recourse was had to tracheotomy. It seemed to afford only a brief respite to the suffering from impending suffocation, and she passed away.

In this case, the early symptoms were not such as to excite alarm; and, there not then being any reason to suspect the serious nature of the malady, she was not visited for six days after the first indications of sore-throat. During that time, great progress had been made; and, when the fauces were examined, the greyish-white false membrane covered the whole of the visible interior of the throat. This insidious character of the disease has been noticed by many observers. A fuller description, as seen later on in the epidemic, is given in the following cases.

Case I. Georgina Hill, aged 18, was admitted into the hospital on April 28th, 1858, with diphtheria.

History. The only important fact was, that she had had scarlet fever.

The *present illness* began three days before admission, with soreness of throat and some sickly feeling, not preceded by or accompanied with chills, rigors, or decided fever. There had been no known communication with other cases of diphtheria.

Present State. April 29th. She was a healthy looking girl, complaining of slight sore-throat. She was quite collected and calm; swallowed a good draught, but coughed a little after it sometimes. She spoke with difficulty; the voice was altered, but not hoarse. There was moderate swelling of the neck about the angles of the jaws; some fœtor of the breath. In the mouth were seen white patches here and there upon the gums, which were swollen. There was great swelling of the soft palate and tonsils, which were partially covered by a greyish white false membrane. There was a dark patch in the centre of the hard palate, which, together with the lateral swelling and the natural narrowness of her mouth, reminded one of a split palate. Pulse 144; skin moist and warm. Bowels freely open; urine depositing lithates. She was given bark and ammonia, and the following gargle.

℞ Sodæ biboratis gr. 60; potassæ chloratis gr. 180; acidi hydrochloric. dil. ʒiss; mellis ʒi; aquæ ad ʒviii. M. Fiat gargarisma.

To be frequently used.

In the evening, she was no better; the throat more swollen. It became evident that, in the ordinary way of gargling, a very small part of the inflamed throat was reached by the gargle. She was, therefore, directed to drink a portion each time she gargled, in the hope that by this method a local action might be obtained as far as the disease extended.

April 30th. She passed a restless night; rambled a little, but only while dozing. She thought herself to-day a little better. The breathing was noisy and pharyngeal, not at all croupy. Irritable cough came on every now and then, apparently from the secretions of the inflamed pharynx trickling down and irritating the glottis. This cough was worse when she lay on her back. There was less swelling of the soft palate. There was commencing separation of the membranous deposit. The posterior wall of the pharynx was visible, partially covered by false membrane. Bowels not open. Pulse 120. She was directed to use the gargle every half hour, and to swallow one tablespoonful each time.

May 1. She had some delirium at times, even when waking. There was less swelling in the neck. She swallowed pretty well; and said she felt better. Pharyngeal respiration was not so noisy. She had had a little puriform discharge from the nostrils. There was less swelling internally; and one could see well into the pharynx, which was less covered by false membrane, as also the palate and tonsils. She coughed less after drinking. Bowels open; appetite returning. Pulse 134.

May 2nd. For twelve hours after the last visit, the delirium continued with hallucinations; not frightful, but annoying, visions beset her and made her restless, but neither unhappy nor violent. She was or-

dered to diminish the quantity of the gargle, and was given a little more wine. She passed a better night, and to-day was better in every way; swallowed and breathed better, coughed less. The inside of the throat was red, and rapidly cleaning. There was slight puriform discharge from one ear; none from nostrils. Pulse 120.

May 5th. She continued to improve. Pulse 84. She was ordered to have chop and light pudding.

May 22nd. She was convalescent, and made an out-patient.

Case II. George Hammond, aged 11, was admitted into the hospital on Dec. 17th, 1858. The disease commenced four days previously, with pain in swallowing, without prior chills or febrile symptoms. The pain increased; swelling appeared in the neck; and then he became feverish. He had redness and slight swelling of the whole fauces; a whitish false membrane lined the pharynx; and a patch was on the uvula. The layer was not thick; but the patches were large. The voice was but little better than a whisper, and tended to wheeze. The breathing was quiet. He swallowed fluids very well, and the last drops did not cause cough. He could not swallow solids. Pulse 132. He was ordered good fluid diet, and the gargle of chlorate of potash, etc.—a teaspoonful to be swallowed every half hour. A portion of the white false membrane was scraped off and examined microscopically. It consisted in the main of molecular fibrine, interspersed with groups of pus-like corpuscles, some scaly epithelium, and a little blood. There were no spores like those met with in aphtha.

December 18th. He was better. The false membrane had not extended, and seemed a little thinner and softer.

December 19th. The general redness and swelling of the fauces were much less; the false membrane much less extended. Skin cool. Pulse 96.

December 20th. He was better. Small separate white patches were seen on each side of the base of the uvula, each surrounded by a red border. The fauces and pharynx were nearly free from deposit. Two or three little white patches were seen on the lower gums, and one or two smaller still upon the tip of the tongue. The white patches from the gums were examined microscopically, and consisted of scaly epithelium; a thick layer rendered opaque by molecular matter in or upon the cells; also, numerous freely moving vibriones, and the molecular matrix in which these arise. There were no spores or filaments comparable to oïdium. He had no febrile heat. Pulse 84. He asked for bread. He coughed in the night somewhat, and had now a little pain about the hyoid bone; yet the voice was not much amiss; the breathing was easy, and free from laryngeal quality. The urine was alkaline, not albuminous. He was ordered to have the mixture every hour only; to take two drachms of castor-oil; and was allowed to have bread.

December 21st. He coughed five or six times in the night, violently, and without expectoration. This cough was not excited by swallowing. The voice sounded normal, and the breathing not laryngeal. He swallowed well; asked for meat, and was allowed it. He was ordered to take the mixture every half hour by day and every two hours by night.

December 22nd. He had a good night, without cough. There still continued a patch or two of white membrane about the base of the uvula; and this, when he retched, was seen to be continuous with a thicker similar layer behind the soft palate. As this part was not touched by the medicine while swallowing, he was directed to continue it every two hours, and to have some poured down the nostril, using this route alternately with the mouth, in order that the mixture might come into contact with the patches behind the uvula.

December 24th. Although the patches above described about the back of the velum and base of the uvula had remained almost stationary for two or three days, yet, within twelve hours of the use of the mixture by the nostril, a very decided amendment was visible. To-day, the throat was nearly well, and the patient felt able to do any ordinary duties. The medicine was omitted.

He was made an out-patient on the 28th; seen occasionally up to February 18th, 1859; and then discharged cured; having never suffered from any secondary paralytic affection.

The following case illustrates a more severe variety of the disease.

Case III. Matilda T., aged 8 years. The illness began without traceable cause on January 15th, 1859, with chills, followed on the next day by feverishness and a sore-throat.

When seen, on January 17th, the tonsils were very red and much swollen; and upon them were patches of milk-white false membrane. There were moderate tenderness and swelling in the neck; the fever was not great.

She was treated with the chlorate of potash and hydrochloric acid mixture before mentioned (two teaspoonsful every half hour).

In this case, there was an unusual pain in swallowing, felt principally about the level of the hyoid bone; and, this being excited more by the mixture than by anything else, it was never so freely and persistently taken as I wished, although, by great perseverance, several bottles were swallowed. During the next three days, the fever increased, and was marked by intense restlessness and some delirium with visions. The pain excited by attempts to swallow increased, until she refused everything on the 21st. At this time, the white deposit had spread, so as to form a continuous covering for the fauces and pharynx as far as I could see; it was, however, always pulpy. She seemed worn out and sleepy; there was a copious puriform discharge from the nostrils and noisy pharyngeal rattle, but no true laryngeal or croupy breathing, voice, or cough. For twelve hours, she took nothing; she slept a little, and then swallowed a little nourishment, which throughout consisted principally of milk. Swallowing was still intensely painful; she longed to drink, but dared not. She took some chlorate of potash dissolved in milk without other medicine, and a little tincture of sesquichloride of iron. She began to amend soon afterwards. Throughout, there was no fœtor, and but little external swelling. The pain gradually diminished; the discharge from the nostrils and mouth became less; she raised a few soft bits of false membrane, consisting, in the main, of exudation-corpuscles and epithelium, with spores like oïdium albicans. By the 31st, she was convalescent. The urine during the first few days only was slightly albuminous.

A week or so after convalescence, she had a slight relapse of feverishness; the face had a blank look, and the eyes stared and squinted a little. She recovered without any more decided paralysis, under the continued use of tincture of sesquichloride of iron. The urine was again tested for albumen during the relapse, without finding any.

The next two cases are given to illustrate a very mild form, which seems to recover under any or no treatment.

Case IV. John Harrison, aged 62, after having been for three weeks in the hospital for a surgical affection requiring operation, was doing well until February 17th, 1859. He then began to have sore-

throat, with slight tenderness externally, and redness and swelling internally of limited amount; there were several spots of whitish deposit scattered over the fauces and pharynx. He was treated by a gargle of alum and dilute sulphuric acid, with simple saline mixture. Four days later, the white patches were gone, and the throat nearly well. He said that he never had scarlet fever, and that sore throats were not prevalent in the village from which he came.

In this case, the false membrane, examined by the microscope, consisted of numerous pus-like corpuscles, with a little molecular matter and numerous scaly epithelium-cells; also many growing spores resembling oïdium, but no jointed filaments.

Case v. Catherine Clews, aged 14, after having been in the hospital one month with hip-joint disease, and while doing well as far as the surgical malady was concerned, began on February 14th, 1859, to have sore-throat. Whitish false membranes rapidly formed, so as to cover the fauces and pharynx as far as one could see. The swelling both inside and out was considerable, and the pain severe. She was treated by the mixture of chlorate of potash and dilute hydrochloric acid, which was used also as gargle, and by a mixture containing tincture of sesquichloride of iron and dilute hydrochloric acid. She got nearly well in four days, and by that time the white false membrane had disappeared, and there remained only a little tenderness and swelling externally. She had never had scarlet fever. There was no rash.

The following are cases of the paralytic sequelæ of diphtheria.

Case vi. Richard M., aged 34, groom, was admitted into the hospital August 10th, 1858, having suffered two months previously from a sore-throat, with pain in swallowing and hoarseness of voice. The wife saw patches of a white colour on his tonsils, and she herself spat up "bits of white skin," having had the sore-throat at the same time. One child suffered similarly at the same time; the two others escaped (these details are mentioned to shew that he had had diphtheria).

August 10th, 1858. At the date of admission, he had difficulty in swallowing, especially fluids, which excited cough. The voice was hoarse and nasal. He had some pain in the abdomen going through to the back, without tenderness. His eyes were staring; face pale. He was very feeble and somewhat agitated; bowels open; appetite good, even craving. Nothing of note was observed on examining the throat. At this date, I was not familiar with this singular form of palsy. He was ordered to take fifteen minims of the syrup of iodide of iron three times a day; to have compound iodine ointment applied to the neck; and solution of nitrate of silver (ten grains to an ounce) on a probang to the pharynx daily.

August 19th. There was no material change. The œsophagus was explored by a bougie in consequence of a sense of obstruction he complained of; but none was met with. Violent spasmodic cough was excited, and a suffocative sensation, which also was excited after each use of the caustic solution (it seemed as if the glottis did not close as the probang bearing the caustic solution approached, and hence some of the fluid entered it). The caustic solution was ordered to be omitted, and a gargle of chlorate of potash (half an ounce to twelve ounces of water) was given instead. After this, the power of swallowing gradually improved.

August 21st. He complained much of numbness in the hands, feet, and head, which had increased gradually since it began; as had also the epigastric and dorsal pain; for which, on September 5th, a blister was applied with benefit.

September 8th. He was worse as to the weakness and numbness of the extremites. Silk between his fingers was mistaken for paper, his eyes being shut; and slight touches upon his legs and toes were unfelt. Painful sensations were distinct enough. He fell if he attempted to walk, and turned in bed with the greatest difficulty. Vision was impaired, a mist being before the eyes. His mental faculties were unimpaired. He swallowed much better, but warm things still with difficulty. His voice was shaky and cracked. A blister was ordered to be applied to the nape of the neck; and an ounce of the following mixture to be taken three times a day.

℞ Potassii iodidi ʒi; decoct. cinchon. ℥xij.

September 14th. The numbness in the right hand and arm was less than in the left. Slight touches on the pulps of the fingers were not felt. When blindfolded, he was quite unable to move promptly and direct accurately the hands or index fingers. He could not bring them together without a great effort, even when looking at them; thus he had a loss of muscular sense as well as of muscular power. Tactile sensibility was perfect on the head, face, neck, and shoulders, and on the arms as low as the insertion of the coraco-brachialis muscle; below that point, touch was impaired gradually, more so downwards. On the anterior surface of the trunk, the sense of touch was normal as low as the xiphoid cartilage; then gradually more impaired downwards to the feet. On the posterior surface of the trunk, sensation was normal as low down as the crests of the ilia; but below that part, gradually more impaired downwards. From the calf downwards, the anterior and posterior surfaces seemed alike. The extremities, both upper and lower, were cold, especially where the sensation was most impaired. There was some tenderness on percussion over the spines of the seventh, eighth, and ninth dorsal vertebræ, and also about the middle of the cervical region, where he had often a pain, relieved by stooping the head. Deglutition, speech, and vision, were better. The skin was moist all over. Pulse 84; urine normal; bowels open. He was ordered to have a blister between the shoulders; and two ounces of wine daily.

September 23rd. The feet and legs were better as to sensation and motion; the arms and hands no better. There were tenderness and a little pain about the ends of the fingers, just under the nails, the matrix of which and the pulps of the fingers were red, although he still could not feel a moderate touch on them. He had occasional twitchings in both hands and arms; a slight rigidity of the fingers and inability to extend them. The mixture was omitted.

℞ Ferri et strychniæ citratis gr. v.; aquæ ʒi. M. Fiat haustus.

To be taken three times a day.

September 25th. The paralysis and anæsthesia were worse in the legs and arms. He had difficulty in passing urine; and was obliged to force and strain; there was a little pain above the pubes. He had some occasional dyspnœa with tendency to sigh.

September 27th. The bowels had not been open for three days. He was ordered to take ten grains of compound colocynth pill immediately; and to have an enema in the evening.

September 30th. In the course of last night, the right arm became worse, both as to sensation and motion, so that he could not lift it. The bowels were still obstinate. He was ordered to have every night ten grains of compound colocynth pill; to omit the iron and strychnia, and to recur to the mixture of cinchona and iodide of potassium.

October 2nd. The bowels could not be made to act without an injection. He was ordered to continue the medicine and pills, and have an injection daily.

October 9th. He was worse in the upper extremi-

ties; unable to move either hand to the head. Anæsthesia was not so much increased as the paralysis; he could feel a few fine hairs placed between his finger and thumb. The loss of sensation was greatest in the hands; but another spot of greatest numbness was found near the right elbow. In the lower extremities, the anæsthesia was greatest also at the distal parts. He used his legs vigorously in bed, and walked with assistance. He had a sore feeling at the soles of the feet, with acute pain and prickling when touched. There was a similar state in the palms of the hands and between the fingers, so that gently moving the hand caused him to cry out. There was no visible redness or other change in the parts thus exquisitely sensitive to pain and insensible to tactile impressions. The use of the word "anæsthesia" for this state of things may reasonably be criticised.

October 20th. He was better altogether; stronger, had more colour, was stouter, and moved the arms more vigorously, especially the left, the hands remaining flexed and rigid. The tactile sensibility was no better. The pulps of his fingers were touched, decidedly without his feeling it; but an attempt to seize them with but moderate firmness caused unendurable pain, especially near the ends of the nails, where also he had pain without being touched. His fingers could not be straightened from the intensity of the pain. The legs were stronger; but in the feet he had the same loss of tactile sensibility, and the same pain and tenderness as in the hands. Respiration, speech, and deglutition, were nearly normal. The medicine was omitted; and he was ordered to have ten minims of tincture of sesquichloride of iron three times a day.

October 25th. He was much better.

October 30th. He was much better; grasped and felt small objects.

November 15th. He was much better, and walked about well. He now felt a single hair between the finger and thumb, although he had a sensation in the hands which he called numbness. This single hair was not easily felt by a healthy person. There was slight swelling of the legs and feet. The urine was not albuminous.

November 27th. He was much better. There was still some swelling of the legs, but they did not pit on pressure. It appeared to be rather in the muscles of the leg, which were tender on pressure; and a somewhat similar state was found in one arm. He was made an out-patient, and recovered by slow degrees.

The son of this patient was in the hospital at the same time with very similar symptoms, and nearly as severe, after a slight diphtheria. He was discharged cured, able to feel a single fine hair, on October 30th, *i.e.*, after eighty-one days' treatment, for the first month with syrup of iodide of iron, and for the rest of the time with tincture of sesquichloride of iron. He also had one blister applied to the nape of the neck.

The following case is remarkable for its extreme severity.

Case vii. William P., aged 14. The only important fact in his history was, that he had fits in childhood. His present illness began September 21st, 1859, with slight swelling of the neck, followed by pain in swallowing. The inside of the throat was described as ulcerated in "rags"; and he spat up "bits of white skin." He was treated by the insufflation of powdered alum and other household remedies, without consulting a medical man. He went out daily, and in ten days was convalescent. After an interval of ten days, he began to have a nasal intonation of the voice. Four days later, there was difficulty in swallowing soft things, while hard things were easier to get down. There was failure of the legs in walking, and a blank stare about the eyes. Four days later, after a walk, he had a fit of some kind, ushered in by a sensation as of stoppage of the heart's action and loss of sight; he was for some minutes unconscious, and the limbs were stiff. During the same day, he had several repetitions of the initiatory stage of the fit. During the same night there came on a sensation of tingling and numbness in the hands; and gradually after this, he partially lost the tactile sensibility of the hands and feet, as well as the motor power of the trunk and extremities.

November 1st. He moved about the room with difficulty. The paralysis above mentioned was irregularly distributed in the parts affected. The pharynx and soft palate failed to act, so that he could not swallow solids; and fluids for the most part returned by the nose and caused cough. He could not clear the throat; hence there remained in the pharynx a great deal of mucus, evidenced by the rale. He had an irritable cough, but no physical sign of mischief in the thorax. He squinted, and saw double; near objects were more indistinct than distant ones. The muscles which support the spine were much weakened; but those which effect inspiration seemed natural. The mental faculties were clear. The treatment consisted of fluid nourishment, and ten minims of tincture of the sesquichloride of iron every four hours.

After this date he gradually got worse. The palsy increased to an alarming degree. From the difficulty in swallowing, the liability of the glottis to be irritated by the pharyngeal mucus and by the drinks, increased so as to become itself a source of danger.

At the worst period of the illness (about November 18th), he took, in forty-eight hours only, about four ounces of fluid, swallowed by a few drops at a time. For one month the voice was without sound; the movements of the lips alone indicated his wishes. The hands lay almost powerless, and the legs quite so, so that on one occasion his foot was burned by a hot bottle, he being unable either to move the foot or call for aid. The trunk was as powerless as the arms; and the head fell about like that of an infant. Once in this state he was nearly suffocated, by a slight sickness coming on as he lay on his back, when, he being unable either to turn or to empty the mouth, or obtain help, a little fluid passed into the larynx, excited a spasmodic cough, and gave rise to a local inflammation which was not subdued for several days. The muscular sense was entirely lost, at least in parts; so that on one occasion, his arm being above his head while he believed it to be at his side, he moved it by a great effort, and was quite startled by its appearing before his eyes from an unexpected direction. The tactile sensibility was never quite lost in the parts affected, but was much impaired; the fingers had the feeling, when touching an object, as if he had a thick glove on. The sensibility to painful impressions was excessive; he could not bear to be turned in bed without calling out. The coats of the bowels seemed partly paralysed; no aperients acted without the help of a clyster. The heart throughout acted weakly and irregularly. The hearing was too acute. Micturition and respiration were well performed. By slow degrees he got better; the voice returned; the swallowing improved; and the power of moving was restored; but it was not until the new year that he was brought downstairs; and three months more elapsed before he was well. He continued to take the iron, doubling the dose after the first few days.

At the time of my first seeing the case, the patient and those around him made no mention of the previous attack of sore-throat, until particular inquiries were made, to which I was led by observing the cha-

racter of the paralysis. This point is important to notice, for it not unfrequently happens; and we are called on then to treat a sequel, the origin of which, having been slight, has been forgotten. We may then, unless acquainted with the distinctive characters of this form of palsy, mistake the case for disease of the nervous centres. Thus, in the spring of 1860, I saw a case of suspected cerebral disease. A child was observed to stagger in walking, falter in speech, squint, and stare in a peculiar blank manner. The intellectual faculties were probably not impaired; but the shyness of the little sufferer made it difficult to affirm or deny this point. It was, however, made out that the loss of motor power was accompanied by numbness and tingling; that it varied much in extent and intensity; was patchy as to its distribution; and in no way defined as to its limits in the way we know to occur in the various diseases of the brain or spinal cord. Then a careful inquiry elicited the information, that some weeks previously the child had had a sore-throat; that such sore-throats had been epidemic in the village; and that a medical man who had seen these cases declared them to be diphtheria. A hopeful prognosis was given. Tincture of the sesquichloride of iron was prescribed, and recovery took place very soon after.

I cannot forbear to mention briefly another case, which was most probably one of diphtheritic paralysis. A young and otherwise healthy man was under my care in the hospital for two months with aphonia, which seemed causeless. The laryngoscope shewed no local mischief, except a very large wide and rather insensible glottis. At length he was questioned as to diphtheria; and it came out that he had suffered from a sore-throat which had been epidemic. He was given the tincture of the muriate of iron, and soon quite recovered.

Case viii. Eliza Swindon, aged 30, was admitted to the hospital January 8th, 1859, complaining of a difficulty of swallowing. Her present illness began eleven weeks before admission with rigors, general pains, and headache. The next day the throat seemed "made up." For two or three days she had external swelling in the neck and raised fœtid slime, and some pieces of "white skin." A few days later, fluids returned by the nose while drinking. On December 6th, she was at my house, and complained of a sense of obstruction to the passage of food, about the lower border of the pharynx. Convulsive cough was excited by attempts to swallow. The voice had the peculiar nasal quality. Nothing of moment was seen on examining the interior of the throat; and at this time she had no paralytic symptoms in the extremities. She was then treated by tincture of sesquichloride of iron and the gargle of chlorate of potash.

December 26th. The report says: "able to swallow better; voice improved, but not able to drink warm fluids at all; cold she manages better." There were tingling and numbness of feet and hands, and weakness of the legs in walking, and of the hands in holding, so that heavy articles dropped from the grasp. She spat in a morning thick whitish slime, which, examined by the microscope, consisted of flakes of semi-solid muco-pus, *i.e.*, cohering pus-corpuscles in a scanty matrix resembling mucus; these were suspended in a more fluid clear viscid mucus. She was directed to continue the sesquichloride of iron, and to omit the gargle.

January 8th. She could swallow solids or fluids pretty well, and looked well. The mucous membrane lining the fauces and pharynx was rather too red, but not otherwise abnormal. The epiglottis was easily visible, rather injected and swollen, and covered with a thick creamy slime. Her voice was weak, not hoarse. She could drink cold things well; warm things caused cough. She had some sensation of numbness in the extremities, but thought the power of movement was quite natural. The urine was not albuminous; it was alkaline in reaction. She was ordered to continue the tincture of sesquichloride of iron, and to have the pharynx touched once daily with a solution of nitrate of silver, of ten grains to an ounce of water.

January 22. She was much better; swallowed hot and cold things equally well. The voice was a little cracked and hoarse. Some creamy slime was seen trickling from the posterior nares; and she had bled a little from the nose. There was some slight remnant of anæsthesia in the hands.

In this case the application of the caustic solution did not excite the same violent convulsive cough and suffocation which it had done in Case vi.

February 8th. She was discharged cured.

This patient, when first she applied for relief, complained of symptoms which suggested rather a stricture of the gullet with spasm, than paralysis. The coexistence of spasm of neighbouring muscular structure, with paralysis of the pharyngeal muscles, is not uncommon in these cases; and these symptoms are the more apt to mislead, as some bloody mucus may be raised, and the patient gives, as in this case, no history of previous diphtheria, unless in answer to special inquiries.

Case ix. Ruth H., aged 21, was admitted into the General Hospital, Nottingham, June 8th, 1858, having had diphtheria, which had commenced six weeks previously, and in which attack I had seen her in consultation. For one week the disease had been severe; after which she gradually improved, but the power of swallowing never became quite right. For fourteen days before admission she had cough on drinking, with a sensation as if something were sticking in her throat at all times.

June 8th, 1858. At the date of admission, she could scarcely swallow anything, being in this respect much worse than she had been after the first week of the illness. Solids seemed to stick; and fluids returned through the nose, giving rise to violent coughing. On inspection, I saw nothing to account for these symptoms; and doubtless overlooked the immobility of the soft palate. There was some swelling of the glands of the neck still remaining; but it was not clear that a part of this was not of ancient date. A probang met with slight obstruction at the lower border of the pharynx; and the discharge upon it was muco-pus streaked with blood.

She was treated with iodine to the neck externally; and a solution of nitrate of silver upon a probang was applied to the outlet of the pharynx every other day; two grains of quinine were taken three times a day.

Fourteen days later, she could swallow solids or fluids without difficulty. She was observed for a month longer, and then discharged cured.

It may be, that in this case, and in the previous one, there was no remaining superficial inflammation of the mucous membrane of the pharynx and posterior nares, other than was excited by the violent convulsive efforts which followed attempts to swallow; still the fact is of some interest, that exudation, which could only have been the result of some inflammation, was met with in both cases, both from the pharynx near its lowest border, and also trickling down from the posterior nares. It has been attempted to prove that this paralysis is often due to prolonged nasal diphtheria. It is certain that, it first begins in many cases in the throat, and it is interesting therefore to mark these indications of inflammatory action in the parts.

Case x. John H., aged 46, innkeeper, a stout healthy man, was first seen February 25th, 1859. Eight weeks previously he had a slight sore-throat, in which no

deposits were seen. He made a good recovery; but the voice remained nasal. Six weeks later, he began to have numbness in the feet and weakness of the legs. These symptoms were now much increased; and the arms were similarly affected; in both upper and lower extremities the loss of sensation and motion was most marked at the distal ends. There was no other discoverable symptoms of cerebral or spinal lesion; no cardiac affection; there was slight œdoma of the legs, but no albumen in the urine. He had no anæmia. Nutrition was normal. There was no pain anywhere. He was ordered twenty minims of tincture of muriate of iron every four hours.

The paralysis spread for a week or two, until he was confined to bed, and unable to turn over without assistance. The urine was again examined a month later, still without finding any albumen. He made a good recovery after a tedious illness of about two months.

This case exhibits the non-dependence of this form of palsy either on anæmia or albuminuria. The patient also made no mention of the previous sore-throat until questioned on the point.

Case xi. Laura W., aged 15, a school-girl of moderately good health, in December 1859 had slight sore-throat. The medical attendant doubted whether it was diphtheritic or not. She made a good recovery; but began six weeks later to have a difficulty in swallowing, a tendency of fluids to return by the nose, and a sensation of numbness of the feet, afterwards of the hands also.

March 16th, 1859. When first seen, she had partial loss of power of motion and of tactile sensibility, limited to the distal portions of the legs and arms, variable in these parts as to the seat of greatest intensity. The extremities were cold and slightly livid. The urine was slightly albuminous, depositing no casts of the tubes. There was a little œdema of the ankles, and great pallor of face. She was ordered eight minims of tincture of muriate of iron every four hours, and strong solution of iodine to the spine daily.

She continued in this state, varying very much, for two or three weeks, and then began to amend. It was noted on March 29th, that the paralysis of motion and sensation was frequently shifting, and varying in intensity; a circumstance to which Trousseau has drawn attention. There were some pain and tenderness on pressure, with redness of the soles of feet and toes. The iron was doubled, and the iodine lotion omitted. The urine was not albuminous.

She improved gradually after this date, recovering the sense of touch faster than the power of motion and the muscular sense. She made by degrees a perfect recovery.

This case contrasts with the preceding, inasmuch as albuminuria and anæmia were both present, but clearly were not essentials, only coexisting. The lividity of the paralysed parts was very striking in this case.

I have twenty-eight cases of diphtheria recorded, and nine cases of slight sore-throat occurring under conditions which left no doubt that they were caused by the diphtheritic miasm, whatever that may be.

In the whole 37 cases, eight deaths occurred; all but one (aged 15) under five years of age. In three of the eight fatal cases, tracheotomy was performed. In all the eight cases, death was due to implication of the larynx: in three of these, I was not sure whether by extension from the pharynx, or by independent origination in the larynx, the croupy symptoms having been amongst the earliest which presented themselves. Indeed, these three cases were such as would a few years ago have unhesitatingly been designated croup; but the existence of some false membranes in the pharynx, and the prevalence of diphtheria in the immediate neighbourhood, induced me to include them in this paper.

Six of the eight fatal cases were not seen until after the extension of the inflammation to the larynx.

Excluding the nine cases of trivial diphtheritic sore-throat, there were twenty recoveries; and of these, fifteen had some paralytic sequelæ. Nor can this be said to include all, for some of the remainder were not observed long enough; and I have certainly seen slight cases of secondary paralysis, which would have escaped notice, had they not been specially sought for.

No sequelæ were observed in any of the nine trivial cases of diphtheritic sore-throat.

That we have in diphtheria to do with a specific febrile disease is, I think manifest, and has been sufficiently demonstrated. The secondary symptoms are so characteristic as to suffice of themselves to distinguish this malady from all others, and, in conjunction with its general history, to establish the claim of diphtheria to be considered an acute specific disease, having for its usual, but not constant anatomical expression, an inflammation of the lining membrane of the throat, which terminates by exudation on the surface, at the same time that it profoundly affects the whole system in a manner peculiar to itself. I cannot, therefore, in any manner yield assent to the argument recently put forth by a writer in the British Medical Journal, that diphtheria has no separate existence as a disease, and is, as it were, but a mere quality of several maladies.

The following observations relate to the morbid anatomy of diphtheria.

I examined a membranous tube coughed up by a child, G. Parr, who had diphtheria in January 1858, and which seemed to be a tolerably good cast of a part of the œsophagus. The mass of the membrane was made up of molecular fibrillated matrix not distinguishable from fibrine, imbedded in which, but very variously distributed, were numerous exudation-corpuscles not distinguishable from pus, and near the attached surface of the membrane groups of fusiform cells and fibre-cells. The free surface showed distinctly the openings of the glandular tubules, had a smooth surface, and was quite denuded of epithelium. The casts of the gland-tubules were elongated a little at their attached ends, and near to them were found highly organised elements from the true mucous membrane, which seemed to have been torn away with the cast. Thus the membrane seems to be an ordinary fibrinous exudation beneath the epithelium, and to have at certain points such intimate adherence to the mucous membrane, that it cannot be separated from it without laceration.

Samuel Issett, aged 16 months, died of diphtheria, so mild for the first week that no medical man was consulted, and so severe at the last that death took place within twenty-four hours after he was first seen, with all the symptoms of croup,* and with visible false membranes in the pharynx, and swelling of the glands in the neck. A *post mortem* examination was made, and the pharynx was seen lined with a white membranous exudation from its upper to its lower border, gradually becoming thinner near its lower termination. A few small patches of the mucous membrane alone uncovered, and these were intensely red. The membrane was continued, though thinner, over the margins of the glottis and epiglottis (the mucous membrane of which was swollen and red) into the larynx to its lower margin, where it was softer an thinner.

The microscopic examination confirmed that made

* The mother refused to permit tracheotomy to be performed.

in the case of G. P. The epithelium was found on the free surface of the exudation in sections made at the edge of a patch, elsewhere it was absent.

I will not say more on the question of the morbid anatomy of diphtheria, than that it presents structurally nothing which distinguishes it from other allied inflammations, and hitherto no parasitic organism has been met with in it which is constant in its presence or peculiar to it. I cannot, therefore, agree with the suggestion thrown out by Professor Laycock that diphtheria may possibly depend on *oïdium albicans*, however strongly I incline to the general doctrine, that, in all diseases which are propagated by a morbid poison capable of increase within the bodies of the sick, the morbid poison is some organised being; and for this reason, that the power of reproduction is restricted to organised beings.

It must not be supposed that, because the development of a pellicular inflammation in the throat or elsewhere is the leading characteristic of diphtheria, it is alone diagnostic of that disease. The truth is, that many forms of superficial inflammation of the lining membrane of the throat or mouth result in a membraniform exudation, not anatomically distinguishable from that found in diphtheria. Bretonneau showed that this resulted from the application of a solution of cantharidine in oil, or from strong caustics, acids, etc. It certainly results from the other specific acute diseases, which often are accompanied by inflammation of the throat, as scarlet-fever and measles; and must be looked upon as merely the result of an inflammation of the mucous membrane, of a certain degree of intensity, perhaps also requiring a particular quality.

Pathologically, there is small difference between the false membranes of diphtheria and those of pleurisy; and still less between them and the fibrinous casts from plastic bronchitis or those occurring in dysentery. It is surprising that Bretonneau, who recognised this tendency of other acute inflammations of the throat to result in the formation of false membranes, should still have reasoned too much as if to find a false membrane in a throat were to prove a case diphtheria.

There must remain, however, always a certain difficulty in the diagnosis, if we refuse to accept the existence of false membranes as pathognomonic; nor can this be entirely removed. Clinically, the same difficulty occurs too often in many maladies; yet we do not doubt the existence of those maladies. Nevertheless, the general course of the disease, the tendency of the inflammation of the mucous membrane to spread and attack the windpipe, will usually suffice to convince the observant practitioner.

Not only is the formation of a false membrane not restricted to the specific inflammation of diphtheria, but diphtheria may attack the throat, and give rise to no visible pseudo-membranous exudation. I have seen in one family, among persons exposed to the poison while nursing a child sick with diphtheria, four cases of sore-throat, without any exudation; and in another smaller family, two such sore-throats clearly due to the diphtheritic poison, yet free from white patches. Every one who has seen much of this disease has remarked upon the prevalence of mild sore-throats during epidemics; and mixed up with the severer cases, it is probable that many of these are of the same kind as those referred to above, which, occurring as they did precisely in those members of the household most liable to suffer, in consequence of their ages or the amount of exposure, left no doubt in my mind that they were cases of true mild diphtheria. I have spoken of these previously as the nine cases of diphtheritic sore-throat.

The name of this disease has, I think, done something to fix too much attention upon the merely local anatomical character; and although I do not doubt that diphtheria and scarlet-fever or measles may co-exist, I cannot help but object to the adjective use of the term in such phrases as "diphtheritic scarlet-fever," used as if to signify scarlet-fever having a tendency to diphtheria, yet not complicated with it. In these cases, I conceive, we have either scarlatina accompanied (as I have myself witnessed) with a membranous exudation on the tonsils and soft palate; or scarlet-fever and diphtheria coexisting in the same person, which I have not seen, at least so as to be able to verify it. It may be, that by some persons the word diphtheritic is used in the sense in which it is employed by pathologists, to signify merely a membranous deposit, without implying any necessary connection with the acute specific disease diphtheria. This, however, is open to the objection that the expression is very liable to misinterpretation. These views include a denial of the supposed alliance, almost amounting to essential identity of scarlet-fever and diphtheria. Drs. Greenhow, Jenner, and others, have disposed of this question; and it would lead me too far to attempt to refute in detail the arguments of those who support such alliance.

The relations of croup and diphtheria are, however, more obscure; and I do not feel in a position to express a positive opinion on this head. English writers generally deny, and French writers for the greater part affirm their identity; and it must be said, that the proof is pretty strong that some at least of the epidemics which have been called croup in past times were diphtheria, and for the remainder it may be said that the question has still to be worked out. I incline, myself, to the view that there is a sporadic inflammatory affection of the larynx and trachea, terminating in the formation of false membrane, quite different in its essentials from diphtheria, to which we may give the name croup; but that it is difficult or impossible sometimes to distinguish it at the bed side from the sporadic form of diphtheria, commencing, as it sometimes does (see Dr. Jenner), independently in the larynx.

That diphtheria is communicable in some way as yet unknown is, I think, sufficiently proven; were the proofs much less convincing, it would, I think, be clearly our duty to advise our patients to take precautions founded on the admission that it is so.

I cannot resist the temptation to say a few more words to you about the secondary accidents (to use a phraseology hitherto confined to another malady) of diphtheria. The fact that these come on at a certain variable time after the primary disease has been recovered from, and then attack remote and various parts of the body in a singularly erratic manner, and do not, at least constantly, spread, so that we can trace them in continuity with the original seat of the primary local disease—strengthens the conviction that we have to do with a general disease, and raises the interesting question, How are these paralytic phenomena produced? Is there a poison circulating in the blood acting specifically upon the nervous centres? or do certain structural changes occur in the brain or cord, or in the nerves themselves supplying the parts which we find paralysed?

I do not think we are in a position to speak with confidence; but negatively more may be ventured than affirmatively. The entire absence of intellectual disturbance, the abruptly limited and scattered spots of paralysis and anæsthesia in distant parts of the body, and the dissimilarity of these symptoms to any known influence exercised by poisonous agents acting through the blood on the brain or spinal cord, exclude the first assumption; whereas the variable seat and intensity of the palsy, its spotted character, its

speedy cure, the discordance of its boundaries with those which we find clinically in cerebral and spinal palsies, induce me to reject the notion of there being any local structural change in the nervous centres, even of a temporary and slight kind, as Trousseau has suspected. Still less can I agree with the suggestion thrown out by Dr. Gull, that an inflammation has spread to the spinal cord from the throat; for on this supposition it is difficult to explain the not uncommon palsy of the muscles of the eyeballs, or the interval of comparative health which, sometimes at least, intervenes between the throat-affection and the beginning of the paralytic symptoms, or the occurrence of severe palsy after trivial throat-affection, or paralysis after diphtheria of the skin; although the fact that the palsy usually begins in the soft palate may seem to give some force to this opinion.

To affirm is more difficult; and it is with the utmost diffidence that I suggest as probable a second outbreak of the specific malady, modified in its character and affinities, having its seat in the nerves themselves in some part of their course, and analogous to the outbreak of secondary syphilis in the skin, etc.

This view may be submitted to the test of the scalpel in fatal cases, and is open to investigation also by a careful tracing out of the boundaries of the spots of paralysis and anæsthesia during life.

Whatever may be the cause of the palsy, it is not connected with the albuminuria often met with in this disease, nor necessarily with the anæmia.

As to the *treatment*, we do not as yet know any agent which can effect that which we seek; viz., to neutralise or destroy the specific morbid poison here assumed to exist; but we have a fair ground for hope that such an agent exists, and may some day be discovered.

At present, our most hopeful measures seem to be those directed towards preventing the spread of the local inflammation from the fauces and pharynx to the glottis and larynx, and thus avoiding one of the main tendencies to death.

It has been recommended for this purpose to use strong caustics, especially the mineral acids or nitrate of silver; but their employment is necessarily limited to a small proportion of cases, because they can never be prudently and effectually applied to that large number of cases, which we only see for the first time when the mucous membrane of the throat is too extensively invaded to permit our applying them in all directions beyond the outermost limits of the redness, by which mode alone can we hope to derive that benefit which has been claimed for them. In many of the cases which we do thus see in an early stage, as I have witnessed, no treatment is needed; and we are here met with a difficulty which too often confronts us in other maladies, that we cannot know a slight case from a severe one while it is yet but imperfectly developed.

On the whole, I am disposed to limit the employment of strong caustics to the earliest stages, and then I prefer the nitrate of silver to the acids. Yet local agents seem to promise more than any internal medicaments with which we are at present acquainted; and we need therefore something not open to the objections which may be raised against the caustics, viz., that they generally harden the exudation, increase the inflammation and swelling at least for a time, and do not with any certainty arrest the spread of the specific inflammation. With this object, gargles have been prescribed; but they cannot be used properly by children, and even adults cannot by gargling bring the fluid used into contact with any considerable part of the pharynx, as in this act the fauces are contracted, and a current of air is blown bubbling through the liquid, which is thus kept in front of the posterior palatine arches, with the exception of a few drops, which accidentally pass a little further. Nor can we apply our weaker agents to these parts frequently by means of a sponge or brush; it wearies beyond endurance a patient very seriously ill; young children will not submit to it; and many persons, young and old, have an amount of pain and stiffness about the angles of the jaws which prevents their opening the mouth widely enough to permit this little operation to be successfully performed.

These considerations induced me to employ an agent which, from its feeble action on the system, might be given in large quantities, and to administer it in small doses very frequently swallowed, so as to attain a local action which should be greatest just at that border region between the pharynx and the glottis, which we most desire to shield from injury. I used for this purpose chlorate of potash, a salt which has long had a reputation for all kinds of stomatitis, and combined with it borax, adding at one time a little dilute hydrochloric acid somewhat empirically. My patients swallowed in twenty-four hours often six drachms of chlorate of potash and two drachms of borax, in very small doses, repeated every half, or even every quarter hour, night and day. In this way, I think I observed that the medicine had, if very resolutely persisted in, a local action on the false membrane tending to soften it, and on the mucous membrane of a soothing character. Hammond's case, detailed above, seems to illustrate this statement. I have treated ten cases, some of them severe, successfully by this method, not including the milder diphtheritic sore-throats, and of the eight deaths which occurred, only one was treated by this method, and in that case the larynx was already implicated before the treatment was commenced, so that the patient, a child, could not try the plan fairly. I do not mean to assert on such a limited basis of facts that it is demonstrated that by this means we can arrest the spread of the inflammation to the larynx; but it is, I think, made sufficiently probable to justify a further employment of the principle involved.

As regards the paralytic sequelæ: it has been generally agreed on by most observers that, under a tonic treatment, the particular tonics seeming to be of but little moment, most cases recover. I can only say, with reference to this point, that I give a decided preference to the tincture of sesquichloride of iron, having, I think, seen it exert some control over the progress of the palsy. I have employed it in nine cases, which all did well; several of them were severe. However, it must be admitted that as yet we know of no means of preventing or cutting short the secondary paralysis.

BENGAL BRANCH.

TWO CASES OF CYANOSIS.

By S. Goodeve Chuckerbutty, M.D.

I have much pleasure in communicating a brief account of two cases of cyanosis which came under my observation.

The first case was that of a Hindoo boy, 5 years old. He was brought to me to be examined. He had been subject to the disease from his birth; he was always blue, but the depth of the colour became highly intensified on any excitement. At first, he had difficulty of swallowing, and was very blue; but latterly, he had suffered comparatively little, and the blue discoloration was perceptibly decreasing. Medicines had had no effect on the affection. On examination, I discovered a strong *bruit* at the base of the

heart corresponding with the first sound. The boy being otherwise in good health, and evidently outgrowing the malady, I advised the parents to desist from treatment, and to give him plenty of rest, fresh air, and good food; and I have reason to think he gradually got over the complaint.

The other case was that of a European infant born only a few hours. It had been of a deep blue colour from its birth; but had cried well and taken castor-oil, honey, and milk and water. It had had the usual warm bath and clothing, and there was no accident at the time of its birth. The respiration was good; swallowing painful, for it rejected the milk put into its mouth; the bowels had moved freely several times; and in every other respect the child was well so far as could be ascertained. But its colour was deep blue, which became highly intensified during crying. It had moaned constantly from its birth, and refused to take the breast; but its stools and urine were good, and the remnant of the milk it had taken also good. There was no audible murmur in the heart. Death took place, in spite of every effort to save it, fifteen hours after birth, April 9th, 1864.

Reviews and Notices.

Outlines of Surgical Diagnosis. By George H. B. Macleod, M.D., F.R.C.S.E. Pp. 529. London: 1864.

The importance of accurate diagnosis in surgical diseases is dwelt upon by the author in an introduction of sixty-five pages. This must be regarded as the most important and original part of the work before us.

"In order to discern diseases aright" (he observes), "there must be a truthful mind, which takes a just and unexaggerated view of things; sound judgment which seizes upon, weighs, and compares those features in cases which are characteristic and of value, and excludes those only which are unimportant; clear reasoning powers, to draw just and logical inferences and conclusions without bias; and, lastly, patience to unravel and often to wait the development of the phenomena. A ready and accurate memory, too, is most requisite; and that education of eye and ear and hand, which renders them acute, intelligent, and ready ministers to the mind."

Dr. Macleod, however, believes that, with all this, the ability to discriminate disease is doubtless, to some extent, a natural endowment; and he might, perhaps, with much truth, have added, that the greatest ability and tact in diagnosis are acquired by those whose constant attention is directed to some particular forms of disease. We are far from advocating the doctrine, that a specialist is likely to form the best diagnosis, even in his own line; but it is nevertheless true, that no one can know all subjects equally well, and that, if he attempt to do so, he will not have a very profound or accurate knowledge of any. These remarks apply with more or less force to all works which attempt to embrace the whole class of surgical or medical diseases. Want of accuracy and precision naturally result from any author attempting to take too extended a view. We, nevertheless, believe that Dr. Macleod has added a valuable book to the literature of our profession; and has directed timely attention to a branch of study which has often been cultivated far less than it deserves.

Lunacy and Law; with Hints on the Treatment of Idiots. By T. E. D. Byrne, L.R.C.P. and M.R.C.S. London: 1864.

In this pamphlet, Dr. Byrne gives an account in full of the now famous case of the unfortunate idiot confined at Flushing. Our readers may remember that to Dr. Byrne is mainly due the credit of having released this poor wretch from the hideous den wherein he was confined. His object is to call upon the legislature to throw a greater protection than it at present does over these unfortunate creatures.

British Medical Journal.

SATURDAY, SEPTEMBER 17th, 1864.

NATURAL HISTORY OF SYPHILIS.*

Under this title, Dr. Diday has published three lectures delivered last year in Paris, accompanied by some very valuable notes in an appendix. We purpose to follow Dr. Diday through some of the principal points of his work, as far as the history and nature of the disease are concerned, adding such observations as the subject may suggest.

Until within the last forty or fifty years, all venereal affections were confounded together, and were all considered equally capable of infecting patients' constitutions; and they were all treated from the commencement with mercury. Gonorrhœa and bubo were placed on the same footing as the infecting chancre.

It appears to us strange in the present day that the difference between gonorrhœa and syphilis should not have been recognised; but between the two kinds of syphilitic ulcers the distinction was less easily made. In 1852, M. Bassereau announced the doctrine that the indurated chancre could only be communicated from a similar affection. In 1855, M. Clerc asserted that this form of disease had the essential characteristics of not appearing until after a long period of incubation, and of not being reinoculable upon the same patient.

Dr. Diday gives the following characters as distinguishing the two forms of syphilis.

An indurated ulcer.	A soft ulcer.
Period of incubation of two or three weeks.	No period of incubation.
Originating in "adhesive inflammation".	Originating in "suppurative inflammation".
Not reinoculable on the patient himself.	Reinoculable indefinitely on the patient himself.
Not capable of being arrested by artificial means.	Arrested every time that it is completely destroyed.
Affecting exclusively the human race.	Capable of being transmitted to several different kinds of animals.

* Diday: Sperino.

Constantly accompanied by chronic enlargement of the inguinal glands.	Not always accompanied by affection of the inguinal glands, but producing suppurative inflammation in these when affected.
Producing always, after a certain interval, a series of characteristic secondary symptoms.	Producing only a local disease.
Susceptible to the action of certain general remedies called specifics.	Not influenced by any specific treatment.
Affecting the same patient once only in the same way.	Reproduced on the same patient, in much the same manner, as often as he may be inoculated.

When Dr. Diday sees these manifest differences in the origin, progress, and results of the two diseases, his reason, his common sense, forbid him to believe that they depend upon a single morbid poison. He asks himself, If these different symptoms be not sufficient to establish the fact of the existence of two distinct affections, what diseases can by their symptoms be distinguished from each other?

But still further distinctions are sought to be made. Dr. Diday believes that there is a strong syphilis and a weak syphilis. That the affections resulting from the latter, which comprise the greater number of cases derived from a secondary disease, admit of being cured without difficulty, and do not require mercurial treatment.

Dr. Sperino (*Etudes Cliniques sur le Virus Syphilitique*, Turin, 1863) maintains a different doctrine. He believes that the syphilitic virus enters a patient's constitution, as a rule, by two different means—viz., by the primary ulcer, and by the mucous tubercle; that the disease which results from the two different modes of infection presents very different characters; that the primary ulcer, or chancre, always results from a similar ulcer, and that the secretion of this is not contagious unless applied to a part where there is a solution of continuity; and that this ulcer has no period of incubation.

The mucous tubercle, on the contrary, Dr. Sperino believes, may be communicated without any solution of continuity, by imbibition of the diseased secretion through the cuticle of a sound part. This disease, he believes, has a period of incubation from fifteen to thirty days.

Dr. Sperino also believes that the primary ulcer is followed by constitutional syphilis only when it has been accompanied by a chronic induration of the corresponding inguinal glands. This induration commences from twelve to fourteen days after the appearance of the ulcer.

The mucous tubercle, on the other hand, is always preceded by the indolent induration of the lymphatic glands. The mucous tubercle, which arises as a secondary affection from the virus of a primary chancre (after it has passed through the absorbent glands), can neither reproduce the primary chancre nor the suppurating bubo; and, on the other hand, the virus of the primary ulcer deposited on the tubercle makes it disappear, and produces an ulcer in its place.

The virus of a mucous tubercle derived from a secondary symptom, and preceded by chronic induration, necessarily and invariably produces constitutional disease.

The virus of a primary ulcer produces secondary symptoms only when it is absorbed and carried into the lymphatic glands, producing there the chronic indolent bubo.

The peculiarity of the primary virus does not depend in any way upon the difference of the poison in different cases, but depends upon circumstances which pathologists had not appreciated at the time Dr. Sperino wrote. According to his theory, the poison taken up by the lymphatics is arrested, for a greater or less length of time, in the ganglions. It may there produce either a chronic induration, or an inflammation followed or not by suppuration.

If the secretion of the primary sore is abundant, and if the pus is thick and well formed, and especially if there are many ulcers, secreting a large quantity of pus, one of two things will take place. Either the virus, secreted in abundance, will be carried directly by the veins, into the current of the circulation (!); and then, not being modified by the action of the absorbents, this virus will be inoffensive as far as the general constitution is concerned, and will be quickly expelled with the different excretions: or else the virus will reach the ganglions, and in sufficient quantity to distend them forcibly. The ganglions will become inflamed, and suppurate; and then, as the destroyed ganglion cannot modify the poison, this will again not affect the patient's general system.

More than this. If a patient who has chronic enlargement of the inguinal glands, or even secondary symptoms, contracts primary sores which produce suppuration of the inguinal glands, not only will the induration subside, but the constitutional syphilis will be cured in a more complete and quicker manner than under other circumstances.

Attaching the utmost importance to the disappearance of the enlargement of the inguinal glands, Dr. Sperino applies mercurial ointment to the generative organs, in order that it may be absorbed and enter the glands by the same channels as the poison—a mode of practice, it may be observed in passing, long ago recommended by Mr. Hunter, Mr. Briggs, and other surgeons of past times. Dr. Sperino says that, if this local treatment commences as soon as the induration has declared itself, and is continued until it has disappeared, no constitutional symptoms will follow.

Now these are some very important conclusions for such an authority as Dr. Sperino to publish; and

it may not be uninteresting to trace how a theory presenting such complication, and so much at variance with that which other modern writers have adopted, should have been matured.

As early as the 23rd of March, 1851, Dr. Sperino presented a memoir to the Medical and Chirurgical Society of Turin. He had observed that those females, who had repeatedly been subject to primary affections, were not so liable as others to secondary syphilis; and he associated this fact in his mind with the experiments of M. Auzias-Turenne. Dr. Sperino, therefore, undertook an extensive series of experiments upon the female patients of the Regio Sifilicomio. The subjects of his experiments were all labouring under either primary or secondary syphilis. The matter inoculated was taken from a primary ulcer presenting all the characters of the "Hunterian chancre".* On the third or fourth day, a syphilitic pustule appeared on the side of each puncture; and, on this bursting, an ulcer was developed, with all the characters of the primary sore. Now, it appears certain that Sperino had fallen into the error common in that day—the great error of Ricord—of regarding all chancres as producing the same immediate effects when inoculated, and as all being equally inoculable upon the patients who had them. It has now been incontestably shown that the indurated chancres cannot be, as a rule, reinoculated upon the patients who have them; and that, when inoculated, the results do not appear immediately; and, when they do appear, that they differ materially from the pustules described by Dr. Sperino. According to Dr. Diday, the mean period of incubation, after the inoculation of the secretion from a secondary syphilitic affection, is twenty-eight days; and after the inoculation of the secretion from a primary chancre, eighteen days. It has, therefore, been proved that Dr. Sperino was not performing his experiments with the virus that he thought he was using; and this cause of error runs through the whole of his observations. Unwilling, however, to give up his idea that the syphilitic poison was always one and the same, but finding that sometimes secondary effects were produced, and that sometimes they were not, Dr. Sperino has had recourse to the theory of which an outline has been given above. With regard to the theory itself, although it contains much that is ingenious, it need only here be remarked, that the English pathologist would feel himself very hard pressed indeed for an explanation before he could admit as satisfactory, that suppurating sores are not followed by secondary symptoms, because in them well-formed pus is carried in quantity by the veins in the course of the circulation. The majority of modern observers can have now no doubt that, while Sperino and his followers believed that they were inoculating the syphilitic poison which infects a patient's constitution, they were, in reality, amusing themselves with a much milder agent, capable of producing only a local disease.

And what must be said of Dr. Diday's idea of a mild and a strong form of syphilis, using the term to designate the infecting form of the disease? Dr. Diday has attempted to prove his position by giving examples in which the disease produced very grave consequences, and the reverse; by describing the causes which lead to the greater or less manifestation of the effects of the poison; and by tracing the different powers of resistance of the constitutions of different infected persons.

The virulence of the poison may, according to Dr. Diday, be diminished by the number of transmissions through different patients; by the manner in which it gains access of the system; by its diffusion in the organism.

Dr. Diday also considers at length the differences of the contaminating causes in different cases of syphilis, the difference of the first period of incubation, the difference in the first manifestation of the disease, the difference in the second period of incubation, and the difference in the treatment required. Now, upon all these points, the learned doctor has the support of numberless well observed facts; and there can be no doubt that the differences which he has described do in reality exist as the disease is presented to us by clinical observation. But it is, nevertheless, very doubtful whether the affections described can be divided into two classes without artificial aid. Such a classification might lead men to the belief that the two classes of disease were essentially distinct, whereas no such clear distinction can be traced in nature. It will probably be hereafter acknowledged that it is much more in keeping with the natural history of syphilis, as written on the bodies of men, to describe the disease as one; not divided in two classes only, but modified in many ways. Such modifications we have fully described in some of the recent works on syphilis. Thus we have now generally recognised the disease as modified by previous infection, as modified by the existence of hereditary influence, and as modified by the length of time that it has existed among a people. We have many other modifications produced by age, sex, and climate; and others, again, by temperament, treatment, and the coexistence of other causes of disease. It is not intended, by anything that is here said, to detract in the least from Dr. Diday's great merit as an original and scientific observer of nature; but it is probable, from the considerations already adduced, that the profession will not be prepared to admit at present that there is anything like a clear distinction of constitutional syphilitic affections into two classes.

* Reports of the Physiological Society of Edinburgh for 1852. Communication by Dr. Murchison, Physician to the British Embassy at Turin.

MR. CARTER AND THE MEDICAL PROVIDENT FUND.

Mr. Carter has been, during the past year, a member of the Committee of the Medical Provident Fund; and his last act has been to issue a printed document, to the character and language of which—and not to the mere publication of a letter—we last week expressed strong objections. In this document, Mr. Carter tells his readers, that the majority of his colleagues in the Committee "welcomed the Fund for the sake of the Association, rather than for the sake of the men who will chiefly need it"; and in his letter in to-day's Journal, he repeats the accusation. We said last week, that Mr. Carter's words conveyed a gratuitous misstatement. What they do definitively convey is: that certain members of the Committee appointed at Bristol had no object in view, in planning the Provident Fund, but the aggrandisement of the Association; that, in fact, they were not influenced by a sentiment that the Fund should be made useful to the profession. That our readers may judge how far such an accusation is likely to be correct, we will recal to their minds the names of the Committee:—Sir Charles Hastings; Mr. Daniell—to whom is due the merit of having been, many years ago, the promoter of a provident scheme; Dr. H. Day; Mr. G. Pound; Dr. Bryan; Mr. H. Gramshaw—both of the latter gentlemen being the authors of several letters in the Journal on the importance to the profession of medical health insurance; Dr. Stewart; Mr. E. Bartleet; and Dr. Richardson; with Mr. Carter. The Association knows these gentlemen well; and we may safely leave it to the members to form their own conclusions as to whether or not the *majority* of the Committee (to use Mr. Carter's own words) welcomed the Fund merely for the sake of the good it would do to the Association. We do not pretend to know what passed in the meetings of the Committee. The Report informs us that the limitation question was discussed seriously; and that a majority of the Committee were in favour of limiting the fund to the members of the Association. But it is an insult to attribute to the majority of the Committee any sinister motive; or to insinuate that their intentions with respect to the fund were less pure than those of Mr. Carter. Mr. Carter says he cannot break the confidence of the Committee; but, inconsistently enough, he has already broken confidence by publicly attributing to his colleagues, as actuating their proceedings in their meetings, certain motives which they have not recognised. He has thus brought against them a most serious and (as we must believe until we have good reason to think otherwise) unfounded imputation. It would have been well if Mr. Carter had stated how many meetings of the Committee he attended; and how he knew that the majority of the remaining nine members had only the Association in view. The minutes of the proceedings of the Committee were open for inspection at Cambridge, in the Council-room. We have seen them; and from them it appears that Mr. Carter was present at *one* meeting only, at which there were present three other members besides himself. From such an intercourse with the Committee, he has published what we venture to think every candid member of the profession will agree with us in considering, until better informed, little better than a gratuitous misstatement.

Mr. Carter, however, would have himself alone regarded as feeling a true and unselfish regard for the real interests of the Fund; and he therefore calls upon the profession to put pressure upon the directors, and force them to do what he (Mr. Carter) thinks ought to be done; and if they will not do it, to get up a Fund of their own. These directors are to have no opinion of their own; men like Dr. Burrows, Dr. Symonds, Mr. Carden, and Mr. Heckstall Smith, are unable to discuss and duly settle the matter affecting the Fund unless a pressure is put upon them by Mr. Carter. This seems to be Mr. Carter's view; and he has acted accordingly. He accuses his colleagues in Committee of having exhibited an incapacity for an impartial examination of the subject; and he now attempts, by pressure from without, to make the directors act according to his lights; and under the threat of creating a schism. We sincerely trust that the profession will not allow themselves to be led away by Mr. Carter's statements, which, of course, being hurtful to the Association, are eagerly endorsed by the *Lancet*. Can any one doubt for a moment that, in the hands of the gentlemen above-named, the Fund is in the hands of those who desire—as eagerly and, we are sure, not less wisely than Mr. Carter—the complete success of this most excellent Fund? The directors will discuss every particular affecting the data on which the Fund is to be based; and need we say, that in the names above given, the profession has a perfect security that nothing will be done except that which is best for the interests of the Society.

As to the statement made by Mr. Carter, that his election to the Directorate was quite unexpected, it is inconsistent with all that had previously occurred. He had been elected at Bristol a member of the Committee; and at Cambridge his protest had been allowed to form part of the Report; and on all occasions every consideration had been shewn him. He could therefore scarcely do otherwise than infer the possibility—not to say the probability—of his being elected a Director; and, as the notice summoning the Committee of Council to elect Directors appeared in the Journal a week before his circular was issued, he might in ordinary decency have waited for a few days, before issuing such a document. He calls the

document a report. If it had been a report of what had taken place, to those gentlemen with whom he had been specially in communication, no one would have objected to its publication; but we have objected, and do object to it, on account of its character, and of the unfair and—as we believe—unfounded accusations which it makes against a body of men who have the good of their profession at heart, at least as earnestly as Mr. Carter.

CARDIO-THYROIDEAN EXOPHTHALMIA.

M. von Graefe has lately called attention to a symptom hitherto unnoticed in the above-named affection. This symptom presents itself from the first, and is characteristic and pathognomonic. It is the suspension of the sympathetic connection normally existing between the vertical rotation of the visual plain, and the movement of elevation and depression of the superior eyelid. In the normal state, the eyelid is seen to follow this movement, and to be elevated or depressed in proportion to the extent of the rotation of the eye. But in the case of this disease, the eyelid remains motionless, especially in the rotation of the eye downwards. This symptom is not observed in ordinary exophthalmia, as when the eye is protruded by an intraorbital tumour. But it is constantly present in cardio-thyroidean exophthalmia. It is evident that this immobility of the muscle of the eyelid depends upon some interference with its nervous influence. Probably, this function of the muscle depends upon the filaments of the sympathetic supplied to some of its fibres, as pointed out by Müller; the portion of the muscles to which those filaments are supplied being employed in co-ordinating the movements of the eye with those of the eyelid. This symptom is important, because it presents itself at a very early period of the disease. Hence, the initial semiology of cardio-thyroidean exophthalmia affords us two symptoms: oculo-palpebral ataxia and acceleration of the heart's action, independent of any organic disease. The condition of the thyroid gland, of the heart, of these muscular fibres of the eyelid supplied by the sympathetic—all tend to show that the sympathetic nerve is the chain by which they are linked together. This theory is strengthened by a recent discovery of von Bezold, that the heart's movements are accelerated through this ganglionic nervous chain. M. Remak has practically made use of this fact by subjecting the cervical portion of the sympathetic to galvanism in a case of spasmodic action of the heart. M. Remak, also, relates the case of a patient affected with facial paralysis of ganglionic origin; the paralysis being characterised by total muscular anæsthesia, as well as by muscular atrophy. The paralysis was attended by swelling of the superior cervical ganglion of the sympathetic, as well as by swelling and induration of the corresponding submaxillary gland. The patient was completely cured by the application of the uninterrupted electrical current.

These facts tend to show that exophthalmia is a nervous affection seated in the cervical portion of the sympathetic. The therapeutical remedy which is recommended as worthy of trial in such case is founded on physiological considerations. It is the application of the electrical current to the cervical sympathetic; the early and true condition of the disease being determined by the symptom pointed out by Graefe, and here detailed.

We are glad to find that the Horse Guards has issued a circular to the effect, that in future, when the necessity for marking a soldier occurs, the operation shall be performed by the drum- or trumpet-major at the orderly-room, in the presence of the adjutant, and under the immediate supervision of a regimental or a staff medical officer. Some small instalment has thus been made of what is due to the feelings of the army medical officer. Let us hope that it indicates the entrance of the thin edge of the wedge of general opinion into the adjutant-general's office.

A French critic says: "The Anglo-Saxon women appear to be pusillanimous, weak, or hyperæsthetic; for it is certain they do not bear the pains of parturition with as much courage as the women of other countries. We have the proof of this in the fact, that in Great Britain chloroform anæsthesia is much more frequent than elsewhere. There it first was used; and there it continues in use, despite the dangers and mortal accidents which attend it."

The discovery of the vaso-motor nerves is of recent date. In 1852, M. Bernard showed that, after section of the cervical portion of the sympathetic, the temperature on the side injured was increased. Dr. Brown-Séquard subsequently proved that the increase of heat was the direct consequence of dilatation of the blood-vessels and of the increased flow of blood into them. Thus it was shown, that certain nerves preside over the contraction of the arteries; and on this fact, Dr. Brown-Séquard founded his theory of reflex paralysis. The Academy of Sciences has also lately rewarded M. Cohen for his researches into vaso-motor neuroses. M. Pontevez, in a thesis, has lately given a complete *résumé* of the whole subject. The theory of the vaso-motor nerves is, as he says, a doctrine pregnant with important results, destined to revolutionise the practice of medicine. Thus, for example, the febrile state, heretofore supposed to be a state of excitation, is by this theory shown to be a state of weakness. The hot and red skin is produced by relaxation of the blood-vessels, just as it is produced after division of the sympathetic. Paralysis of the vaso-motor nerves produces congestion; their excitation removes it; and their destruction deter-

ines suppuration. In these facts, we have a physiological and modern key to the character of inflammation.

M. Bernard has made an interesting communication to the French Academy, entitled "A Physiological Study of Opium and its principal Alkaloids." He has experimented with morphine, narceine, codeine, narcotine, papaverine, and thebaine. He has found that the three first of these only are soporific, each of them producing sleep in its own particular way; and that the three last have toxic effects. Opium, therefore, is a mixture of many substances, whose properties, as regards their action on the body, are different. Opium, indeed, probably contains other substances besides those here enumerated. M. Bernard, in his experiments, administered the alkaloids in the form of hydrochlorates, and by injection into the cellular tissue. By this means, the absorption of the active principle is more regular than when introduced into the stomach, and the results obtained are more sure and trustworthy. His experiments were made on dogs, cats, rats, frogs, sparrows, etc. The effects produced were always alike; due allowance being made for the different degrees of sensibility of the animals operated on. Morphine, he found, is a more profound soporific than codeine, and narceine was intermediate in power. MM. Debout and Béhier have, it appears, lately studied the action of narceine on man, and will shortly publish the results of their researches. All the bodies extracted from opium are toxic. Thebaine is most especially so; next stands codeine. Hence it follows, that physicians err in prescribing larger doses of codeine than of morphine. Two or three *centigrammes* of codeine injected into the veins of a dog kill it rapidly. All the alkaloids of opium, with the exception of thebaine, produce convulsions.

In a late number of the *Archives Générales de Médecine*, MM. Bergeron and Lemaitre treat of the question of the elimination of medicaments with the perspiration. M. Lemaitre studied the matter in the wards of M. Cazenave, where he had large opportunities of observing cases in which vapour-baths and arsenic and mercury were employed. The perspiration of patients subjected to arsenical and mercurial treatment was carefully collected, and as pure as possible, for examination. Nine patients were experimented upon. Of these, seven suffering from psoriasis were treated, two of them with arsenite of potash, two with arsenite of soda, two with arsenite of iron, and the other with bichloride of mercury; the eighth was treated with iodide of mercury; and the ninth with iodide of potassium. The results obtained were as follows. The arsenites of potash and soda are eliminated as such; the arsenite of iron is decomposed, the iron being eliminated from the kidney; and the arsenic in an alkaline form from the skin. The protoiodide of mercury is eliminated; traces of mercury are found in the perspiration; and iodine in the saliva and urine. Bichloride of mercury is found in the sweat, and traces of it also in the urine. In a case of albuminuria, these observers found no albumen in the sweat; but, in a case of diabetes, they found in it a large quantity of sugar.

It is much to be desired, says M. Bataîlhié, that the theory of acute putrid infection were adopted in the interests of our hospitals, of our patients, and of the army. A great example has just been set in this way by one of our most celebrated surgeons. *L'Hôpital des Cliniques* has the worst repute for healthiness of all the Parisian hospitals. There especially are observed the severest epidemics of purulent infection; so that it might almost be said that this terrible affection is endemic there. Professor Nélaton, and his assistant there, M. Houel, have completely given up the surgical doctrines of the schools. They have excluded from their practice ointments, emollients, etc. They now employ *antiputrescents*, and almost solely that which is the type of them, strong spirits; and, besides this, they give their patients after operations eatables and drinkables. This has been their practice for fifteen months, and during this period there has not been in this hospital a single case of purulent infection; and, in fact, this hospital is now the healthiest in France; and all this without moving a stone, taking out a nail, or spending a *sou*.

MM. Inzani and Lusana give two pathological cases which confirm the usually accepted view, that the lingual nerve presides over taste in the anterior part of the tongue, and the glosso-pharyngeal over taste in the posterior part of the tongue and in the fauces. They also affirm that the branch of the fifth nerve has no influence over the sense of taste, but that its specific influence over taste is derived from the chorda tympani.

The following are the conclusions of the report drawn up by a Committee of the Parisian Hospital Society, on the subject of isolation of patients suffering from contagious diseases. Patients affected with small-pox should be isolated. The excellent results obtained from the methods of isolation used in the convalescent asylums of Vincennes and Vesinet, in the army and navy hospitals, and in the hospitals of Germany, Denmark, Russia, Sweden, etc., show that the dangers supposed to result from isolation may be readily obviated. Special hospitals are not required, and may be attended with inconvenience. Special small-pox wards should be attached to all hospitals.

M. Brierre de Boismont has lately pointed out what he believes to be the differential characters between the suicidal acts of reasonable beings and of lunatics. He considers it to be an established fact, that lunatics, when about to kill themselves, never leave behind them any kind of writing to indicate the motive of their act; and, consequently, he draws

the inference, that it is extremely probable, whenever a suicide leaves behind him any writing indicating the reason of his destroying himself, that the deed was not the act of a lunatic.

A statue is to be raised in France to the memory of Laennec.

Progress of Medical Science.

MEDICINE.

MENINGITIS OF THE BASE OF THE ENCEPHALON: RAPID DEATH. The following case is related by Dr. W. Derblich, regimental surgeon in the Austrian army.

A. G., a soldier, twenty-four years of age, a large made robust man, was brought into hospital on July 5th, 1864. He was perfectly conscious, and complained of universal tenderness, especially in the head, right knee, and back. He had always enjoyed good health, until nine days before admission, when he returned home heated after exercise, hastily drank a pint of water, and afterwards felt oppression in the chest, and in the course of the day had alternations of heat and chills. Slight febrile rigors, loss of appetite, and sleeplessness, were followed by return of appetite, loss of pain, and disappearance of fever. This was within the first four days; and on the fifth day he was sent on foot as sentry to a station some miles distant. He arrived wet through by rain, was unable to obtain any rest during twenty-four hours, and on the next day was seized with violent pains in the limbs, loins, and head. These increased so greatly, that, when admitted into hospital, he could not turn his head nor draw up his feet towards the abdomen. The temperature of the whole body was remarkably increased; the face was red; the conjunctivæ were somewhat injected; the pupils were not dilated; the countenance was clear; there was no photophobia; the tongue was covered with a white fur, and could be moved in any direction, but trembled slightly. The head was strongly turned to the left; and any attempt to move it to the right caused much pain. Touching the nape of the neck caused pain, although nothing abnormal could be detected either here or in the muscles of the neck generally. The carotids on both sides pulsated vigorously. The chest was strongly arched; the respirations quickened—42 in a minute. The percussion-sound was everywhere clear and full. By immediate auscultation, an exaggerated, slightly rough breath-sound was detected. The heart was in its normal position; its impulse was strong and full; the first sound was accompanied by a scarcely audible blowing murmur. The abdomen was somewhat enlarged, but the percussion-sound was duller than normal. The stomach was moderately full. Nothing abnormal could be detected in the liver, spleen, or intestines; the bladder was moderately full of urine. The patient was in a state of general depression and *malaise;* he was rather feverish (pulse 78), and complained of entire loss of appetite and moderate thirst. His bowels had been open in the morning; the evacuation was loose, and was unattended with tenesmus. Eight leeches were applied behind the ears, and ice to the forehead; and one-sixth of a grain of morphia was prescribed. Lemonade was ordered for drink.

The next day, July 6th, the patient was found in the morning to be in nearly the same condition. He had slept but little, and had been very restless. His consciousness was still undisturbed; but he was more excitable. His manner of expressing himself was quicker, and his gestures were vehement. He would rise up, but could not raise his head. Motion of the head to the right was impossible, on account of pain. There was slight divergent strabismus in the right eye. The tongue was moist, and moderately covered with white fur; it could be protruded in all directions. The breathing was somewhat accelerated, but otherwise normal. The heart's action was somewhat stronger than on the previous day; the blowing murmur was heard during the diastole. More than two pints of reddish urine, of high temperature, and rich in urates, were drawn off by the catheter. The right knee was very painful; but there was neither redness nor swelling of the part. He had no appetite; was thirsty; and his bowels were constipated.

The continued pain in the head, the rigidity of the left sterno-mastoid muscle, the inability to hold up the head, the extreme tenderness of the nape of the neck, the strabismus, the paralysis of the bladder, and the hyperæsthesia of the right lower limb, pointed to pressure on the brain by a limited exudation. In order to moderate the hyperæmia and promote absorption, leeches were ordered to be applied, and the ice to the forehead was repeated; and the patient was directed to take every three hours a table-spoonful of a mixture containing half a drachm of iodide of potassium, and half a grain of morphia, in four ounces of water. Cupping-glasses were also applied to the back, and sinapisms to the calves of the legs. Towards noon, convulsions appeared; the patient had slight trismus, and drank with difficulty. The face was very red; the right pupil was dilated and distorted. The respiration was difficult; the heart's stroke quicker and weaker; the pulse was small and very rapid; consciousness was much obscured. In the evening, perfect sopor set in; the breathing became stertorous. Blood-letting, cold affusion, and clysters were employed; and the urine was drawn off by the catheter. The patient was afterwards found in a state of stertor, and unconscious; but, when attempts were made to turn the head to the right, clonic contractions of the muscles of the face took place. The pupils acted but slightly under the influence of light; both eyes were strongly injected; the lips were nearly dry; the respiration was frequent and irregular; the pulse less frequent. The lower limbs were cold to the touch, and were entirely painless on deep pressure. The bladder was much distended. The urine was drawn off by the catheter; and a yellow fluid stool was passed involuntarily. Towards midnight, the stertor increased; the patient had more violent contractions of the muscles of the nape of the neck and general twitchings; the redness of the face disappeared; the forehead and face became covered with a clammy sweat; and the patient died at 2 A.M. on July 7th.

A *post mortem* examination was made thirty-six hours after death. There were some brownish-red *post mortem* ecchymoses on the surface of the body. The expression of the countenance was quiet; the eyelids were sunken. Both pupils were dilated, the right more than the left. The lips were closed, and covered with dry mucus. The abdomen was somewhat distended, and presented several bluish-green spots, where decomposition was commencing. On sawing through the skull, the bones were found to be very thick; the diploe especially was much developed, and very vascular. In the neighbourhood of the sutures, however, the bones were thin and remarkably transparent. The dura mater was firm and vascular; as were also the Pacchionian bodies, which were enlarged. The arachnoid could be separated at parts

om the dura mater; on the convexity of the brain specially, it appeared macerated. The vessels of he pia mater were strongly injected; and, in some of he convolutions, it was infiltrated with a muddy erum. The lateral ventricles were dilated, especi- lly the right, and contained about an ounce of whitish olerably clean serum. The brain-substance did not resent any considerable amount of hyperæmia. The ons Varolii and the medulla oblongata, with the erves issuing from them, were covered with a green- sh purulent exudation. In the three fossæ of the ase of the skull there was a large quantity of red- ish serum mixed with greenish pus. The cerebellum hewed many vascular points on section; the medul- ary substance was firm. No pathological appearances ould be found in the muscles of the nape and left ide of the neck. The pleuræ were adherent poster- orly; the lower lobes of the lungs were slightly edematous; the bronchial tubes were partly filled ith reddish mucus. The pericardium contained a ttle clear fluid. There was a considerable deposit of at on the left side of the heart. The right side of the eart was much dilated, and was distended with dark ed clotted blood. Nothing remarkable was found in he abdominal organs; there was no trace of tubercle n any part. (*Spitals Zeitung*, July 30th, 1864.)

Bromide of Potassium as a Sedative. Dr. A. ubler, physician to the Beaujon Hospital, has been nvestigating, by experiment and clinical observa- ion, the action of bromide of potassium. He has iven it in laryngeal and bronchial affections, in sophageal spasm, in hysteric and spasmodic cough, n chorea and other nervous disorders, and in heart- lisease; and sums up his memoir with the following onclusions.

Bromine, in combination as a salt, is not only an naphrodisiac, or an anæsthetic to the throat; it is a owerful general sedative. Bromide of potassium as generally been preferred; but the preference hould probably be given to bromide of sodium, on ccount of the greater tolerance, on the part of the nimal system, of soda-salts, which enter in large roportion into the composition of the tissues of the ody. Bromide of potassium, in average daily quan- ies of about thirty-five grains, in two or three doses, n some mucilage or sugared water, produces a narked sedative effect on the sensory and motor ervous system and on the circulation. As an anæs- hetic, it acts more on the internal than on the ex- ernal integuments, and especially on the isthmus of he fauces, the pharynx, and the genito-urinary pas- ages. The action, however, is not confined to these arts, but extends into the neighbouring regions; especially the œsophagus, larynx, and air-tubes. By his action, painful dysphagia, œsophageal contrac- ions, and spasmodic cough, are calmed. Bromide of otassium acts equally on the nervous centres, as a ontrastimulant. It relieves congestive headache, revents or moderates convulsions, diminishes the excito-motor action of the cord, and relaxes tetanic ontractions, while at the same time it restrains re- lex action. Under the influence of the alkaline romide, the action of the heart is moderated and endered slow, turgescence of the capillaries is dimi- ished, and fever is abated. Diuresis, if it have not already existed, appears on the cessation of febrile excitement. Perspiration, on the other hand, is arrested; and the formation of pus and mucus is diminished. The symptoms of *bromism* are almost exactly the opposite of those of *iodism*; hence bro- mine may be regarded and used as an antidote to iodine. (*Bull. Génér. de Thér.*, July 15 and 30, 1864.)

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Bull, at Rochester, on Friday, September 30th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Tickets, 6*s*., exclusive of wine.

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, September 14th, 1864.

WEST SOMERSET BRANCH.

A Quarterly Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. Kelly, M.D., *Hon. Sec.*

Taunton, September 1864.

Correspondence.

POOR-LAW MEDICAL RELIEF.

Letter from Richard Griffin, Esq.

Sir,—I shall feel obliged by your giving insertion to the following correspondence, which will inform the Poor-law medical officers that there is a prospect of some relief being yet afforded them. Whether that relief will be of a substantial character, or not, time will disclose. A liberal measure on the part of the Poor-law Board may tend to allay much of the present dissatisfaction which prevails amongst their medical officers. The reverse will most certainly drive us to lay our grievances before the House of Commons next session; and woe betide those members at the general election who turn a deaf ear to our complaints! I have votes in two counties and a borough, and it is my intention to give my support to those six members only who will promise their aid to an equitable adjustment of the system of Poor-law medical relief. If all the medical men would do the same, the grievances of the Poor-law medical officers would quickly vanish. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, September 3rd, 1864.

1. *Mr. Griffin to the Poor-law Board.*

12, Royal Terrace, Weymouth, August 22nd, 1864.

My Lords and Gentlemen,—On the 11th of last March, the Select Committee on Poor Relief recommended "that in future cod-liver oil, quinine, and other expensive medicines, shall be provided at the expense of the guardians, subject to the orders and regulations of the Poor-law Board." As some months have elapsed since the recommendation was made, I take the liberty to ask the favour of your informing me if it is your intention to issue any order on the subject, or whether you propose to bring the recommendation of the Committee before Parliament next session. I make this inquiry on public grounds, as many Poor-law medical officers have written to me respecting the recommendation.

I have the honour to be, my Lords and Gentlemen,

Your obedient servant,

The Poor-law Board. Richard Griffin.

II. *The Secretary of the Poor-law Board to Mr. Griffin.*

Poor-law Board, Whitehall, September 2nd, 1864.

SIR,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 22nd ultimo, and to inform you that the subject to which you refer has been under their consideration, but that they have not yet come to a decision as to the measures which it may be desirable to recommend the guardians of the different unions to take with reference to the resolution of the Select Committee on Poor Relief as regards the supply of expensive medicines. The question, however, will receive the attention of the Board forthwith.

I am, sir, your obedient servant,
Richard Griffin, Esq. H. FLEMING, *Secretary.*

MR. CARTER AND THE MEDICAL PROVIDENT FUND.

LETTER FROM R. B. CARTER, ESQ.

SIR,—The leading article, in which you have done me the honour to refer to me in terms of disapprobation, is calculated, I think, to mislead your readers on matters of fact. As far as these matters of fact are concerned, I beg leave, very briefly, to be permitted to address the members of the Association through your columns.

Your article implies, I think, that the publication of my letter was an uncalled for act. On the contrary, I have been occupied for a considerable time in collecting information about the prospects of a provident fund on behalf of certain gentlemen, and I could no longer delay making a report to them. In a sense, I was their delegate, and became so prior to the meeting of the Association at Bristol. My letter was one of a series addressed to the same persons; and the last, like the earlier ones, was placed at the disposal of the weekly medical journals.

Your article implies, further, that the case against me is worse than it otherwise would have been, inasmuch as I have been elected a Director of the Fund. My letter was distributed on the 3rd instant, and I first heard of my election to the Directorate on the 6th. It was a perfectly unexpected distinction. No one had ever asked me if I would undertake the office; and no one had ever suggested to me that I might possibly be selected for it.

I have used certain words, after deliberate reflection, to describe the sentiments by which some of my colleagues in the Committee were actuated. You say that those words convey "a gratuitous misstatement". I have no wish to enter into "he saids" and "they saids"; and, indeed, I could not do so without a breach of confidence. But I adhere to my original statement. I am possibly more likely to be right than you are in describing opinions that were expressed on an occasion when I was present and you were not, and about a subject on which I am warmly interested. At any rate, your readers must decide for themselves upon the respective values of our opposing testimony.

I have confined myself strictly to matters of fact. Your opinions, and the language in which those opinions are conveyed, are matters which it does not seem necessary that I should discuss.

I am, etc., ROBERT B. CARTER.

Stroud, September 12th, 1864.

[Mr. Carter writes to put us right as to *facts*. He repeats his opinion, that the members of the Committee (excepting, of course, himself)—viz., Sir C. Hastings, Mr. Daniell, Dr. H. Day, Dr. Stewart, Mr. Pound, Dr. Bryan, Mr. Bartleet, Mr. H. Gramshaw, and Dr. Richardson—in getting up the Fund, have shown that they cared little or nothing about the men who needed its help, but were selfishly engaged in working the Fund for the sake of improving the Association. We venture to think that very few men in the profession will put trust in such an opinion, even though Mr. Carter speaks as a member of the Committee. Mr. Carter forgets that some of these honourable members of the Committee were striving to establish such a Fund long before he even entered the profession. EDITOR.]

"OUR JOURNAL" AND THE LANCET.

SIR,—The *Lancet* has cunningly taken its measures to catch the members of the Association in the trap of discord; and it is painful to see men, deservedly respected, so ready to nibble at the bait. It is a pity that they cannot see that that journal is only anxious to obtain their subscriptions, and, if possible, to draw them away from our JOURNAL, and, by consequence, our Association. I look upon it as long ago decided, that our body must have an organ of communication. The aims of the Association are so important, that they cannot be carried on to advantage except through the medium of a journal of high character—of aims and objects commensurate with those of the Association itself. There can be no excuse for members of our body choosing the *Lancet* for a medium of communication regarding the affairs of our Association. Why should they go to a declared enemy of the JOURNAL in order to ventilate matters in which our Association especially takes an interest? As regards matters of scientific and general professional interest, I apprehend that the editor would be only too happy to receive any really valuable communication. I can speak, from the experience of some years, as to the editor's readiness to give effect to all arguments that may be adduced on both sides of all debateable questions. I call those "debateable", in which the first principles of honour and morality are not concerned. I call those non-debateable, in which there cannot be a second opinion, such as the propriety of medical men consulting with homœopaths, of advertising their wares for sale, etc.

I consider that the *Lancet*, like the *Telegraph*, etc., is to be looked upon as a private speculation, whose business is to disseminate news; and that we need not look in it for any higher principle of conduct than the wish to reflect, as cleverly and cunningly as possible, the most popular opinions of the day, and therefore to sell as many copies as possible. It is, however, impossible that the BRITISH MEDICAL JOURNAL can ever lay itself open to the imputation of being unprincipled, or of simply reflecting the opinions of the baser multitude. It must, as a condition of its existence, reflect the opinions of the *élite* of the profession, who constitute that ever-growing Association. The editor of our JOURNAL cannot use his influence to pander to the passions of an unreflecting mob. I look upon all these false imputations as so many insults to the understandings and feelings of the associates, and quite agree with the view you take of those men who make themselves the tools of the *Lancet's* impotent malice, while they are fouling their own nest.

It is only fair to add, that I have never heard of any expression of opinion, at the Branch meetings throughout the country, other than highly in commendation and self-gratulation upon the present mode of conducting the JOURNAL, and its increasing success. I am, etc., W. M.

September 1864.

Medical News.

APOTHECARIES' HALL. On September 8th, the following Licentiates were admitted :—

Hayward, John William, Seasalter, Canterbury
Langworthy, George Vincent, Modbury, Devon

APPOINTMENTS.

ARTLAND, William, Esq., appointed one of the Surgeons to the Blackburn Infirmary.
ENCE, James, Esq., elected Professor of Surgery in the University of Edinburgh, in the room of the late James Miller, Esq.
HORNE, G. L., M.D., to be Admiralty Surgeon and Agent at Swanage, *vice* T. R. Mitchell, M.D., resigned.

NIVERSITY OF DURHAM. The following appointments have been made in the Newcastle-upon-Tyne College of Medicine.

RMSTRONG, Luke, L.R.C.P.Ed., Lecturer on Anatomy and Dissection.
NISON, William C., M.D., Lecturer on Botany and Vegetable Physiology.
BLETON, Dennis, M.D., Lecturer on the Principles and Practice of Physic.
RRAY, William, M.D., Lecturer on Physiology.
SHAM, Thomas C., M.D., Lecturer on Anatomy and Dissections.
HILIPSON, George H., M.B., Lecturer on Pathological Anatomy.
TSON, John, Esq., Lecturer on Anatomy and Dissections.

RMY.

AMS, W., Esq., to be Acting Assistant-Surgeon.
VIDSON, Staff-Assistant-Surgeon W. A., to be Staff-Surgeon, *vice* Staff-Surgeon-Major H. J. Schooles.
INLAN, Assistant-Surgeon P., 90th Foot, to be Staff-Assistant-Surgeon, *vice* J. F. Deakin, M.D.
CQUEEN, Staff-Surgeon D., M.D., to be Surgeon 44th Foot, *vice* T. Mee.
E, Surgeon J., 44th Foot, to be Surgeon Royal Artillery.
LLER, Assistant-Surgeon O. B., 11th Hussars, to be Staff-Surgeon, *vice* D. Macqueen, M.D.
ISCHAMP, Staff-Assistant-Surgeon W. H., to be Assistant-Surgeon 11th Hussars, *vice* O. B. Miller.

DEATHS.

KINS. On August 1st, at Bombay, aged 7 days, William Garway, infant son of H. Atkins, Esq., Assistant-Surgeon 4th N. I. Bombay Rifles.
TES, William, Esq., Surgeon, at Uppingham, on August 31.
KE, William, M.D., at St. Leonards-on-Sea, aged 58, on Sept. 6.
EEMAN, R. G., M.D., at Greenwich, aged 24, on September 13.
RDINE, Arthur D., Esq., Surgeon, younger son of *J. B. Jardine, M.D., at Chatham, aged 24, on September 5th.
OWELL, Robert George, Esq., at Buntingford, Herts, on June 4.
OME. On August 31st, at Parkhurst, Isle of Wight, aged 4 years, Evander, eldest son of Henry Roome, M.D.
TREET, William, Esq., of Reigate, at Llandudno, aged 66, on September 3rd.

APOTHECARIES' HALL : BOTANICAL PRIZES. At the recent examination for the prizes in botany, given annually by the society, the successful candidates were—1. Mr. Robert S. Smith, of King's College, gold medal; 2. Mr. George R. Raine, of Guy's Hospital, silver medal and books.

UNIVERSITY OF EDINBURGH. Mr. Spence has been elected by the curators of the Edinburgh University Professor of Surgery of the university in the place of the late Professor Miller. Mr. Spence's chief opponent was Mr. Lister, and the contest was a very close one, Mr. Spence gaining the election by a majority of one.

BANTINGISM. Mr. Justice Williams is at last pronounced out of danger. For weeks he has been hovering between life and death. It is to be hoped, that those of our readers who are tempted to try the effect of the Banting system to reduce that obesity which nature has given them will think a little of Mr. Justice Williams before adopting it, for it is certain that the serious illness of the learned judge was occasioned by the use of Bantingism.

POISONED BY SPIRITS OF NAPHTHA. The deceased was an assistant to a wholesale druggist, and had been addicted to drink for the last eight years. Dr. Llewellyn, who had made a *post mortem* examination of him, said at the inquest that the deceased had evidently been in the habit of satisfying his craving for drink by diluting the spirits of naphtha and spirits of wine and drinking them. He had expired from the effects of taking an overdose of spirits of naphtha.

DEATH BY HANGING. An inquest has been held on an apprentice to a printer, who, by allowing his mind to dwell constantly on the case of Müller, came to speculate on the subject of hanging; and while making some experiments lost his life through a misadventure. It appeared that ever since the murder of Mr. Briggs, his thoughts had run in that direction; and often, when speaking of the probable fate of Müller, he had said that he himself should like to be hanged. The rope about his neck was only tied by a single knot. The impression was, that the lad was playing at hanging, and slipped, and became entangled in the rope. He was of a cheerful disposition, and no one ever supposed him to be serious when he talked about his desire to be hanged.

ARMY ASSISTANT-SURGEONS IN INDIA. The following has been issued from the Horse Guards. "His Royal Highness the Field Marshal Commanding-in-Chief, with the concurrence of the Secretary of State for War, approves the transfer to the new brigades of Foot Artillery, or to the Staff, of the third assistant-surgeons of all infantry regiments in India as have still three. These officers will be exempted from the payment of the entrance, band, and mess contributions to the corps to which they may be transferred, they having made these payments in their present regiments, and they will only be called upon hereafter to pay the annual subscription while serving. Those assistant-surgeons who may be transferred to the Staff, and have not been eighteen months with their present regiment, will have their entrance, band, and mess contributions returned to them. His Royal Highness also approves that, for the future, all medical officers who may have paid mess and band contributions to one regiment shall not be required to pay the same again to any other regiment, should they be transferred for the convenience and benefit of the service, and not at their own request."

DR. LANKESTER ON POST MORTEM EXAMINATIONS. Some days ago Dr. Lankester held an inquest on the body of Elizabeth A. Bushnell. It appeared from the evidence of the husband, a fruit porter in Covent Garden Market, that his wife had been addicted to drink, and that on the day before her death she fell down and injured her head. Mr. Morritz, a surgeon, was sent for, but the woman died before he arrived. In answer to the coroner the medical gentleman said he did not analyse the stomach, as he felt certain about the cause of death. The coroner said he wished it to be distinctly understood by the profession that, when he ordered a *post mortem* examination to be made, it was to be a thorough and not a partial examination; all the organs were to be tested, as poison had frequently been found when there was no suspicion of anything of the kind having existed. As a proof of the necessity for such a thorough examination as he insisted upon, he mentioned a case which came before him some time ago—that of a woman who was supposed to have died from an epileptic fit; but on the stomach being carefully analysed, it was discovered that she had taken a large quantity of oxalic acid. In the present case the jury found that the deceased died from apoplexy, accelerated by a blow and by her previous habits.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. ....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

DISEASE IN MANCHESTER AND PRESTON.

MONTHLY RETURN of new cases of disease coming under treatment in the four weeks ending July 30th, 1864. (A) At 28 Pauper Charitable and Public Institutions in Manchester and Salford. Communicated by the Manchester and Salford Sanitary Association. (B) In 6 Poor-law Districts and 1 Dispensary at Preston. Communicated by R. C. Brown, Esq., Preston.

	(A)	(B)
Small-Pox	39	—
Chicken-Pox	8	10
Measles	76	10
Scarlatina	48	15
Diphtheria	—	2
Hooping-Cough	18	4
Croup	3	2
Diarrhœa	372	103
Dysentery	29	18
Cholera	—	—
Erysipelas	19	4
Puerperal Fever	—	—
Insanity	43	6
Bronchitis and Catarrh	429	85
Pleurisy and Pneumonia	32	12
Carbuncle	—	—
Accidents and all other diseases	3982	440
Totals	5098	711

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

S. O.—Dr. Bree left the Association, he says, because the Editor of this JOURNAL refused to allow him to express his opinion on a matter of great public interest; and because, as he supposes, his opinion differed from the Editor's. Dr. Bree's note (it was nothing more) was not inserted in the JOURNAL, simply on account of the unbecoming violence of its language. The past records of the Association shew, that the present Editor of the JOURNAL is not the first who has felt obliged to object to the language used by Dr. Bree in his correspondence, and who has thereby fallen under his (Dr. Bree's) displeasure. Dr. Bree and rash statements seem to go together. No better proof of the fact can be given than his last appearance in print.

PRESERVATION OF VEGETABLE INFUSION.—SIR: It perhaps might be useful to many members of the Association to know, that a small quantity of chloroform added to any vegetable infusion or decoction will preserve it for many weeks. By well shaking one minim of chloroform with each ounce of concentrated infusion of gentian, I have been enabled to preserve it *perfectly unchanged* for six or eight weeks during the late hot weather, at a cost of only one halfpenny for each imperial pint of decoction.

I am, etc., JAMES GAGE PARSONS.

Bristol, September 10th, 1864.

S. C.—Our correspondent need be under no apprehension. The utmost which the malice and envy of the *Lancet* have accomplished, is to have induced three or four gentlemen to write as it desires they should write in its pages about the Association and its JOURNAL. Any one who will act in this sense will doubtless earn the temporary gratitude of the *Lancet*. Even anonymous writers are encouraged. Last week, the *Lancet* tells a correspondent, who writes under the Israelitish pseudonym "Josephus" about the "Association and its Weekly Print", that his letter shall be inserted, if he will only send his name in confidence! One of the three correspondents above alluded to, has already had his reward in a notice, half a column long, and in the leading part of the *Lancet*, of a paper lately read by him at one of our Branch meetings! Papers of this kind, when they appear in our columns, become, as the insolence of the *Lancet* puts it, *rubbish*. We are sure that there are not half a score of men in the profession who do not see, as plainly as we do, that the whole affair on the part of the *Lancet* is simply and purely a commercial move. It sees our Association and its JOURNAL strong and thriving, and it thereupon follows the instincts of commerciality. Never, since our Association was founded, have the influence and reputation of the Association and its JOURNAL been greater than they are at the present moment; and never, consequently, has it been assailed by more unseemly and furious, though impotent, malice and envy.

THE EDINBURGH MEDICAL JOURNAL for September contains the following papers:—On Treatment of Albuminuria, by Dr Dickinson; On Arsenic Eaters of Styria, by Dr. C. Maclagan; Customs of Old Calabar People, etc., by Mr. A. Hewan; Cosmic Sensibility, by Dr. Inglis; Case of Alopecia treated by Carbolic Acid, by Dr. Watson; and Fourteen Cases of Ovariotomy, by Dr. Keith.

PART II OF VOL. IV OF THE LONDON OPHTHALMIC HOSPITAL REPORTS has appeared. It contains a paper by Mr. Bowman, On Needle Operations in Cases of Detached Retina; A Case of Congenital Cataract treated by Iridesis, etc., by Mr. Critchett; A Tabular Review of 106 Cases of Squint treated by Operation, by Mr. Hulke. Mr. Lawson contributes Cases of Traumatic Cataract produced without Rupture of the External Coats of the Eye. Mr. Hutchinson continues his Cases illustrating the Connexion of the Fifth Nerve with the Nutrition of the Eye. Mr. T. P. Teale, jun., describes a Suction-Curette for Extraction of Soft Cataract. Translation of two papers by Von Graefe are added; viz., Observations on Compression Bandages, and on Perforation of Detached Retina, etc.

SUPERANNUATION ALLOWANCES TO UNION OFFICERS.—SIR: You will oblige me, and probably some others, if you will kindly state in your next issue, whether the recent Bill to provide Superannuation Allowances to Officers of Unions and Parishes, refers to officers whose services have been solely confined to union or parish duties; or whether it includes also such officers as have attended to private practice as well. Unless the latter class is included, I am inclined to think scarcely one union medical officer in three hundred is in a position to derive any benefit from it, or ever will be.

I am, etc.,

AN UNION MEDICAL OFFICER.

Easingwold, September 12th, 1864.

[There can, we believe, be no doubt that the Bill includes those officers who have attended private practice as well as parish duties. EDITOR.]

INDIAN ARMY MEDICAL WARRANT.—A correspondent in India writes: "The Warrant, as it now stands, is most unjust and unfair towards the assistant-surgeons of the old Indian Medical Service. It is true, the Horse Guards and Indian Services now stand in much the same position as regards pay; but when the Indian Service has paid the heavy subscriptions to funds, there is a great falling off in their net pay. I am told, an assistant-surgeon of ten years' standing, if a married man, has to suffer deductions to the amount of 20 per cent. from his pay proper. I will try and send you to-morrow by the Southampton portion of the mail some extracts from some of the papers on the subject."

COMMUNICATIONS have been received from:—Dr. GEORGE BUCHANAN; Mrs. E. POWELL; Dr. J. G. PARSONS; ONE WHO HAS SERVED; Dr. E. MORRIS; Dr. T. INMAN; AN UNION MEDICAL OFFICER; Mr. I. HARRINSON; Mr. JOHN BRIDGER; Mr. J. VOSE SOLOMON; Dr. W. H. RANSOM; Dr. F. E. ANSTIE; Dr. FREDERICK J. BROWN; Mr. R. GRIFFIN; Mr. M. T. MASTERS; Dr. ALEXANDER FLEMING; Dr. G. L. THORNE; Dr. WILLIAMS; Mr. WILLIAM MARTLAND; Mr. R. B. CARTER; Mr. A. RANSOME; Mr. E. ATKINSON; Mr. S. A. PARKER; Mr. HOPLEY;

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.*]

DIPHTHERIA IN LONDON.

By Thomas Hillier, M.D.

My object in this paper is to call attention to a few points in relation to this disease, which have been forced upon my notice whilst analysing the cases that have come under my care at the Hospital for Sick Children in London.

Statistics. Diphtheria has no doubt existed sporadically, under other names, in England, almost from time immemorial. This is the opinion of many eminent medical men. Dr. Bennett read a paper on it in 1850, founded on cases which he had recently seen in London. A severe outbreak of it occurred at Haverfordwest in 1849-50; as many as two hundred cases coming under the care of one surgeon there. (*Med. Times and Gazette*, Dec. 1850). It was epidemic in Cornwall in the autumn of 1855; it was recognised by the Registrar-General as extensively prevalent in England for the first time in November 1857.

At the Hospital for Sick Children in London, there was no case registered as diphtheria until February 1857; but, in March 1856, there was one case described as "ulceration of the fauces—secondary croup". This child recovered; her malady was, in all probability, diphtheria. Every year since 1856, there have been under treatment cases recognised as diphtheria. Amongst the in-patients in 1857 were 5 cases; in 1858, 5; in 1859, 3 cases; in 1860, 4 cases; in 1861, 19 cases; in 1862, 16 cases; in 1863, 26 cases; and in the first six months of 1864, 4 cases.

There have been altogether, since the beginning of 1857, 3,318 in-patients in the hospital; amongst these, there have been 85 cases of diphtheria, 71 being primary, and 14 secondary. Of the 71 primary cases, 37, or 52 per cent., died; of the 14 secondary, 10, or 71 per cent., died.

Since February 1852, with 4,538 patients, there have been 49 cases of croup, and 4 cases of laryngitis. Of the 49 croup cases, 41 were primary, and 8 secondary, most of them to measles. Of 41 primary, 14, or 34 per cent., died; of 8 secondary, 5, or 62 per cent., died.

It will be observed, that the mortality of diphtheria has been very high in the hospital. In judging of these results, it must be remembered that all the milder cases are treated as out-patients, and that only the severe cases are admitted into the wards; and that a very large proportion of the children affected were either tuberculous or rickety, or otherwise unhealthy.

The affections to which diphtheria was secondary were, measles in three instances, scarlet fever in two, surgical operations in two, and once to Bright's disease, tubercular meningitis, pneumonia, typhoid fever, chorea, and convulsions, severally.

Laryngeal Complications. Of 33 cases, the larynx was involved in 23 (or nearly 64 per cent.), and not involved in 10 cases. Of the former—*i. e.*, where the larynx was implicated—15 died, and 8 recovered; and of the latter, 6 died, and 4 recovered.

Where laryngeal symptoms existed, the days on which they made their appearance were as follows. On the first day, in 11 cases; on the second day, in 3; on the third day, in 4; on the sixth day, in 1; on the seventh day, in 2; on the twelfth day, in 1; and on the nineteenth day, in 1.

Of the 15 who died with laryngeal symptoms, death occurred at the end of one day from the appearance of these symptoms in 1; at the end of two days, in 2; of three days, in 2; of four days, in 3; of five days, in 4; of six days, in 1; of nine days, in 1; and not until the end of seventeen days, in 1 case.

These results do not quite agree with those of Bretonneau. He says that, of 41 cases, the larynx was the seat of disease in 29; and of these, 26 died. Of my 23, only 15 died. In all the 29 cases, except 1, the laryngeal symptoms supervened before the end of the first week; and in 16 of them, on or before the third day of illness. Two of my cases had laryngeal symptoms for the first time after the end of a week; one of these died on the twenty-third day with laryngeal complication, after only four days' dyspnœa. Of the cases which died of asthenia, 1 died on the sixteenth day; 2 on the seventeenth; 1 on the nineteenth; 1 on the twenty-second; and 1 on the twenty-third day.

Albuminuria. Dr. Greenhow states that, "when albuminuria occurs in diphtheria, it does so generally within a few hours of its commencement". My observations in reference to 14 cases are quite opposed to this statement. Of 38 cases, albumen was present in 33, and absent in 5. In eleven other cases, the urine was not examined. Among the 38 cases in which albumen was present, there were 32 deaths, and 6 recoveries.* Of the five cases without albumen, all recovered. In 14 cases, it was accurately determined on which day albumen first appeared in the urine. There was one case of old renal disease, in which albumen was present throughout. In no other case was albuminuria present till the fourth day, and on this day in 1 case only: it was found on the fifth day in 3 cases; on the seventh day, in 2; on the ninth day, in 5; on the thirteenth day, in 1; and on the nineteenth day, in 1. In one case, in which the urine was not examined till the sixth day, it was found to contain albumen; and in another, the urine, examined for the first time on the ninth day, contained albumen abundantly.

Dr. West states (fourth edition, p. 394), that "the presence of albumen is not accompanied with diminution in the quantity of the secretion." This does not at all accord with my experience in the cases where I have been able to get the urine saved. There has been, together with the presence of albumen, a great falling off in the amount of urine secreted. I believe this to be a more striking symptom in diphtheria than in scarlatina. As the urine becomes more loaded with albumen, the total quantity of urine secreted is much diminished. This point is illustrated in the history of the cases which I shall presently read.

The most striking difference between the albuminuria of diphtheria and that of scarlet fever is, that the former is not attended with dropsy, or, at any rate, very rarely.

Casts of the tubes are occasionally to be found in the urine, but not blood visible to the naked eye. As a general rule, to which there are some exceptions, albuminuria is present in all the severe cases; and it commonly occurs within the first week or eight days. It is not in any way dependent on obstructed respiration, inasmuch as it may occur to an extreme

* These figures unfairly represent the fatality of cases accompanied with albuminuria; because in many cases that recovered, no note was taken as to albumen; but in the fatal cases, this point was nearly always ascertained.

degree when the air-passages are not implicated. Albuminuria may also be found in mild cases.

The kidneys exhibited to the naked eye but little change in many cases. In some, however, they were abnormally congested; and in most cases the cortical portion was too opaque.

On microscopical examination, transparent fibrous casts were occasionally met with in the straight tubules, and more rarely hæmorrhage. The epithelial cells of the convoluted tubules were generally too numerous; they were also granular; the granules were sometimes protein, and at other times fatty. In some cases, there was granular exudation between the Malpighian capsules and tufts. The tubules in many cases were much too distended with epithelial cells. These appearances indicate the presence of nephritis; and there is no doubt that the renal changes play a most important part in the course of diphtheria. The relative frequency of renal affection is much greater than in scarlatina; it is very much rarer to see a severe case of diphtheria unattended with albuminuria and diminished renal secretion, than to see severe scarlatina not so complicated. In fact, the worst cases of scarlatina very frequently run their course with little or no albumen in the urine.

Fatty Degeneration of the Heart. Another *post mortem* change, to which no attention has been directed, is fatty degeneration of the muscular fibre of the heart.* This I have met with in a well marked degree in three cases. I am inclined to ascribe to this cause the sudden deaths by syncope which not uncommonly occur during apparent convalescence, and at a time when both the patient's friends and his medical attendants are calculating on his speedy restoration to health.

The three cases in which I observed this change in the heart's fibre were all of them rather chronic cases; two had a duration of twenty-three days each, and the third was one of eleven days only. Each of the patients died of syncope, with symptoms of asthenia, and not of asphyxia.

Case I. The first was a boy, G. E., aged 6, who had been always rather delicate. The first symptoms observed were feverishness, drowsiness, and listlessness, with slight sore-throat. A day or two later, he was hoarse. On the fourth day, he had a bad headache, and his throat was more painful and swollen. His mother looked into his mouth, and said that his throat was covered with a white coating. On the eighth day, the boy complained still of his throat, but was less hoarse; his appetite was very bad. On the tenth day, he was languid and listless; he took an egg for breakfast, which he immediately vomited. On this day he came under my care. There was seen to be a thick white deposit on both tonsils and arches of the palate, extending down the pharynx as far as the eye could see. Pulse 108, weak; respiration quiet. The tincture of sesquichloride of iron was applied locally, and given every two hours internally. Wine was ordered to the extent of four ounces in twenty-four hours; beef-tea and milk freely. The urine at this time contained a trace of albumen.

11*th Day.* He was in much the same state. He had loose cough, but no laryngeal sounds. In twenty hours he passed 11½ ounces of urine, of specific gravity 1021.

12*th Day.* He was not quite so well. His appetite was worse; and swallowing was apparently more difficult. There was slight hoarseness. Pulse 124, weak; respiration 24, not noisy. He had passed 16 ounces of urine, of specific gravity 1015.

13*th Day.* He seemed rather better, and sat up to play with his toys. Pulse 120. He passed 16 ounces of urine, of specific gravity 1017, containing more albumen.

15*th Day.* He took breakfast with appetite; was a little sick early in the morning. The fauces were still red and swollen; the deposit was clearing somewhat from the surface of the tonsils and uvula. His urine was seven ounces only in twenty-fours hours, of specific gravity 1026.

16*th Day.* He swallowed much better, and had more appetite. The fauces looked better. He passed eight ounces of urine, of specific gravity 1025.

18*th Day.* The fauces were almost free from false membrane. The urine amounted to six ounces, of specific gravity 1020. Pulse 88, of moderate volume, weak.

20*th Day.* He seemed better. The fauces were quite clear. He passed six ounces of urine, of specific gravity 1024. Pulse 88.

21*st Day.* He took breakfast with fair appetite; was cheerful, but more languid. Pulse 104, *very weak.* His urine amounted to six ounces, of specific gravity 1024. The sediment, examined by the microscope, showed crystals of uric acid, some transparent medium-sized casts of tubes, and also larger granular casts.

22*nd Day.* He was weaker; constantly sick. His urine was only three ounces and a half in twenty-four hours, of specific gravity 1035.

23*rd Day.* He was still weaker. Sickness continued. Pulse very weak, 120, not quite regular. His urine was only an ounce and a half in twenty-four hours.

24*th Day.* He had yesterday nutritious and stimulant injections two or three times, but he did not retain them long. He was much weaker, and was sick at intervals. Pulse imperceptible. He died of asthenia at noon. The urine during twenty-four hours before death amounted to about one ounce, and was highly albuminous.

On *post mortem* examination, the fauces, pharynx, œsophagus, larynx, and trachea were found quite healthy. The *lungs* were also healthy, with the exception of a very slight amount of collapse. The *heart* was very flabby; the blood was loosely coagulated. The muscular fibre looked pale; and, when it was examined microscopically, many of the fibres were seen to be very imperfectly striated, the transverse striæ being replaced by rows of fatty globules. The *kidneys* were also diseased; the cortex was pale and opaque, and wider than usual; the outer third of the pyramids much congested. Microscopically, the tubules had, very many of them, the appearance of being filled with granular matter, the outlines of epithelial cells and nuclei being imperceptible; in others, the outline of cells was discernible, and they were filled with granular matter.

Case II. The second case was that of a little boy, aged 2 years, W. S. He complained of slight soreness of his throat, with a little swelling of the glands of his neck, for about three weeks. He became thirsty, lost his appetite, and was drowsy; his skin was rather hot at first, but subsequently became of its usual temperature. About the nineteenth day of his illness, he became hoarse, and there was difficulty in his breathing; and his mother stated that, from about the tenth day, his urine was scanty in amount. He came under my care at the end of three weeks' illness. He was then pale; his skin was cool; and he was drowsy. There was no difficulty in his breathing. The tongue was coated with dirty yellow fur; and the tonsils, uvula, and soft palate were coated with a thick yellowish membrane. Pulse 140, regular. His throat was brushed with a lotion consisting of equal parts of hydrochloric acid and gly-

* Dr. Bristowe states that he has seen this condition in one case.

cerine; and an emetic of sulphate of copper was given, which caused moderate vomiting. He was ordered a mixture containing five grains of chlorate of potash, one grain of iodide of potassium, and ten minims of liquor cinchonæ, every second hour. Wine and nourishment were given freely. He passed a comfortable night. The next day, his throat presented much the same appearance; his breathing was still unobstructed, though the nurse stated that once during the night he breathed with difficulty for about ten minutes. Over his body were some petechial spots, like old flea-bites. He seemed quite comfortable at 11 P.M.; and passed a quiet night, taking some nourishment and wine. At 7 A.M., the house-surgeon was called to him, and found him dying of asthenia. No urine could be obtained.

On *post mortem* examination, his *heart* was found to have a pale tint, and to exhibit, under the microscope, fatty degeneration of the fibres. There was a clot in the right cavities, of a dirty bottle-green colour. The *lungs* were healthy. The *liver* was congested. The *kidneys* were congested; the cortex opaque; the epithelial cells were very granular. The *stomach* was studded with ecchymosed spots, of the size of a split pea. The *intestines* exhibited a similar petechial condition. The *bladder* contained half an ounce of albuminous urine. The *spleen* was of dark colour, hard. The *fauces* were covered with membrane; and there was a little granular lymph in the *larynx*.

Dr. Wade has pointed out a peculiar change in the spleen in cases of diphtheria accompanied with purpura.

CASE III. A boy, aged 5, died on the eleventh day of illness. He had suffered from a chronic abscess in his arm, which was found to be connected with disease of the humerus. This had kept him weak. On the 8th of June, he was sick; and his mother thought he had a bilious attack. The next day, he vomited a quantity of green watery fluid. On the third day, he wanted to "lie about", and his skin was hot. On the fifth day, he for the first time complained of a sore throat. A doctor, who saw him the same evening, thought he was suffering either from scarlatina or diphtheria. The next day, his throat was worse, and the case was pronounced to be undoubted diphtheria. On the seventh day, he could not be induced to swallow; and the surgeon applied lunar caustic to the throat. The glands of his neck had been swollen for some time past. There was no hoarseness nor difficulty of breathing at this time.

On the eighth day of his illness, he was admitted to the Hospital for Children. He was then drowsy. His nares were excoriated, with clear discharge running from them. His lips were dry; the tongue had a bright red tip, edges, and centre, with elevated papillæ, and two lateral streaks of brown fur. He vomited several times. Both tonsils were covered with a thick white layer; the back of his pharynx could not be seen, on account of the quantity of mucus regurgitated. He had a short cough, decidedly laryngeal, but rather loose. His voice was moderately suppressed. During inspiration, there was decided but moderate recession of the anterior and lower part of the chest. His ordinary breathing was noiseless. The urine was clear, and without albumen. He was ordered ten grains of ipecacuanha, which made him sick. He was to have beef-tea, milk, and wine, and to suck ice freely; also to take, every second hour, four grains of chlorate of potash and one grain of carbonate of ammonia.

The next day, his breathing became much more difficult. A sulphate of copper emetic was given without effect. As the dyspnœa became urgent, with increasing lividity and much restlessness, the trachea was opened by Mr. Marsh, the house-surgeon. The operation was easy; and, after expectorating a little false membrane, the patient breathed without the least discomfort. The pulse was 152, and regular. His look was rather pale and earthy. The temperature of the skin was 102°.

The next day, he looked better. The skin was, however, hot and dry. The pulse had fallen to 132; the respirations were 38 in a minute. His urine measured forty-five ounces in twenty-four hours, and was of specific gravity 1005, without albumen. It had been denser on the previous day, having a specific gravity of 1012, with a distinct trace of albumen.

On the succeeding day—the third from the operation, and the eleventh of illness—he looked no worse. Pulse 152, rather weaker; respirations 26 in the minute. The tongue was redder, but not coated. He had more pain in swallowing. The skin was cool. About 11 A.M. of this day, he was seized rather suddenly with symptoms of exhaustion. Pulse 160, intermittent, and very weak. His extremities were cold. Hot bottles were applied to his feet; and brandy, milk, and eggs were forced down his throat. He rallied, and seemed doing well again; when, at a quarter to eight in the evening, although half an hour previously he had received *per anum* some beef-tea and brandy, he died suddenly of syncope.

His urine in twenty-four hours amounted only to seven ounces, of specific gravity 1010, faintly alkaline, and containing much more albumen than it had two days before.

On *post mortem* examination, there was no exudation or ulceration on the fauces. One tonsil was swollen; and there was swelling and injection of the epiglottis and root of the tongue. The interior of the larynx was lined with a thin shreddy mucus; and the membrane beneath was abraded, injected, and uneven. In the fossæ above the ventricles, and over the vocal chords, the mucous membrane was white, from an interstitial change, and not from superficial exudation. The mucous membrane around the wound was ulcerated; and there was also an ulcer, of about the size of a pea, half an inch below the wound. The mucous membrane of the trachea was of a dusky purple tint, covered with slimy mucus, in which were entangled a good many shreds of lymph, all very small. All the bronchi and secondary divisions of these tubes contained much slimy mucus. Both lungs were emphysematous; the pleuræ of the left lung—costal and pulmonary—were much injected. The kidneys weighed together six ounces and fourteen drachms. The cortex appeared cloudy; and, under the microscope, the epithelial cells were too granular. The heart's fibres were unduly pale. Under the microscope, the transverse striæ were found in many cases replaced by fatty granules.

Sickness is always a symptom of serious import. It is generally connected with scanty secretion of urine.

Paralysis and other Nervous Phenomena. One circumstance, which has very forcibly struck me in reviewing the cases of diphtheria at the Children's Hospital, is the great rarity of paralysis or other nervous phenomena as sequelæ. I have not seen, in hospital practice, any case of general paralysis, or paraplegia, or impairment of vision, and only one case of loss of sensibility of the velum pendulum palati, and one case of strabismus. In one case, fluids passed the rima glottidis, and were rejected through the tracheal tube. In private practice, although I have not seen nearly so many cases of the disease, I have met with partial amaurosis twice, with paraplegia twice, and with nasal voice several times.

Great slowness of the pulse has been observed after

diphtheria. I have seen it in an adult fall to 50 in a minute during convalescence, but never below this. In children, I have not seen this symptom at all to a marked degree.

Maingault has analysed ninety cases of diphtheritic paralysis. Twenty-nine of the patients were children. He says that the order of frequency with which the different forms occcur is as follows:—1. Paralysis of the soft palate; 2. General paralysis; 3. Amaurosis; 4. Paraplegia; 5. Strabismus; 6. Paralysis of the muscles of the neck and trunk; 7. Impairment of sensibility, without loss of motor power; 8. Loss of virile power; 9. Paralysis of the rectum; 10. Paralysis of the bladder.

There does not appear to be any proportion between the severity of the primary symptoms and the frequency or extent of these peculiar sequelæ affecting the nervous system. Severe paralytic symptoms have been often observed to follow very mild attacks of diphtheria; and some of the most severe cases have recovered without any nervous sequelæ whatever.

My experience would lead me to believe that these symptoms are relatively more frequent amongst those in easy circumstances than amongst the poor, and in adults than in children. Diphtheritic paralysis has occurred in three medical men personally known to me. It is very likely that slight paralysis would be overlooked in children too young to describe their sensations, and in whom a tottering gait would be ascribed to simple debility. The way in which this paralysis is induced is at present entirely a matter of speculation; I have not yet met with any theory which satisfactorily explains the phenomena. They are not due to imperfect aëration of the blood, or to albuminuria, or to anæmia; because they may occur where the larynx has escaped, where there is no albumen in the urine, and where there is no great degree of anæmia. They may be regarded as proving that the disease is a general, and not a local one. They present some analogy to symptoms which occasionally follow continued fever and some poisons. I am inclined to ascribe them to impaired nutrition of the nerves supplying different parts, and perhaps in some cases to fatty degeneration of the muscular fibre. The muscles of the heart I have found in three cases undergoing fatty change; and I believe the muscles of the soft palate have been found in the same condition.

Pathology. As to the pathology of diphtheria, there is no doubt that it is a general, and not a local disease. It may prove fatal even when the throat is quite well. There is no constant relation in severity between the local and general symptoms. The presence of albumen in the urine, and the occurrence of the nervous symptoms just referred to, are additional evidences in support of this statement.

It is not a modified form of scarlatina. This was a very favourite opinion when the disease was less known than it is now. There are, I presume, now but few practitioners who adhere to this theory. It attacks quite as frequently those who have had scarlatina, as those who have not. No doubt, it sometimes follows close upon the steps of scarlatina; it sometimes complicates that disease; and it frequently occurs as an epidemic in seasons and places where scarlatina is epidemic. The albuminuria which accompanies diphtheria sets in earlier, is seldom attended with dropsy, and less frequently with convulsions and coma.

Diphtheria and Croup. What is the relationship between diphtheria and croup? On this point I will not speak too dogmatically. I can only say that, in my experience in London, I see no distinction between them. Most of the cases formerly called croup would now be called diphtheria; and many of the cases now called diphtheria would ten years ago have been called croup. In France, the distinction between the two affections is not attempted. What are the points of distinction insisted on between croup and diphtheria? The false membrane is said to affect different parts, and to differ in its physical characters. Croup is said to be sthenic, and diphtheria asthenic; croup sporadic, and diphtheria epidemic; diphtheria to attack more adults than croup; diphtheria is said to be infectious, and croup not so; diphtheria to be attended with albuminuria, and followed by paralysis, which is not true of croup. I will take take each of these points in order.

In these remarks I am referring, of course, to membranous or pseudo-membranous croup, and not to spasmodic croup, or catarrhal laryngitis without the formation of false membrane.

The seat of the deposit in true croup is said to be the larynx, and not the pharynx. Until diphtheria became epidemic in England, the fauces were not carefully examined in many cases of croup. Since the throat has been examined in croup, it has often been ascertained that there are deposits of false membrane on the tonsils and soft palate, when no symptoms lead to the suspicion of their existence. I quite agree with Guersant, a French writer, who says: "The number of cases in which croup is not preceded by membranous angina, and presents itself in its most simple state, is much more restricted than was formerly supposed." He says: "Perhaps the number of such cases may amount to a twentieth; for, since a more minute attention has been paid to exploring the pharynx, some traces of false membrane are almost constantly found there at the commencement."

Dr. West gives his experience of croup from May 1839 to April 1849, before diphtheria prevailed epidemically in England. Of 23 cases, 11 were idiopathic, and 12 secondary. Of the 11 primary, 2 had a formation of false membrane on the velum and tonsils; and of the 12 secondary, 7 had such a formation.

In looking back to different old accounts of croup, I find that a certain proportion of them are always described as having a deposit on the fauces, whilst in many cases probably no attention was directed to that part. Of the autopsies recorded at the Hospital for Sick Children in four years, there have been only two cases in which a false membrane has been found in the larynx whilst the fauces had escaped;* and one of these was pronounced to be diphtheria, because of the existence of albuminuria, and death from asthenia. During the late epidemics, it has not been at all infrequent to have cases which everybody admitted to be diphtheria beginning with laryngeal symptoms, whilst the fauces and pharynx were attacked at a later period. This was true of a medical man whose case I recorded in the *Medical Times and Gazette* for February 1861. He was seized on March 31st with all the symptoms of severe laryngitis. On the 2nd of April, laryngotomy was performed; and it was not until a day or two later that any membranous deposit could be seen in the pharynx; it never appeared on the tonsils or soft palate. No one doubted that this case was one of diphtheria, although it was certainly pure croup, if the primary seat of exudation is a distinctive mark in these diseases.

In the next place, the anatomical characters of the deposit will not distinguish these affections. In diphtheria, you may have as tenacious and plastic a false membrane, with as much injection of the ad-

* It is quite probable that in some seasons and some places the pharynx has been more constantly attacked than others. I have thought that the existence of an epidemic of scarlatina may increase this tendency to implicate the pharynx.

joining mucous membrane, as is ever seen in true sporadic croup. Microscopically, there is no distinction between the exudation.

It has been thought that diphtheria more frequently leads to ulceration than croup; but ulceration was very commonly met with from croup before epidemic diphtheria was known.

As regards the sthenic and asthenic character of the diseases, croup of thirty years ago was either sthenic or asthenic, according to the patient's previous health, and the circumstances under which he was attacked; and diphtheria of the present time is sometimes moderately sthenic. Diphtheria is epidemic, and croup is not so, it is said. This is begging the question. I believe diphtheria to be epidemic croup; and, just as in other diseases, the characters are modified during the prevalence of an epidemic. The disease is more asthenic; it attacks a larger number of adults; lays hold of the constitution more severely; and is accompanied with graver sequelæ. Moreover, if the pharynx is more frequently attacked in the epidemic than in the sporadic cases, this is only analogous to what is seen in scarlatina, in some epidemics of which the throat is much more seriously affected than it is in others. The swelling of the submaxillary glands is no mark of distinction; it often exists in croup, and is often only slight in diphtheria.

With regard to albuminuria as a mark of distinction, this symptom, I believe, occurs in both forms of disease. It was recognised in diphtheria for the first time in 1856, by Dr. Wade of Birmingham. The difficulty now is to meet with what will be admitted as a pure case of croup. I have found albuminous urine in cases of disease beginning in the larynx, with a considerable amount of sthenic reaction, and characterised by the exudation of a tenacious false membrane. Such cases would formerly have been regarded as typical of true croup.

In the last place, we come to the peculiar disorders of innervation which have been observed after diphtheria in the late epidemic. To judge of the value of these as distinctive symptoms, it must be remembered that, even since they have been recognised and accurately described, their occurrence is found to be comparatively rare. At the Children's Hospital, only two very slight cases of it have come to my knowledge, out of upwards of 80 cases, with more than 10,000 outpatients coming annually to the hospital. Maingault was only able to hear of 29 cases in children. Again, although epidemics of diphtheria have been described from the time of Aretæus downwards, it was not until 1834 that any frequent connexion was observed between paralysis and diphtheria by M. Orillard. Previously to this, Chomel and Ghisi in 1749, Bard of New York in 1771, Sédillot in 1810, and Guimier in 1826, had reported cases of paralysis following diphtheria; but they were lost sight of by later writers, or looked upon as mere accidental coincidences. It need not, then, excite much surprise, that when croup was comparatively rare, paralysis was not observed to follow it. It may either be that, until the disease became epidemic, these sequelæ did not occur; or, what is more probable, that, occurring but rarely, the connexion between them and the primary illness was overlooked. The very gradual manner in which M. Trousseau came to recognise the connexion between diphtheria and these paralytic symptoms, after he had seen several cases of the kind, is well described in his *Clinique Médicale*, vol. i.

The last point of distinction insisted on between croup and diphtheria is, that the latter is contagious, whilst croup is not so. I quite admit that diphtheria is contagious. One of the most remarkable evidences which I have met with of its contagious property was afforded by the case of an eminent surgeon, who has kindly afforded me the following interesting account of his case.

Case of J. L., surgeon, reported by himself. "In the first week of August 1862, I was asked to perform tracheotomy on a child *supposed* to be suffering from *croup*, but, *in reality*, as my subsequent symptoms showed, affected with *diphtheria*. I had at the time a puncture on the top of the thumb of my right hand, and next day felt it painful. The day after, I observed a small pustule, which was punctured and poulticed; and, a day or two later, I removed the epidermis, and found the dermis beneath in the condition of a peculiar dark slough. This sore had very peculiar characters; viz., a total absence of any tendency to suppuration; and excessive pain, which quite prostrated me by its severity, and obliged me to take to bed.

"About eight days after the first symptoms, feeling the thumb less painful, I was able to go about. One evening, I drove about seven miles on the outside of a carriage; and, though the air was very mild, I felt it uncomfortably, and next morning found one of my tonsils affected with redness and swelling, with a white patch on it, and extremely painful. This state of the tonsil was accompanied, like the sore on the thumb, with great prostration; and I was compelled to return to bed for two or three days. I then went to Torquay; and, though very feeble, accomplished the journey satisfactorily; but I was there prevailed on to apply solid nitrate of silver to the tonsil, and this produced excessive aggravation of the difficulty of swallowing. After about a week at Torquay, I ventured out for a walk on a fine hot day, which nevertheless gave me tonsillitis of the other side, in spite of a thick handkerchief round my neck. I was thus thrown back another week, when I was convalescent as regards the throat and general symptoms; but the small sore on the thumb was not healed, the slough having separated very slowly, and the ulcer showing extreme languor in cicatrising, and remaining remarkably sensitive. It healed up completely in about a month from its first appearance, and I then considered myself perfectly well. A month later, however—viz., in the last week of September—I found that liquids which I swallowed tended to pass up the posterior nares; and the same occurred with air, when I blew air out of my mouth. My articulation also became somewhat thick, from a sort of sluggishness of the tongue, which also tingled slightly. About the middle of October, tingling and slight impairment of sensibility appeared in the fingers and feet, and crept up the lower limbs until it reached the gluteal region. This I describe as tingling, rather than numbness. There *was* numbness, but tingling was the prominent feature. I also found that I could not stoop so low as usual without bending the knees, on account of painful stiffness about the calves and hams. Lastly, at the beginning of November, I found I had difficulty in preventing myself from tripping and falling in walking down stairs; and progression on a plane surface was decidedly impaired. I had at this time to deliver an introductory lecture, which I just managed to get through; and since that time the symptoms have gradually subsided, but very slowly, so that even now I am not quite sure that my velum acts quite as it used to do; and now and then, after much mental exertion, I feel a slight tingling in the little fingers, which I attribute to the dregs of this strange disorder."

It is interesting to observe, that the case of laryngeal mischief for which tracheotomy was performed was regarded as croup, until the peculiar symptoms which appeared in the surgeon were manifested. This I find constantly to occur, that cases are called croup until a late period, when some symptom shows

tself which we are not taught to connect with croup, or till other cases occur in the family affecting the pharynx more decidedly, and coming up to the conventional description of diphtheria.

Admitting, then, that diphtheria is contagious, what is to be said of croup? I know nothing of its contagiousness. Of course, the chances of contagion are much smaller when a disease is sporadic, than when it is epidemic. That diphtheria is infectious, as well as contagious, appears to be pretty well proved; and this is the strongest argument in favour of the non-identity of the two diseases. But even diphtheria is not highly infectious, especially when sporadic. Single cases constantly occur without any tendency to spread to others.

After fully considering all the evidence *pro* and *con* on this question, I am inclined to believe that most of the cases formerly called true croup in London were identical with what is now called diphtheria. At the same time, I am willing to admit the existence, as a rare disease, of laryngitis with the formation of false membrane, not anatomically different from laryngeal diphtheria—a disease having all the characters of a simple local inflammation, and not the characters of a general specific disease.

The following case illustrates my statement, that what used to be called croup is now called diphtheria. If a distinction is maintained, I confess I do not know by what name such a case as this should be called.

Case. C. H., aged 5, a moderately healthy child, was supposed to catch cold on the evening of March 1st, whilst returning from church. She was slightly hoarse afterwards. On the evening of March 2nd, she woke up, was sick, had some difficulty in breathing, and a croupy cough. She did not complain of sore-throat.

When admitted into hospital, on March 3rd, she had distinct laryngeal breathing and croupy cough. There was no redness, swelling, or sign of exudation about the fauces. Two leeches were applied to each side of the larynx. Dyspnœa increased, and tracheotomy was performed.

The patient appeared to progress favourably. On the 9th of March, six days after the operation, her urine was found to be albuminous.

March 10th. Slight signs of pneumonia appeared.

March 13th. The patient's pulse was 160; respirations 60.

March 14th. Pulse 140; respirations 50. The urine was more albuminous.

March 18th. The urine contained a very large amount of albumen. Under the microscope, some medium-sized granular casts were seen. Pulse 154; respirations 56.

During the next night, she continued in much the same state, breathed very rapidly, and died at 4.30 A.M., of asthenia.

On *post mortem* examination, the pharynx presented no abnormal appearance. The epiglottis was thickened and congested. The whole of the mucous membrane of the larynx and trachea was of a dark red colour, and studded with a dirty grey granular exudation. The lymphatic glands were large and brittle. There was some lobular pneumonia.

This case was regarded as croup at first, inasmuch as it commenced in the larynx, with all the symptoms characteristic of that disease. Although the pharynx and fauces were never covered with exudation, it was subsequently called diphtheria, on account of the renal complication and gradually increasing asthenia. If this case was true croup, and not diphtheria, it shows, at any rate, that albuminuria and scanty secretion of urine will not distinguish one disease from the other.

Treatment. I now come to the subject of treatment, on which I have not time to say much. Unfortunately, no specific has been found for the disease. We must study in what way it usually destroys life, and endeavour to counteract this tendency. This is the true rule of practice in all the acute specific diseases. Diphtheria kills either by asphyxia from obstruction to the entry of air into the lungs; or by asthenia from the intensity of the general disease; or from derangement of the nervous system, with imperfect elimination from the kidneys; or from syncope, with fatty change in the heart. The general disease should be treated on the same principles as other acute diseases.

In children or adults of good constitution, where the symptoms have been moderately sthenic, and the tendency to death by asphyxia is manifested, I have seen decided benefit from the use of calomel in small doses—say half a grain every two hours. In some of the worst cases that I have seen recover, this treatment has been adopted. I have been surprised to find that the patients thus treated have recovered quite as rapidly, if not more so, than those treated on a less lowering plan, and have not been more reduced by the disease than others. The presence of a small quantity of albumen in the urine has not prevented my continuing to use it. I have given it until there has been free discharge of green stools, or sponginess of the gums. Trousseau suggests that the benefit derived from calomel is due to its local action. I have given the calomel treatment in thirteen of my worst cases, and have had successful results in seven of them; two being cases of tracheotomy, and the symptoms at one time being of apparently the most desperate character. In six of the successful cases, there was decided laryngeal obstruction; and in three, albuminous urine. Whilst giving calomel, I do not omit nourishment and wine in some cases.

I would not advocate the mercurial treatment in a rickety or tubercular child, nor in cases of secondary diphtheria; but, in cases which begin in previously healthy children, with heat of skin and a good firm pulse, and without signs of great prostration, I believe it is the most effectual plan of treatment.

When there are heat of skin and a firm pulse, if calomel be not given, a simple saline, such as citrate of potash or acetate of ammonia, may be given. The bowels should be acted on by a simple aperient; and warm fomentations applied to the throat externally, and steam internally.

In some cases, ice will be very grateful to the patient, and may be freely allowed. It has been recommended as a specific. I cannot, however, say that I have seen much benefit from its use.

If the disease set in, as it more commonly does, with a feeble pulse, and the throat have a dusky redness, and there be considerable prostration, wine should be given in fair quantities, with a nourishing diet; and chlorate of potash, with liquor cinchonæ, every two or three hours.

In local applications I have not much faith. However, if the deposit begin on the fauces, and its lower limit can be seen, I recommend the free application of equal parts of hydrochloric acid and honey, by means of a camel's-hair brush. The lotion should be painted not so much on the false membrane as on the inflamed mucous membrane immediately adjacent. Except in cases where this could be done, I have seen no benefit from caustics. At a later period, the use of Condy's solution, in the proportion of one part to about thirty or forty of water, is sometimes useful to correct fœtor, if this exist, but not otherwise.

When there is laryngeal obstruction, as evidenced by suppressed voice, by stridulous inspiration and

expiration, and recession of the soft parts of the thoracic walls during inspiration, if the child is becoming restless, starting up impatiently with a wild distressed look, and there is commencing lividity of the finger-nails and lips, it is time to consider the propriety of tracheotomy. That this operation has saved life in diphtheria, there can be no question; it has proved successful in the case of some patients who would certainly have died in a very few hours, or even minutes, had not the operation been performed. In many other cases it has prolonged life, and rendered death more easy; the death after the operation being commonly by asthenia, instead of slow asphyxia, than which no death is more agonising.

That a large number of cases should die after operation might be anticipated. Opening the trachea has no effect in checking the extension of exudative inflammation downwards; so that the patient still runs the risk of dying from extension below the seat of operation, the most common cause of death; as well as of dying from the general effects of the disease on the nervous system, the kidneys, and the heart. There is also the risk of pulmonary collapse, with or without pneumonia. This is a very common cause of death, especially in very young children. The tendency to this is much increased by a very flexible state of the chest-walls, so that it is worst in rickety children; and the difficulty of getting rid by coughing, without the aid of the larynx, of bronchial secretion, also favours the occurrence of pulmonary collapse. In addition to this are the risks incident to all surgical operations, of erysipelas, hæmorrhage, and so forth, to say nothing of unskilful operations. Incessant watchfulness, by experienced attendants, is also absolutely essential, to prevent clogging of the tube, or its slipping out of the trachea during a fit of coughing, and other misadventures. It is important to keep the air warm and moist. With all these dangers, it need not excite surprise if a large proportion of the cases operated on do not recover. I have a distinct account of thirty-two cases. Of these, nine recovered; seven were children, and two adults. Three of them were in the Children's Hospital, one in University College Hospital, and five in private practice; of which four were communicated to me by Mr. Marsh, house-surgeon to the hospital, under whose care they had been. Of the cases that died, four lived a week or more, two lived three days, five lived two days, and eleven died within twenty-four hours of the operation.

In nearly every case, great relief was afforded; so much so, that the result in nearly every instance satisfied me that the operation was justifiable merely as a palliative measure. *The younger the child, the less chance is there of a favourable result.* Three of the successful cases were of children four years old; three were five years old; and the age of the other is not stated. In Dr. Buchanan's successful cases,* the ages were, one 2¼ years, one 4 years, two 5 years, and one 6 years.

In regard to the adult on whom laryngotomy was performed, Dr. Jenner says: "There is not a shadow of doubt on my mind that he would have been dead in two minutes, had his larynx not been opened. I never saw any one so manifestly brought back from the threshold of death. His complexion had that bluish pallor which precedes immediate dissolution. I felt his pulse failing until it was imperceptible. His eyes closed, and his diaphragm made those convulsive contractions which indicate that respiration is about to cease, when the knife entered the larynx, and air was drawn by what really seemed to be the last efforts of the diaphragm."

* Reported in the *Glasgow Medical Journal.*

Some of the children on whom the operation was performed were as near death, apparently, as the gentleman whose condition I have just described. This patient was a medical man; and he intimated in writing, several hours before the operation, a strong desire to have his air-passages opened; and, since his recovery, he states that no one can conceive the distress which he suffered during the night preceding the operation—suffering which, he thinks, ought to have been prevented by an earlier performance of bronchotomy.

In children, laryngotomy is not advisable, because the crico-thyroid membrane does not admit of a tube large enough for purposes of respiration. In the adult, the operation of laryngotomy is to be preferred to that of tracheotomy.

The time at which the operation should be performed is a matter of some importance. As soon as it is evident that there is mechanical obstruction to the entrance of air by the larynx, and that the difficulty is increasing, the sooner the operation is performed the better. By delay beyond this period, the sufferings of the patient are increased, his powers exhausted, and his chance of rallying diminished. The most important guide to the amount of obstruction to the entry of air, is the extent to which the intercostal spaces and the inner part of the supraclavicular region recede during inspiration.

A great mistake is, I believe, made in the after-treatment of the cases in which tracheotomy is performed. It is very commonly assumed that, after this surgical proceeding, no medical treatment is required; and nothing is done to check the extension of the disease below the wound. In the two successful cases which I had under my care at the Children's Hospital, I continued to give small doses of calomel after the operation, until green stools were produced. If calomel be not given, the iodide of potassium and chlorate of potass may be administered; or a saline mixture, with a very small dose of ipecacuanha or antimony. I believe that stimulants should be given in moderation, and that it is quite possible to give them in excess. The amount of stimulant should depend on the force of the pulse.

Dr. Fuller, in his paper on Tracheotomy in Croup, in the fortieth volume of the *Medico-Chirurgical Transactions*, refers to the importance of not suspending medical treatment when the trachea has been opened. He reports seven cases of tracheotomy in croup, three of which terminated favourably; and in all of these calomel and salines were given after the operation had been performed.

There are, no doubt, a considerable number of cases of diphtheria in which the disease assumes so very asthenic a type, that anything like a lowering plan of treatment does not seem justifiable. In these cases, I would use chlorate of potass and carbonate of ammonia.

I should not strongly advise tracheotomy in a child whose chest-walls were extremely pliable from rickets, nor in children under twelve months of age; but in such cases as these the operation is, I believe, sometimes justifiable as a palliative measure.

Trousseau says that he has performed tracheotomy two hundred times, with success in about one-fourth. Bretonneau saved six out of twenty; Velpeau, two out of ten; Spence, six out of thirteen; Dr. G. Buchanan of Glasgow, five out of fifteen; Dr. Steiner of Prague, two out of six.

In two cases that have come under my observation, one a child about fourteen months old at University College Hospital, and the other a child five years old, it has been necessary to retain the tube for months, in consequence of the dyspnœa which was produced on the removal of the tube. The younger child lived

for several months; and died of caries of the dorsal vertebræ, with inflammation of the trachea and bronchi. Just above the incision in the trachea, there were two ulcers about the size of small beans, which slightly narrowed the trachea; the vocal cords were healthy. In the elder child, operated on many months ago, attempts have been made to dilate the laryngeal aperture by passing upwards from the wound into the larynx a piece of seaweed which swells; this has been left for several hours; and under this treatment, the voice has been almost restored, and a good deal of air is constantly passed through the rima glottidis. The child can now breathe for twenty-four hours with a cork in the cannula; but she has not yet been left at night without the tube, on account of the alarming dyspnœa which several times followed the removal of the tube. It is hoped that shortly the tube may be laid aside.

There is at the present time in St. Bartholomew's Hospital, a child, aged 15 years, whose trachea was opened for diphtheria about three months ago. She had quite recovered her voice, and could breathe very comfortably with the cannula corked; but could not bear its withdrawal for more than a few minutes without extreme dyspnœa until a few days ago. She now breathes perfectly without the tube, and the fistula has healed. It has been suggested as an explanation of these symptoms, that when the tube is withdrawn, the sides of the trachea near the wound collapse and prevent the proper passage of air.

Dr. Steiner of Prague records a case of tracheotomy for diphtheria in which recovery took place; but the child could not breathe without the tube. The patient died at the end of nine months of hydrocephalus; and, on *post mortem* examination, it was found that the cavity of the larynx was entirely obliterated by a firm, almost cartilaginous, mass of cicatricial material, which must have been due to deep ulcerations following the croupal exudation.

Many persons, before they resort to tracheotomy, make it a rule to give an emetic. I cannot say that I have seen much benefit from this plan of treatment. If given at the onset, emetics are, I believe, often of service; but, after there has been laryngeal obstruction existing for some time, and the patient is becoming exhausted from a want of oxygenated blood, the emetic is not likely to detach the membrane, and serves only to increase the exhaustion without improving the respiration.

Dr. Wade of Birmingham attaches great importance in the treatment of diphtheria to the promotion of the urinary secretion, which, as he correctly states, is often very deficient in amount. With this object, he recommends the copious administration of pure water or other diluents, and iodide of potassium in two-, three-, or four-grain doses, every two or three hours, with five- to ten-grain doses of chlorate of potass. He says that he has known no case of fatal termination where this plan has been carried out. I have tried it in two cases, both of which terminated fatally. I have also tried the tincture of sesquichloride of iron in free doses, and cannot say that I have been satisfied with the results obtained under this plan of treatment.

Conclusions. Diphtheria, when attacking the larynx, is not anatomically different from croup as known in London twenty years ago. There have been during the last eight years in London, an increasing number of cases characterised by asthenia, in which the fauces are the primary seat of disease. The general nutrition of the body has been much affected in these cases; the kidneys and the nervous system have frequently suffered.

Diphtheria is, like croup, either a primary disease, or secondary to another.

Diphtheria is infectious; but its infectious properties have not been strikingly seen at the Children's Hospital in London.

No specific has been discovered for the treatment of diphtheria. Just as in croup, mercury has in some cases been of marked benefit; but it is a remedy which cannot be safely used in all cases. Chlorate of potash has also been of service in some instances. Alcoholic stimulants in moderation have been useful; but, even when given in very large quantities, they have not counteracted the tendency to syncope, and have sometimes appeared to aggravate the renal complications. No marked results have been obtained from the use of ice, iodide of potassium, or the perchloride of iron. Local applications are regarded as of secondary importance, except at the outset, or to correct fœtor at a later stage.

When asphyxia is imminent, tracheotomy, or, in the adult, laryngotomy, is indicated. This operation has saved the lives of some, and has delayed the deaths of others, and rendered them less painful. The chances of its success are *cæteris paribus* much influenced by the age of the patient, and the firmness of his chest-walls. The operation is useful only by admitting air to the lungs below the narrowest part of the air-passages, thus giving a longer time for nature, assisted by art, to throw off the disease. It has no power to arrest the progress, either of the local lesions or the general disease. Internal treatment should therefore not be suspended after the performance of the operation. It is useless to resort to the operation, unless the services of judicious attendants and favourable conditions surrounding the patient can be subsequently secured. As much depends on the after-treatment as upon the skill of the operator. The tube which has been found most useful, is a double one; the outer tube is bivalve, opening laterally, which when closed, is very narrow, and can be introduced very readily into the wound in the trachea; the inner tube has a nearly circular aperture, with a fenestra on its convex aspect looking upwards. The aperture of the tube should be as large as the aperture of the narrowest part of the patient's natural air passages.

INVESTIGATION OF EPIDEMIC AND EPIZOOTIC DISEASES.

By William Budd, M.D., Clifton, Bristol.

[The following memorandum on a scheme for the investigation of epidemic and epizootic disease, drawn up at the request of the Committee appointed for that object at the annual meeting of the British Medical Association held in London in August 1862, was read by Dr. Budd. It should have been presented to the annual meeting at Bristol in 1863, but was unavoidably postponed.]

I am of opinion that the Committee appointed by the Association to investigate the laws of epidemic and epizootic diseases, would best advance the object in view by issuing, in the first instance, a series of preliminary reports, setting forth the exact state of our present knowledge as to the diseases which are to be the subjects of inquiry,

By laying down, clearly, what is already known, and what remains to be determined, and thus defining the principal *desiderata*, the Committee would give a definite aim to whatever future investigations it might hereafter desire to recommend or undertake.

The course here suggested, was the course taken by the British Association at the commencement of its scientific labours.

At its first meeting, the two following resolutions were unanimously passed.

1. "The General Committee shall appoint at each meeting, committees, consisting severally of the members most conversant with the several branches of science, to advise together for the advancement thereof."

2. "The committees shall recommend reports on the state and progress of particular sciences to be drawn up from time to time, by competent persons, for the information of annual meetings."

The result was the series of admirable reports, prepared in some instances by committees, and in others by individuals, which fill the early volumes of the *Transactions* of the Association, and which cover nearly the whole field of physical science. Many of these reports would be excellent models for our own Committee to follow.

In recapitulating what the Association had done, in his inaugural address to the meeting held at Cambridge last year (1862), Professor Willis referred in emphatic terms to these reports, as having had a most important influence on the advancement of science.

The reports on magnetism and on the tides, respectively, may be particularly mentioned in illustration here, as having originated a record of phenomena, with definite aims, and extended by concerted action to the whole globe, which has already led to generalisations of the highest importance, and will probably pave the way to future discovery.

In regard to epidemics, my own attention has hitherto been almost entirely confined to that great group of epidemic diseases which may be shown to be contagious or communicable.

These diseases, as being open to more definite conclusions than can be come to as to the rest, in the present state of knowledge, might perhaps advantageously occupy the attention of the Committee, in the first instance.

If we had once attained to a clear view and a true theory of all the phenomena of the contagious group, we should be much better prepared to deal with the far more difficult problems which attach to the study of the others.

In regard to the former, the following appear to me to be the principal points on which it is of *the highest importance* to obtain precise data, and as to which a report should be expected to give the actual state of our knowledge.

1. *The nature of the evidence showing the disease that may be the subject of inquiry to be contagious or communicable.*

2. *Whether such disease admits of being artificially propagated by inoculation or otherwise; and if by inoculation, what are the morbid products which are capable of conveying the virus?*

3. *Through what surface or surfaces the virus may be shown to enter the body, and to leave it when the disease is taken in the natural way.*

4. *Whether the disease is distinguished by eruptions, external or internal, or by ejecta more or less characteristic.*

5. At what periods of its course, if this be ascertainable, the power to propagate by contagion begins and ceases.

6. Through what media the specific poison passes from the infected to the non-infected; whether it be transmissible by fomites, by mediate intercourse, or by flies, birds,* or other agencies.

7. Whether the specific poison is cast off in a form in which a considerable portion of it is likely to pass into the dried state; and if so, whether there are any facts tending to show how long, when in this state, it may retain its noxious powers.

8. *Whether the individual disease under inquiry has a period of true incubation; and if so, what are its length and limits?*

9. *Whether one attack, as in small-pox and many other contagious diseases, preserves against future attacks.*

10. *Whether, in the case of human disease, animals as well as man are susceptible; and if so, what animals? Or, in the case of animal diseases, whether more than one species; and if so, what species?*

11. *What is the evidence, if any, as to the particular country or region in which the disease first appeared?*

12. *What are its present geographical limits?*

13. *Whether there is any evidence, and if so, what evidence, of its modern or recent introduction into, and establishment in, countries previously exempt?*

14. *How far any such disease may have been prevented from invading new countries, or from spreading from any particular centre, by measures directed against contagion.*

15. Whether it is capable of assuming different types, so as to cause maladies which, although diverse in outward guise, are only the same disease in different forms.

16. *What is the nature and what the true value of the evidence supposed to show that the specific poison of a contagious disease may be originated spontaneously, or be generated "de novo"?*

17. What is the general proportion which cases that can be traced to communication with the infected, bear to those that cannot be so traced? and whether, in human diseases, there is any difference in this respect between town and country.

18. In what degree the prevalence of any given disease is affected by the surrounding sanitary conditions, by density of population, etc.

19. And lastly, as of secondary and minor importance, data tending to show in what manner the action of each specific poison is affected by conditions relating (*a*) to the individual, such, for instance, as age, sex, state of health, etc.; (*b*) by conditions relating to the poison, such as greater or less malignity of the case from which derived—greater or less concentration, etc.; and (*c*) by conditions independent of the individual and of the poison, but acting on both, such as climate, weather, soil, etc.

In the determination of conditions of this order, statistics find their true province.

It is obvious, on the most cursory glance, that the questions just enumerated differ greatly in importance.

I have put in italics those which, I myself, consider the most vital.

What we most want to know in regard to this whole group of diseases is, where and how the specific poisons which cause them, breed and multiply.

In small-pox, we have ocular proof that the poison breeds in the living body, and it may be assumed as certain, that the same is the case with the other diseases of this family which agree with small-pox in certain leading characteristics.

This being so, the question arises—granting that these poisons do breed in the living body—whether they may also be generated elsewhere.

Numbers 8, 9, 10, 11, 13, and 14, and in a less degree, number 12 also, are clearly of the greatest significance in their bearing on the answer to be given to this question.

Some parts of the general inquiry might advantageously be made the subject of a separate and independent report. Such is especially the case, for instance, with the question just referred to, as to whether,

* In the recent epidemic of variola ovina, in Wilts, *starlings* are supposed by Professor Simmonds to have had a principal hand in propagating the disorder.

namely, the poisons of specific contagious diseases ever originate spontaneously.

After giving many years of time and thought to an examination of the evidence bearing on this question, I have myself come to the conclusion that there is no proof whatever, that they ever do so.

That the evidence, in fact, on which the contrary conclusion is founded is negative only; that evidence of precisely the same order, only to all appearance still more cogent, would prove animals and plants, even of large species, to originate spontaneously; that this evidence is therefore of no weight; and lastly, that, as in the case of plants and animals, all the really important facts point the other way, and tend to prove that these poisons (to use a term which is probably provisional only), like animals and plants, however they may have once originated, are only propagated now by the law of continuous succession.

Opinions like these are no doubt at present those of a small minority.

A very large, and by far the most influential school in this country—a school which probably embraces the great majority of medical practitioners and the whole of the "sanitary" public, holds the exact contrary, and teaches that sundry of these poisons are constantly being generated *de novo* by the material conditions which surround us.

In regard to the great work of prevention, it is obviously of the first importance to determine with which of these two parties the truth really lies; for so long as opinion remains divided as to this cardinal point, it is vain to hope for the general adoption of any definite scheme of preventive measures. A report on the subject by a really competent hand, might do much towards settling public opinion in regard to it.

Certain other points would admit of being studied experimentally. I would cite as an example, the influence of *heat* on contagious poisons.

Rather more than twenty years ago, the late Dr. Henry showed, by a series of decisive experiments, that the powers of the small-pox poison are destroyed by a temperature of 212° Fahrenheit. These experiments have since been repeated, and extended by a committee at York, who have published a very valuable report on the subject.

In some experiments of my own on the vaccine virus, I have ascertained that the temperature of boiling water is fatal to that virus also; but that the temperature to which meat is raised in being roasted, and in some other modes of cooking, leaves these powers intact.

It would be well if this inquiry were extended to other contagious poisons; and to be comprehensive, it should include the effect of cold also. Among the poisons that might be selected, I would mention, particularly, the poison of cattle affected with "charbon"; that of the foot and mouth disease; of the pleuropneumonia of oxen; of the Rinder-pest, or cattle-plague; of variola ovina; and of glanders, as poisons which it would be very desirable to submit to these same tests.

As regards the whole subject of the investigation of contagious epidemics, perhaps the best course would be not to deal with it collectively, but to report at first, in reference to the several heads enumerated above, and any others that might appear important, on one or two typical members of the class.

If I might venture to make a suggestion, it would be that the following diseases should be thus dealt with in the first instance.

1. Typhoid or intestinal fever.
2. Maculated typhus.
3. The Rinder-pest, or cattle-plague.
4. The foot and mouth disease of oxen and other animals.
5. The pleuropneumonia of cattle.
6. The variola ovina or small-pox of sheep.

It is not without design that in this list the epizootics are made to outnumber the diseases of man.

The obvious reason is that, in regard to everything which concerns the genesis and reproduction of specific contagions, it is much easier to obtain sure and precise data in the case of animals than in that of man.

In a paper on Malignant Pustule, which I read at our last annual meeting (1862), I pointed out some of the many advantages which these diseases offer to the inquirer, and from which we are for the most part debarred in our own case.

These facilities are illustrated in a very striking way by the list of epizootics just suggested.

Not the least among them is the fact that, three out of four of these epizootics, if not all four, may be propagated by inoculation, and admit, therefore, of being studied *experimentally*.

Two of them—the Rinder-pest, and the variola ovina—have an interest of another kind, which is of the highest possible importance in relation to the general inquiry.

The morbid changes which are characteristic of the Rinder-pest, or cattle-plague, bear in every respect so close a resemblance to those of typhoid or intestinal fever in man, and the eruption of the variola ovina is in its appearance and distribution, so close a counterpart to that of human small-pox, that many observers of the first eminence have been led in either case, to consider the human disease and the animal disease to be identical.

And yet, as far as present evidence goes, it appears, not only that this is not so, but that both these farm plagues present the remarkable and deeply significant characteristic (a characteristic which is observed indeed in many other members of the same family) of being absolutely peculiar to the species of animal in which they, severally, occur.

Both also—agreeing in this with small-pox, and with contagious fevers generally—are diseases which happen only once in life. So that the poison of the variola ovina, for instance, not only is incapable of breeding in the body of any other animal, but cannot even breed in the body of the sheep more than once.

This singular ovine malady, and the pleuropneumonia of cattle, have also an extreme importance in relation to the general inquiry, as examples of diseases which have *been introduced into this country, in our own day, in consequence of the removal of the restrictions which formerly almost entirely prevented the importation of live stock from those parts of Europe in which these diseases have immemorially prevailed.**

The importance of this fact is still further enhanced by the opposite fact that, the Rinder-pest has hitherto been excluded, not only from our own shores, but from countries actually conterminous with those in which this epizootic is most rife, by measures expressly founded on the idea that the disease spreads exclusively by contagion.

Among human diseases, I have specified typhoid or intestinal fever, and typhus, for several important reasons.

1. Because of the great intrinsic interest of both, and of the large annual mortality occasioned by them.
2. Because of the wide difference of opinion at present prevailing as to their origin and mode of spread-

* There is reason to believe that pleuropneumonia has been imported into England more than once; but if so, it had died out again before its recent introduction. For the variola ovina, see the author's essay on the subject, which formed the Address in Medicine read to the Association in August 1863.

ing, and the very great importance as regards prevention, that these differences should be reconciled or cancelled.

And 3. Because there already exists, in regard to both, scattered abroad in books, written in many tongues, a far greater mass of precise data touching the points at issue, than people generally are at all aware of, and which are fully ripe for generalisation.

In order to render the inquiry on which the Association is about to enter, really comprehensive, it would be necessary to associate with the study of epidemics, that of the diseases caused in man and animals, by living parasites, external and internal.

A fuller knowledge of the phenomena attaching to the dissemination of the prolific and minute germs of these parasites, could not fail to be of great use in helping to the true interpretation of the phenomena which attach to the strictly analogous dissemination of the equally prolific, and equally minute genus of contagious poisons.

In particular, it would be of the highest value, in showing by data, that could not be gainsaid, what is the real value of the negative evidence now so implicitly relied on, as an indication of spontaneous origin, and as opposed to the law of propagation by continuous succession.

Additional reasons for putting the parasites and the contagious together in such an inquiry are, 1. That at many points the two blend insensibly one into the other; 2. That, with the advance of knowledge, diseases are constantly being transferred from the group of common contagions, to the group of parasites; and 3. That there already exists among the most advanced thinkers on these topics, a shrewd suspicion that the two groups will eventually coalesce, and be found to be in their essence, identical.

The only other suggestion I would venture to offer to the Committee is, that in the conduct of their inquiries it would be well to keep the great object of *prevention* constantly in view.

And this, not only because prevention is the ultimate aim of all investigations of this sort, but because, in a degree far greater than is commonly supposed, preventive measures may be made a test of the truth of theory itself.

What I mean here, will be best illustrated by an example. The example I shall take is, that of the Rinder-pest, or cattle-plague.

In Austria, Prussia, and other countries immediately conterminous with those in which that fatal pest is most destructive, a very stringent code of regulations for the prevention of the disease is enforced, which is founded, as before remarked, on the idea that this disease is propagated exclusively by contagion. Wherever these regulations have been thoroughly acted upon, there the progress of the pest has been stayed. Wherever they have been neglected, the disease has spread with fearful rapidity. The perfect success of the method is here one of the best of all proofs of the truth of the theory.

In conclusion, I would remark that, such a series of reports as that now suggested, drawn up by able men, and with a well concerted unity of design, could not fail, even if limited to the topics hastily indicated in this brief memorandum, to be of great value to science.

From such an inquiry, so conducted, generalisations of a high order, and of the utmost practical importance, which are now the possession of a few only, would be sure to emerge with a clearness and distinctness to compel universal assent.

Were there time, it would be easy to enlarge on all these topics of inquiry, and to add many others to their number. As I only received notice that this memorandum would be required of me, so lately as the 17th of this present month, I must content myself with the few brief and imperfect notes which I have here so hastily strung together.

The great pressure as to time under which they have been written, will, I trust, be received as a sufficient apology for the many imperfections as to form and manner in the language in which they are expressed.

Clifton, March 21, 1863.

At the same meeting, Dr. W. Budd exhibited two drawings which he had lately obtained from Vienna, of the disease of the intestinal follicles, which is characteristic of the Rinder-pest, or cattle-plague, and which present such a striking resemblance to that of typhoid fever in man. Dr. Budd has promised a report on this disease for the next annual meeting.

ON INTUSSUSCEPTION.

By George Hare Philipson, B.A., M.B.Cantab. M.R.C.P.Lond.; Physician to the Newcastle-upon-Tyne Dispensary and Fever Hospital; etc.

This lesion of the intestinal canal is one of the most formidable, generating obstruction. Its occurrence, in general, is very sudden. In the first few years of life, most frequently without any previous symptoms; but, in adults, more often preceded by some derangement of the bowels.

It is a malady fatal in the extreme. In the infant, highly so. The immediate effect of the alteration of natural position, one portion of intestine having passed within another, is a prostration of the vital powers. The shock is severe in character, and runs a swift course to death; the suffering being excessive, and frequently extended only over a few hours. The first risk having been passed, but without the restoration of the natural relation of the parts, for many days there is danger of no small amount. The contained portion of bowel, being constricted by the containing, becomes strangulated; and, by the process of sloughing, eliminated. Even if this period be got over, the recovery is uncertain, and may be of short duration. At the site of the cicatrix, a partial obstruction may be formed, liable at any time to be exaggerated.

This disease, happily, is not very common. At the General Dispensary, Newcastle-upon-Tyne, during ten years (1854—1863), where the annual admissions were 12,000 (4000 by letter, and 8000 without), only two cases of intussusception are recorded.

Of all the lesions, within the bowel itself, producing obstruction, those from intussusception are as numerous as all the others added together. Out of twenty-five cases of obstruction, fifteen arose from intussusception; while, in the remaining ten, some other cause was present. In three, the intestine was twisted upon its own axis; in one, the intestine was turned round a distant portion; in three, a stricture existed, twice from carcinoma of the rectum, and once from simple hypertrophy of the muscular structures of the sigmoid flexure of the colon; and in the remaining three, the obstruction had arisen from a mechanical impediment, in no way connected with the structures of the bowel, in two from a fæcal impaction, and in one from a collection of cherry-stones.

No age is exempt from the occurrence. It is much more common in children than in adults, increasing rapidly in frequency as infancy is approached; the first few months of life contributing the largest number of cases. Even with the careful exclusion of those in which it was evident the inversion had occurred in the "agony". From an analysis of the

fifteen cases, there were seven under 1 year, five being under 4 months; three between 1 and 2 years; three between 2 and 12 years; and two above 12 years. There were five recoveries, all above 2 years old. Of the ten fatal, seven had not passed the first year of life.

The following case is an example of this condition in an exaggerated degree; the portion of bowel invaginated being unusually large; and ending in death by exhaustion in a very few hours.

A male infant, aged 10 months, at five o'clock in the morning of May 6th, 1864, aroused his parents by his violent crying. At 3 A.M., his bowels had been freely moved. At this time, he was suckled, fell into a sleep, and was returned to his cot. Some castor-oil was given; but the child continued to cry loudly, and appeared in such suffering, that at 9 A.M., their regular medical attendant, Mr. T. Y. Thompson, was summoned.

The child was then perspiring most profusely, crying out as if in great pain, vomiting continuously, and passing bloody mucus from the bowels. The rectum was found occupied by an obstructing body, situated about four inches from the anus. The nature of the case was fully recognised. After a failing attempt at reduction with the finger, insufflation of air and the injection of warm water were both employed, but with only temporary benefit.

At 5 P.M., I was requested in consultation. The following was the condition. The lips pale and blanched, surface cold and clammy, pulse scarcely perceptible, vomiting incessantly a clear, watery liquid; every few minutes repressing respiration, expiring deeply, and then suddenly crying out in a whine. In the interval, passing into a state of syncope. During each paroxysm, the abdominal muscles were forcibly contracted. The action was likened by my friend Mr. Thompson to the contractions aiding the uterine efforts during parturition. A distinct fulness was visible in the left side of the abdomen; and upon examination, a tumour was easily defined. Nearly pure blood was exuding from the bowel. Upon exploration of the rectum, the finger was at once arrested by a tumour, firm, round, smooth, without any indentation or opening. The finger was passed with ease between the tumour and the mucous surface of the rectum, without being obstructed by a second protrusion.

Upon gradual but with rather firm pressure, the tumour was reduced to the length of the finger. During the time, the urine was expelled in a full stream. After the finger was withdrawn, the protrusion became as low as before. A rectal bougie was afterwards carefully passed to its entire length, the abdomen being at the same time gently palpated. It was allowed to remain for more than ten minutes; but after its withdrawal, the tumour was again forced down. After a short interval, recourse was again had to the insufflation of air. This proceeding was maintained continuously for some time; but the abdomen was not perceptibly distended. The air nearly all the time escaped through the sphincter, even when it was firmly compressed round the tube. Warm water was again injected in a full and forcible stream; but this time quite as fruitless in the result, as at the first attempt eight hours previously. At each contraction, the tumour was felt to be firmly compressed, forced onwards, becoming visible at the anus, of a bright rose colour, receding in the interval. No further attempt was made at reduction. A little wine and water was ordered to be given from time to time, and two grains of Dover's powder every second hour.

At 7 A.M. the next morning, the child died, twenty-eight hours after the probable seizure. During the last few hours of life, the vomited matter was stercoraceous.

SECTIO CADAVERIS, thirty hours after death. Incisions were made from the ensiform cartilage to the umbilicus, and from this point laterally to the centre of each Poupart's ligament. Upon reflecting the flaps, the small intestines were seen to occupy the right lumbar, umbilical, and hypogastric regions; while, in the left lumbar region, a dark mass was to a small extent visible. On drawing the small intestine over to the right side, the lump was found to consist of the sigmoid flexure and descending portions of the colon. It was of a dark colour, firm and unyielding to the touch, and securely fixed in position. The cæcum, ascending and transverse colon, were nowhere to be found; the right iliac, lumbar, hypochondriac, and umbilical regions, being void of any large intestine. The small was continuous with or rather passed into the large at the left hypochondrium, at which point a marked constriction existed. The cavity of the peritoneum contained fully six ounces of clear serosity; but no flakes of lymph. The peritoneum at various parts was very loosely connected with the abdominal wall. The small intestine was of a natural hue, adhesions existing at no part. The first portion was greatly distended with flatus and liquid; while the last part, for about three feet, was collapsed and empty. The intestine had become twisted upon itself, at the commencement of the collapsed portion. The large intestine was carefully removed in its entirety. The mass measured eight inches in length. Upon turning the rectum inside out, the tumour occupying its interior was of a dark purplish colour, nearly black, quite dull, firm, and round, without the least appearance of an opening. An attempt was made to effect the reduction, in a similar manner to that during life; but it was unsuccessful. Traction was then made upon the small intestine; and it was only dislodged after a considerable amount of force. Bloody liquid and a few flakes of lymph ran from the sheath. A few adhesions were present; but they were quite recent. The length of the small intestine inverted was three inches. The cæcum and appendix were then drawn out; but still more force was required; the adhesions were very firm. The ascending and transverse colon were withdrawn with ease, few adhesions being present. The portion of the inverted intestine situated lowest, nearest to the anus, was the very commencement of the colon. The head, or the lowest part of the tumour, was formed by that part closely adjoining the ileo-cæcal valve. The mesentery within the sheath was greatly congested, chiefly in patches. No extravasation was discernible. The serous layer of the cæcum, appendix, and the commencement of the ascending colon, was of a dark hue. The mucous membrane corresponding was deeply congested, nearly black. The lips of the ileo-cæcal valve were greatly congested, quite black, closely resembling a clot of blood. The opening between was perfectly closed. The intestine in its entire length was quite free from any scybalous matter or other obstructing body. The sheath, consisting of the rectum, sigmoid flexure, and descending colon, therefore contained the transverse and ascending colon, the cæcum, and appendix, with a portion of the great omentum and meso-colon, and three inches of the ileum, with the corresponding mesentery.

This case is one of no small interest. The nature of the disorder was recognised early. The indications were clear and unmistakeable. The age of the little sufferer, the extreme suddenness of the attack, the evident suffering, the violent shock to the vital powers, the existence of a tumour in the abdomen, visible to the eye, and with more certainty deter-

mined by the hand, the unceasing vomiting, and the passage of a bloody mucus from the bowel, together pointed to the occurrence of intussusception. The exploration of the rectum, when the tumour occupying its interior was discovered, left no doubt.

The amount of intestine displaced was unusually large. The invagination, consisting of the three lowest inches of the ileum, the cæcum, and appendix, with the ascending and transverse colon. In the other nine fatal cases, the inversion was, in no instance, to the same extent. The invagination consisted of—the ileum into ascending colon, 3; ileum into transverse colon, 1; ileum, cæcum, and ascending colon, into transverse colon, 3; cæcum and ascending colon into transverse colon, 1; transverse into descending colon, 1; or 4 examples, where a portion of the small intestine alone was inverted; 3 of portions of the small and large together; and 2 of a portion of the large alone.

The sequence of events at the time of, and subsequent to, the occurrence, was probably the following. At the time of the action of the bowels, said to have been both violent and sudden, some irregularity of the intestinal contractions followed; the consequence being that the termination of the ileum passed within the colon, carrying with it the cæcum and appendix. The effect of drawing the breast, in all probability, increased the displacement. The ileum then, acting as a mechanical obstruction, would soon rouse the peristaltic action. These contractions to overcome the obstruction, aided by the diaphragm and the muscles of the abdominal parietes, instead of lessening, would only increase the derangement. There being no hindrance to this, from the peritoneal folds being unusually lax and free, not fixing the intestine in position. Thus, a predisposition to the affection would exist, the chief cause of its greater frequency in children over adults. At each subsequent contraction, the inverted portion would be forced onwards, nearer the outlet, dragging after it the successive portions of the colon.

Any treatment, to be efficacious, must be manipulative rather than remedial. Aperients are, with certainty, contraindicated; every movement and muscular contraction increasing the displacement, and only adding to the danger. Castor-oil, so useful a remedy in the various disorders of early childhood, and so frequently administered by the anxious parent, must often establish, if it do not increase the malady. In every case, the rectum should be explored. If a tumour be present, its reduction should be attempted at once, by the finger or the rectal bougie, aided by the gentle palpation of the abdomen. If no tumour be discovered, or if by these manipulative efforts its reduction cannot be effected, insufflation of air and the injection of warm water may be successively employed. The former may be safely accomplished by an ordinary pair of bellows. To be serviceable, either proceeding must be employed early. The adhesions are quickly formed. In the autopsy related, in less than thirty hours after death, when decomposition was advanced, a considerable amount of force was required to withdraw the inverted intestine.

The question of opening the cavity of the peritoneum, and then attempting the reduction by drawing upon the uppermost portion of the invagination, forces itself forward for consideration. The most eminent surgeons of the day neither advise nor perform this operation themselves. There is no case recorded of obstruction from intussusception, in which the operation has been followed by a successful result. These are not satisfactory data to rest this question upon. With the difficulties consequent upon the operation superadded, it may be fairly considered untenable.

In those cases, in which a tumour is present in the rectum, if the sufferer survive the first few days, it may be proper to puncture the protrusion by means of a trochar. The distension will thus be relieved; and a way will be formed for the exit of the contents of the bowel, especially the gaseous, a fertile source of irritation. In the early period, no good can, with any possibility, accrue from this proceeding.

If a fair attempt has been made at reduction, manipulative efforts must be suspended for the administration of narcotics and sustaining food; trusting that, by these means, time may be obtained for the operation of Nature's curative efforts. In which process, the portion of damaged bowel is discharged, and the canal rendered pervious, and capable of performing its allotted functions. The remedy of all others most fitting, and from which the best results are obtained, is opium. To be of any service, it must be given in full doses, and repeated at short intervals. From a certain power it exercises over the circulation, the inflammatory action becomes less. In addition, from its sedative action on the nervous system, the irritability of the intestinal canal is allayed, the expulsive efforts of the abdominal muscles becoming less forcible, and occurring at notably longer intervals. Last, but not least, by the aid of a drug, that has been called "the gift of God" to man, one of the greatest aims of any treatment is accomplished, the assuaging of pain.

Original Communications.

INFRAMAMMARY PAIN.

By Thomas Inman, M.D., Liverpool.

Dr. Martyn considers that some cardiac distress may be the cause of inframammary pain; but we can scarcely agree with the conclusion, when we consider that the pain in question is absent in endocarditis, pericarditis, valvular disease, and in all other cases where the heart is organically changed.

In any inquiry upon the signification of a symptom, we should, I think, try to discover its analogies, its concomitants, and its relations. If we treat inframammary pain in this way, we shall find that it has no analogy with common tic. I have had under my care a man who, from the extension of an aneurism affecting some of the dorsal nerves as they emerged from the spinal canal, had a pain about and below the nipple, from true nervous irritation; and that pain had no resemblance to that spoken of by females and others. The pain is analogous to that complained of over the spinous process of the seventh cervical vertebra after a very long walk, with a heavy coat on one's back. It resembles the pain felt at the insertion of the biceps humeri after carrying a heavy gun all day; it is similar to that felt at the insertion of trapezius, in the shoulder, by so many consumptives; it is described in the same terms as the pain in the back in gibbous spine; and a similar symptom is occasionally met with in gouty subjects in the knee, in the heel, in the pubes, and elsewhere; and I have known a similar pain in the plantar fasciæ of delicate housemaids, from long standing, etc. The pain is associated with delicacy of constitution, and with work disproportioned to strength. With it come pains in other parts, showing muscular weakness; loss of appetite and digestive power, showing stomachic feebleness; flatulence, borborygmi, irregularity of bowels, showing a want of "tone" in the intestines. There is something wrong in females with the uterine functions. In all, there is a weak

heart and respiratory muscles, as shown by palpitation on movement, sluggish action during repose, and frequent sighing. The nervous system is generally unusually irritable, and the "spirits" are either low or variable.

The pain is related closely to movement. Absent in the morning, it increases in severity as the day wears on, and reaches its acme at night. It is invariably relieved by perfect rest. The spot most commonly affected can readily be seen in athletes who are exhibiting feats of strength; it is the sole point in which no movement of the skin takes place; viz., where the integument is tied down to bone, and is more or less stretched at every movement of the trunk. The left side is more commonly affected than the right, because it is weaker. The pain is occasionally persistent in pregnant women after the fifth month, and seems to be due to stretching of the skin.

I conclude, therefore, that inframammary pain is due to movement disproportioned to strength. We may call it myalgia, neuralgia, or any other algia that we like, without harm, so long as the name involves no wrong system of therapeutics. As the symptom is due to movement, the relief must be sought in repose; and counterirritants, anodynes, etc., are rarely of service, except in so far as they compel quiescence. Strapping with a sufficient number of strips to insure immobility of the side is an instant cure. But, as few persons like to go about thus crippled, a more satisfactory method of treatment is solicited. This is to be sought by endeavouring first to save the patient's strength, and secondly to increase it. In carrying out the details, each practitioner can adopt the plan he likes best; but of one point he may be assured—viz., that, as a general rule in these cases, air without exercise is better than air and exercise. Even in Dr. Fuller's case, the cure was not effected without "bodily repose", though the air and exercise he took increased his health.

CONTRIBUTIONS TO DENTAL SURGERY.

By Samuel Adams Parker, Esq., Licentiate in Dental Surgery of the Royal College of Surgeons of England; Surgeon-Dentist to the Queen's Hospital, and Senior Surgeon-Dentist to the Birmingham Dental Dispensary.

Case I. *Facial Neuralgia of Twelve Years' Standing, Cured by the Removal of Diseased Teeth.* J. Johnstone, aged 43, was admitted to the Dental Dispensary in February 1863, suffering from a violent attack of facial neuralgia, which had existed for a space of twelve years with greater or less severity.

During the last three months previous to my seeing him, the pain, which had been of an acute character, had come on regularly in the evening, and had increased in severity till nearly midnight; when it had gradually subsided into a dull heavy pain, continuing uninterruptedly till the following evening, when the same thing was repeated; and this without variation night after night. The patient also complained of a burning pain on the top of the head, and of a little intermittent pain in the ears. Previously to the occurrence of the neuralgic pains with such severity, the patient had suffered much from his teeth; but, as in numerous cases which I have already published, the pains in the teeth had subsided before those of a neuralgic character supervened. The patient attributed his sufferings not to his teeth, but to tic douloureux.

I examined his mouth, and found the teeth for the most part sound, of a slight yellow colour, indicative of strength, and non-liability to decay like those of a pearly white character. However, the stumps of the first and second superior left bicuspid and the second inferior right molar were remaining in the jaw; and the inferior right dens sapientiæ was much decayed. On the sixth day of February 1863, I removed all the stumps above mentioned. On the 10th, the patient was somewhat better, but still experienced much pain. I then removed the dens sapientiæ.

The patient saw me on the 18th, and informed me that he had been perfectly free from pain since the last operation; and I know he has continued so up to the present time.

Case II. *Facial Neuralgia Cured by the Removal of Diseased Stumps.* November 6th, 1863. J. Wood, aged 49, had been suffering a long time from neuralgic pains in the head, which had visited him in such violent paroxysms that he became for a time perfectly giddy, and his vision was somewhat impaired thereby.

He had been in this state three years, during which time he had been under medical treatment, and had taken a variety of medicine without much benefit, and had been ultimately consoled by the information that the pain would continue for the remainder of his life. This patient always had an idea that the pains started from the lower jaw, where two or three old stumps were; but the mouth had never been examined.

From the condition and appearance of the stumps, I was induced to believe that much benefit, if not an ultimate cure, might be effected by their removal; to which the patient readily consented. I removed four stumps, which were all that remained in the lower jaw; the other teeth being in a tolerably good condition.

I saw him three times after the removal of the stumps, and found that the pain had gradually subsided, and had finally left him.

Case III. *Morbid Growth of the Gums Caused by Diseased Stumps: Removal of the Stumps, and Ultimate Cure.* Mr. B., aged 30, consulted me in July 1863, respecting his gums and palate, which had been in an inflamed and otherwise diseased condition for four months.

I found upon examination, that the gums were very thick and spongy; that they bled profusely upon the slightest touch, and discharged a thin matter from their margins, which rendered his breath very offensive. This condition of things had extended to the palate and throat, and had rendered them very much inflamed. In the centre of the palate was an abscess, which, when opened, discharged a quantity of thick pus. The patient had lost the crowns of nearly every tooth; the stumps were for the most part loose, and on that account had been a cause of great irritation, and had rendered the patient's condition daily worse.

I removed four or five (as many as he was able to bear at one time) stumps and freely scarified the gums, more particularly between the teeth; and ordered a wash for the mouth composed of

Tinct. myrrhæ ʒiv; infusi rosæ comp. ℥viii; acidi nitrici diluti ♏xx.

To be used three times a day.

This wash I invariably order in cases where the gums are at all inflamed and spongy, and always have found that patients have derived great benefit from it. I also ordered him to take a small quantity of lime-juice internally every day, and to be careful as to his diet.

I saw the patient a few days after the operation, and found that a more rapid improvement had taken place than I had anticipated. The palate and throat were free from all inflammation, and the abscess was fast closing up. The gums, although not by any means well, had an improved condition about them

which gave promise of an early cure. On the occasion of this visit, I removed the remainder of the stumps, and ordered him to continue the wash and lime-juice.

At the expiration of a fortnight, I again saw the patient, and during the intervening time, he had been getting gradually better, and the mouth, in which, however, very few teeth remained, was cured.

Case iv. *Strabismus Caused by a Decayed and Aching Temporary Lower Molar: Removal of the Tooth: Instantaneous Cure of the Disease.* This may, at first sight, seem a strange case. It is the first of its kind that has ever come under my notice, and was remarkable in two respects; first, for its sudden appearance; and secondly, for its sudden disappearance. The case may be related in a very few words.

A child, four and a half years old, came under my care at the Queen's Hospital. She was brought by her mother, who stated that, seven days previous to my seeing her, she was attacked with a violent pain in the first inferior temporary molar, and at the same time the left eye completely turned and became fixed. The tooth was not aching at the time I saw her, but it was very much decayed, and I extracted it. In twenty-four hours after the operation the eye began to turn, and in three days it was perfectly straight.

In this case, there could be no question as to the cause of the strabismus, and none as to the remedy and cure.

Case v. *Lesion Produced by a Coming Wisdom Tooth.* Georgina Maynard, aged 29, was admitted an out-patient at the Queen's Hospital, October 7th, 1863, under the care of Mr. Gamgee, suffering from a large, hard, and extremely painful swelling on the whole of the right side of the face, more particularly over the upper molar teeth. She stated she first felt pain six months previously, when she noticed a swelling. She did not do anything for it till some seven weeks previously to coming to the hospital, when, on account of the great pain she experienced, she fomented the parts daily with poppy heads. Mr. Gamgee ordered a linseed meal poultice to the swelling, and a mixture of acid and bark to be taken internally.

October 14th. At this time, in consequence of the size, stiffness, and extreme tenderness of the swelling, she was unable to open her mouth. The medicine was continued, and an embrocation of two drachms of tincture of hyoscyamus and six drachms of oil of almonds ordered to be applied over the swelling.

October 17th. The poultice was repeated, and she was ordered to see the surgeon-dentist.

October 29th. This was the first time I saw the patient; and, finding that she could open the mouth but very little, I ordered a fomentation of poppy-heads to be used as hot as she could bear it inside the mouth.

November 1st. An abscess had burst in the mouth since using the fomentation, and she could open her mouth very much better. The poppy-head fomentation and mixture were continued.

November 9th. The swelling had been considerably diminished. She could open her mouth almost without pain, though she still suffered much pain at the back of the jaw. I now carefully examined the mouth, and found that the whole of the mischief was caused by a coming wisdom tooth. The gum over the tooth I freely lanced by making a crucial incision.

November 16th. The wisdom tooth had made great progress; the swelling was entirely gone down, and the pain gradually subsiding. The tonic mixture was continued.

November 23rd. She was discharged cured. The wisdom tooth was nearly through the gum.

Remarks. This is the fourth time I have contributed cases of dental interest to the medical journals; and in doing so, I have selected those cases from my note-book, which are of importance, rather, perhaps, to the medical than to the dental profession, on account of their coming under the notice and treatment of the former class, before they are seen by the latter.

I have endeavoured from time to time, to point out and impress upon my readers, the great importance of the mouth being at all times carefully examined by the medical practitioner, whenever cases may come under their observations, of facial neuralgia, and tic douloureux, for it very rarely occurs that the teeth have not played some prominent part in bringing on the mischief.

For instance, in case No. 1, the disease had extended over twelve years, without any examination having ever been made of the teeth; and in case No. 2, it was the patient's own opinion, that prompted him to seek advice, after he had been informed that he should never be well again.

In most of the cases I have published, it will be seen that the pains alluded to are confined to one or two particular spots, either in the temples, over the orbit, in the ears, or along the lower jaw; sometimes the pain extends down the neck to the shoulders.

It is sometimes very difficult, without a considerable amount of experience, for the dentist to distinguish, or rather to diagnose, the particular tooth or teeth that may be the primary cause of the mischief; for, as I have stated before, when the pain becomes seated in any of the parts above mentioned, little or no toothache proper is experienced; hence the unwillingness of the patient to have any operations performed upon the teeth.

The pain arising from toothache is nearly always centered in and around the diseased organ; while neuralgic pains, arising from the same cause—viz., diseased teeth or stumps—are situated at some distant part.

We find occasionally, not frequently, upon examining the mouth carefully for some exciting cause, that every tooth appears perfectly sound, though still some diseased condition may be lurking in one or more of them, which may be generally discovered, by gently tapping each tooth with an instrument, or, as Professor Tomes suggests, by throwing a jet of cold water from a syringe upon them.

When the pain appears to arise from a sound tooth (there being no diseased ones in the jaw), every means should be adopted by the medical practitioner previous to extraction—aperients, tonics, and local depletion being especially valuable.

As regards the injury done to the general system by a diseased condition of the mouth, a few remarks will not be out of place. Proofs without number have been given, that a diseased or abnormal condition of the teeth may very seriously, and indeed sometimes fatally, affect the general health of the sufferer therefrom; and it must be no less evident to unprofessional than to professional observers, that ill health is the frequent cause of bad teeth. One would have thought, as in this case, a reciprocal action is so plainly evident, that it would naturally be made the basis for the exertions of both medical and dental efforts, to restore the general health to its normal natural tone.

There is, however, another consideration which may serve to put the danger of diseased teeth affecting the general health in a yet stronger light. Their important connection with the organs of digestion, by whose abnormal condition the whole body becomes weak and disordered, is surely enough to suggest that by attention to those teeth the very fountain-head of the malady may be reached, and its further progress arrested.

It is well known that even sound teeth in every stage of their development have been the cause of

serious and at times of fatal mischief. They have been the cause of infantile convulsions and consequent death; and surely in a diseased condition they may naturally be expected to interfere with the health of the adult, who is arrived at that period of life at which he is more at the mercy of their mischievous tendencies, though in his case the evil may proceed in a subtler form, and with a slower pace.

SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, ETC.

By JAMES VOSE SOLOMON, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[*Concluded from page 92 of last volume.*]

Diseased States in which the Operation has proved Useful. On March 1st, 1860, I operated upon a much disorganised and tense eye; and on the 31st, upon a case of near-sightedness (myopia), complicated by choroido-retinitis. The pupillary margin of the iris "was drawn slightly towards the lens, the other part of the membrane being arched forwards, except at its ciliary origin."

The effect upon the accommodation of the eye and congestive symptoms proved so remarkable, that I was encouraged to submit other myopic patients to a similar plan, and obtained markedly beneficial results.

The theory of treatment in this class of cases was based upon the opinion, at the time generally prevalent in England, and taught in the best text-books of physiology; namely, that the ciliary muscle consisted of a single set of fibres, which in direction were radial, and that the adjustment of the eye to near objects was effected by contraction of the muscle drawing the lens towards the cornea.

I argued thus: if I cut some of these fibres *across*, the muscle of the lens will be weakened, and the far point for reading will undergo an increase.

As my views upon this subject, with clinical illustrations, have been already given in the *Medical Times and Gazette* (vol. 1861-62), and will shortly appear in a separate form, it is unnecessary here to do more than notice that, in cases which I have had opportunity of following since the year 1860, the increase of accommodation for large and distant objects, as human features and landscape, has been most completely maintained*; while a very slight contraction has taken place in the reading distance.

In other words, the myopia, as regards distance, has been permanently improved and *arrested*; a slight progress only having occurred in respect to near objects.†

Another point of interest was presented in two cases of extreme myopia, who, having been much improved by the operation, resumed, after a time, the use of their deep concave spectacles for looking at near and far objects. In each instance, the near-sightedness returned to what it was before surgical treatment.

Do not these facts obtain interest from their relation to the mechanism which accommodates the eye to different distances? Are they not suggestive of the existence of some active agency by which the organ is adjusted for objects placed beyond twenty feet? The time, we would fain believe, is not remote, when a solution of some of the several problems connected with the subject of optical accommodation and refraction will be attempted by a recourse to intraocular myotomy in suitable cases.

A word of caution on the selection of cases. Instances of hypermetropia and astigmatism, diseases which are sometimes relieved by concave glasses, and which might, on cursory examination, be confounded with near-sightedness, must be carefully excluded from operation.

To proceed with the narrative. In the same year and month, I operated upon a case of *acute* choroiditis, complicated by great tension and myosis. The first two conditions were reduced by the treatment, and vision restored; and I would here repeat the opinion expressed at the meeting of the British Medical Association in London (1862); namely, that I am unacquainted with any "surgical measure, equally safe and easy of execution, which exerts the same amount of curative power in cases of subacute and chronic choroiditis," as intraocular myotomy.

In April 1860, I treated instances of glaucoma, with very satisfactory results. In the glaucomoid tension well known to practical ophthalmic surgeons, as occasionally following the operation of cataract extraction, where vitreous, even though small in quantity, has been lost, and the iris obliterated from view at the centre of the cicatrix, the operation under consideration removes the tension and restores clear vision. In one case, the tension was not completely overcome until after the incision was repeated, and slightly extended in length.

Previous to adopting this method, I made trial of division of the ciliary structures at a right angle with the cornea, selecting the point where they were continuous with the coloboma. In none, were the symptoms ameliorated; in two, so much aggravated as to suggest the expediency of an immediate enucleation of the globe.

I recommend that the intraocular myotomy should always include the base or pillars of the widest part of the iris. Mr. Teale (BRITISH MEDICAL JOURNAL, April 9th, 1864, page 404) appears to have practised, at the suggestion of Mr. Bowman, a somewhat similar, if not an identical, plan of treatment, in two cases in which exalted tension was consequent upon a needle operation for cataract. The first of Mr. Teale's cases occurred nearly a year *after* my papers had appeared in the *Medical Times and Gazette*.

In the glaucomoid state, which sometimes forms a sequela of violent injury to the eyeball, when complicated by dislocation of the lens deeply into the vitreous, no surgical treatment can be relied on as curative of the tension and prophylactic of the occurrence of sympathetic ophthalmia.

Discouraged by the results which I had witnessed in my own practice and that of others, I withheld all surgical interference in the last case that came under my care. The irritation subsided, and no serious sympathetic mischief followed in the fellow organ. The patient was nearly 60 years of age.

In May 1860, the operation—by removing tension from an eye in which the pupil was closed and the iris bossulated (synechia annularis)—cured a sympathetic irritation of the fellow organ, that had existed a year, and which, at the time of treatment, rendered the reading of small type impossible. (*Vide Medical Times and Gazette*, vol. 1861, p. 327.)

The case derived additional interest from showing that the irritation due to an exalted intraocular tension may be imparted to a sound eye.*

* Many writers consider the eye to be passive when viewing landscape, and that *accommodation* or adjustment only comes into play when near objects are viewed. They therefore object to speak of *accommodation* for distance.

† According to Donders, the natural tendency of myopia is to advance.

* This fact is, I believe, now (September 1864) conceded, *quoad* glaucoma, by the iridectomy school.

In the next year (1861), instances of conical cornea were submitted to treatment. The sides of the cone became more flat; when opacities were present, they underwent rapid absorption, and if superficial, disappeared. The vision was much improved. These results appear to point to an improved nutrition of the cornea, and a diminution of the secretion of aqueous humour, which, it will be remembered, is derived from the surface of the iris and tips of the ciliary processes—parts that are immediately implicated by the operation.

In regard to the treatment of nearsightedness by the procedure under discussion, I cannot, Mr. President, close this paper, without referring to a claim of priority, which was put forth in a letter in the *Lancet* (vol. II, 1862, Sept.), upwards of two years after the journals and retrospects had given publicity to my method of treating myopia.

In this letter, it is asserted: 1. That I wrote to Mr. Hancock *a few days after* the publication of his paper on Division of the Ciliary Muscle in Glaucoma, in the *Lancet* of Feb. 11th, 1860, inquiring whether he had any *new facts* to communicate. 2. That Mr. Hancock and his colleague Mr. Power wrote to me in reply; and that *very soon afterwards* I visited the Westminster Ophthalmic Hospital, and had explained to me the application of division of the ciliary muscle to cases of myopia. 3. That, on my return to Birmingham, I prepared the notices of my cases of myopia which appeared in the British Medical Journal and *Medical Times and Gazette*, of the respective dates of May 26th and June 1st, 1860.

Very fortunately, the letters to which reference is here made are in my possession; and I need feel no delicacy, Mr. President, in placing these letters in your hands.

You will observe, sir, that Mr. Hancock's letter is dated May 17th, 1860, is written in answer to one from me, and concludes with a request that I would publish my cases.

The letter of Mr. Henry Power is dated, as you see, May 18th; and contains a full description of the operation of division of the ciliary muscle, and a drawing of conical cornea, showing the direction which the knife should take.

Here, then, are the letters which the writer in the *Lancet* asserts were written in February, and interchanged previously to my visit, "*shortly* afterwards", to the Westminster Ophthalmic Hospital; which visit was followed, he says, by an announcement, in the British Medical Journal, of my cases of nearsightedness treated by intraocular myotomy. I hand you that Journal; it bears the date of May 26th; just one week later than the letter of Mr. Power, and eight days later than that of Mr. Hancock. In the next week, June 1st, the *Medical Times and Gazette* drew attention to the same subject; and on that day I visited the Westminster Ophthalmic Hospital, and not before since 1850.

If reference be made to the cases published by me in the last mentioned periodical (vol. 1861, January), it will be found they were operated upon in March, April, and May, 1860; therefore, in order to give a colour of probability to Mr. Hancock's claim of priority, it became absolutely necessary to place back the date of that gentleman's letter, and his colleague Mr. Power's, to about February 14th; and my visit to their institution to early in March or the end of February. It was also essential that the date of my letter should be omitted.

The evidence in refutation of the statements to which allusion has been made, admits of being carried much further. It will suffice, however, to refer to the *Lancet* for an announcement that succinctly and conclusively decides my claim to priority of operation in cases of myopia. The *Lancet* for July 7th, 1860, p. 7 (six weeks after the note of my operation in the British Medical Journal), contains the following paragraph.

"The cases in which division of the ciliary muscle has been resorted to are, hydrophthalmia, sclerotic staphyloma, and acute and chronic glaucoma. It has also been performed in conical cornea by Mr. Power."

The same periodical furnishes a conclusion so appropriate to the present paper that I cannot refrain from making use of it.

"We wish it to be understood that any new operation, with whatever authority it may be introduced, or with whatever amount of success it may meet in the hands of its originator, offers a fair subject for just and even rigid criticism; but this criticism, if it is to be of service [to medical science?], *must be conducted in a spirit of equity.*"

PARAPHIMOSIS.

By John Thompson, M.D., F.R.C.S., Bideford.

Among the minor cases of surgery that frequently come under the treatment of the surgeon, is paraphimosis. As observed in the wards of the hospital, it will be generally in connexion with venereal disease; but in private practice, it occurs mostly without this complication.

It is met with in two principal forms: the first, when a natural phimosis is converted into a paraphimosis, by the forcible retraction of the prepuce behind the glans; the second, from great swelling of the glans and prepuce, making it impossible for the patient to bring the prepuce forward, when it has by accident or design been drawn behind the corona. In the latter case, the swelling of the glans and prepuce causes the paraphimosis; in the former, the paraphimosis causes the swelling.

A moderately tight constriction where disease exists on the glans will quickly produce tumefaction, discoloration, ulceration, and even sloughing; whereas, when disease is absent, the results are not so severe, and consist of swelling of the organ, followed by inflammation, with perhaps ulceration at the seat of stricture, and also adhesions among the surrounding integuments.

As regards the treatment, it is advised by all to relieve the constriction, by reducing it with the hands as quickly as possible, more especially where venereal disease is present, as any impediment to the circulation fearfully promotes the ravages of ulceration and slough. But, supposing efforts with the hands fail to reduce it, a good deal of variation exists among the directions given by writers on practical surgery. Thus, scarifications, elevation of the penis against the abdomen, and confinement in this position for some time, the use of saturnine lotions, division of the stricture at once, have their several advocates.

The late Mr. Samuel Cooper advised the copious affusion of cold water to the organ, and then trial of reduction by the hand. He stated that this method had in his experience been most successful, and that division of the stricture would not often be necessary, were it more generally adopted.

The main object of my communication is to state that I most fully concur in the justness of Mr. Cooper's views, from their practical value tested by experience. In the course of my practice, I have met with a good many instances of paraphimosis, and have never failed at reduction, provided persistent adhesions had not formed. Merely moistening the parts is not sufficient; a pan must be placed beneath

the genitals, and cold water must be poured on them for a quarter of an hour or more; and such diminution in size will result as to allow of reduction with comparative facility. Of course, were the organ in such a state of disease as to threaten sloughing, the cold affusion might be injudicious; but common sense would direct in exceptional cases.

Mr. Cooper remarks, in his *Surgical Dictionary*, "that Mr. Dunn, of Scarborough, had reminded him that, in a former edition, he had omitted to speak of the power of the cold affusion in promoting the reduction of the glans." I regret to observe the same omission in many modern Systems of Surgery; for I am convinced that, next to division of the stricture, it is the most powerful aid to reduction.

Cases will undoubtedly occur where attempts at reduction will fail, even with the aid of cold affusion; but they are almost invariably those where the disease has existed for a long time, and rigid adhesions have formed. In such cases, reduction cannot be effected, even by division of the stricture. The most that will result will be a loosening of the integuments where the division is made. This I have noticed in several cases.

A lad was some time since brought to me with severe paraphimosis, which had existed nearly a week. It was caused by his forcibly retracting a phimosis. I was unable to reduce it by simple pressure; but on using for some time the cold douche, next drawing the integuments of the penis well up towards the pubes, so as to break up newly formed adhesions, then placing my thumbs on the glans and my fingers on the integuments, I succeeded, after some steady manipulations, in completely relieving the strangulation.

A man, the subject of balanitis, drew his prepuce behind the glans, and could not afterwards draw it forward. He remained in this state, fearfully swollen, for four days, and then applied to me. I thought that, in this case, I must divide the stricture; and I accordingly took a knife into the room, intending, if my ordinary plan did not succeed, immediately to operate; but, on using the cold douche for some time, I was enabled completely to relieve the strangulation.

I might add a number of similar cases, but it would draw my communication to too great a length. I trust, however, I have said enough to induce some to try the effect of the cold affusion, before they resort to the knife.

Non-Combatants Again. Colonel Green, in his dispatch from New Zealand, thus speaks of the doings of the non-combatants in the last fight with the Maories. "Surgeon-Major Best, 68th Light Infantry, principal medical officer, performed his duty assiduously under fire, paying the greatest attention and care to the wounded. I can say the same of Assistant-Surgeons Henry, 43rd; Applin, 68th; and O'Connell, Staff: the former was particularly brought to my notice by Major Synge, commanding 43rd Light Infantry."

The Doctor and the Artisan. "Talk," said the late Sir James Graham, "of the dependency of the skilled artisan, with more work than he can do, and a choice of employers at 30s. per week! Compared with the struggling tradesman, the young surgeon, the clerk at £100 a year, or the decayed merchant, whose trembling hold on the position of a gentleman in his native town depends upon the humour of his banker, he is both positively and relatively far better able to repel dictation, or to resist menace." And yet it is to this skilled artisan that the young surgeon is called upon to give his gratuitous medical services!

Transactions of Branches.

BENGAL BRANCH.

A CASE OF PHLEGMASIA DOLENS.

By S. Goodeve Chuckerbutty, M.D.

Mrs. S. C., aged 24, residing in a damp, low-roomed house, surrounded by bad drains and abominations of all kinds, was confined of her fourth child, at the full term, on August 23rd, 1863. The smell of the locality was so very offensive, that it was impossible for a stranger to visit there without feeling sick; indeed, I was forced to speak to the proper authorities on this subject, on my own account as well as for the benefit of my patient. Another circumstance which struck me in this case, was the great size of the womb during gestation; almost double of what it was on any former occasion; and she herself told me that the feet were slightly œdematous. The delivery was attended with an enormous loss of liquor amnii, and followed by much hæmorrhage.

On the third day after child-birth, I was hurriedly sent for to see her, as she was seized with fever. There was then some heat of skin; and increased frequency of the pulse. The complexion was darker than natural; the secretion of milk was deficient; and the breasts were neither swollen nor hard—a circumstance which seemed to puzzle her to account for, as she had always herself nursed her infants before. The fever assumed an intermittent character; but was soon cured by castor-oil and a few large doses of quinine. She continued, however, very weak, from the loss of blood she had suffered, and from the lochial discharge, which was very free and sanguineous till the ninth day, but then suddenly stopped. Its arrest was followed by a severe pain in the right iliac region; the left being perfectly free from suffering of any kind, even on the firmest pressure with the hand.

About this time, too, a pustular eruption broke out on her elder children; and large blisters formed on various parts of the youngest infant, becoming rapidly converted into large confluent sores, especially on the neck and flexures of the thighs, and finally proving fatal.

Whether to conceal her own sufferings in consequence of these fresh troubles, or really from a sense of benefit, after syringing the vagina with warm water and the application of a few hot bran poultices to the seat of pain, the lady soon declared that she was well. The next day, without asking my permission, she had a bath, according to her former practice, and washed her infant herself, suspecting that the nurse did not do her duty properly to the child, and that that was the cause of the sores. Two days after this, she attended the funeral of that child, and stood upon the wet grass during the burial service. For the next day or two, her grief was too fresh to permit her to notice her own condition. She then found that any attempt to stir about the house seemed to give pain in the right iliac region. The milk dried up without any accident. But now she felt feverish, and the pain extended down to Poupart's ligament. It also turned out that she had had all along a fœtid discharge from the womb ever since the first attack of pain, which she did not like to mention before. She was ordered to keep her bed, and to apply bran fomentations to the seat of pain. Purgatives, quinine, warm ablution of the vagina, and generous diet, were at the same time prescribed. As soon, however, as she had derived some benefit,

and before she was quite well, she began again to walk about without telling me of it, though the effort gave her much pain.

On September 14th (twenty-one days after parturition), I found the whole of the right lower extremity, from the hip to the foot, immensely swollen and painful, though still soft and fully extended. There was, however, no pitting on pressure. She was now completely restless, and unable to rise from the recumbent posture; had no appetite, but a bitter taste in the mouth; and her complexion generally was of a darker hue. On a closer examination, the lymphatic glands of the groin and the upper part of the thigh were found to be greatly enlarged and tender; there being a string of them along the lower border of Poupart's ligaments, another cluster over the cribriform fascia, and a third group of two or three in the crural arch pressing on the femoral vein. The cords uniting these glands were, also, in some places, thickened and painful; but the most careful scrutiny failed to discover any pain whatever in any of the principal veins. The right iliac region was still somewhat tender, and presented to the fingers a knotty feel. The opposite limb, as well as the rest of the body, was quite healthy and free from pain. She had fever and constipation.

In this condition, I prescribed for her an immediate purgative of castor oil; to be followed by a mixture (consisting of quinine, chlorate of potash, tincture of the sesquichloride of iron, spirit of nitric ether, and water) thrice a day, local fomentation, anodyne friction, flannel bandage, perfect rest, and generous diet. This procured her some quiet; but the next day, the swelling had increased, and was getting harder; the pain was yet more agonising; and the patient deeply alarmed about her life.

Matters being still worse in the evening, a dozen leeches were applied to the affected glands, and the bleeding was encouraged by warm water fomentation. The relief from this treatment was most marked; and she slept soundly that night for the first time since her illness. The following day, she had no fever; her complexion was lighter; and, though the swelling was still undiminished, the pain was so much less, that she could allow the limb to be freely handled. Six more leeches were ordered to be applied to the remaining glands; and the morning afterwards, a further improvement was observed, the appetite having returned, and the glands at the groin being now no larger than mustard-seeds.

No further leeches were ordered this day; but the next, there being more pain and swelling of the leg, and an enlarged gland being discovered between the divisions of the gastrocnemius, four more leeches were applied to the latter with great benefit.

From this time forward, nothing beyond continuing the above measures, as to medicine, diet, and regimen, was done; and she went on progressing steadily, with the exception of only a single attack of fever brought on by having too soon imprudently left off the mixture for a day. On October 1st, her complexion was perfectly natural, appetite good, sleep sound, bowels regular, and the affected limb now nearly free from swelling, and only slightly painful in a small vessel about an inch and a half in length, crossing obliquely the middle of the thigh. This pain she felt while trying to stand on her bed, with the help of the tester-frame and bedposts. The purulent discharge from the womb still continued; but it was not so offensive as before.

On October 6th, there was no pain, and hardly any swelling of the limb, though it was still very weak. Her health was much improved; and she could now stand and move a few steps by holding the tester-frame of her bed. The vaginal discharge had much decreased; and she was anxious to know when she would be allowed to go into the next room.

About the beginning of November, she was quite well; though the right foot was still apt to feel heavy and swollen on standing for a long time. On Christmas Day, she was as well as ever in her life.

In reading through the above narrative, the principal facts which strike the mind are as follows.

1. The highly insanitary condition of the locality where the case occurred, as shown by its bad conservancy and drainage, offensive odour, and the presence of sickness among other inmates of the house.
2. Dropsy of the amnion during gestation.
3. Excessive loss of blood during and after parturition.
4. Development of intermittent fever from the third day, unattended with mammary fulness.
5. Arrest of the lochia on the ninth day, followed by severe right iliac pain and the establishment of an offensive vaginal discharge.
6. Increase and extension of that pain downwards to the groin, and return of fever, following imprudent exposure to cold and damp at the burial of her child.
7. Speedy drying up of the lacteal secretion on the death of her infant.
8. Swelling and tenderness of the lymphatic glands and vessels, and of the whole length of the right lower extremity, without œdema, phlebitis, or tendency to flexion, twenty-one days after parturition.
9. Cure by rest in the recumbent posture, fomentation, leeches, constitutional remedies, and generous diet.
10. The prolonged convalescence and debility of the limb attacked.

A SINGULAR CASE OF HYDROPHOBIA (?) SEVENTEEN YEARS AFTER THE BITE OF A DOG, FOLLOWED BY PARALYSIS AGITANS.

By S. Goodeve Chuckerbutty, M.D.

Jas. C., aged 24, an indigo planter's assistant in the Mofussil, was brought down to Calcutta in a most helpless and deplorable state. The day after his arrival, I was called in to see him, when I found him in the following state.

He was struggling in a fit of convulsions, into which he had been thrown by the announcement of my presence. The mind was perfectly clear, and the speech rational, though interrupted by muscular spasms. The eyes were starting and rolling restlessly. There was a strong expression of alarm in the countenance, and violent working of the muscles about the neck; the patient crying out, gaspingly, "I am dying," "I am dying," repeatedly. The body was inclined; the legs resting on the bed, and the head and shoulders raised by two persons. The whole frame was convulsed; and he snapped at any one who came within the reach of his teeth. His mother, father, and sisters, were thus severely bitten in several places. The fit lasted about two minutes.

When tranquillised, he spoke well and intelligently; but on trying to give him some drink, the fluid was violently rejected, and there came on dreadful spasms of the throat, with a sense of choking, which made him jump up into the sitting posture and pitifully implore for help. His parents stated, that he had had many similar fits all through the night since his arrival, though his bowels had been freely moved by some purgative which had been obtained from a druggist.

On inquiry, I learnt that he had been ill in this way for three days in the factory, when another assistant, discovering the state in which he lay, immediately brought him down to Calcutta, and turned

him over to his family. This was on January 24th, 1864; and my first visit was paid on the 25th. He was bitten by a dog only once in his life, and that was seventeen years ago, when quite a boy, by a pet animal. He had not been bitten by any other animal. His health generally had been good, except that he had long suffered from spermatorrhœa, for which he had been under my own treatment at different times. Latterly, he had worked very hard, riding about the whole day, and exposing himself a great deal to the sun. His meals were irregular, and he never took stimulants of any kind—his drink being pure water. A sense of fatigue seemed to creep over him gradually, till at last he was suddenly seized with convulsions and general tremors, incapacitating him for work and even for rising from his bed. He had indulged much in venery long ago; and there was a small chancre on his penis at the time.

With regard to his present state, he was very anxious to learn what was the matter with him. He told me that he felt very curious in his head, and that, though he could not drink water comfortably, the application of it to the vertex gave him great relief. His appetite was good; but he could not sleep for fear of choking.

On further examination, I found his urine abundant and clear; skin of natural warmth; face slightly flushed; pulse weak but frequent; abdomen soft; loins free from pain; spleen and liver healthy; heart's action and respiration good (though hurried during the fits.)

Besides the purgatives already mentioned, he had had some port wine and sago; of which, however, he could not make much use.

I continued the port wine, and ordered him as much solid food as he could eat. I also prescribed for him ammonia, sulphuric ether, compound tincture of lavender, and camphor mixture, every half hour; a gentian and opium pill at bed-time; and anodyne friction all over the body; leaving the chancre to be dressed with black wash, as he had been doing.

On the 26th, matters were much in the same state; he had passed a very bad night; several times his family thought he was expiring. The mixture had been given him regularly; and latterly he was able to swallow some of it. Since the morning, too, the snappishness had disappeared, and he had slept a little. He had taken food pretty well, and the bowels were freely moved; the stool and urine were natural. The same treatment was ordered to be still continued, with the exception that beer was substituted for port wine.

On the 27th, the restless rolling of the eyes and the muscular agitation were somewhat less, though the patient was still afraid to turn in his bed for fear of convulsions. The power of swallowing had increased, so that he took his medicines regularly. He drank, also, broth and water; ate some calves'-feet jelly; and was inquisitive as to what I thought of him. The bowels were constipated. He took to-day a dose of castor-oil, which operated well; and continued the same medicines as before.

On the 28th, the rolling of the eyes had ceased, the jerking of the head was less, and he had had no convulsive fit. He could sleep now without opium; and wished to know if he could bathe, as the application of a wet towel to the head gave him great relief. He also complained of weakness, and wanted something to give him strength. The opium was now entirely omitted; and sulphate of iron and gentian pills were given instead. The mixture was continued every hour. He took now some mutton-chops with relish. His clothes, also, were changed.

On the 30th, he was stronger and better, though still unable to rise, passing his excrements in bed. So long as he lay perfectly still, there was no agitation of any kind; but the moment he attempted to move, the whole body was thrown into a state of tremor. The appetite and sleep were now remarkably good; and he ate well. He was told to take three pills a day, and the interval between the doses of the mixture was increased.

On February 3rd, he could sit up; and was allowed to take a warm bath, which stopped the convulsions for the day till the bed-time.

After this, his progress was steadily satisfactory, under the influence of generous diet, beer, sulphate of iron and gentian pills, warm baths, and gentle airing.

On March 5th, he paid me a visit at my house; and stated that he felt as strong as ever, though still unable to walk by himself.

In two weeks more, he was able to return to his work.

Reviews and Notices.

RHEUMATISM, GOUT, SCIATICA, AND NEURALGIA: THEIR RATIONAL PATHOLOGY AND SUCCESSFUL TREATMENT. Illustrated by the Details of numerous Cases. By JOHN PURSELL, M.D. London and Brighton: 1864.

EXANTHEMATOUS DISEASES: THEIR RATIONAL PATHOLOGY AND SUCCESSFUL TREATMENT. To which are added Remarks on Hooping-Cough, Diphtheria, Croup, Laryngismus Stridulus, Chorea, and Erysipelas. By JOHN PURSELL, M.D. London and Brighton: 1864.

FOR many years Dr. PURSELL has, in the treatment of the diseases mentioned in the titles given above, adopted the plan of giving quinine or its allied alkaloid cinchonine from an early stage of the malady. The results of this treatment appear to have been in his hands very successful; in illustration of which, he relates numerous cases in detail, and also states, in a note to page 26 of the work on Exanthematous Diseases, that "in the epidemic of scarlet fever that prevailed at Brighton three or four years ago, he had in dispensary practice about seventy cases, including all varieties of the disease; and all recovered."

A sense of duty has led Dr. Pursell to lay before the profession the plan of treatment which he pursues, with examples of the results which he has obtained. He appears to have made out a very good case in favour of the early use of quinine in the various diseases referred to; and we recommend his views to the careful consideration of our readers.

AN INQUIRY INTO THE RELATIVE FREQUENCY, THE DURATION, AND CAUSE, OF DISEASES OF THE SKIN, ETC. By ERASMUS WILSON, F.R.S. Pp. 80. London: 1864.

THE observations made in this pamphlet are the results obtained from an investigation of one thousand consecutive cases of skin-diseases which have fallen under the author's notice. Mr. E. WILSON's object herein is to determine the relative frequency, the cause, and the duration of cutaneous diseases. The conclusions arrived at by a writer of Mr. Erasmus Wilson's large experience are necessarily of great value, and claim the attention of the profession.

Appended to the pamphlet is a note on the Exanthematous Epidemic of the Spring of 1864—the so-called *Rubeola Notha*.

On a Form of Bronchitis (simulating Phthisis) which is peculiar to certain Branches of the Potting Trade. By Charles Parsons, M.D. Edinburgh: 1864.

One of the gold medals of the Edinburgh University was this year awarded to Dr. Parsons for this graduation thesis. The subject is a thoroughly practical one. Dr. Parsons has had experience of diseases in the Potteries, having lived as house-surgeon in the North Staffordshire Infirmary. He now attempts to show in this thesis the very bad effects of the dust—the clay-dust—which is inhaled in large quantities by certain workmen in pottery ware. His thesis is a valuable addition to the history of the diseases of artisans.

British Medical Journal.

SATURDAY, SEPTEMBER 24th, 1864.

SANITARY SCIENCE AND THE INDIAN ARMY.

The report of the Commission on the Sanitary State of the Indian Army has just been published. At the date of its appointment, May 31st, 1859, it consisted of: Hon. S. Herbert; Major-General Sir R. J. H. Vivian; Colonel Sir P. T. Cautley, K.C.B.; Dr. Alexander, C.B.; Colonel E. H. Greathead, C.B.; Dr. W. Farr; Mr. J. R. Martin; and Dr. Sutherland. Since then, Dr. Gibson and Colonel Durand were nominated members of the commission; and Lord Stanley succeeded Lord Herbert. Appended to the report is a summary of the evidence, an abstract of all the reports from the stations in India, and a paper of comments on them written by Miss Nightingale. Among those who contributed to furnish the information are: Sir J. Lawrence; Sir C. Trevelyan; Sir A. M. Tulloch; Colonel Durand; Colonel W. Thompson; Brigadier-General Russell; Dr. Bird, late Physician-General to the Bombay Army; Dr. W. C. Maclean; Major-General Cotton, Madras Engineers; and others.

The English population in India amounted to only 125,945 persons in 1861—to less than the population of Marylebone. Of these, 84,083 went to compose the British officers and men of our Indian army; while 22,556 consisted of men and boys in civil life, including the civilians in the public service; the remaining 19,306 being females, of whom 9,773 were over 20 years of age. Taking the English children in India, it is found that the rate of mortality among them is lower than that which generally prevails among children at home; but, then, as they advance in years, they grow feeble, and gradually wither away. This remark does not, however, apply to the children reared on the Hills. The mortality among the wives of officers, the commissioners regard as a fair representation of the mortality of English women in India; and this has been ascertained not to exceed 14 in 1000, between the ages of 20 and 40. The wives of the non-commissioned officers and soldiers do not fare so well; dying at the rate of 35 per 1000. Among the civil servants in India, between the ages of 20 and 45, the average rate of mortality per 1000 has been found to be little more than 20. In England, the mortality among men of the same age is about 9 per 1000. Among the natives of all ages in India, it amounts to about 51 per 1000; while, in this country, the number of deaths per 1000 is under 23.

In April 1862, the army in India numbered nearly 200,000; of which number, 3962 were European officers and 70,489 European non-commissioned officers and men. The average mortality of men of the soldier's age in the healthy parts of England is 8 per 1000; while, in the unhealthiest towns and in the unhealthiest trades, it is not more than 12 per 1000. In the British army at home, the mortality is 17 per 1000. In India, however, the death-rate of the English soldier has ranged from 41 in 1852, to 134 per 1000 in 1804. Fluctuating during a long series of years, the average mortality has been put at 69 per 1000; so that, taking the average mortality of men in England at the soldier's age at 9, it would seem that 60 in every 1,000 die annually in India owing to the special causes there in operation.

As regards the rate of mortality among the British troops in India of different ages, it is found that the mortality per 1000, between the ages of 20 and 25, is 56.4; between 25 and 30, 48.8; and between 40 and 45, 61.6. After the age of 55, the deaths grow less; and at 70 and upwards, old men die nearly at the same rate in India as in England.

But while the mortality of the soldier in India has been at the rate of 69 per 1000, that of the officers has been only 38; from which it would appear that the 31 deaths in excess are due to other causes than the climate. While the soldiers live together in numbers in common bed-rooms in barracks, the officers generally reside in separate bungalows; their food and drink are of superior quality; their contact with the sick in barracks is limited to periodical inspections, and when ill they have the advantage of being able to resort to healthy places. Similar causes operate in favour of the civil servants, the mortality among whom does not exceed 20 in 1000 at the soldier's age.

Disease, too, contributes to destroy the efficiency of the army in another way. In the stations of Bengal, 84 men in a battalion of 1000 were, on an average, constantly in hospital, a large proportion of

the cases being of a syphilitic character. With this amount of sickness, an army of 70,000 would require constant hospital accommodation for 5880 men; while, with a mortality of 69 per 1000, it loses yearly 4830, or nearly five regiments. The general tabular results show that 1000 effectives serving in India are reduced to 96 in 20 years; so that to maintain an army of 86,000 men a yearly supply of something like 10,000 recruits is necessary.

As regards the native corps, the mortality was somewhat under 8 per 1000; the average rate for the three Presidencies for the twenty years ending 1844 being 18 per 1000, 19 in every 1000 being the extent of the invaliding. Their superiority in health to the English soldiers has been explained on the supposition that their organisation is adapted to the climate; but there is no good ground for believing that the fact of their breathing their native air produces the marked difference which exists between an average mortality of 18 and 69 in every 1000. The men generally sleep outside the huts; and to the fact of their possessing separate huts, and not being cooped with several of their fellows in one sleeping apartment, much of their superiority in point of health to the European soldier is attributed.

The Commissioners dwell upon the expediency of taking steps to preserve the British soldier's life, not only upon the score of humanity, but also on that of economy. They find that £100 is on an average annually expended on the European soldier serving in India. A death-rate at 20 per 1000, to which amount the Commissioners express a confident opinion the present rate might be easily reduced, would render necessary only 1400 recruits *per annum*, instead of 5037, as at present; so that the excess of mortality presumed to be avoidable is absolutely 3577 lives in the year, and is equivalent to a tax of nearly £1000 a day. A careful examination of the causes of disease, and the character of the diseases prevalent in India, lead them even to cherish the idea that the day is not far distant when the natural death-rate in times of peace of men of the soldier's age in India will be no higher than 10 per 1000 *per annum*, which would bring it down almost to the English level.

The barracks at the several stations are constructed on a plan which prevents their being thoroughly ventilated, while the men are exposed to injurious draughts. The barrack-rooms, too, are generally greatly overcrowded; so that a large number of men are huddled together in one barrack. Another great defect in the present barrack accommodation is that the means of cleanliness are almost everywhere deficient. At the large station of Peshawur, where there were in 1860 between 1600 and 1700 men, no rooms for the purposes of ablution were to be found. The means of cooking in barracks, too, are very defective.

The Commissioners are of opinion that improvement is much needed in this respect, as well as in the nature of the diet with which the troops are supplied. The Commissioners consider that the diet would be amply sufficient for men engaged in out-door toil in a cold climate. They find that the natives eat very little animal food, especially in hot weather. They had, also, before them the facts stated by Dr. Rennie, for several years in medical charge of convicts in Western Australia, to the effect that over-feeding and the too free use of animal food produced among those men much disease; and that improved health was the result of reducing the scale of diet. Dr. Rennie adds that, in his opinion, what are familiarly known as "the diseases of tropical climates" are, in reality, diseases occasioned by habits and circumstances of life unsuited to tropical climes; and that the relation which food bears to temperature is seriously overlooked in the dieting of bodies of men in the public service. The Commissioners, therefore, recommend that the diet of the soldier in India should be rendered more in accordance with the nature of the climate and his sedentary habits than it is at present.

As regards dress, the Commissioners strongly recommend the use of flannel underclothing, which Sir R. Martin looks upon as absolutely necessary as a preventive against chills and their frequent consequences—dysentery and liver-disease—in India.

The sanitary condition of European troops is seriously affected, also, by intemperance. Every soldier has a right to purchase at his regimental canteen two drams of spirits of good quality—generally rum or arrack—supplied by the commissariat; and it has been calculated that every soldier who avails himself of his privilege of dram-drinking, consumes eighteen gallons and a quarter of raw spirit in the year; but most of the men content themselves with one dram, taking instead of the second a quart of malt liquor. As a matter of fact, however, the troops do indulge in the habit of dram-drinking, which is most fatal to their health.

At some of the stations, the cases received into hospital, and attributable to intemperance, have been known to constitute about a tenth part of the total admissions from all diseases. Many of the medical officers object to the use of malt liquor as well as spirits in India, and propose as substitutes for it light wines, ginger-beer, tea, and coffee. In regiments where habits of temperance prevail, the health of the men is greatly improved. Of the 2nd troop 1st brigade Horse Artillery, in which a temperance movement was set on foot at Meerut, Mr. Dempster says, that he "had never before seen European troops in India in so good a condition in all respects." When the troop arrived at Meerut from Loodiana, it had fifty per cent. of its numbers actually in hospital; but, after a residence of four years at Meerut under the temperance system, it marched to Sealkote "with

clean bill of health", no death having occurred among the men for a period of two years. The whole evidence, in short, goes to prove that the consumption of ardent spirits among the troops is a very potent cause of disease in India. The testimony in favour of the use of malt liquor is nearly as unanimous as that against the use of spirits; but it must not be imagined that the tendency of the evidence is to show that malt liquor is indispensable to the soldier; it only goes to prove that it is greatly less injurious to his health in a warm climate than spirits.

The Commissioners, moreover, find that the soldier, when sick, is exposed to agencies inimical to his recovery. The hospitals are, like the barracks, badly ventilated; the drainage is defective, and the water-supply almost universally bad; and no trained attendants are provided for the sick. These observations apply with still greater force to the hospitals for natives, in which the sole thing done to promote the recovery of the patients would seem to be to supply them with drugs. But the native, being permitted to reside in a separate hut, instead of in a crowded barrack-room, possesses an inestimable advantage over his European fellow-soldier.

The Commissioners also think that properly selected hill-stations, under a well conducted system of sanitary management, would be of great advantage to the health of the army.

To improve the sanitary administration existing in India, the Commissioners suggest the appointing a Board of Public Health for each Presidency, to give advice in all sanitary matters, such as the selection of new stations, and the improvement of existing stations and bazars; to examine new plans for barracks and hospitals, etc.; that an improved system of registering deaths and the causes of death should be established in all the large cities of India.

Such are the chief points discussed in this Report. Should the recommendations of the Commissioners be carried into execution, great and rapid improvement in the sanitary condition of the army serving in India will be the result. It is satisfactory, indeed, to know that, since the inquiry began, many of the evils detailed in the evidence have been removed, or are in progress of removal. Sanitary Commissions for the three Presidencies have been appointed, and put in communication with the Barrack and Hospital Improvement Commission at the War Office, to which two members representing the Indian Government have also been added; and, under their auspices, suggestions for carrying out sanitary works, including water-supply and drainage, as well as improved plans for hospitals and barracks, have been prepared and sent out to India; and it may be fairly anticipated that, when the proposed scheme of sanitary reform has come into full operation, an immense saving of European as well as native life will be found to be the result.

LUNATICS ABROAD.

A CASE, in which is apparently involved the taking of a lunatic from this country to Belgium, has made some considerable excitement in the daily papers. We refer to the case of a supposed lunatic woman who was forcibly put on board a packet at Dover. The young woman was said to have been brought from Great Ormond Street; and the report has drawn forth the following letter from the medical officers of the institution there.

"The medical officers of the Hospital of St. John and St. Elizabeth present their compliments to the Editor of the *Daily Telegraph*. In a leading article of the 17th instant, he has commented upon the case of a patient who, labouring under insanity, was being conveyed to an asylum in Belgium, and referred to her as having come from the hospital to which they are attached. They beg to be allowed to state that she was not a patient of the hospital, nor a member of its community of nursing sisters; nor was she ever seen by the medical officers, who, indeed, only learned the occurrence from the notice in the papers. They understand that the patient was merely at the convent for a few hours before proceeding to her destination.

"St. John's and St. Elizabeth's Hospital, 47, Great Ormond Street, Queen's Square, Bloomsbury, Sept. 20."

We refer to the case because, assuming the young woman to have been a lunatic, there is manifestly something required in the way of interference on the part of the Lunacy Commissioners to justify such violent extradition of a subject from England. On this subject, we would refer our readers to an article in this JOURNAL of June 6th, 1863, "On Lunatics in Foreign Asylums". In that article, we related certain facts, on the authority of Dr. Robertson; and those facts showed demonstratively that our Lunacy Commissioners ought to have some control or power of visiting English lunatics in foreign asylums. Dr. Robertson tells us that lunatics are provided for much more cheaply in Belgium than here; that patients are often there consigned to an inevitable doom; that the plot of *Lady Audley's Secret* is not wholly a romance; that he has known cases in which one payment *for life* has been made, and then asks, "What chance of cure in such a case?"; and that patients may be unknowingly kidnapped and consigned to a foreign asylum—"not a pleasant abode, or one from which escape or release is easily got." In a Parliamentary Committee in 1859, Lord Shaftesbury stated that there was no legal check to prevent such a transportation of lunatics out of England. We sincerely trust that this case may be the means of calling the attention of lunacy authorities to the necessity of bringing the extradition of lunatics from this country under some regular legal restrictions. No doubt, in respect of the case in point, our Lunacy Commissioners will satisfy themselves that the demands of the Lunacy Law were duly and fully complied with.

We are glad to find Mr. Carter shows signs of contrition, by attempting to smooth down the obvious meaning of his own words. As, however, he accuses us of "garbling", and of "supporting incorrect statements by a misquotation", we will give extracts containing the very words of his circular letter.

"The first duty of the Board," says Mr. Carter, "will be to decide points left open by the report, and consequently left open by the vote of the Annual Meeting. First among these questions will be the subject of my protest, namely: Shall the Provident Fund be open to all members of the profession, or shall it be limited to members of the British Medical Association?

"The majority of the Committee, who were and are in favour of the limitation, regarded the matter from an Association point of view. I mean that they are old members of the Association, that they have laboured for it in various ways for many years, that they are proud of its progress, and hopeful of its future. They think that it will become an important political engine for the elevation of the profession, and a power that the Circumlocution Office will not be able to ignore. *They think that the Provident Fund will strengthen the Association; and they therefore welcome it for the sake of the Association, rather than for the sake of the men who will chiefly need its help.* I, on the other hand, and those who think with me, while we should rejoice to see the most sanguine anticipations of the friends of the Association realised, yet feel that there are many practitioners whom sickness would render destitute. There are men of small capital striving to establish themselves; there are qualified assistants who aid in maintaining widowed mothers or younger brothers and sisters; and there are established practitioners who, from local circumstances, are almost precluded from earning incomes sufficient for their needs. I conceive that it would be an act of cruelty to call upon such men to subscribe an annual guinea to the British Medical Association, before admitting them to become members of the Provident Fund."

We would call Mr. Carter's attention to the words which we have italicised, and ask him, Does he call this "attributing no motives"? We can tell him that members of the Committee do not so consider his words. Mr. Carter is really amusing when he pretends to make out that the "pressure" alluded to, to be put on the Directors, is merely of a moral kind. Our readers shall judge from his own words. After some remarks on the Journal (to which we shall return), he suggests that the organisation of the Association is, after all, likely to be very valuable to the Provident Fund; and recommends that every subscriber to the Provident Fund should contribute *two shillings* a year to the executive expenses of the Association.

"The Board of Directors should be applied to, as soon as formed, to admit subscribers upon such a basis.

"That such a proposal may be acceded to, those who are in favour of it must bestir themselves. They must endeavour to procure the election, by the Branches in their respective neighbourhoods, of Directors who will support it at the Board; and they must seek to obtain the names of practitioners who wish for admission on the terms proposed. *I should like the Directors to consider the question of limitation, under the pressure of 200 or more applications from gentlemen who are not members of the Association, and who are prepared, in the event of being refused, to establish a separate fund of their own.* From all such I shall be most happy to receive communications."

This is merely "a pressure of evidence—an aid to the discovery of truth!" Does Mr. Carter take us for children? Can any one but Mr. Carter read the words which we have italicised, and not see in them a positive defiance to the Directors to act otherwise than as he would have them to act? Mr. Carter wants an apology from us. In reply, we tell him that the apology needed is one from Mr. Carter to his late colleagues in the Committee and his colleagues in the Direction of the Provident Fund (if he have the courage to meet them there), and to the associates generally for saying that their Journal "supports incorrect statements by misquotation". We have not wasted the space of this Journal by publishing his address entire; but the above quotations contain the pith of it. We will, nevertheless, flatter his vanity so far as to give one more extract from his circular—the impertinence which he introduces into it about this Journal, when addressing, be it remembered, some hundreds of gentlemen not members of the Association.

"The meetings, and speeches, and dinners, are necessarily limited to men in comparatively easy circumstances; and the less affluent members receive for their subscription only a copy of that Journal upon which about ten-elevenths of the income of the Association are expended, and which must always, from the operation of commercial laws, be inferior to its contemporaries that are maintained by private enterprise. The present deplorable position of the Journal, and its recent advocacy of superficial attainments and of trading greed, although they cast some reflected discredit upon the Association, are yet mere accidents, due to causes that are temporary, or, at least, that admit of being removed. Still the fact that such accidents are possible, that they have occurred, and may recur, increases the hardship of asking any man to pay for a publication that may offend his taste and judgment in every number, and that he cannot discontinue without forfeiting his right to obtain provision during sickness."

Our friends in the *Lancet* could hardly beat this. Is it unreasonable, considering the tone of this paragraph, its thorough agreement with the *Lancet* opinions, and the fact that Mr. Carter's letter has received the editorial approval of the *Lancet*, to conclude that Mr. Carter has been, in lawyers' phrase, instructed by the *Lancet?*

Mr. Talley, a solicitor, residing at Beaconsfield, is endeavouring to do good service by instituting prosecutions against persons falsely pretending to be legally qualified members of the medical profession. One case in which he has prosecuted has been heard in the Marlborough Street Police Court; and other summonses for infringements of the Medical Act have also been granted in the same court at his request. It is incorrectly stated in the public papers

at Mr. Talley represents the Medical Council of ducation and Registration; he is conducting the osecutions on his own responsibility, but has, of urse, applied for and received certain necessary in- rmation at the office of the Medical Council. His st case was heard at the Marlborough Street Police ourt on Wednesday week; when Mr. Francis Bear- ard, "surgeon-chiropodist", No. 59, Regent Street, peared to answer a summons under the new Medi- l Act, for unlawfully, wilfully, and falsely pretend- g to bear, and taking and using, the name of "sur- eon", implying that he was registered under the Iedical Act as a surgeon. The defendant had on s door a plate with the words "Surgeon-Chiropo- st to the Royal Family." The magistrate, Mr. yrwhitt, adjourned the case for a week; and on Vednesday last delivered his opinion as follows.

"I have considered this case; and it appears to me iat 'surgeon', though prefixed to 'chiropodist', can- ot be treated as mere surplusage, but must have a eaning, and was intended to have one. That mean- g must be measured by the general acceptation hich the great body of mankind passing the de- ndant's door-plate would ascribe to the words used ere. I think, on the whole, that these words would nvey to them that a surgeon, duly qualified and re- istered as such, practised at the house in question s a chiropodist. Taken to be such a surgeon, he ould command more confidence with those who ught his aid as a chiropodist; and, not only that, ut he might naturally be consulted by them in sur- ical matters beyond the mere treatment of corns. n the whole, if the defendant will remove from his oor-plate and cards the word 'surgeon', I might con- der as to mitigating the penalty, which is £20, and i that hope would adjourn my decision till this day eek. But if the defendant requests me to grant a ase for the opinion of a superior court I will do so. n that case, it will be needless to adjourn the case, nd I fine him £20." After some consultation be- ween Mr. Lewis (who defended) and Mr. Bearnard, he defendant decided to take a case for a superior ourt.

In striking contrast to this case, was one which as on the same day (Wednesday last) brought be- ore Mr. Paget, in the Thames Police Court, Mr. entiman, a chemist, druggist, and medicine vender, f No. 2, Upper East Smithfield, appeared to answer summons taken out by Dr. Wills, a registered me- ical practitioner, of No. 22, Upper East Smithfield, hich charged the defendant with wilfully and falsely retending to be, and taking and using the name and tle of a surgeon. Evidence was given to shew that he defendant designated himself as a surgeon on his rinted bills, his name not appearing in the *Medical Register*. Mr. Paget, however, said that a conviction nder a similar charge had been quashed by the Court of Common Pleas in 1860, and intimated his ntention of dismissing the case; but on the repre- entation of the plaintiff's counsel that, as he believed, here were other convictions which had not been uashed, he consented, with some reluctance, to ad- ourn the summons for a week.

A MEETING of members of the medical profession was held in Calcutta on August 3rd, at which it was resolved to raise a subscription for the purpose of perpetuating the memory of the late Surgeon Llewellyn, of the *Alabama*. A committee, consisting of Drs. Gordon, Chevers, Fayrer, Beatson, and others, was also formed for the purpose of carrying out the resolution, in communication with the profession in India and England; and Mr. S. B. Partridge was appointed honorary secretary. The sum of 909 rupees (about £90) was subscribed at the meeting. In their circular, the committee say:

"In appealing for aid to our professional brethren throughout Bengal, we feel that our cause is a good one. Noble conduct, such as that of Mr. Llewellyn, richly merits the recognition of his own profession; and we shall be doing no less honour to ourselves, than to his memory, if we place on record, by a befitting memorial, the high sense we entertain of the exalted self-devotion with which he gave up his life to his duty, in refusing to imperil the lives of the wounded by entering the boat in which he was invited by his brother officers to leave the sinking ship. History records no nobler instance of self-sacrifice than the death of this surgeon, the only officer who perished in the engagement."

The Calcutta Committee are desirous of co-operating with any movement made in England to perpetuate the memory of Mr. Llewellyn.

THE *Wien. Med. Wochen.* gives, in a late number, an account of successful German doctors in Paris, and compares the liberality of the French faculty with the narrow-mindedness of the German faculties. He refers to Gruby, Liebrich, Mandl, Meding, Ottenburg, and Sichel.

"Dr. Gruby we well remember as a poor student in Vienna, a hard-working anatomist under Hyrtl, Rokitansky, and Koletchker. Gruby, as a Jew, had no prospect of admission to the University here; and, in fact, he was not permitted to practise here. He went to Paris poor in everything but scientific knowledge; and there won the character of a *savant*, and obtained a very large private practice. Dr. Liebrich, who had been assistant of Gräfe in Berlin, has in a very short time, about two years, obtained an excellent position as an oculist. Dr. Mandl is at present chiefly occupied with the laryngoscope. Also well known in Paris are Drs. Wecker, Mayer, and Herschel, all three of whom are oculists, and enjoy the especial protection of Gräfe, who every year goes to Paris for at least a month, and also practises there. Drs. Meding, Sichel, Ottenburg, and Schuster are representatives of the senior German school in Paris."

The prize of 50,000 *francs* (£2,000), founded by the French Emperor in 1852, to be adjudged in five years to the author of the most useful applications of the voltaic battery, has been given to M. Ruhmkorff. None of the works presented for the prize in 1857 were considered worthy of it; and the prize was, therefore, opened a second time, and has now been adjudged as above stated. A long report by M. Duruy, concerning M. Ruhmkorff's labours, is inserted in the *Moniteur*.

Association Intelligence.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Bull, at Rochester, on Friday, September 30th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Tickets, 6s., exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, September 14th, 1864.

WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

Correspondence.

MR. CARTER AND THE MEDICAL PROVIDENT FUND.

LETTER FROM R. B. CARTER, ESQ.

SIR,—In your article in the JOURNAL of the 17th instant, and in your remarks appended to my letter published therein, you say that I repeat an *accusation* against my colleagues in the Bristol Committee. You also say that my circular letter conveys that certain members of the Committee had *no object* in view, in planning the Provident Fund, but the aggrandisement of the Association; that, in fact, *they were not influenced by a sentiment that the Fund should be made useful to the profession.* You profess to *quote* me when you say that the majority of the Committee "welcomed the Fund *merely* for the sake of the good it would do to the Association." You say it is "an insult to attribute to the majority of the Committee any sinister motive; or to insinuate that their intentions were less pure," etc.; thereby implying that *I* have attributed "sinister motives," or "less pure intentions." You say that I repeat the opinion that my colleagues were *selfishly* engaged for the sake of improving the Association; and your remarks contain more matter of the same kind, which it is not needful to particularise.

I think it is due to myself to seek to inform your readers that the passages I have quoted, have no foundation in anything that I have either said or written. I have brought no accusations. I have attributed no motives. Your groundless charges compel me to tread on the very confines of a liberty; and to assure my colleagues that, both for their motives and their opinions, I entertain the highest and the most unfeigned respect.

What I have really written, amounts to this. In a Committee occupied in considering two distinct undertakings, namely, the Association and Provident Fund, and thoroughly convinced of the actual or prospective value of each, there arose a difference of opinion with regard to the relative or comparative importance which, at a given time, should be assigned to them. Ought A, or B, at that particular conjuncture, to be considered the primary object? I have stated reasons why the minds of certain persons might be expected to lean in one direction; and I addressed those whose minds might be expected to lean in the other. Upon such a question it would be absurd to impute motives; and it might even be difficult for anyone to analyse with exactness the whole of the train of thought that led to his individual conclusion.

I should like to point out also, that the "pressure," to which you object, would only be a pressure of evidence, which most people would value as an aid to the discovery of truth. If a number of gentlemen, not members of the Association, were desirous of admission into the Provident Fund, their desire would prove the existence of an important element of success, outside the limits of our body.

In conclusion, I wish to say a few words upon another aspect of the question. You have very freely put into my mouth your own interpretations or imaginings, and have then written as if I were responsible for them. Professing to give my "words," you do not inform your readers at what part of the sentence my words end, and your own composition recommences. I trust that, upon reflection, you will perceive that an apology is due to me for this most unfair and disingenuous garbling. Considering that the present is not the first occasion on which your JOURNAL has supported an incorrect statement by a misquotation, you could give no better evidence of good faith than by printing my circular letter, as your contemporaries have already done. For this, however, I do not press. I imagine that you cannot refuse to make me some amends; or, if you do refuse, I shall certainly deem your future errors entirely unworthy of notice or refutation.

I am, etc., ROBERT B. CARTER.

Stroud, September 18th, 1864.

LETTER FROM HENRY GRAMSHAW, ESQ.

SIR,—I hope I shall not be accused of egotism, if I venture to make a few remarks on the subject of the Medical Provident Fund and Mr. Carter's present line of action. I think it is much to be deplored that any member of the original Committee for the formation of the Fund, should be led by the strength of his convictions to run the risk of marring the fair project we have in view. As you say in your leading article, I was one of the members of the profession who wrote several of the earliest letters on the subject of the formation of a Provident Fund; but I never thought or dreamt of it being established for *the sake of the Association.* Unfortunately, I was unable to be present at the Committee meetings; though I wrote and stated my views to the chairman. I hope it is no breach of confidence for me to say, that in my letter I urged a wish that the advantages of the Provident Fund "should not be confined to the members of the profession who belong to the British Medical Association only."

Now, though I felt, and do feel, that we ought to allow the advantages of a Medical Provident Fund to be *very widely spread*—and we shall consult our best interests by doing so—yet I recognise the British

edical Association as a very valuable means of laying the foundation stone of the structure we are bout to erect.

I do not know why anyone should feel aggrieved if ie Medical Provident Fund *does* strengthen the Association. For my part, I hope it will; assuredly not ecause the Association requires to be bolstered up y it, but because the British Medical Association deghts to act as pioneer in every movement which has ie best interests of the profession for its primary bject. And, more than this, I have such confidence i the Association in general, and the Board of Directors of the Fund in particular, that I do not doubt that, hen they have cleared preliminary difficulties from ieir path, they will welcome the profession at large o share all the advantages they have to offer. Sinerely hoping that the sparks of fire already struck re mere indications of the life and warmth of the iovement, and that asperity will give place to good mpered zeal, I am, etc.,

HENRY GRAMSHAW.

Laxfield Villa, near Framlingham, September 20th, 1864.

TREATMENT OF PARTURIENT WOMEN.

LETTER FROM THOMAS POPE, ESQ.

SIR,—In the *Lancet* of the 3rd inst., under the iead of Clinical Conferences in Midwifery, held at St. Mary's Hospital Medical School, by Graily Hewitt, M.D., there is a doctrine which I am impelled, out of desire to discharge an incumbent duty, to ward off s much as in me lies; particularly his advocacy of a full, generous, and the usual diet when in health", or a woman immediately after delivery. Perhaps, it nay seem too severe when I designate it as

"Monstrum horrendum, informe, ingens, cui lumen ademptum."

What is the state of a woman so circumstanced? The gravid uterus, particularly in the latter half of pregnancy, has so compressed the whole of the abdominal viscera, and more so those immediately connected with the digestive function, as to leave them n a state unfit for such a diet; and if it be administered, it must so interfere with the heart's action as o to accelerate it, and constitute fever with its natural consequences, anorexy, innutrition, debility, etc.; so that the quieter the heart be kept, her safety and well-being are better consulted. The biliary and other chylopoietic viscera are then more or less deranged; the pulse is generally accelerated, also, more or less, according to the parturient process; and to put the patient on a diet which would aggravate these evils, must come within the category of my quotation. Another most important process alike forbids such treatment. Generally, before the secretion of milk is fully formed, fever must supervene; and this is mainly regulated by the diet; and the more this is on the orthodox plan recommended by the most celebrated authors, Lowther, Haighton, Churchill, Ramsbotham, Smith, etc., the more is it mitigated, and the patient more speedily restored to her wonted health; whereas, by the opposite treatment, the liver and other parts may be very much injured, not only functionally, but even organically. This is the doctrine I believe to be founded on truth; *et magna est veritas et prævalebit.*

1. Milk-fever is included in the foregoing.

2. Puerperal peritonitis, puerperal fever, phlegmasia dolens, etc. Under these heads, much may be said; but I do not see how these affections can be amended by Dr. Hewitt's method of diet.

3. Puerperal mania. The only three instances I have seen in my very protracted and eminently successful practice, of upwards of sixty-four years; the first was from interference with lactation and generous diet, the second from generous diet, and the third from fright.

4. Sudden death during the puerperal state. On this head I have had no case.

5. Protracted convalescence. Of all that I have seen of this, I never observed one the effect of low diet prior to the formation of milk; but many of the opposite plan.

The sum and substance of the preceding observations are, to allow the system to recruit itself by abstinence from stimulants till the milk be fully formed; and then, and not till then, *cæteris paribus*, a generous diet.

Regretting any difference of opinion with such an ornament of the profession as Dr. Hewitt, and hoping to make a convert of him, I will say to him, with all sincerity, *Deus tibi benefaxit.*

And now, sir, let me say a few words on the ranting and raving of the editor of the *Lancet*, all of which I see is a matter of £ *s. d.* His reasoning is most flimsy. He tells us, that our JOURNAL is valueless, and that we ought to be content with a yearly volume of *Transactions*, in hopes that it may bring that grist to his mill; but we know too well the value of it for such sophistry to mislead us; for the guinea which each member of our increasing and illustrious Association pays, he receives that indispensable information contained in our JOURNAL, *nulli secundus*, with the annual saving of fourteen shillings. Our editor caters so well for us as to render the volume of *Transactions* unnecessary. Therefore, let us foster the BRITISH MEDICAL JOURNAL, and heartily wish that *semper floreat et increscat.* I am, etc.,

THOMAS POPE.

Cleobury Mortimer, Salop, September 16th, 1864.

GUNSHOT-WOUND OF THE FOOT: PYÆMIA: ERYTHEMATOUS RASH OVER THE WHOLE BODY.

LETTER FROM I. HARRINSON, ESQ.

SIR,—Will you have the goodness to publish in an early number of the JOURNAL the following case, kindly supplied me by F. S. Butler, Esq., one of the surgeons of the Winchester Hospital.

I am etc., I. HARRINSON.

Reading, September 17th, 1864.

"MR. S., a member of a mounted volunteer corps, of middle station and sanguine temperament, in robust health, on July 2nd, 1863, whilst resting his rifle on his foot, forgetting that it was loaded, pulled the trigger for the purpose of exploding a cap, and shot his foot.

"The ball passed through the second phalanx of the fourth toe, shattering the bone. Surgical aid was soon obtained, and the toe removed; after which he drove home, a distance of seventeen miles, and went to bed. He was seen the following morning by his ordinary medical attendant, who enjoined rest, and applied water dressing to the foot. He was considered to be going on well for some days; but on the evening of the 8th, he not being so well, I was requested to see him, and found his condition extreme. He had great prostration of strength; his mind was wandering at times, but he was quite conscious when roused; pulse rapid and feeble; abdomen tense and tympanitic; he had hiccough; a dry and brown tongue; occasional vomiting and purging of dark matter; scanty and high-coloured urine. The toe was sloughy and very offensive, but not inflamed or tender when touched. There was no swelling of the foot, nor evidence of any inflammation of the absorbents or veins; but the whole surface of the body presented a red

appearance, as if covered with the rash of scarlet fever. There was no sore-throat; nor was there any scarlet fever in the neighbourhood. The house stood alone, quite in the country, and far removed from any other dwelling. I regarded the case immediately as one of pyæmia, and ordered brandy, champagne, etc., *ad libitum* and eggs, beef-tea, and brandy by rectum, plenty of fresh air, and Condy's solution to the foot. A catheter was also introduced into the bladder, and a considerable quantity of dark coloured urine drawn off.

"During the next few days, there was some improvement in the symptoms. The tympantic condition of the abdomen subsided; the hiccough and sickness lessened; the wound began to put on a more healthy appearance; and there was much reason to hope that the vital energies would be equal to the conflict and to expel the poison from the blood; but, alas! on the afternoon of the 12th, ten days after the accident, a violent attack of diarrhœa came on, which resisted all the means used to restrain it, and death speedily followed.

"The skin retained its red appearance, though it assumed a darker hue, to the very last.

"Winchester, October 20th, 1863."

TEACHING OF BOTANY IN MEDICAL SCHOOLS.

LETTER FROM MAXWELL T. MASTERS, ESQ.

SIR,—In an article in your impression of the 3rd inst., referring to the manner in which botany is taught in the medical schools of this country, you have cast an imputation upon the teachers of this science, which is not altogether merited.* Your statements are based upon those contained in an able paper in the July number of the *Natural History Review*. The writer of that article really acquits the teachers, and lays the blame on the examining bodies, who prescribe a certain course to be followed both by teacher and pupil.

I have no intention, in this communication, of entering upon any defence either of the system or of the lecturers. My object is simply to correct some mis-statements; and to point attention to the causes of the dearth of botanists in this country.

The bill of indictment against the medical schools is, as you say, "that they turn out no botanists." This raises the question as to whether it is the proper function of the medical schools to turn out botanists? Is it desirable they should do so?

Most, if not all, the botanical lecturers, as also the writer in the *Review* in question, look upon botany, as introduced into the curriculum, simply as a means to an end; and that end is mainly the culture of those habits of observation and reflection which are to be hereafter exercised in the study and practice of medicine. In addition to this, it is obvious that physiology cannot be properly learned without some insight into the nature of plant life, as well as of animal life.

But is it true, that the schools have turned out no botanists? On the contrary, is it not a fact that the great majority of botanists, from Theophrastus to Robert Brown, have been educated—nay, have even practised—as medical men? and, even in our own time, when the range of science has become so vast, that men can no longer hope to excel in more than one branch or subdivision of science, have there not been turned out from the schools such botanists as Joseph Hooker, Thomas Thomson, William Griffith, W. H. Harvey—in fact, the greater portion of the leading botanists of the day?

It is not necessary to enter into detail as to the method pursued by botanical lecturers; suffice it to say, that the course followed is one laid down for them by the authorities; and it is one which, in most if not in all the schools, involves a great deal of practical demonstration, while the pupils are encouraged to write descriptions of plants, or fill up "schedules", which are corrected by the teacher. This practice of writing correct, terse descriptions, is peculiarly valuable; and it is one which is adopted by all the more intelligent and diligent of the pupils, and might be followed by all the members of the class if they chose. The great difficulties that lecturers have to contend with are these: first, the utter ignorance of the pupils generally in natural science when they come up to a medical school—a defect chargeable to the universities and schools, but one which seems likely to be surely, if slowly, remedied; the next great obstacle to the teacher's success is this, that the time allowed for the acquisition of botany is barely three months.

The best men—those most likely, under propitious circumstances, to be turned out as botanists—are those preparing for the Preliminary Scientific Examination at the University of London. The authorities of that institution have very properly established a Preliminary Scientific Examination, obviously intending that the studies to be undertaken for that end shall be completed before the pupil enters upon his more strictly professional studies. What happens generally is this, that the preparation for this ordeal is wholly deferred until after the student's entry at a medical school. The ordinary routine of the first winter session is gone through; and when the summer arrives, the pupil sets to work to "read up" mechanical and natural philosophy, chemistry, organic and inorganic botany, and vegetable physiology and zoology. All these, with the exception of chemistry (supposed to have been learnt during the winter), have to be "got up" in three short months. Is it wonderful that the Examiners find the pupils crammed with details of which they know not the import—with principles of which they know not the application.

If the candidate be fortunate enough to pass this examination, he gives no further heed to these preliminary studies; but devotes his whole attention, and properly so, to more practical work.

What is the remedy for this state of things? How can the schools be made to turn out botanists? How can the system of botanical teaching be improved?

The answers to these questions are not difficult to find. Secure a reasonable income to botanists, and men would be found whose tastes and abilities would lead them to follow botany as a profession. As it is now, scarcely one of the botanists, great or small, of this country, live on means afforded them by their favourite pursuit. Most of the botanical lecturers are engaged in medical practice, and could not live without its aid. In the next place, make the study of botany, or at any rate the elementary portion of it, strictly preliminary to professional education.

Botany, if introduced into the curriculum at all, should be "advanced botany." The pupil, with his elementary knowledge, would, when he entered upon the advanced class at the medical school, be far better enabled to estimate the bearings of the science on his medical studies than he now is; would be far more likely, should his tastes and means allow him to do so, to pursue it for its own sake.

Medical practitioners and students seem at present hardly aware of the facilities afforded them by the Society of Apothecaries for the prosecution of botany. The Society has already done much towards the reorganisation of the Physic Garden at Chelsea; and

* We cast no imputations whatever. We merely repeated the opinions of the able writer in the *Natural History Review*. EDITOR.

rther improvements are contemplated, under the pervision of N. B. Ward of fern-case notoriety—a edical man, be it observed.

It is greatly to be wished that the Society would -institute the botanical demonstrations, such as, a w years since, were given by Professor Lindley, and nich live in the memories of those whose tastes or ocations still link them to the pursuit of the "Amalis Scientia." Apologising for the length of these marks, I am, etc.,

MAXWELL T. MASTERS,
Lecturer on Botany, St. George's Hospital.

CRIMEAN MEDICAL OFFICERS.

SIR,—I was glad to see that you noticed the rearkable omission in the address of Dr. Gibson to e Prince of Wales at Netley, of any mention of edical officers having been *killed*. It is true that, the Crimea, the majority of the medical officers no died, did so from disease, they having been orked much more severely than other officers; but is also true, that the first officer killed in the enches was Assistant-Surgeon O'Leary, of the 68th egiment; and it is scarcely right that that fact ould have been ignored.

Mr. Le Blanc, surgeon of the 9th Regiment, was so killed in the Crimea; but he was killed by a ench sentry, and not by the Russians. I do not ink that any other medical officers were killed out ere; but many were wounded.

The omission of any notice of Mr. O'Leary's death, d the pointed manner in which Dr. Gibson stated at the greater number of the medical officers died disease, was doubtless appreciated by those comtant authorities whose delight it is to depreciate e services of medical officers, and to ignore the fact their being exposed to the same dangers as themlves; that there are individuals of that description, am well assured; for I am aware of an instance of certain "centurion" having told a lady of my acaintance, that "it was quite a mistake to imagine at doctors were exposed to fire"; and that gentlean had served in the trenches, and could scarcely ve failed to have met there one of the four "docrs" engaged there daily.

That a large proportion of "combatant" officers ely acknowledge the services of the medical offirs, and their claims to equal honours with themlves, there can be no doubt; and I trust that very w indeed would deny openly that medical officers e "exposed to fire" as much as themselves; but we nnot shut our eyes to the fact that the authorities d the military journalists (notably him of the *Army d Navy Gazette*) delight in offensively applying the rm "non-combatant" to them, and desire to treat em as an inferior race.

I trust that on the "Cross at Netley" they will not il to specify that Assistant-Surgeon O'Leary and rgeon Le Blanc were killed. I am, etc.,

"ONE WHO HAS SERVED."

September 7th, 1864.

HEALTH OF SCOTLAND. The Registrar-General's onthly return for the eight principal towns of Scotnd shows that the births, deaths, and marriages all ntinued to be far above the average in August. ne zymotic class of diseases caused 27 per cent. of e deaths, and in Greenock as many as 46 per cent. om the combined fatality of scarlatina and typhus. yphus was the most fatal. Greenock, Perth, Aberen, and Glasgow are the towns where this disease s been more especially prevalent.

Medical News.

APOTHECARIES' HALL. On September 15th, the following Licentiates were admitted:—

Bennett, Francis Graham, Brighton
Grace, Alfred, Downend, near Bristol
Sheldon, Edwin Mason, Liverpool
Shuttleworth, George Edward, Russell Place, Fitzroy Square
Vipan, William Henry, Ely, Cambridgeshire
Witherby, William Henry, Combe, near Croydon

At the same Court, the following passed the first examination:—

Edmonds, Charles George, St. Thomas's Hospital
Wilton, Francis, St. Bartholomew's Hospital

APPOINTMENTS.

ARMY.

ARMSTRONG, Surgeon W., 9th Foot, to be Staff-Surgeon, *vice* Surgeon-Major L. C. Stewart,

BEATTIE, Staff-Assistant-Surgeon J. F., M.D., to be Assistant-Surgeon 79th Foot, *vice* G. N. Irvine, M.D.

CLARKE, Staff-Surgeon P. J., to be Surgeon 84th Foot, *vice* Surgeon-Major J. M'Grigor Grant, M.D.

DAVIS, Staff-Assistant-Surgeon J. N., to be Assistant-Surgeon 44th Foot, *vice* A. Royle.

DUNLOP, Staff-Assist.-Surg. R., to be Assistant-Surgeon 10th Foot.

GILBORNE, Surgeon E., Royal Artillery, to be Surgeon-Major, having completed twenty years' full-pay service.

GRANT, Surgeon-Major J. M'Grigor, M.D., 84th Foot, to be Staff-Surgeon-Major, *vice* P. J. Clarke.

GREENHILL, Staff-Assistant-Surgeon J. R., to be Assistant-Surgeon 72nd Foot, *vice* J. J. Pope.

JEE, Surgeon-Major J., C.B., 78th Foot, to be Surgeon 1st Dragoons, *vice* Surgeon-Major A. Forteath, M.D.

M'GRATH, Staff-Assistant-Surgeon E., to be Assistant-Surgeon 8th Hussars, *vice* H. Sherlock.

SAUNDERS, Staff-Surgeon G., to be Surgeon 9th Foot, *vice* W. Armstrong.

STEWART, Staff-Surgeon-Major L. C., to be Surgeon 78th Foot, *vice* Surgeon-Major J. Jee, C.B.

TUSON, Surgeon E. B., 17th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

To be Staff-Assistant-Surgeons:—

AMBROSE, J., M.D.
ANDERSON, J.
ATKINSON, G., M.B.
ATKINSON, J.
ATKINSON, W.
BABINGTON, T.
BALL, J. J., M.D.
BARNWELL, Assistant-Surgeon T., Rifle Brigade, *vice* J. N. Davis
BARROW, T. S., M.D.
BOLSTER, T. G., M.D.
BURKE, J.
BURNSIDE, Assistant-Surgeon G. S., 51st Foot, *vice* J. R. Greenhill
CHURCHILL, C. F., M.B.
COGAN, M.
DAVIES, R. W.
DOOLEY, G. F.
DUNLOP, R.
FINEGAN, J. B.
FLEMING, J., M.D.
GRAY, J., M.D.
HICKSON, R. C. C.
HYDE, R.
JOBSON, W., M.D.
JOHNSON, F., M.B.
KING, J. G.
KIRKWOOD, T. M.
LESLIE, D. A., M.D.
LITHGOW, A. M. S., M.D.
MALCOLM, J. V. T., M.D.
MAXHAM, J. W., M.D.
MELLADEW, H. F. L., M.D.
MIDDLETON, J., M.D.
MINTY, A., M.B.
MUIR, H. S., M.D.
ORWIN, T. W.
PHILLIPS, H. H., M.B.
POUT, Assistant-Surgeon F., 46th Foot, *vice* J. Beattie, M.D.
ROSS, D. P., M.D.
SHERLOCK, Assistant-Surg. H., 8th Hussars, *vice* W. W. Quinton, M.B.
STOCK, J. N.
TURNER, R., M.D.
WALLACE, J., M.D.
WATTS, A. N.

To be Assistant-Surgeons, Royal Artillery:—

BERKELEY, Staff-Assistant-Surgeon R. W.
BEVERIDGE, Staff-Assistant-Surgeon A. W., M.D.
BRACKEN, Assistant-Surgeon J. H. N., 54th Foot.
CLARKE, A. F. S., M.D., 42nd Foot.
DAVIDGE, Staff-Assistant-Surgeon J.
FAUGHT, Staff-Assistant-Surgeon J. G.
GODWIN, Assistant-Surgeon C. H. Y., 38th Foot.
HALL, Assistant-Surgeon A. R., 52nd Foot.
HAMILTON, Staff-Assistant-Surgeon J. B., M.D.
ILLINGWORTH, Staff-Assistant-Surgeon J. A.
IRONSIDE, Assistant-Surgeon W., M.D., 71st Foot.
IRVINE, Assistant-Surgeon G. N., M.D., 79th Foot.
JARDINE, Assistant-Surgeon J. B., 56th Foot.
JOYNER, Assistant-Surgeon J. S., 89th Foot.
KENNEDY, Staff-Assistant-Surgeon T.
MACARTHUR, Staff-Assistant-Surgeon T. A. C.
M'TAVISH, Assistant-Surgeon A. C., 60th Foot.
MAUNSELL, Assistant-Surgeon T., 48th Foot.
OLIVER, Staff-Assistant-Surgeon J. H.
POPE, Assistant-Surgeon J. J., 72nd Foot.

Quinton, Staff-Assistant-Surgeon W. W., M.B.
Royle, Assistant-Surgeon A., 44th Foot.
Scott, Staff-Assistant-Surgeon J. A.
Simon, Staff-Assistant-Surgeon G., M.D.
Wall, Assistant-Surgeon W. B., 81st Foot.
White, Assistant-Surgeon R., 23rd Foot.
White, Assistant-Surgeon T. H., M.D., 80th Foot.

Royal Navy.

Crawford, William, Esq., Surgeon-Superintendent to the *Rochester* convict-ship.
Duncan, George, M.D., Surgeon, to the *Esk*.
Lucas, Leonard, Esq., Assistant-Surgeon (additional), to the *Royal Adelaide*.

Volunteers, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Barnes, G., Esq., to be Assistant-Surgeon 1st Administrative Battalion Staffordshire R.V.
Hughes, J. R., Esq., to be Honorary Assistant-Surgeon 3rd Denbighshire R.V.
Jones, G. T., Esq., to be Surgeon 1st Administrative Battalion Denbighshire R.V.
Keith, A. D., Esq., to be Honorary Assistant-Surgeon 21st Aberdeenshire R.V.
Walker, J., Esq., to be Assistant-Surgeon 1st Administrative Battalion Staffordshire R.V.

BIRTH.

Hewitt. On September 14th, at Winkfield, near Windsor, the wife of *T. S. Hewitt, M.D., of a son.

Birmingham General Hospital. The Chairman of the Birmingham Musical Festival Committee has handed over to the weekly board of the hospital the sum of £3000, being the first instalment of the proceeds of the musical festival recently held in aid of the funds of the hospital.

Adulteration of Pepper. There is reason to believe that pepper is still adulterated extensively. Of thirty samples of pepper lately analysed by Mr. Phillips, only twelve were genuine and eighteen adulterated, the adulterants being the starch and husks of rice, wheat starch, linseed meal, and in one instance ground pine wood.

Adulteration of Snuff. The law permits the use of lime water in the manufacture of high-dried snuffs, that is, of a perfectly clear solution of lime. Many manufacturers, however, use a thick mixture of undisolved lime and water. The vicious form of adulteration is almost entirely confined to the north of Ireland, where it appears the habit is very prevalent among the women employed in the linen and other factories of taking snuff highly charged with lime, and which is known as "white snuff;" and the manufacturers allege, in extenuation of their dishonest practices, that no other description of snuff is acceptable to their customers. In several samples of snuff obtained in Belfast, it was impossible to say whether lime or tobacco predominated. Some manufacturers, it is said, actually grind up dry lime with the tobacco.

The Indian Army. Probably very few persons in England have an adequate appreciation of the serious difficulties and dangers with which the constitution of the Indian army threatens the future of our empire. In these days India is governed from England. No great measure is originated here; in Sir Charles Wood centres the hopes or fears of both branches of the service. He is upon the whole more dreaded than the Hindoo dreads his avenging deity, and his two last measures—the New Medical Warrant and the despatch upon the Reorganisation of the Indian Army—have filled the doctors with despair and their brother officers with consternation. There is not a regiment in the land whose officers are not thoroughly dissatisfied; and, as to the medical service, it is quite impossible that under the new rules it can ever be as efficient or as distinguished as it was of old. It is only the plain truth to say that the Indian army is deeply and thoroughly discontented. (*Times Correspondent.*)

Value of Life in India. From the rate of mortality a life table has been constructed from which the mean duration of life, as well as the value of the annuities dependent on soldiers' lives in India, can be deduced. By this table it will be seen that the mean after-lifetime, or expectation of life, as it is sometimes termed, at the age of 20 in India is 17·7 years, while it is 39·5 years in England; so that life is shortened by more than 21 years by residence in the former country. The after-lifetime at the age of 40 is 15 years in accordance with the Indian, 26 in accordance with the English table.

Dr. Edmonds' Ventilation of Ships. A trial was made the other day at Portsmouth of the ventilating apparatus which has been adopted on board the screw three-decker *Victoria*. The arrangements are those recommended by Staff-Surgeon Dr. Edmonds, of Her Majesty's ship *Victory*, and have been carried out under that gentleman's supervision. "It was ascertained that half a million cubic feet of the foulest air of the ship were constantly being carried off by the apparatus through the funnel draught while the fires were lighted. With the fires unlighted about one-third the amount of air is carried off through the funnel." In the case of the *Royal Sovereign* turret ship, which has also been ventilated upon the plan of Dr. Edmonds, it was found on the experimental trip, that, "on measuring the strength of the current of air which was passing up from the vessel's hold and bilges by the air-shafting into the funnel it was discovered to be moving at the rate of 31 feet per second, equal to 225,000 cubic feet per hour.

Successful Ligature of the Arteria Innominata. Dr. Rogers of New Orleans, in a letter to Dr. Mott of Philadelphia, describes a successful case of ligature of the innominate artery, performed by Dr. Smith of the Charity Hospital of New Orleans, during the present year. The subject was a mulatto man, 33 years of age. He had a large aneurismal tumour, with a strong pulsation. On May 15th, Dr. Smith applied a ligature to the arteria innominata and to the right carotid about one inch above its origin, as proposed by Dr. Rogers in 1849. The wound was dressed in the usual manner, and the man removed to bed. On May 28th, the ligature came from the carotid artery; and the next day there was some hæmorrhage from the wound, but it was arrested by slight pressure. It returned on each of the following three days; and on June 1st, Dr. Smith removed the lint, and filled the wound with small shot. On June 2nd, the ligature was separated from the arteria innominata. On June 17th, a part of the shot was removed from the wound; but this was followed in a few hours by hæmorrhage, and the shot was returned. On July 5th and 8th, the hæmorrhage returned. It being thought that the hæmorrhage must be supplied by the vertebral artery, through the subclavian, Dr. Smith secured the vertebral artery on the 9th of July. On July 19th, there had been no return of hæmorrhage. The ligature separated from the vertebral artery this day. A doubtful pulsation could be felt in the right radial artery. The aneurismal tumour had disappeared. On July 30th, the general health had much improved since the last report. The wound was nearly closed. He walked about the ward, and was desirous of returning to his home. There was every reason to believe the operation to be in every respect a success. On this case, Dr. Mott remarks: "I have expressed myself to my class for many years past, that I would like to live long enough to see the innominata successfully tied for aneurism. For this surgical achievement I am more than gratified—*I am delighted*. On the brow of Dr. A. W. Smith of New Orleans will always rest the

rel of the first successful operation of ligature of s great artery. Time never can rob him of this gical achievement."

DINBURGH UNIVERSITY. Professor Balfour, in his ress to the new graduates on August 1st, said: n the military and naval services, and in our colo-s, eminence in science has raised graduates (of the nburgh University) in several instances to places igh responsibility and emolument. Some of the st important recent scientific expeditions owe much their value to Edinburgh Doctors of Medicine. ong these may be noticed Dr. Balfour Baikie, who superintended the exploration of Western Africa; Hector, who acted as geologist in Palliser's expe-on to the Rocky Mountains, and who is now en-ed in valuable geological researches in New Zea-d; Dr. John Kirk, who acted as medical man and uralist to the Livingstone expedition; Dr. Thomas derson, now filling with the highest credit the e of superintendent of the Botanic Garden of Cal-ta; Dr. Birdwood, filling a similar office at Bombay; Cleghorn, conducting the forest department in North-Western Provinces of India; Dr. Alex-ler Hunter, ably conducting the School of Design Madras, and the Horticultural Garden there; Dr. chison, advancing the knowledge of Indian botany his researches; Dr. Wallich, publishing valuable atises on the lower forms of animal and plant life; l many others who are doing credit to their Alma ter."

WINTER JOURNEY. The annual reports just is-d from the army medical department comprise one n Dr. Muir, inspector-general of hospitals, on the rland transport of British troops to Canada in the ter of 1861-2, on the occurrence of the Trent affair. e weather was on the whole unusually mild. Seve-medical officers note the thermometer as having ched the low figure of 25°; but, as there was little d at these times, the effects of so intense a cold e, comparatively, little felt. The health of the n was excellent. Of a force of nearly 7,000, not re than seventy claimed admittance into the hos-als *en route*, and nearly all eventually returned to y. Excluding two fatal cases directly attributable excess in drinking, only two men died—one from umonia through hard drinking, and one from en-itis. Eleven cases of frost-bite occurred, but only man was seriously injured—both his hands re-red amputation. Of the seven cases of pneumonia got well with the exception of the fatal case just ntioned. The other affections were trifling attacks diarrhœa, occasioned by drinking, to which not a gave themselves up when they had the opportu-y. Such a journey in midwinter was an operation some peril, and called for forethought and sanitary caution; but the arrangements were eminently cessful. Dear-bought experience bore its fruit; military organisation was proved equal to the sud-n strain, and the men were placed in Canada with idity, in excellent condition and fit for taking the d.

MUSHROOMS. Enormous quantities of mushrooms e been gathered in Devonshire this season, which accounted for by the long drought and the rains owing upon it. People generally look upon mush-oms as a sort of luxury, and not as an actual article food. The inhabitants of Italy, France, Germany, d Russia use large quantities of various species re-ted by us as articles of food. In the Italian market, re is a regular inspector, whose business it is to k over the various lots brought into the market. Badham has written a treatise on the edible spe-s indigenous to this country, and he has enumer-d upwards of thirty species that might be used as articles of food. As a nutritious article of food, the mushroom, perhaps, yields to none of the higher forms of the vegetable kingdom. Of all vegetable productions they come nearer in their chemical composition to the flesh of animals than any other of the vegetable kingdom. If more attention were paid to these lowly forms of the vegetable kingdom many a good meal might be obtained by those who now feel the pinch, or want a dinner. The aggregate number of fungi, so far as is at present known to inhabit the British Isles, is about 2,400 species.

LIABILITY OF CLUB-PATIENTS. The plaintiff, a surgeon living at Prahran, sued the defendant for the sum of £10:10, for professional services. Payment of the claim was resisted on the ground that the plaintiff being the medical officer of No 6, Oddfellows' Lodge, Prahran, of which the defendant is a member, the latter was entitled to be attended in terms of the contract existing between plaintiff and the lodge. It was admitted that under ordinary circumstances such was the case, but it was contended that as the defendant received his injuries whilst in a state of intoxication, he thereby forfeited the right which he would have otherwise possessed. This view of the case was taken by the judge, who gave a verdict for the amount claimed, with three guineas costs. (*Australian Medical Journal.*)

EXTRAORDINARY CASE. Before the Lincoln County Court, Dr. W. O'Neil, a physician, brought an action against Mr. T. W. Pauli, to recover the sum of three guineas as compensation for loss occasioned by his being made the subject of a hoax. On August 18th last, Dr. O'Neil received a letter, purporting to be from Mr. J. Parker, of Fulbeck, a village fourteen miles from Lincoln, asking Dr. O'Neil to visit his wife, who was seriously ill. The doctor went over to Fulbeck, but found that no such person existed there. He came to the conclusion that he had been hoaxed. After riding about fifty miles, and spending eight hours in his bootless journey, the doctor returned to Lincoln, and on carefully scrutinising the letter it struck him that it was in the handwriting of the defendant. Several friends were of the same opinion. Dr. O'Neil placed the matter in the hands of his solicitor, who wrote to the defendant, stating that if three guineas, the amount of expenses incurred, were not paid, and an apology made, legal proceedings would be commenced against him. The defendant replied by denying the authorship of the letter in most indignant terms. The letter was produced on the part of the plaintiff, as was also another written by the defendant relative to a business matter. A number of witnesses were examined, all of whom were of opinion that the handwriting was the same in both letters. For the defence a dozen witnesses, one of whom had dispensed medicine for several years for Mr. Pauli, swore distinctly that the letter was not in the defendant's handwriting; and on Mr. Pauli being called into the box, he swore that he was not the writer, and was totally ignorant of its being sent. The jury (composed of five tradesmen of the city) returned a verdict for the plaintiff—damages, three guineas.

HEALTH OF THE ARMY ABROAD. The returns which have been issued from the Army Medical Department relating to the health of the army in 1862 present a very encouraging result:—Admission into hospital, 1,736 per 1,000 of mean strength; deaths, 25·68 per 1,000, the deaths being nearly a third under the proportion of 1861. The mortality in the Madras Presidency was 20·83 per 1,000; Bombay, 24·60; and Bengal (where the majority of the troops are quartered), 27·55, the Bengal mortality of 1860 and 1861 having

averaged 42·27. These statements include the deaths of invalids on their passage home, or while waiting their discharge in England. There were no less than 96 cases of sunstroke, or heat apoplexy, and 30 terminated fatally. The number of invalids sent home in the year for discharge or change of climate was 1,795, being 28·17 per 1,000 of mean strength. The return of deaths at each age shows a much more rapidly progressive increase of mortality in India with the advance of age than is usual in temperate climates. In 1862 the deaths from spasmodic cholera in Bengal were only a third of the ratio of 1861, but it still remains the chief cause of mortality, its fatal character having undergone no modification. Of the European troops employed in China in 1862, we find an average strength of 3,511, admissions into hospital 1,847 per 1,000, and deaths no less than 99·12, literally decimating the force. This is due chiefly to the returns from North China; in South China the ratio was 28·78. At Shanghai, the deaths were 163 per 1,000, a fearful rate of mortality, due in nearly equal proportions to epidemic cholera and to dysentery and diarrhœa. The surgeons are not sanguine of its ever proving a healthy station. It is estimated that between Shanghai and Scon-Kiang, distant some 40 miles, about an eighth of the Chinese population died from cholera in 1862. In New Zealand, the average strength was 5,482, admissions into hospital 546 per 1,000, deaths 9·10. Mr. Mouat, Deputy Inspector-General of hospitals, notices the comparative absence of some diseases, as venereal and malarious fever, and the entire absence of others, such as small-pox and cholera; he considers that with improvements (much required) in barracks, a proper check upon intemperance, and an allowance of four consecutive nights in bed, the mortality might be reduced one half. In Australia the average strength was 1,000, admissions into hospital 685, and deaths 22. The Australian climate was not well suited to persons having a tendency to tubercular disease. In Ceylon also tubercular diseases were a source of considerable mortality. In Mauritius the deaths rose to nearly 44 per 1,000, owing to the prevalence of epidemic cholera. The chief cause of the invaliding, which was much above the average of the three preceding years, was pulmonary disease. At the Cape of Good Hope the average strength was 4,519, the mortality 9·37 per 1,000, just 1 per 1,000 above that of the army at home in the same year; more than 20 men per 1,000 were in hospital for diseases directly resulting from intemperance. From the West Indies the mortality return from Jamaica, 12·81 per 1,000, is favourable, but in the Windward and Leeward command the deaths were 13·10 per 1,000, which is considerably higher than in the previons year owing to an outbreak of yellow fever at Barbadoes. From Canada the return is favourable—admissions into hospital 667 per 1,000, and deaths 8·36. The admissions into hospital were chiefly from venereal disease or the consequence of intemperance. At Malta venereal disease was reduced more than half, owing to the adoption of a system of police surveillance of the loose women. At Gibraltar the sickness and mortality were lower than in the army at home, but continued fevers were in excess of the average. They are attributed to the continuance of imperfect drainage, overcrowding, intemperance, and exposure to the heat of the sun on the public works. Mr. Paynter, Deputy Inspector-General of hospitals, believes intemperance to have been the source of two-thirds of the diseases which came under treatment. In the whole army at home and abroad in the year 1862 the admissions into hospital amounted to 1,165 per 1,000 of mean strength, the deaths to 16·38, and the discharges by invaliding to 26·13.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TO CORRESPONDENTS

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

F. A.—To ask the question: "Is medicine a profession for a gentleman?" is certainly something the same as asking: "Are there any gentlemen in the profession?"

MEASUREMENTS OF THE FEMALE PELVIS.—The measurements of the female pelvis of the model skeleton in the Museum of the College of Surgeons, are: Brim of pelvis, antero-posterior, 4.5 in.; transverse, 5.9 in.; width of inferior outlet, 4.7 in.; greatest width of ilia, 11.5 in.; greatest width of ischial tuberosities, 6 in.; height, 7.9 in.

THE QUACK NUISANCE.—(E. D.)—Anybody in this country may *practise* either medicine or surgery, so long as he does not use certain titles; and we believe there is no power in the law to prevent a man putting "Dr." before his name. We are not aware of the existence at the present time of any Medical Protection Society to meet such cases by prosecution: but we would recommend our correspondent to apply to Mr. Talley, solicitor, of Beaconsfield, who, we learn, is taking measures for fairly testing the powers of the Medical Act against offenders.

MR. THOMAS CHARLES (Sydney).—Your letter and enclosure have been safely received by Mr. Honeyman.

IN THE SOCIAL SCIENCE REVIEW of August, Dr. E. Smith has a paper on Gaol Dietary. Also, we find the following: Notes on the Basque Provinces; Agricultural Capacity of the United Kingdom; Education in Trieste; Working Men's Clubs; and Cash *versus* Credit.

SIR: Will you be good enough to answer the following query?

I am, etc., L.R.C.P.LOND.

"If L.R.C.P., not being M.D., can call himself physician and not doctor, can M.D., who is a doctor, call himself a physician, without a diploma from the College of Physicians?"

[All we can say is, that a Doctor of Medicine is not a member of a College of Physicians unless he take the College License. What men can do at the present time and what men ought not to do, and what they do in the matter of assumption of titles, and what they ought to do, are questions quite beyond us to decide. Certainly, according to *lex talionis*, if a physician take the title of doctor, the doctor might lay equal claim to the title of physician. EDITOR.]

COMMUNICATIONS have been received from:—Dr. WILLIAM BUDD; Dr. T. HILLIER; Mr. BRIDGER; Mr. CARTER; Mr. HENRY LEE; Dr. MAUDSLEY; Dr. JOHN THOMPSON; Mr. A. B. BOULLAND; Mr. THOMAS POPE; Mr. I. HARRINSON; Dr. FREDERICK J. BROWN; Mr. J. VOSE SOLOMON; Dr. THOS. INMAN; Mr. OLIVER PEMBERTON; Mr. J. GARDNER; Mr. T. CHARLES; Mr. S. B. PARTRIDGE; and Dr. G. A. PHILIPSON.

President's Address

IN THE

PUBLIC HEALTH DEPARTMENT OF THE SOCIAL SCIENCE ASSOCIATION.

Delivered at York, September 1864.

BY

SIR CHARLES HASTINGS, M.D., D.C.L.

When I accepted the honourable position proffered to me by your Council, I did so with a full conviction that I should meet from this assembly a kind reception, and that, however far I may fall short of my distinguished predecessors, I shall receive an indulgent criticism at your hands.

The question of Public Health is so large, and branches off into so many and intricate paths, that I should in vain attempt to draw your attention to the whole subject; and I feel grateful for the arrangement which in this, as in the other Departments, has pointed out certain special questions for discussion.

We will first glance at some general principles. Sanitary science, in an extended sense, must be regarded as considering the constitution of man in reference to external objects. It has been wisely said, "that physical laws of nature, affecting our physical condition as well as regulating the whole material system of the universe, are universally acknowledged to exist, and constitute the elements of natural philosophy and chemical science.... Accordingly, the laws of nature have formed an interesting subject of inquiry to philosophers of all ages, however few may be those who have attempted to point out in a systematic form the relations between those laws and the constitution of man, which nevertheless must be done before our knowledge of them can be beneficially applied." In looking back on what has been done by the Association in this branch of its labours, it must be admitted that these views are in harmony with the recorded proceedings of our Department. Its presidents have, in their addresses to the members, successfully and eloquently pointed out the necessity of studying the organic laws in every attempt to improve the health of the community: nay more, that it should be alike our duty and our highest pleasure to show the beneficence of the Creator, who made the eye for seeing, the ear for hearing, and the brain for the manifestation of intelligence and will; and to prove to a world, which has too much neglected or utterly ignored the fact, that the laws of bodily are those of mental health. I consider it to be the sacred mission of this Association to impress upon the body politic these enlightened views; for be assured that, the more we can procure their practical adoption among communities of men, especially in large towns, the more we shall succeed in the chief end for which our society was called into existence—the improvement of the condition of the people.

With this aim steadily before us, it is matter of congratulation that the Council have set forth, for consideration at this meeting, some problems intimately connected with the progress of sanitary science: the three subjects so pointed out being: The best mode of disposing of the sewage of towns; the causes of, and the means of preventing, excessive mortality among infants; and the influence on health of the over-crowded dwellings of the working classes.

Nothing can be more certain than that the mortality of towns is greatly increased by the imperfection of the means for disposing of their sewage, and that a satisfactory solution of this question is a desideratum of great importance. Hitherto, the growth of a fresh evil has been in too many cases coincident with the increase of town-drainage. The sewage thus collected has been heedlessly cast into rivers, to pollute their waters, to destroy one source of food-supply in their swarms of fish, and to convert the healthful stream into an impure ditch. Such, as many can testify, is the condition of the rivulets in our manufacturing districts; such, in a degree, is the condition of our noblest rivers. The state of the Thames has long been notorious; a gigantic effort is now being made to restore its purity; but it is a sad reflection on the economy of the age, that an expenditure of three millions of money will lead to no more satisfactory result than the daily casting of nearly ninety millions of gallons of highly fertilising matter into the sea. So, again, with that fine river the Severn; the refuse of the towns on its banks, and indeed of some far from its banks, is poured into its waters; and, as I pointed out in a contribution which I had the honour to make to the Association at the Birmingham meeting, and which was subsequently printed in the *Transactions*, the river is thus poisoned and made unfit for the supply of pure water to the inhabitants of the districts which it traverses. A Select Committee of the House of Commons has recently collected much valuable information, and has made some useful suggestions on the subject; we have heard at this meeting, from Mr. Rawlinson and others well qualified to speak on the question, the latest results of scientific investigations. It seems capable of demonstration, that the application of town sewage to land may be made pecuniarily profitable; and I trust that the discussion which has taken place may lead to the adoption of some practical plan by which the improved health of the community, and the renovation of the producing vigour of the land, may be alike secured. In this respect, as I believe in many others, it will be found that health and wealth go hand in hand, and that science is the parent of economy.

The revelations that have been made in the returns of the Registrar-General, and the results of recent laborious investigation in large towns on the subject of infant mortality, are absolutely appalling. This mortality cannot be said to be peculiar to any state of society, for it exists under circumstances most dissimilar in our urban and rural population. True it is, that it is found in its most serious form in our large towns; but the returns of the Registrar-General, and the able Report lately presented by Mr. Simon to the Privy Council, show that, under conditions not yet fully determined, infant mortality is very high in rural districts. It will require much patient labour on this question to eliminate all sources of erroneous calculation, so as to arrive at the exact truth, and to draw safe deductions therefrom. In the meantime, it is clear that in our large towns potent agencies are ever at work, to which much of the deadly destruction may be charged. First among these is the over-crowded state of dwelling-houses; but, as I shall have to allude to this subject under another head, I will now only say that the impure air of crowded, badly ventilated, and badly drained dwellings is singularly inimical to young life; for, during the earlier period of human existence, a free supply of oxygen is of peculiar consequence to carry on healthily the vital functions. Then, again, the poor form a large proportion of almost all communities; and a deficient supply of nutriment to the infant is the frequent consequence

of the want by the parents of the necessaries of life. Thus sickly and fragile children are produced; and it is found that the ordinary epidemic diseases, to which all infants are more or less liable, fall upon these feeble beings with great severity. Many succumb to their influence; and those who survive grow up a debilitated race, and never bring the full quota of health to the life of their generation. Of these diseases, scarlatina is peculiarly destructive. Considering the progress of sanitary science, it is mortifying to reflect that within the last year we have had to deplore a serious loss of young life in many parts of the kingdom from this epidemic. Its prevalence in towns where great attention has been paid to drainage, and where the water-supply has been improved, shows that we have not yet solved the problem of preserving infant life from such visitations, and that every stimulus ought to be given to inquiry into the obscure working of these subtle agencies on the human frame in its early period of development.*

Perhaps there is no view of society more disheartening than that which is afforded by the facts lately brought to light respecting the murderous destruction of infant life. A return has been made to the House of Commons, by which it appears that no less than 22,757 inquests were held in the course of last year upon persons who had come to their death in some violent or unusual manner. But it is in respect to infants that these returns are most deplorable. Nearly one-third of the number of inquests—or 6506—were held upon infants under seven years old, of whom over 1100 were illegitimate. There were held 3644 inquests on children under a year old, and of these nearly 1000 were illegitimate. There can be no doubt that the crime of infanticide is of frightful prevalence, especially when the marriage tie does not throw its consecrating protection over the mother. With such a gigantic evil how are we to contend? That attempts should be made to diminish it, I think few will deny; for, although we cannot eradicate the crime, we may check its growth. The public meeting over which Dr. Lankester presided some time ago, at the Freemasons' Tavern, was a move in the right direction; and let us hope that some preventive measures may soon be adopted.

I pass to the third question contained in our programme—What is the influence on health of the over-crowded dwellings inhabited by the working classes? The reply to this inquiry is of paramount importance. Over-crowding is not confined to the inhabitants of towns: it exists to a great extent in the rural, as well as in the urban districts, and is in each case a pregnant source of disease. There is no doubt that its effects are most conspicuous in towns; for there the atmosphere surrounding the habitations is, as a general rule, more polluted than in the country; but the cottages in country districts are often so over-crowded, that less than 100 cubic feet of air is allotted to each inhabitant; and when any epidemic visitation appears in such localities, a higher rate of mortality is caused, especially among the young.

Perhaps, of all the questions relative to the improvement in towns, that of over-crowding is most difficult of solution. In London, great efforts have been made, and are now in progress, to diminish the evil; but it still prevails to an alarming and dangerous extent, and calls aloud for the application of such remedial measures as may be possible. The misfortune is, that the diminution of the evil in one part of the town has a tendency to increase it in another. Thus the destruction of old streets and the formation of new not unfrequently has the effect of forcing the working people into habitations more crowded and more objectionable than those that they have left. This, however, should not stop the progress of improvement, but should stimulate to further effort to dispose of the population thus dispersed.

Model lodging-houses have in many instances been erected, to set an example of improvement, and to show how much the health of the worst localities can be improved. But, unless the municipal authorities in our towns can be convinced that it is their duty to take the lead in this movement, it is not probable that anything adequate to the extent of the evil will be achieved. Such rare munificence as that of Mr. Peabody is not likely to find many imitators; and, although in some instances model lodging-houses have succeeded in a pecuniary sense, yet, generally speaking, no such return on the capital invested as will tempt private enterprise has been realised from these undertakings. Full information on this subject will be found in the valuable papers contributed, on more than one occasion, by Mr. Henry Roberts, to the *Transactions* of this Association.

In the city of Worcester, where I have exercised the profession of medicine for half a century, I can produce, on a small scale, a striking illustration. More than ten years ago, an association was formed to build model lodgings in one of the lowest and most degraded parts of the city, where there was a squalid population, with a death-rate of not less than twenty-three or twenty-four in a thousand. The old houses were cleared away; and in their place a rather handsome pile of buildings was erected, and the internal arrangements of some of the London model lodgings were copied. It is gratifying, at the end of ten years, to be enabled to say that great success, in one point of view, has attended the experiment. A most decent set of inhabitants, belonging to the working classes, tenant the houses, and form an agreeable contrast to the former inhabitants. The sanitary result is highly encouraging. During the last five years, in a population of about 140 men, women, and children, of the artisan class, occupying thirty-four houses, there have not been more than eight deaths; thus reducing the rate to sixteen in a thousand. It is also worthy of note that, whilst Worcester, from the month of November 1863 to the month of May 1864, was visited by a severe epidemic scarlatina, attended by a high rate of mortality, only one death from this cause occurred in the model lodgings. The financial result is less satisfactory; for although the houses have been well let, the pecuniary return has not been hitherto such as to make it a remunerative investment for capital, two per cent. having been the best rate of interest realised. I see no reason, however, why the experiment should not succeed financially, if the authorities would take the lead in the matter, and carry out the improvements cautiously and judiciously, by altering, amending, and cleansing old buildings, and adding to them all the modern appliances, rather than by removing them altogether, and erecting new ones in their stead.

Before quitting this subject, I may observe that the spread of epidemic fever is greatly aided by over-crowding and want of ventilation in houses. Perhaps, of all causes, this has most to do with incubating and diffusing those continued fevers, which are known as inflammatory or relapsing fever, typhus, enteric, and gastric fever. Concurrent experience seems to show that by diminution of the numbers in

* It is a subject for consideration, how far the mortality from epidemic disease might be lessened by the establishment of children's hospitals. Many lives might be saved if, on the first appearance of scarlatina in a community, the children were quickly removed out of their crowded and unhealthy dwellings to well ventilated hospitals.

a given space, so as to obtain pure air, and by free ventilation, you stay the progress of these diseases. It is by these means especially, that model lodging-houses have been instrumental in diminishing the death-rate of crowded localities; though, no doubt, improved drainage and water supply have acted powerfully in the same direction. A forcible illustration may be seen in the results of the improved sanitary arrangements in our prisons. In the year 1783, as I shall have further occasion to mention, a severe outbreak of fever took place in the county gaol of Worcester; while in 1863, when a fatal epidemic scarlatina raged in that city, not a single case occurred in the prison; showing conclusively that, under proper hygienic conditions, a barrier may be opposed to the inroads of infectious disease.

It is, however, not less certain that alterations of the soil and surface of a country are influential in modifying the character and abating the prevalence of particular diseases of the febrile type. My distinguished predecessor, Professor Christison, alluded last year to the alteration of the type of disease, more especially in Scotland, through the disappearance of intermittent fever or ague. This fact he was enabled to prove in a satisfactory manner from the dispensary records at Kelso, which show that the agues appear in these records from 1777 to 1806, after which they disappear from the books. Now, it is certain that in England many districts were subject to ague about the same period of time; and equally certain that for more than half a century they have been free from it. The Worcester Infirmary was founded in the year 1745; and I have discovered, by consulting the records of that institution, that, during the latter half of the last century, cases of ague were very frequently admitted; but the disease disappears from the books about the year 1800; and I can state positively that, since 1812, in which year I became connected with the hospital, and have continued so, more or less intimately, down to the present time, scarcely a case of ague has occurred in the district. As far as my own practice goes, the few cases I have had to treat in Worcestershire during the last half-century have been imported into the county. Here we have a change of type in disease; and the question is, how it has been brought about. The common solution is, that the country has been drained, and that ague has consequently ceased. To this, Professor Christison demurs; and denies that drainage had been effected to any considerable extent in Roxburghshire till long after ague had disappeared from Scotland. He seems to draw the conclusion, that this change of type in disease was not owing to the improved drainage of the country.

Now, whatever may have been the case in Scotland, I am in a condition to prove that a very great alteration of the soil and surface of the county of Worcester took place in the latter part of the last century. The chase of Malvern was, up to a comparatively recent period, a royal forest; and, as it was situated in the vale of the Severn, and liable to be inundated, its rank vegetation would be likely to produce miasma of an active kind; a sufficient cause at once for the prevalence of ague. Towards the end of the last century, nearly the whole of this chase, which contained many hundred acres of land, was enclosed. The effect of this enclosure, and of the cultivation of the soil, was considerably to alter the surface of the country, and to make the land drier. There was not, indeed, any such scientific drainage as is now practised with so much advantage to agriculture; but the mere effect of ploughing, of making water-courses and ditches, and the substitution of serial crops for rank vegetation, must have had a great effect in removing water from the surface of the land, and in diminishing miasmatous exhalations. So that, as regards Worcestershire, the disappearance of ague seems to be accounted for by its being coincident with a very material diminution of the causes which are known to produce the disease.

The alteration of the type of disease in Worcestershire is not confined to intermittent fever; but I think, to some degree, an equally satisfactory explanation can be given of other changes. On studying such records as exist of the fevers prevalent in the last century, it cannot be denied that they varied greatly from those of this generation. More especially is this shown by the comparative rarity of continued fevers at the present day. I can quote from a contribution by a resident practitioner in Worcester, on the various sources, symptoms, and treatment of fevers as they occurred in that city and its immediate neighbourhood, between the years 1781 and 1820. He remarks that in 1781, the city and suburbs of Worcester were much subject to fever; and if we consider the wretched state in which many of the lower classes of the inhabitants were crowded together in the remains of the former clothing manufactories; the neglected state of the streets in which these buildings were situated; that even those in the most airy parts were but partially under-drained, and that the drains were so ill-constructed as frequently to admit of their contents stagnating and infecting the air for a considerable distance round their grates; considering, also, the large quantities of water highly charged with animal matter, issuing continually from the glove manufactories, we feel no surprise that idiopathic fevers did, during this time, frequently and generally prevail in Worcester.

The severity of these visitations may be estimated by the fact stated by the same authority, that an epidemic fever, in 1783, lasted for eight months, during which time he attended seventy cases in the county prison, of which number thirteen died. There appears to be no doubt that these frequent scourges induced the inhabitants to make efforts to better the condition of the poorer people by cleansing the streets and improving the houses; and that these efforts were followed by a diminution of disease. In the year 1812, when my medical connection with the neighbourhood commenced, typhus and enteric fevers were of milder type and less frequent, though severe cases of typhoid fevers were still not unfrequently admitted into the infirmary. And so matters continued till the year 1832. In that year, came the first outbreak of cholera, when the whole city and county were seized with alarm as to the probable effect of the visitation. The calamity was met by the city with wisdom and firmness, and vast improvements resulted. The houses were cleaned, the streets were better drained, and much was done to better the condition of the labouring classes. My conviction is that, from that time, the health of Worcester, as respects epidemic fever, has been materially improved; and I may state that, during the last twenty years of my attendance as ordinary physician at the Worcester Infirmary, I very rarely admitted a case of fever. Nor can I doubt that this comparative immunity from continued fever, and the diminished severity of its type, must be attributed to the better habitations of the labouring classes, and to the improved drainage and water-supply which within the last few years have been obtained by a great but assuredly a highly remunerative expenditure.

Yet much remains to be done. During the last year we have had an admonition that Worcester is not safe from outbreaks of scarlet-fever. That terrible disease began to rage in October 1863, and continued its ravages in the city and suburbs until the summer of the present year. The mortality, which was greatest

among children under twelve years of age, reached as high as 250, in a population, according to the census of 1861, of 32,802. Such a loss of life forces on us the question—How is it that, in a community where several sanitary improvements have been effected, and where the occurrence of the ordinary continued fevers has been so considerably diminished, such an outbreak of disease can take place? The question is important, and applies more or less to the whole country; the case of Worcester, which I have taken as an example, being the case of many other towns. The answer is twofold. In the first place, the ordinary sanitary improvements which may be effective in lessening the fatality and frequency of fevers less intensely infectious, fail to stop the progress of scarlet-fever. This may arise from the activity of the poison productive of that disease, and which is generated profusely by every person attacked, contaminating the air around him, and endangering the individuals with whom he comes into communication.* It is clear that some active measures of a preventive character would have a salutary effect. When the cholera visited Worcester in 1832, the inhabitants were so alarmed that stringent means were promptly taken by the public to meet the danger. In every place where the disease appeared, the houses were purified; the persons attacked were removed to a hospital, and the crowded dwellings were emptied of their inhabitants, who were placed in temporary habitations erected for the purpose.

Yet the cholera of 1832, which was thought terrible enough to produce these exertions, killed fewer people in Worcester than did the scarlet-fever of 1863. I do not say that the same plan could be always carried out for the prevention of scarlet-fever, but the check given to the spread of cholera by the vigorous efforts I have described, points to the establishment of some system of medical police by which persons labouring under infectious disease, may be prevented from disseminating the poison throughout the community. But in the second place, much must be added to the ordinary sanitary improvements before any charge of failure can be made against the science of health. Houses must be well ventilated, and overcrowding be avoided; the means of cleanliness by baths and washhouses must be provided for every citizen; and above all, perhaps, an effective house-drainage must be applied, to make the main sewers of real use. It seems to me idle to point to the continuance of fever in towns where cesspools and middensteads are allowed to collect impurities. Such towns are not in a sanitary condition, and must expect the visitations of disease. However beautiful their situation, and imposing their architecture—nay, whatever their expenditure on sanitary measures, such cities are but whited sepulchres, hiding, under a fair exterior, the rottenness and corruption of death.

It is possible that the day may come when, as in small-pox, a mild disease may be substituted for scarlet-fever; and some continental physicians have brought forward facts which, if duly authenticated, would render it even probable. But were such a discovery assured, it is to be feared, should the community at large remain as ignorant of physiological laws as at present, that great indifference would be manifested as to the utilisation of the benefit. The history of vaccination and of the opposition made to its general introduction among our population, is a striking proof of the obstinate adherence to preconceived notions created by uninformed prejudice. If we figure to ourselves the dreadful ravages of small-pox in the last century, and then reflect on the brilliant yet simple discovery of Jenner, by which the disease was robbed of its terrors, we must be filled with astonishment that, sixty years afterwards, the country in which the life-giving knowledge was made public, should have failed to realise all the advantages of its adoption. The mortality from small-pox is no doubt greatly diminished; but it is still considerable, and this, in a great degree, from the ignorance and apathy too much prevailing on the subject.

The protection of vaccination is accepted by only a portion of the community, and that a smaller proportion than in many other civilised states, so that the British Isles are deriving less advantage from the genius of their immortal countryman than are the inhabitants of other lands. The same remark applies to our colonies, as is seen from the occurrence of small-pox among our troops stationed in various parts of Her Majesty's dominions. It appears from an elaborate paper on the results of revaccination in the British army as compared with continental armies, lately read before the Epidemiological Society, that no portion of the empire is exempt from the scourge. From Canada to the Mediterranean, from the West Indies to Sierra Leone, and from the Cape of Good Hope to India and China, the same tale is to be heard of small-pox prevalent among the civil populations, and of more or less disease among the troops in consequence.

Among the causes which operate to produce this lamentable state of things, the following seem to be the chief.

I. The carelessness and want of foresight of a large number of the population, who seldom think of providing against the evils of a future day, and when small-pox is not prevalent, neglect to vaccinate their children.

II. The prejudices of a few who persist in believing that vaccination is injurious; who ignore the plain proofs of the enormous benefits it has conferred, and who therefore refuse to have their children vaccinated.

III. The insufficient payment of public vaccinators under the Poor-Law Act; the fee usually paid being so low that it fails to induce them to seek out children who have not been vaccinated; so that they consequently only vaccinate the children brought to them.

IV. The want of a duly authorised medical officer to see that the provisions of the Vaccination Act are properly carried out. Great irregularities consequently occur, especially in the issue and returns of the certificates of vaccination.

V. The want of a more complete registration of births. Many children are born who are not registered, and it becomes impossible to give the notice for vaccination.

VI. A general aversion on the part of the public to legislation in a matter which they believe to involve interference with their natural rights. This feeling, however praiseworthy and useful in some cases, is, when acting in the wrong direction, fatal to all combined action for the civilisation of man, which requires that many individual rights shall be given up for the benefit of the community. This feeling not only exists among the poorer classes of the population, but

* Dr. Murchison, in his Lectures, justly states that scarlet-fever depends upon a peculiar poison capable of being communicated by the sick to persons in health. This it is which explains its frequent visitation to rural districts, where the causes producing zymotic disease do not appear to be very operative. A remarkable instance occurred in the neighbourhood of Worcester during the late epidemic. The parish of Martley has an exclusively rural population, with an ordinary mortality of about 21 per 1000. There are no specific circumstances in the locality which appear likely to produce zymotic disease. In the month of December 1863, scarlet-fever was imported into the parish by a tailor, whose business called him to Worcester. This was the spark to ignite the flame. The disease spread, for he lived in a dirty and ill-ventilated cottage, and his family were attacked. In a short time, fifteen children in the parish fell victims; so that in a population of 1140 persons, more than 14 per 1000 were sacrificed. The separation of the sick from the healthy, with the use of disinfectants and free ventilation, would probably have arrested the pestilence at once.

even among the wealthy and influential, and forms a serious barrier to the adequate carrying out of many sanitary measures.

Some of these obstacles in the way of the diminution, if we may not hope for the final eradication of a terrible disease, may be removed by legislation; and we ought, as far as possible, to impress on parliament the duty it has to perform in this direction. The cry of liberty of the subject ought to be scouted in every case, when the exercise of this so-called liberty endangers the lives and health of others. It is just as criminal, and calls as loudly for the interference of police authority, to spread small-pox by the exposure of persons infected, as it is to set fire to a barn or hayrick; but I fear that it is much more easy to put the law in force in the one case than in the other. Nor should the liberty of parents be recognised to put in peril the lives of their children. The law does not permit a parent to starve, or ill-use, or overwork a child; it compels proper care and maintenance; should it not also compel, and that stringently, the adoption of a safe and simple means for securing it from disease and death? Yet, I admit that in such matters the law must always be less powerful than public opinion; and it is the paramount duty of this Association to educate the popular mind, and to show the nation how deeply it is interested in the dissemination of sound views respecting zymotic diseases.* Some people have had their faith shaken in the efficacy of vaccination, because cases occur of small-pox, after that operation has been performed. But the truth is, that such cases are likely to occur, for even small-pox itself is not a positive protection against a second attack. Let it be remembered, however, that the occurrence of the disease after vaccination is a rare event, that it is then nearly always much milder in its character, and the rate of mortality low. Moreover, we have an additional preventive in the practice of revaccination, which has been too much neglected, but is now beginning to be more generally observed, and to command the close attention of the medical profession. The experience which has been obtained seems to prove that, if vaccination and revaccination were uniformly carried out as effectively as they ought to be, the disease would become almost unknown. It is a remarkable fact that, in the Small-Pox Hospital not a single person, servant or other, has for twenty-five years past caught the malady; and this immunity is explained by the fact that every one in the establishment, without exception, is subjected to revaccination, and that care is taken that the operation should be thoroughly done, and a considerable amount of local inflammation be produced. There seems to be no reason why, in select bodies of men, like our army and navy, a similar result should not be achieved by proper vigilance, nor why, even in the population at large, small-pox should not well-nigh disappear from the bills of mortality.

It is at any rate cheering to reflect that the legislature is awakening to the duties which it has to discharge in reference to the sanitary condition of the community. Two important measures for the suppression of vice, and the preservation of health, have become law during the last session. They may both be considered in some degree tentative, and their results will form a valuable guide for any further efforts in the same direction. With respect to the first, I may observe, that to frame laws for the partial restraint of vice, is altogether a different thing from devising schemes for its toleration. In this respect, the recent Act differs from the system adopted in other countries; since, without licensing vice, it is content to acknowledge its existence, and to impose certain penalties on those who superadd physical to moral impurity. While this great social experiment is in progress for the protection of our soldiers and sailors, regulations of scarcely less importance have by another measure been enacted in our metropolis. The Act to which Lord Brougham referred in his opening address, has established an early closing movement of a different, but not less salutary character, than that which has been long agitated. Our old friend "the liberty of the subject" is no longer to be allowed night-long revels and unrestrained profligacy, but is compelled, for his own and his neighbour's benefit, to limit his excesses to one hour beyond midnight.

Looking, then, at the great advances already made, and the many efforts that we see originated around us, we may have good hope for the future. The time will assuredly come when the laws of health will be generally known and obeyed throughout the community. None of us are likely to reach that day; but we may hasten its coming for a future generation, and even now we may see it and rejoice. Already, the average term of human life is increasing, year by year, in England and Wales, owing to better drainage, freer ventilation, a wider diffusion of the comforts of life, and greater moderation in the use of fermented liquors. Already the wisdom of John Wesley, that apostle of the last century, who said that cleanliness is next to godliness, has been practically accepted by the nation. Already the indissoluble connection between physical and moral law is admitted by most thinking men. Nor is this kingdom the only part of her Majesty's dominions in which sanitary science is being studied, and hygienic improvements carried out. Even in our Indian Empire, where the condition of nearly two hundred millions of human beings has been too long a reproach to our rule, we can see the advent of a wise policy destined to elevate a population ignorant and abject to the benefits of Western civilisation. It must be a matter of congratulation to this Association that one of our members, and one who has taken a deep interest in our proceedings, is now guiding the destinies of India. Sir John Lawrence has paid much attention to sanitary investigations; and I understand that one of the last steps he took before sailing to the scene of his viceregal labours was to obtain from the office of the Association the valuable paper of Miss Nightingale on health in India, and others bearing on the same subject. The circulation of that paper, which has just been reprinted by the Council, may have much effect on the sanitary condition of the native population, as well as of Europeans resident in the East; and it is gratifying to learn that exertions have already been made to improve the health of the presidential towns of Calcutta and Bombay. More encouraging still is it to know that many of the natives are turning their attention to these questions; and that a society of native medical practitioners, having for its object, among others, the hygienic improvement of their country, has recently been formed in Bengal. England may thus be destined to spread a knowledge of sanitary science over the globe; to set an example to other peoples of obedience to the physical laws laid down by the Almighty; and, in the words of Milton's magnificent prose, "to lead the nations in the way of life." But, whether England herself have the wisdom to walk in this way, and whether others follow or not therein, be assured that in the observance of these immutable principles the

* The diffusion of knowledge on many matters relating to the public health, has been greatly aided by the labours of the Medical Department of the Privy Council. The reports published by the officer of that department (Mr. Simon), have been of much value, and they promise to illustrate some of the obscure problems of sanitary science. The Sixth Annual Report, which has just been issued, is a document of rare interest, both to the public and the medical profession. It refers to vaccination, the distribution of disease in England, infantile mortality, and other questions.

permanent prosperity of states is bound up. As the Scripture says, "God is not mocked," and His laws are not broken with impunity.

"The sword of heaven is not in haste to strike,
Nor yet doth linger."

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

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SOME CAUSES OF EXCESSIVE MORTALITY AFTER SURGICAL OPERATIONS.

By T. Spencer Wells, F.R.C.S., Surgeon to Her Majesty's Household; to the Samaritan Hospital, etc.

Mr. President and Gentlemen,—When concluding one of the most eloquent, thoughtful, and suggestive addresses in Surgery ever delivered before this Association—after the statement that in Paris "the mortality of great operations has been diminished 10 per cent. in the last twenty years, yet that the mortality of all amputations in the Parisian hospitals is still about 50 per cent.", while at Oxford, Exeter, and Cambridge, three distinguished members of our Association have shown that instead of 50, it is only 13, 14, and 16 per cent.—Mr. Paget said: "Some of the deaths are preventable"; and added, that the mortality of great operations must be and "*will be* reduced, if the members of this Association will decide that it *shall be*".

It would be very easy to add many facts to those just cited, to prove that some of the mortality after surgical operations might be avoided or prevented—in other words, that the mortality is excessive—especially in the large hospitals of large cities. A mortality of 39 per cent. after amputations in the Paris hospitals from 1836 to 1841, including amputations of the fingers and toes (the thigh 62, leg 55, arm 45, forearm 28), was, when announced by M. Malgaigne, regarded as a startling revelation. Yet M. Frelat, carrying on the researches to 1861, shows that the mortality was by no means over-rated, for 1,144 amputations in those later years gave 522 deaths, or 45 per cent. In the Glasgow Infirmary, reports of different periods give 36 and 53 per cent.; in the Edinburgh Infirmary, 50 per cent.; in the large London hospitals, 25 to 35 per cent.; and yet, in smaller provincial hospitals, it is 13, 14, and 16 per cent.

If we descend a little into detail, we find the same difference of result carried out. Separating primary from secondary amputations, we find the mortality in Paris 50, in London 22, in Massachusetts 12 per cent. Taking secondary amputation of the thigh alone, we have: Paris 60, London 21, Massachusetts 19. Take lithotomy, and we have: Paris 37, London 22, and of 222 cases in English provincial hospitals, 12 per cent. Herniotomy shows a mortality in Paris of 60, London 50, and Würzburg 43 per cent. Results so different from the same operation surely prove that in some places the mortality must be excessive, and encourage us to hope that by discovering the causes of excess we may reduce it.

All these facts having been collected in hospitals, the first and most material inquiry relates to the mortality in hospitals of different sizes. McCulloch, in his *Statistics of the British Empire*, has shown that for every 100 cases treated in county hospitals about four died, while in the London hospitals about nine died in every 100. One most eminent medical statistical authority has recently stated that "the mortality of the sick who are treated in large general hospitals in large towns, is twice as great as the mortality of the sick who are treated in small hospitals in small towns. It remains to be seen whether the mortality in small hospitals is not twice as great as the mortality of the same diseases when they are treated in clean cottages."

However the large array of facts upon which Dr. Farr's conclusions are based may be acknowledged to bear them out fully, partially, or not at all—whatever allowance may be made for the greater severity of cases attracted to large Metropolitan hospitals by the celebrity of some of the physicians and surgeons to those institutions—however great must be the allowance made for the number of slight cases admitted in some of the smaller country hospitals, especially in the medical division, we have good reason to believe that the mortality after certain operations which must be the same wherever thay are performed—such as secondary amputation and lithotomy—is much greater in large city than in small country hospitals, and that the mortality of the same operation in hospitals of the same city varies very much with the situation, size, and crowding of the hospital.

The first conclusion, therefore, is that hospitals, without being so far removed from the centres of population as to be accessible with difficulty, should be surrounded by open spaces, and should not be too large for the number of patients. And, whatever may be the size of the building, the fewer the number of floors or stories in it, the less is the probability of ex-excessive mortality.

In the very interesting account of this town, with its university and colleges, for which we are all so much indebted to Dr. Humphry, I find the following passage:—

"Addenbrooke's Hospital, founded in 1719, by the will of Dr. John Addenbrooke, of St. Catherine's Hall, was insufficient for its purpose, and ill-constructed. It has lately, therefore, been pulled down, and is in process of re-erection. It will be an extensive, commodious building, with spacious wards having windows on both sides, convalescent rooms, etc. The accommodation for out-patients, other offices, and one ward, will be on the ground floor; wards for medical patients will be on the first floor; *and above will be the surgical wards* and operating-room."

Supposing this plan to be carried out (which, for the credit of the future surgery of Cambridge, I sincerely hope it will not be), I think we might predict very confidently that the low mortality hitherto so honourable to the institution and its surgeons, will rise much nearer to the high rate of our city hospitals. In a recent discussion in the French Academy, M. Malgaigne showed that the mortality from erysipelas and allied affections associated with overcrowding is increased when surgical wards are placed over other wards; and Velpeau supported the statement when he admitted that erysipelas was more frequent in the Charité among the females than among the males, the female wards being on the second floor, immediately over those occupied by the men. Women after delivery are so nearly in the same condition as patients after operation, that we may learn a great deal from the mortality in lying-in hospitals, or in the maternity department of large hospitals, and we find the same increase of mortality in the upper wards. Several years ago the lying-in wards of St. Louis were on the ground-floor, hemmed in on every side, and almost dark; still the mortality was lower than in other hospitals, puerperal peri-

tonitis being especially rare. At the time of the construction of the Pavillon St. François, the lying-in wards were removed to the first floor, which was isolated and very light. The latest sanitary improvements were adopted; yet the mortality, instead of diminishing, rose rapidly to equal that of other lying-in hospitals.

But lessening the number of large hospitals, and increasing the number of small hospitals, and having the wards all on one story, would all be useless if there are too many beds in a ward. It is very possible that a large hospital, with large wards and beds widely apart, would be a far better place for the sick than a small hospital in which many beds are crowded into small wards. Indeed, by lessening the size of a ward, we multiply the surfaces and angles to which putrescent matters or organic poisons may adhere. And it is extremely probable that we may have to go farther than this, and not only lessen the size of hospitals, the number of floors of the building, the number of wards, and the number of beds in each ward, but also *isolate* the patients in all cases when contagion or infection is probable. Not only must communication of wards with each other be avoided, but there must be separate wards, containing one, or at most two beds, for patients recently operated on, and in lying-in hospitals, for women recently confined, before we can hope to reduce mortality from the excessive to the unavoidable rate.

Now, to show that these lessons of modern sanitary science are borne out by the most recent discoveries in physiological chemistry, let me turn for a moment to the remarkable labours of Pasteur—all made known within the last five years. His memoir on "Alcoholic Fermentation, in 1860; "On the Organised Corpuscles existing in the Air," and his "Examination of the Doctrine of Spontaneous Generation," in 1862; in the same year his "Studies on the Mycoderms," and the "Manufacture of Vinegar"; and in 1863 his "Examination of the part attributed to Oxygen in the Destruction of Animal and Vegetable Matters after Death," and his "Researches on Putrefaction," have all a very important bearing upon the development of purulent infection and the whole class of diseases most fatal in hospitals and other overcrowded places.

Commencing by purely chemical researches into the phenomena which accompany the decomposition of organic bodies, M. Pasteur was soon led into the field of physiology. He found that fermentation was always associated with the existence and development of certain microscopic beings; and he was led to inquire whether the generation of these living corpuscles was a spontaneous act or change, or whether it could only be explained by the ordinary laws of reproduction. In order to ascertain what germs might be suspended or floating in the atmosphere, he adopted the simple expedient of causing a current of air to pass over gun-cotton—a substance soluble in a mixture of ether and alcohol. The fine fibres of the gun-cotton act as a sort of air-filter, arresting all the solid particles, and the finest powders are found in the solution, and fall slowly to the bottom of the fluid. By careful microscopic examination he found in these atmospheric impurities (1) a quantity of granules of starch, very easily recognisable, and the numbers explained by the abundance of cultivated cereals; and (2) corpuscles which resemble in every particular the germs of the lowest organisms, and vary greatly in size and structure. The germs so collected are fecund. If they are sown in infusions in which any pre-existing germs have been destroyed by ebullition, and which have only been exposed to air which cannot possibly contain any living organism, as it has been passed through a tube of red-hot platinum, an abundance of cryptogamic vegetables or infusorial animalcules very soon appear. These are the *Mucors* or *Mycodermes*, which cover the liquid with a greasy or gelatinous pellicle; the *Mucedinea*, formed of small tubes; *Torulacea*, or non-tubular plants, which attach themselves to the bottom of the vessels. The infusoria are small *Monads*, *Bacteria*, and *Vibriones*. The Bacteria, especially the *Bacterium Termo*, exist in the air in immense abundance. The smallest of the infusoria is found also in putrefying substances. It multiplies in the intestinal canal of man, and is found constantly in the white matter which collects daily between the teeth. In sour milk it is found in company with Vibriones, the most vivacious of the infusoria, whose germs are not destroyed by a temperature of 100° *centigrade*. The spores of the *Mucedinea* remain fecund even up to 120° *centigrade*. It appears that a short exposure to 130° *centigrade* destroys all fecundity even in the most robust; but in nature neither spores, vegetable, nor animal germs are ever exposed to a degree of heat which can render them sterile.

When an organic infusion has been deprived of germs by heat, and is mechanically protected from the corpuscles which the air might carry to it, it is as unalterable as an ordinary chemical solution of a mineral. The liquids ordinarily the most prone to fermentation now show no tendency to decomposition—no symptom of life is manifested. It is quite clear, therefore, that the development of living beings in organic infusions is not spontaneous, and that, in the circumstances under which fermentation ordinarily takes place, the germs of the living beings are carried in the atmosphere.

The germination of inferior beings as powerful agents of decomposition, has relations as important in the putrefactive as in the fermentative process. Whenever organic matter undergoes change—dies, is decomposed, putrefies—germs are sown which find their nourishment in the remains given up to destruction. Without these germs the immediate principles of living bodies would be almost indestructible; with them, everything which has ceased to live is returned to the atmosphere and to the mineral kingdom. Blood as it issued from the arteries, fresh urine, milk received into close vessels, and open only to air which had been deprived of germs, remained unaltered for three years; but when these liquids were exposed to ordinary atmospheric air, they very soon became covered with mucedinea, bacteria, and monads, and were filled with moving vibriones.

Each form of fermentation or decomposition is associated with the growth and development of some low form of vegetable or animal life. It had long been known that the yeast formed in brewing beer was an organised substance, living, and formed by a mass of cells capable of reproduction by budding; but it was left for M. Pasteur to show that the cells of the yeast really nourish themselves at the expense of the sugary infusion, and transform it, not by a physical or chemical, but by a physiological action; that some substances added to the infusion favour the budding and multiplication of the yeast, others retard, others altogether arrest it—like the albumen of fresh eggs, which kills it, or acts on it as a poison. When alcohol is transformed into acetic acid, a vegetable mycoderm (*mycoderma aceti*) is the agent of the transformation. When sugar or lactic acid is converted into butyric acid, the agent is not a vegetable, but a small animalcule, seen in the form of small cylinders or rods, isolated or united into chains of many links, which turn, undulate, and float in every direction in the liquids, and are reproduced by fission. The most remarkable property of these vibriones is that they have the power of living and indefinitely multiplying themselves without oxygen. Not only can they

live without air, but air kills them. This peculiarity essentially distinguishes the mycoderms from the vibriones. The mycoderms incessantly feed on oxygen, and when they do not find it in solutions take it from the atmosphere. The vibriones are killed by oxygen, yet it is by them that the butyric and tartaric fermentations are effected.

These are the most simple of the decompositions produced by animalcules which live without free oxygen. They are phenomena which do not differ from what is called *putrefaction* of animal substances. In putrefaction, as in the butyric fermentation, the work of the vibriones is prepared for them by infusoria. In infusions of animal substances no change is observed for about twenty-four hours; then a slight movement may be observed, which is caused by small animalcules—*monas corpusculum, bacterium termo*—moving in all directions in search of the oxygen in the infusion. If access of air is shut off, the infusoria die as soon as they have consumed all the free oxygen, and fall dead to the bottom of the vessel. But if the infusion is open to the air, they find an inexhaustible supply of oxygen at the surface, when they soon form a pellicle of gradually increasing thickness. But as soon as this living pellicle has been formed, the germs of vibriones are in their turn fecundated, and these animalcules rapidly multiply in a liquid which contains no oxygen. At the bottom, the vibriones change the organic matters into substances of more simple composition; while at the surface the bacteria and mucedinea burn these new products with the oxygen which they take from the atmosphere, and reduce them to the state of the most simple binary compounds—water, ammonia, carbonic acid. In the same way, after the death of an animal or human body, the vibriones and their germs which have remained in the intestinal canal quite inoffensive so long as the movements and functions of life have prevented their development, commence their office directly after the death of the body which they have inhabited. Shut off from oxygen, surrounded by nourishing food, they pass from within outwards, destroying the substances which surround them. At the same time the germs of infusoria which the air has deposited upon the external surface of the body are developed, and work from the surface inwards. At length the infusoria and vibriones meet. The vibriones are killed by the contact of the air, the infusoria die in their turn as soon as they have consumed all the vibriones, and the work of destruction is then complete.

I have given this rapid sketch of some of the principal results of the researches of Pasteur, in order that the influence of atmospheric germs upon our bodies in health and disease may be comprehended. Although the air contains the germs which are necessary for the processes of fermentation and putrefaction, these germs cannot be everywhere present in all forms and equal numbers. In some currents of air there are few, in others many; they are numerous in the lower strata, fewer and fewer as we rise higher and higher, and almost absent at the level of the snow-capped Alps. Air taken on the slopes of Mont Blanc was almost free from germs. On the chain of the Jura they were more numerous; and they increased in quantity as one descended into the valleys and approached inhabited places, becoming most abundant in the air of large cities, where an enormous quantity of organic matter is daily decomposed. Their influence upon the development and propagation of epidemic and contagious diseases has yet to be made out; but something has been done. Many years ago, Dr. Angus Smith led the way by his examination of the air of large cities and of crowded rooms, which others have carried on further. M. Chalvet found in the air of the wards of St. Louis a large quantity of starch-corpuscles; and he collected a great deal of putrescible organic matter from the walls, windows, and bed-curtains, and found that the linen returned from the laundry was still tainted by altered blood, pus, linseed-meal, and other organic substances—probably as capable of infecting as threads charged with vaccine lymph. When watery vapour near a suppurating focus was condensed, it was found to be strongly charged with irregular corpuscles resembling dried pus; and Eiselt, of Prague, found small cells, like pus-cells, in the air of a ward where epidemic ophthalmia was raging. The following extract from Chalvet's paper was given in the British Medical Journal for July 12th, 1862:—

"The atmosphere of a hospital is no longer a vague expression. The air of it differs essentially from pure air. In 1860 I witnessed the experiments of M. Réveil, and recognised in the most positive manner the presence of organic corpuscles in the apparatus constructed by that skilful chemist. We then observed chiefly cells and the *débris* of epithelial cells; corpuscles of divers forms, which became yellow under the action of nitric acid; and bits of charpie charged with these corpuscles. Under like conditions we saw, with M. Kallmann, in the laboratory of M. Réveil, organic *débris* incrusted with a granular substance, which gave the reaction of copper. The dust thus observed was collected in an ophthalmic hospital, where sulphate of copper was largely used as a caustic.

"Dust, collected by dusting the walls of the ward St. Augustine at St. Louis, furnished me with 36 per cent. of organic matter. At another period, in the laboratory of M. Réveil, dust collected from the same quarter yielded 46 per cent. of organic matters, which consisted in large part of epithelial cells, and yielded a horny smell when calcined.

"When wetted, the dusty powder quickly gives off a very fetid smell. Doubtless, the thick layer of dust covering the walls of our old hospitals may produce gases capable of favouring the transport through the air of corpuscles, which, perhaps, play a very important part in the air of hospitals."

When commenting on the spread of puerperal fever, M. Trousseau says:—

"These germs will not be developed as readily in all patients, because the conditions of their reception vary infinitely. Some patients, like certain earths, may not receive certain germs. The wind may spread the same seed widely over a country, and yet the grain will not spring up everywhere alike. Here the soil may be too wet; there too dry; here other germs have grown up, and stifled the new seed. Just so is it with morbid germs and ferments. They, individually, require conditions favourable to their development."

Carrying on the analogy between puerperal fever and purulent infection in the various forms which contribute so large a share to the excessive mortality after surgical operations, and applying the knowledge for which we are indebted to Pasteur of the presence in the atmosphere of organic germs which will grow, develope, and multiply, under favourable conditions, it is easy to understand that some germs find their most appropriate nutriment in the secretions from wounds, or in pus, and that they so modify it as to convert it into a poison when absorbed—or that the germs after development, multiplication, and death, may form a putrid infecting matter—or that they may enter the blood and develope themselves, effecting in the process deadly changes in the circulating fluid.

That these low forms of animal life may seriously affect the blood of the higher orders of animals, is clearly proved by the recent researches of Davaine, who has furnished us with the first well-established example

of a disease of the blood due to the presence of inferior beings which are capable of development and multiplication in the torrent of the circulation. These creatures (*bacteria*) differ from the whole class of infusoria which form in putrefied matter, as they disappear completely as soon as putrefaction of the blood commences. The bacteria are rapid consumers of oxygen; and when they exist in the blood they absorb the greater portion of the oxygen furnished by respiration, and thus hinder the combustion of all the effete and used-up substances which ought to be eliminated from the body. The blood, instead of nourishing the body, nourishes the parasites. Inoculation of animals with fresh blood which contains them leads to their development in the blood of the inoculated animal, not in any special organ. They consist of minute, straight, extremely fine filaments, varying in length from four to twelve thousandths of a *millimètre*, and have no spontaneous movement whatever. When the blood putrefies they become flexed in different directions, and then break up and disappear.

M. Davaine was first disposed to consider them as belonging to the filiform infusoria, the bacteria or vibriones, from which they differed only in the absence of movements. In subsequent observation, however, he found a great number of these corpuscles of far greater length than that assigned to bacteria or even vibriones. He now believes that they cannot be properly classed with any of the known species; he considers them to be a well-defined species, resembling the filiform protozoa by their mode of generation and propagation, the filamentous confervæ in form, appearance, and dimensions, and certain ferments by the phenomena which they induce. M. Davaine proposes to term them, provisionally, merely *bacterides* There are considerable varieties observable in the size of the bacterides, without any condition of the inoculated animals explaining the fact. Their number also greatly varies, from myriads found in some instances, to their rare occurrence in others. A very peculiar condition in animals affected with carbuncular disease, is the disposition which exists for the globules of blood to become agglutinated to each other, so as to present little islets in the serum. When the blood infected with bacterides begins to putrefy, these agglutinated globules separate again. The blood of the capillaries is far richer in bacterides than is that of the large vessels; but they have not been found to have passed from the mother to the fœtus, although existing in prodigious numbers in the placenta. When putrefaction has commenced, and the bacterides can be no longer recognised, the blood ceases to possess the power of inoculating the carbuncular disease; although, if used in sufficient quantity, it may still cause the death of the animal, with other accompanying phenomena. The carbuncular disease, or splenic apoplexy, as observed in sheep, and which first led to the discovery of the bacterides in the blood, can only be transmitted by inoculation when the blood is fresh. The power which the blood possesses to communicate the disease continues for a longer or shorter time after death, according to the temperature; this faculty disappearing during the heat of summer in less than two days. Dried blood may retain the power of propagation, providing it be rapidly desiccated prior to putrefaction; and it is highly probable that dried bacterides transmit the disease in flocks of sheep through the medium of the respiratory organs. The disease may, too, be transmitted by the agency of the digestive organs, though less certainly than by subcutaneous inoculation. The duration of the period of incubation, after inoculation with fresh blood, has in Davaine's experiments varied with the size of the animal; but the rapidity of the occurrence of death has not been found to be in proportion to the number of bacterides produced. They multiply within a very few hours after they first appear, but cease to multiply after the death of the infected animal. Inoculated rabbits lived from eighteen to seventy-seven hours, a mean of forty hours; but only five hours after the bacterides appeared, thus giving thirty-five hours as the mean period of incubation. The blood in the heart and large vessels was found firmly coagulated.

In connexion with these most important observations, I cannot do more than allude to the recent researches on trichinosis, so beautifully demonstrated last night in the grand old hall of Gonville and Caius College, by Dr. Thudichum, which have already been so thoroughly worked out, and add so much to our knowledge of those diseases in the human subject which are caused by the inoculation, inspiration, or digestion of the ova or germs of lower animals. Nor need I refer to the admirable paper of Dr. John Harley, on the Endemic Hæmaturia of the Cape of Good Hope, which he proved so conclusively to depend upon the development within the human body of the eggs of a parasite—one of the Trematode class of worms, and of the family Distomum. The dependence of various skin-diseases upon the growth of vegetable parasites is now quite familiar to us all. The *Achorion Schönleinii* is almost as universally recognised as the cause of favus—the *Trichophyton* of tinea tonsurans—the *Microsporon Audouini* of alopecia areata—the *Microsporon furfur* of pityriasis versicolor, as is the *Acarus Scabiei* of scabies, *Pediculi* of some forms of prurigo, or the *Entozoon Folliculorum* of acne. In all these instances, however, inoculation, or mediate or immediate contact, has been assumed; and it is only lately that the presence of living germs in the air, capable of reproducing contagious diseases, has been demonstrated. The honour of this important addition to our knowledge is due to M. Lemaire, who contrived an apparatus which conveys a current of air over the scalp affected with favus into receivers containing ice. In this way he was enabled to detect the achorion in the air itself so carried, and in the moisture which ensues upon its condensation in the refrigerators, and was able to reproduce the disease by means of the achorion so obtained from the air. Still more important are Dr. Kennedy's curious case, illustrating the production of measles by the inoculation or inhalation of the fungi given off from mouldy straw or linseed-meal; and Dr. Salisbury's corroborative proofs of the production of a disease like measles by inoculating the fungus—an inoculated disease which seems to protect patients from ordinary measles.

And here I should end with the mere suggestion that the members of this Association may do good service in the cause of science, by carrying out these observations, confirming or refuting, correcting or amplifying them. But the real practical end of all our work—the prevention and cure of disease—the lowering of excessive mortality—must not be lost sight of. And here, fortunately, the recent experiments of Polli of Milan, on the action of sulphurous acid and the alkaline and earthy sulphites, open to us a wide field for inquiry, brightened by cheerful rays of hope.

In his work, we first find a record of experiments on animals which prove—

1. That the injection of a certain quantity of pus into the blood produces pyæmia and affections characterised by multiple abscesses.

2. That the injection of putrid matter produces septicæmia, or putrid infection, characterised by the symptoms of typhoid gastro-enteritis.

3. That the injection into the blood of the exudative materials in contagious diseases, as in glanders, produces the general contagious affections.

In all these cases, the introduction of the foreign substance or poison into the blood must be regarded as the origin of the disease; and Polli went on to inquire whether it would be possible to render the poison inactive, or neutralise it, without such an alteration of the properties of the blood as would endanger life. A great number of experiments upon the action of sulphurous acid and the alkaline and earthy sulphites, showed that sulphurous acid prevents or arrests all known fermentations of organic matters, as well as the putrefactive metamorphosis of animal tissue and liquids; having a much more energetic antiseptic action than arsenic or prussic acid, while it is not, like these substances, poisonous. But the irritating effects of sulphurous acid on the mucous membrane led to experiments which showed that the sulphites of soda, potash, ammonia, magnesia, and lime can be given either in the solid or fluid form in efficacious doses; that they may be found in the urine even several hours after administration; and that the blood, flesh, and viscera of animals to whom they have been administered, resist decomposition much longer than in non-sulphurised animals.

These results led to a therapeutical inquiry. If the administration of sulphites by the mouth could so modify the fluids and tissues of a living animal as to render its organic constituents more able to resist the putrid fermentation which they would naturally undergo after death, it was a rational hope that a similar effect would be manifested also during life, and that the living fluids and tissues charged with the sulphites would resist the action of morbid poisons which lead to an unnatural rapidity of putrefaction after death.

Having proved that the sulph*ites*, when given internally, are absorbed, and exert their specific action upon the blood and tissues during all the time necessary for their conversion into sulph*ates* by repeated passage through the lungs, and the elimination of the sulph*ates*;—and, further, that to secure the longest presence of the sulphites in the organism, or to retard their conversion into sulphates, it is useful to substitute the hyposulphites, as they require a long oxidising process to convert them into sulphates,—the cautions are laid down—1, that they should be given as long as possible after food, unless it is especially desired to neutralise the fermentative action of the gastric and pancreatic juice; and, 2, that nothing containing citric, tartaric, malic, or oxalic acid, should be taken after them, as these acids decompose the sulphites and hyposulphites, and set the sulphurous acid free. But acetic acid does not decompose these salts.

It then remained to prove that, when the sulphites are administered to a living animal, they really do alter the action of pus upon the blood, as well as that of putrid matters injected into the blood, or of a virus distinctly contagious and not putrid. By a large number of experiments on dogs, it seemed to be perfectly established that the sulphite or hyposulphite of soda really did neutralise the effects both of pus, putrid matter, and the secretions in glanders, and without any ill effect upon the animal. The administration of those salts to children and adults showed that they are perfectly well borne by the human organism up to three or four drachms daily, and that this quantity is sufficient to prevent or arrest the action of morbid poisons.

I must refer to the work itself for any further account of these experiments; and, as it has not been translated from the original Italian, it is well worth the attention of the Council of the New Sydenham Society. But I may add, for the information of those who may be willing to carry on these observations, that the sulphite of magnesia in the solid form answers well for internal administration. It contains more sulphurous acid than other sulphites, and is not disagreeable. The sulphite of soda is disagreeable, easily decomposes, and is chiefly useful in solution for lotions or enemas. The sulphites of potash and ammonia are too disagreeable and changeable for medical use. The hyposulphite of soda is not very disagreeable: its solubility makes it convenient for administration, but it is more adapted for prophylactic use than for severe cases, its action being much slower than that of the sulphites, as it must be converted into a nascent sulphite before the wished-for effect can be obtained.

Some cases of septicæmia in which I have given the hyposulphite of soda having been already brought before the profession, I will now only add that the effects convinced me that it is a remedy of great value, well worthy of a general and extended trial. But I trust that no such exaggerated expectations will be entertained of its value, or of that of any other remedy, as could possibly lead any one to neglect those leading principles of sanitary science which should govern the size and construction of our hospitals, or those lessons recently taught by physiological chemistry which confirm those sanitary principles—which teach us how easily our patients may be poisoned by any want of that attention which should always secure the most scrupulous cleanliness and purity of everything surrounding them—and which prove that a knowledge of principles and a practical supervision of details must be combined to enable us to recognise, avoid, prevent, or counteract the Causes of Excessive Mortality.

Fees. A New York doctor says: "The truth is, we must bring our fees to a gold basis, or no one can tell what his income is, or on what principle to estimate his services. If we do not, and call the 'greenback' a dollar in fact as well as name, we shall find ourselves in a position similar to that of a person in a railroad car looking at a train upon a parallel track and thinking how rapidly it moves past him."

Lagos: A Model Miasmatic Island. The island is low and swampy, in the delta of a tidal river; the town of the filthiest description. Marshy tracts give off an immense quantity of miasma, and even the sea breeze has in its passage to the island to pass over miles of lagoon and swamp, and must become loaded with pestilential vapours. In the town collections of decaying animal and vegetable matter are to be met with at every turn. The religious prejudices of many of the natives enjoin them to pollute particular spots, however inconvenient, with nuisance. It is almost impossible to change their practice of burying the dead in their houses. In several parts of the town there is a depth of six to twelve or more feet of rich black soil, produced by the decomposition of human excreta and leaves, the accumulation of centuries. The habitations of the natives consist of the same low mud huts, which appear to be the dwelling-places of the negro wherever the white man has not exerted his influence. The principal diseases are fevers, from which blacks are not more exempt than whites, though with the black man there is not the same tendency to cerebral complication which renders those diseases so fatal to Europeans. Such was Lagos in 1862. The ratio of the troops (black) constantly inefficient through sickness was 85·71 per 1,000. But plans were being arranged for the better accommodation of the troops, and for sanitary measures for their protection as far as may be.

Original Communications.

NOTE ON THE SYPHON DOUCHE, AND ITS USE IN AFFECTIONS OF THE UTERUS AND THROAT.

By Alexander Fleming, M.D., F.R.C.P.London,
Physician to the Queen's Hospital,
Birmingham.

I do not pretend to any originality in either the principle or application of this very simple, but almost unused instrument; but being convinced, by much experience, of its value, I am anxious to draw attention to its great usefulness in diseases of the throat and uterus.

The douche I employ is made thus. An India-rubber tube, five inches long, half an inch in external diameter, and retaining the wire inside, is fitted at one end with a brass stopcock, on which the vaginal tube is screwed. The other end is inserted in a large jug of water placed at a suitable height. The tube is tied with string to the handle of the jug, care being taken that the end is near the bottom of the vessel. The jug may be put on the top of a chest of drawers; and, to avoid the risk of its being overturned, it may be placed inside an open box. Should a more complete syphon douche be desired, I have had the following convenient instrument made for the use of my patients by Mr. Salt of Birmingham. It is a round tin vessel, sufficiently large to contain two gallons of water, to the inside of which the pipe is fastened, and in which it is coiled when not in use.*

In douching the throat, a tube of the same length, but of smaller bore than the ordinary vaginal tube, is fitted to the stopcock.

The accompanying wood-cut exhibits the form and working of the instrument.



Diseases of the Uterus. In using the douche, the patient must be flat on her back, with the head on a pillow; and a bed-slipper of white ware is placed under the pelvis, to collect the water as it escapes from the vagina. The vaginal tube should then be introduced for about three inches, and the stopcock opened. As the bed-slipper fills with water, it should be emptied. The douche is continued three, five, or ten minutes, according to circumstances; and the water used may be cold, tepid or warm, pure, or medicated with borax, nitre, lead, alum, tannic acid, krameria, oak-bark, zinc, or copper.

Advantages. In the treatment of congestive and inflammatory diseases of the uterus and vagina, the advantages of this instrument over the ordinary forms of injection apparatus are very great: It can be used promptly, without fatigue or exertion, and without the aid of an attendant. It furnishes a continuous stream, of equal and measured force; and, the vaginal tube being at perfect rest, and quite under the control of the patient, all risk of injury to the parts is avoided. In all cases, this is of the highest importance, but especially so when the sensibility and tenderness are exalted by disease. After a little practice, the superior cleanliness and dryness of this mode of irrigation will be found of much comfort to the patient.

Diseases of the Throat. The value of the douche is even more evident in the treatment of affections of the throat. In relaxation, chronic congestion, inflammation, and ulceration of the fauces, it enables us to apply continuously and efficiently to the whole morbid surface a stream of water, cold, warm, or medicated. The superiority of this means over the ordinary method of gargling is most evident in actual practice. In ordinary gargling, the difficulty of bringing the fluid into contact with the fauces is always great; in some cases, it is impossible. This I have demonstrated repeatedly by the following experiment. I have painted the back of the throat with iodine, and then caused the patient to gargle with a solution of starch. On examining the throat, I have found that, in many of those experimented upon, the starch did not pass behind the anterior arch; and even in the remainder, the blue colouring matter resulting from its contact with the iodine was very partial. These experiments have been repeated for me, and with the same result, by Mr. Wilders of the Queen's Hospital, and Dr. Anderson of the General Hospital.

The result in this experiment, when the douche is employed, has been, on the other hand, most satisfactory; the blue colouring being then displayed over the entire surface on which the iodine had been painted.

Another obvious advantage of the douche over the gargle is the avoidance of the spasmodic action of the fauces, which in some cases is so severe as to render gargling very difficult, and is always undesirable when the throat is swollen and tender. In the treatment of affections of the throat in children, in whom gargling is always such a trouble, this superiority is obvious; the soothing influence of the water thus used being in marked contrast with the gasping efforts made by the little patient in his attempts to gargle. The comparatively slight exertion required in its use is also important when the patient is weak and exhausted, enabling him to continue without fatigue the irrigation of the throat as long as may be requisite.

Mode of Using. Care must be taken that the vessel containing the fluid to be applied to the throat is placed at a sufficient height above the patient to bring the syphon principle into action. The patient should be seated before a basin, over which he leans. He then inserts the pipe into the mouth sufficiently

* The instrument may be had at Mr. Salt's, High Street, Birmingham.

far to secure the fluid reaching the back of the throat; the stopcock is turned, and the irrigation continued as long as may be necessary; the fluid flowing into the basin as it leaves the mouth.

The diseases of the *uterus* in which I have found the douche of most service are, leucorrhœa, menorrhagia, dysmenorrhœa, congestion, inflammation, erosion, and ulceration of the os uteri. The diseases of the *throat* in which it has proved of most value are, acute and chronic inflammation, relaxation, and simple and syphilitic ulceration.

In the treatment of these affections, according to the mode of application, the douche may be used as a tonic, sedative, or astringent. We obtain a *tonic* action when cold water is used; but its employment must be continued for a few minutes only. The douche in the first instance lowers the vascular activity and nervous sensibility of the part; but, on its cessation, this is followed by reaction and exalted textural and functional energy. By successive applications of the water at proper intervals, the os uteri finally becomes firmer in substance and healthier in function, or, in other words, its tone is improved. On the other hand, we obtain a *sedative* action (1) by the *continuous and prolonged* use of cold or iced water, which directly lowers the heat and depresses the nervous and circulating systems of the parts exposed to its operation; and (2) by the employment of warm water, which directly relaxes the structures and enfeebles their vital energy. Lastly, the douche is made *astringent* by the addition of one or other of the astringent drugs formerly mentioned.

CASE OF DEATH FROM SHOCK.

By I. Harrinson, F.R.C.S., Reading.

Under the above title, a paper (a summary of which will be found in the British Medical Journal for Dec. 12th, 1863, p. 633) was read by me at the Pathological Society of Reading on November 5th, 1862. As the case was in many respects a very interesting one, I will now give its conclusion.

An inquest was held; and the finding of the jury was, "Death from the effects of the accident."

In due course, a claim was presented to the assurance office in which the deceased had been insured. They objected. There was no alternative but to get up the case as completely as possible, and submit to trial. This was very ably done by Messrs. Whatley and Dryland, solicitors, of Reading.

Mr. Jonathan Hutchinson was applied to for more extended information on the various points of the case. Mr. Luke was also consulted. After various conferences, Mr. Hutchinson drew up the following conclusions.

"1. A compound dislocation, with fracture, of the thumb, is not a trivial accident, but a severe, and occasionally very serious one.

"2. It is especially likely to be followed by serious consequences in an elderly and rather feeble man.

"3. The occurrence of severe nervous shock at the time of the accident would very greatly increase the risk attending the local injury.

"4. In this instance, mortification of the thumb occurred, and was spreading to the forearm at the time of the man's death.

"5. The process of mortification doubtless commenced very soon after the injury, as it was complete (the thumb being cold and black) on the day before death (the third after the accident).

"6. Mortification of this character is quite sufficient to account for the symptoms presented, and for the fatal issue.

"7. The occurrence of a scarlet rash is not at all unusual after accidents and after operations, especially in cases of blood-poisoning.

"8. It is improbable *in the highest degree* that Mr. T. had scarlet-fever: *a*. His age. *b*. The rash was not general over the whole surface. *c*. There was no sore-throat. *d*. The tongue was not like scarlet-fever. *e*. He was quite well at date of accident. *f*. He would not have died at so early a stage, if it had been scarlet-fever. *g*. All the medical men who saw the rash considered that it was not scarlet fever.

"The probable causes of death were, the fall; the injury to the thumb; the shock to the system (bodily and mental); gangrene of the thumb; the shock of the gangrene and toxæmic absorption from the gangrenous part."

It may be added, that no scarlatina followed in the house, though there were children who had not had it.

We were prepared to go to trial at the Kingston Assizes. Mr. Holt and Mr. Paget were retained by the office; and they, I believe, would have supported the view that death arose from scarlatina. A few days, however, before the assizes, the money was paid; viz., £1,000.

A clinical lecture by Mr. Paget, on "Scarlatina after Operations", in the British Medical Journal of August 27th, has determined me to publish this case; and I should be much obliged if any gentleman would have the kindness to give, through the Journal, any information he may possess as to the frequency of *rashes like* scarlet-fever after operations, accidents, etc.

UTERINE HYDATIDS IN THREE SUCCESSIVE GESTATIONS.

By Ashby G. Osborn, Esq., Dover.

Mrs. J. P., when a single woman, aged 17, supposed herself pregnant at the beginning of 1862. She suffered most severely with sickness and retching, and was often obliged to lie in bed all day. She cannot remember having had any fall, blow, or fright, during this gestation; but on April 26th, she went to see a man who had hung himself. She did not consider that this sight had affected her, but flooding commenced a week afterwards; it soon ceased, but frequently returned, sometimes as much as half a teacupful being lost at a time till June 12th, when profuse hæmorrhage with labour-pains having come on, she was delivered by Mr. John Walter of Dover, and the late Mr. J. E. Parratt of Charlton, of a mass of hydatids—as much as would fill three parts of a hand-basin. The principal loss of blood occurred before the bulk of the diseased growth was removed. There was scarcely any loss afterwards; but on the following day, something which her mother described like a "pig's night-cap," came away; this, I suppose, was the decidua. She was much weakened by the flooding, but in the following spring, again considered herself pregnant by the same young man.

She was more sick and incapable than is usual in early pregnancy; but she had not the bilious vomiting which had been so distressing the previous time. Flooding commenced about the third month. It ceased repeatedly, and returned without warning. The principal hæmorrhage occurred when labour-pains came on June 13th, 1863, one day over the twelvemonth since the previous delivery. The hydatids were less in quantity; and the decidua passed the second day following.

Her friends supposing that these hydatids were dependent in some manner on the young man with

whom she had cohabited, dissuaded her from marrying him. Accordingly, before she had thoroughly regained her health—indeed whilst still very anæmic—she married her present husband, a thick-set, healthy man, of swarthy countenance.

The menses, which had returned a few months after her recovery from the last discharge of hydatids, ceased in Christmas week 1863; and she then considered herself pregnant by her present husband. There was only a little sickness of a morning, leading her friends to hope that this would be a natural pregnancy; but in the latter part of February, she observed two spots of blood on her linen, and about a week afterwards she fell flat on her face down a step in the yard.

A little weeping of blood continued at intervals of a week or more, till about ten days since, when, after going to bed, she lost about a quart. It ceased, however, and only returned after walking. On Saturday evening, May 14th, labour-pains set in, and I was sent for about ten P.M. I found that considerable hæmorrhage had occurred, enough to wet through several thicknesses of cloths; and the patient was exsanguine and rather faint. The uterus felt hard and globular midway between the umbilicus and pubes; the os uteri was patulous, and by inserting two fingers within, a soft substance could be felt, apparently occupying the fundus of the uterus, but unattached or not firmly attached to any part within reach. I removed a quantity of semi-transparent pale bodies, of a dirty white hue, of various sizes, from that of a small lentil seed to an out-door grape. They were adherent together by a yellowish material which seemed like yellow curd, and they could only be removed in small quantities at a time. The largest fragments—indeed the bulk of the diseased mass—were expelled during violent pains before 1 A.M. The hydatids and occasional pieces of loosely textured decidua at length filled a moderately sized pudding basin, and a large piece of decidua was expelled the second morning after.

There was no particular hæmorrhage after the first loss, as though the early uterine contractions had separated the decidual attachments, and the uterus contracting on its contents had closed the mouths of the vessels. On neither occasion was anything resembling an embryo discovered.

After each discharge of hydatids, there has been an abundant secretion of milk, continuing some months; and it is singular that the appearance of milk in the breasts was the earliest sign she had of her first pregnancy (?). It continued up to and subsequent to the first discharge of hydatids. It ceased for about a week, when she thought herself pregnant the second time, then returned as before, and appeared again early in this her third hydatid gestation.

Remarks. I suppose the hydatids in this instance were the result of impregnation; and the fact of their recurrence after intercourse with another than her first paramour, seems to show that whatever the cause may be of the formation of hydatids, it is peculiar to the woman, and not dependent on the man.

I should not have thought of doubting the dependence of hydatids on impregnation in any instance, only that the remarkable case related in Dr. Fleetwood Churchill's *Diseases of Women*, 5th edit., page 283, of a single lady passing hydatids annually for nearly thirty years, makes one pause in ascribing intercourse and impregnation as their invariable and undoubted cause, even when intercourse has taken place. For since hydatids of some form or other have occurred without impregnation, this kind may occur after intercourse, and yet be independent of impregnation; the return of the disease at a corresponding period of the year for three years successively, is perhaps in favour of the resemblance of this case to the one cited above.

My friend Dr. Graily Hewitt has stated that mechanical injury is one of the causes of hydatidiform degeneration of the chorion; for, in very many instances, he had elicited that there had been a fall or blow within about six weeks of impregnation. Now, in this case, there was before the first discharge of hydatids only the mental shock or feeling of horror about the end of the third month; in the second gestation she can remember nothing of the kind; and in the third, though she certainly had a fall about the eighth week, yet there seems reason to fear from the two drops of blood which had escaped a week previously, that already there were hydatids formed, and separation of the decidua commencing.

I hope to note the future uterine history of this patient, and to report it in the Journal.

Reviews and Notices.

The Principles of Surgery; Clinical, Medical, and Operative. An Original Analysis of Pathology systematically conducted, and a Critical Exposition of its Guidance, at the Bedside and in Operations: Representing the Principles of the Earliest and most Exact Diagnosis, Etiology, Prognosis, and Therapeutics, Medical and Operative. By Frederick James Gant, F.R.C.S., Surgeon and Pathological Anatomist to the Royal Free Hospital; etc. Pp. 860. London: 1864.

Mr. Gant's object in writing this book has been to point out the necessity of the application of pathology, so far as our knowledge of it has extended, to the practice of surgery.

The first part of the work is entitled Principles of Surgery. The author gives a brief historical sketch of the rise and progress of surgery and medicine. He points out that the earliest medical system was founded on clinical knowledge or symptomatology alone; but that subsequently physiology, in its chemical, mechanical, and vital aspects, has been from time to time, up to the present day, called to aid in the explanation of disease. He objects to the direct inferential application of physiology to practice; and insists (agreeing on this point with Dr. Walshe) that the relationship of physiology to rational medicine is only indirect. In like manner, he disapproves of the foundation of surgical practice on the mere knowledge of the anatomy of the body in its normal state, and on the performance of operations on the dead body.

Pathological anatomy, bearing the same relation to pathology as anatomy does to physiology, must, according to Mr. Gant, be studied in order to the attainment of success. It is important, he says, to study the pathological objects presented by every form of injury or disease, in their relation to diagnosis, etiology, prognosis, and therapeutic treatment. He states that he has found the existing works deficient in the information which he required in respect of this practical application of pathology; and this deficiency is what he proposes to remedy.

Next follows a chapter, occupying 124 pages, on the Elements of Pathological Anatomy, in which the author sketches the various changes which the textures, organs, and fluids of the body may undergo from the normal healthy standard, arranging them

under the following heads: Alterations of Degree—Physical, Chemical Constituents, Structure: Alterations of Kind—Morbid Products, Transformations of Texture, and Foreign Bodies.

The next part of the book is on the Principles of Clinical Surgery, or those of Diagnosis, Etiology, and Prognosis. This part is divided into fifteen chapters; seven being devoted to Diagnosis, four to Etiology, and four to Prognosis. In speaking of Diagnosis, the author treats in two chapters of what he calls "Negative Principles"; the aim of which is to show that neither anatomy and physiology, nor pathology—*i. e.*, functional disturbance—are alone sufficient guides to early and exact diagnosis. Proceeding then to "Positive Principles", he advances pathological anatomy as the guide during life to the earliest and most exact diagnosis, taking as illustrations fracture, aneurism, and dislocation. He then goes on to discuss the application, during life, of Clinical Pathological Anatomy, illustrating by examples the sufficiency, or the insufficiency, as the case may be, of physical and chemical signs to supply the foundation of diagnosis.

In speaking of the Principles of Etiology, Mr. Gant describes the causes of disease as being external or internal; either of which may be predisposing or direct in their operation. The internal causes are local or constitutional morbid conditions. In the detection of these, pathological anatomy must guide us; and, being the guide to the earliest and most exact detection during life of diseases and injuries, it suggests the principles of prevention. The author classifies morbid conditions as follows, commenting on each class: Local arising from Constitutional Morbid Conditions; Constitutional from Local; Local from Local; and Constitutional from Constitutional.

In the chapters on Prognosis, Mr. Gant, after some remarks on the guidance afforded by clinical pathological anatomy, lays down the following Principles.

"I. The comparative functional importance of any organ or texture determines our prognosis, favourable or unfavourable, as to the course and tendency of any morbid condition of structure it may have undergone.—*Sub-Principle* 1. Organs and textures which fulfil functions by virtue of their vital endowments (and chemical composition) suggest an unfavourable prognosis.—*Sub-Principle* 2. Organs and textures which fulfil functions by virtue of their physical properties and mechanism suggest a more favourable prognosis.

"II. Local disease or injury, *per se*, suggests a favourable prognosis.

"III. Local disease or injury, sustaining or sustained by some constitutional disorder, suggests an unfavourable prognosis.

"IV. Constitutional diseases, implying each some morbid action of a texture or textures, of general distribution, as well as of predominant functional influence throughout the system, suggest an unfavourable prognosis."

A long chapter is here devoted to the consideration of the existence, operation, and resources of the Restorative Power; these being illustrated by examples showing the natural course and tendency of injuries and diseases towards recovery.

The Principles of Therapeutics next come under notice; and, in the chapters devoted to this subject, Mr. Gant insists on Pathology as the guide in Surgical Operations. It must, he says, take the place formerly occupied by Anatomy.

Finally, in a chapter on the Principles of Surgery (and of Medicine concurrently), arranged synthetically, Mr. Gant gives a summary of the views propounded by him in the previous parts of his work, and adds an exposition of the statistical method of investigation, drawing largely from the essay of Radicke, translated some time ago for the New Sydenham Society.

Those who would be more fully acquainted with Mr. Gant's views, must read the book itself. He has undertaken a very laborious task; and deserves praise for this, and also for the object by which he has been actuated—that of utilising our knowledge of pathology. We cannot avoid thinking, however, that he might have expressed his views in more concise, and sometimes more readily intelligible language, than that which he has employed. There are some opinions advanced with which some may find it difficult to agree; and some which, if we had space, we should be inclined to criticise—such as, especially, the apparently too sweeping condemnation of the inferential application of physiology to the explanation of disease. But the book has great merits, and every allowance must be made for the author's mental bias, and for the zeal with which he has sought to establish—very justifiably—the high value of pathological anatomy as a guide to the prevention, discrimination, and treatment of diseases and injuries.

THE PRINCIPLES AND PRACTICE OF MEDICINE; designed chiefly for Students of Indian Medical Colleges. By JOHN PEET, M.D., F.R.C.P., Surgeon-Major Bombay Army; Principal and Professor of Medicine, Grant Medical College. Pp. 590. London and Bombay: 1864.

THIS book, as its title indicates, has been specially written for the use of the students of the medical colleges in India; but Dr. PEET observes "it may perhaps be found in some degree useful to those medical officers who are for the first time entering on medical practice in India."

It consists of two parts—the first on General, and the second on Special Pathology. In the division on General Pathology, the author treats in succession of modes of death; elements of disease; causes of disease; hygienics; and therapeutics; while, in the second division, the diseases of the abdomen, chest, and head and spine, and general diseases, are described in order.

We do not see anything in this book which calls for special remark or analysis; and we shall, therefore, content ourselves with a general expression of approbation. Dr. Peet has written especially for practitioners in India, and has very properly directed special attention to the circumstances peculiar to or prevalent in that country, which influence the nature or treatment of disease. The introduction of two chapters on Hygienics, or the Prevention of Disease, is a proof that Dr. Peet fully appreciates the importance of this branch of science; and of its value in Indian practice, his opinion may be gathered from the following remarks:

"Obvious as are the advantages of its study, the difficulties in the way of prosecuting hygienics as a practical science are very considerable. Many causes of

disease are unknown; and of those that are known, not a few are so related to occupations, social customs, and in India to religious observances, that it is at present impossible to prevent their operation. It is the duty of the medical practitioner to set the true nature of such causes before the public and the government, leaving their removal to be effected by the gradual progress of enlightenment and a wise and cautious legislation." (P. 126.)

Dr. Peet has done a good service to the rising generation of medical practitioners in India, by the production of this book.

British Medical Journal.

SATURDAY, OCTOBER 1st, 1864.

PUBLIC HEALTH REPORT.

The Report of the Medical Officer of Health of the Privy Council has just appeared. It comes opportunely. The public requires constant watching, and the occasional alarm of an epidemic or a medical report to keep its sanitary conscience awake. The present Report contains ample evidence of the necessity which still exists for this constant watchfulness.

First of all, there is small-pox. It is well known that we have in our hands a simple means by which we might absolutely banish this disease from the country. For eight consecutive years in the Grand Duchy of Baden, and for thirteen years in the city of Copenhagen, this disease has not taken away a single life; yet in London, last year, there were no less than 2,000 deaths from small-pox. In Shrewsbury, on an average of ten years, more than a ninth part of the deaths of children under five years old were due to small-pox; in Northampton and Plymouth, about an eighth part; and in Merthyr Tydvil, not less than a sixth part. These lamentable results are ascribed by Mr. Simon to the great inefficiency of our system of public vaccination. A precisely similar story is repeated as to the local prevalence of typhoid fever, diarrhœa, and similar diseases. In all cases where these diseases prevailed, the population was found to be either breathing or drinking, in greater or less extent, offensive matter which ought to have been carried away by drainage.

Of the few diseases which we are infallibly able either to prevent or to cure, scurvy is one. There was a time when this disease was as destructive to sailors both of the Royal and merchant services as small-pox has ever been on land. In Anson's celebrated voyage of 1740-2, he lost from scurvy, within the first ten months, nearly two-thirds of his whole force, and during the remaining period about half the survivors. From a knowledge of the fact that the disease is caused entirely by the absence of vegetable food, Cook was enabled, twenty-five years later, to bring back a healthy crew after three years' absence, with a loss, from disease, of only one out of 112 men. In spite of this example, twice during the next twenty years the Royal Navy had scurvy enough to endanger its existence. Since, however, the year 1796, the use of lemon-juice has been general; and the result is, that at Haslar Hospital, which in the year 1780 received 1,457 cases of scurvy, it is now an almost unknown disease. It is a curious piece of information, in connexion with this subject, that scurvy in the middle of the seventeenth century was a land as well as a sea disease. The average number of deaths in London from this cause was 30 *per annum*, and in the Plague year they reached the number of 105. It seems that at that date our ancestors were still unaccustomed to the use of vegetables. Our readers may have heard the story that Queen Catherine of Arragon could not procure a salad till a gardener came from the Netherlands to raise it for her. But it is even said that the most common articles of the kitchen garden, such as cabbage, were not cultivated in England a century ago. Scurvy ought to be as unknown in the merchant service as it is in the Royal Navy; but it still prevails to a most alarming extent. Of the entire number of men received into the Sailors' Home at Poplar, about half are at the time of their admission suffering, more or less, from scurvy. Out of eighty-six cases of scurvy treated in the *Dreadnought*, only fourteen came from ships which had sailed from the port of London, thirty-one came from foreign ships, twenty-one from Liverpool ships, eight from Sunderland ships, and twelve from Glasgow and other British ships. Such a state of things is a disgrace to the owners of that part of our mercantile shipping in which it occurs. There can be little doubt that many ships have actually foundered at sea because the crews were so prostrate from scurvy as to be unable to handle them when overtaken by severe weather. The proportion of a crew disabled by scurvy has been found to range from 20 to 70 per cent.

In his Report, the Medical Officer of the Privy Council also tells of the danger involved in the industries which use lead and mercury. In this country, the work of glassmakers, enamellers, shotmakers, printers, and typefounders is but slightly liable to lead-poisoning. In the manufacture of white lead and sugar of lead, the danger is beyond control, as at present conducted; but it is suggested that the processes now employed might be modified. There are but two industries connected with mercury—water-gilding and mirror-silvering. The former process is being superseded by electro-plating; the latter is still an extensive manufacture. These manufactures are often carried on in ill-ventilated rooms, and to these the inspectors could not obtain access. Of their fatal results we do not know the extent. The Medical Officer urges that it is our duty to compel the observance of all necessary precautions.

The accounts given of the conditions under which printers, tailors, and dressmakers work confirm the descriptions which have in individual cases startled the public. Of one establishment which employs dressmakers, we read:

"One room, area in cubical feet, 1,280; persons present, 14; area to each in cubical feet, 91.5; the women weary-looking and squalid, their earnings from 7*s.* to 15*s.* a week and their tea; their hours, 8 A.M. to 8 P.M. The small room in which they were crowded was ill ventilated. There were two movable windows and a fireplace; but the latter was blocked up, and there was no special ventilation of any kind."

This is bad, but not much worse than the majority reported. Such-like is the condition of most of the shops of printers and tailors.

A disastrous amount of lung-disease is invariably developed among any population employed in these in-door industries. Among the printers of London, consumption, in proportion to other diseases, is twice as prevalent as even among the general male population of London. At the age of 35 to 45, the mortality of London tailors is 57 per cent. higher, and the mortality of London printers 117 per cent. higher, than that of the male agricultural population; and at the age of 45 to 50, the London tailors have nearly twice, and the London printers more than twice, the mortality of agriculturists. A still worse story would have to be told in the case of the dressmakers. Human nature is too selfish to remove these sufferings of its own accord; and here, therefore, the Medical Officer also recommends the interference of the legislature.

Another instance of the sacrifice of life, even more melancholy, is given in this Report. In the marshy districts, malarious diseases have been steadily on the decrease; but the Medical Officer was startled to find that the habitual mortality of young children was here as great as in the most infanticidal of our factory towns. In those dense centres of the struggle of life, it was well known that the absence of women from home in industrial employment led to. It was never imagined that the neglect, the drugging, and the involuntary and too often voluntary starvation of infants, known to be going on in factory towns, would be met with in country marsh districts. It appears, however, that the mortality in question is due to precisely the same cause—that is, to the employment of adult women. Women travel about the country in "gangs", under charge of an undertaker, who contracts for them, and work in the newly recovered land. Consequently, their infants are neglected; and thus malaria is banished, to introduce a fatal enemy to children. Directly the mother rises from confinement, she goes off to work, leaving the baby to any one who will pretend to take care of it. The deaths are reported as arising from "debility" or "overlying", or some such cause; but no less than sixty-seven of the medical practitioners in these districts agree that, in the case of more than half the deaths of infants, the true cause of death is "deprivation of milk and narcotic poisoning".

"To what extent the administration of poison causes death or disease in England is not even approximately known," says Mr. Simon. The returns of the Registrar-General, showing that 400 to 500 persons a year perish from the accidental or the wilful administration of poison, are far below the reality. Few sources of death are so apt to escape discovery. Dr. Alfred Taylor was commissioned by the Privy Council to report upon the subject; and his Report is not reassuring, either as to the facility with which poison is obtained for criminal purposes, or as to the danger which arises from the carelessness or ignorance of druggists.

"So long," says Dr. Taylor, "as a person of any age has the command of threepence, he can procure a sufficient quantity of one of the most deadly poisons to destroy the lives of two adults. No one wishing to destroy another by poison, and having the knowledge to make a selection among drugs, need have any difficulty in carrying out his design. If refused at one shop, he can procure the poison at another. If refused by a druggist, he can procure it at a grocer's. If refused at a grocer's, he can procure it at a village general shop, where poisons are retailed by girls and boys, and no questions are asked."

In the case of arsenic, the legislature has attempted to impose some restrictions upon its sale; but these restrictions are practically inoperative. It is sold, moreover, on the most frivolous pretences, to almost any applicant, and chiefly by the grocer, chandler, oilman, and village shopkeeper. The sale of other poisons is free from even these ineffectual restrictions; and, whether they are wanted for murder or for suicide, they are readily obtainable by the poorest or the most casual applicant.

The danger to the general public also, arising from a careless dispensing of drugs, is very great. Persons wholly unacquainted with the properties of powerful drugs retail them without check or control; and the danger is increased by the practice of keeping innocent and poisonous compounds in close proximity, such as laudanum, tincture of rhubarb, senna, etc. No wonder that fatal cases have occurred, in which laudanum and strychnine have been given in place of innocent tinctures. In village shops, where draperies and groceries, and drugs and poisons, are all kept and sold in confusion, Dr. Taylor has known instances in which arrowroot, rice, or oatmeal has been sold with a fatal admixture of arsenic. In one case where arsenic had been given instead of arrowroot, and had killed the consumer, a witness, who went to the shop after the accident, found "rice, corrosive sublimate, jalap, and oxalic acid in different papers in the same drawer, and all under the care of an ignorant boy." Twelve pounds of white arsenic have been sold instead of plaster of Paris, and have been used to adulterate lozenges; or thirty pounds of

ugar of lead have been sent, perhaps instead of lum, to a miller, and used for admixture with eighty acks of flour. In the one case, at Bradford, arsenical lozenges killed seventeen persons, and severely njured 183 others; in the other case, no fewer than 00 persons were more or less affected—none, indeed, atally, but some with great severity—by the poisoning of their bread with lead.

A remarkable illustration of all these evils is afforded in the employment of opium in the marsh districts and in manufacturing towns. "There can be no doubt," it is said, "of the horrid statement, made by almost every surgeon in the Marshland, that there was not a labourer's house in which there was not a bottle of opiate to be seen, and not a child who did not get it in some form." Immense quantities of opium are sent to these districts, and the retail druggists often dispense as much as 200 pounds a year. In one district, the average annual consumption is calculated to be at least 100 grains per head; and a well accustomed shop will serve as many as 300 or 400 customers on a Saturday night. To infants it is administered under the form of "Godfrey's Cordial". When the mother, going to field-work, deposits her infant with a nurse, she always leaves her own bottle; and, as there are different sorts of "Godfrey", it not unfrequently happens that the nurse substitutes her own 'Godfrey' for the mother's, and, frightened at its effects, has summoned the surgeon, who finds half a dozen babies, some snoring, some squinting, all pallid and eye-sunken, lying about the room, all poisoned.

In the face of these facts, the interference of the legislature is naturally demanded by the Medical Officer. The common law fails to protect the public by punishing the incompetent or careless druggist. To obtain a conviction for manslaughter, it is necessary to establish "gross or culpable" negligence; and it appears to have been repeatedly ruled that such negligence does not come under the legal definition. Most people will, therefore, agree with Mr. Simon, that there must be some direct legislative interference with the sale of poisons. The Report of Dr. Taylor contains suggestions for carrying out still further and more effectually the principle already affirmed in the case of arsenic; but a great check might be put upon the evil by making persons readily and seriously responsible for any negligence in a matter of so much danger to the public.

BENZINE AND TRICHINIASIS.

Professor Mosler of Giessen has convinced himself, from experiments on man and animals, that "benzine is of all remedies the best anthelmintic, and that it may be taken by man in large doses; that, taken in proper doses, it destroys the trichinæ in the intestines, and thereby prevents the spread of their embryos; that it is, therefore, the only rational remedy which can be employed in trichina disease in man."

Professor Mosler had an opportunity of observing the effects of the benzine in an epidemic of the disease at Quedlinburg. On his return from Quedlinburg, he experimented on five young pigs, to determine the curative action of the benzine in trichiniasis. He first kept the pigs for a time, to prove that they were in perfect health; and, on April 17th, fed them with the trichinised flesh of rabbits, giving each of them a similar weight of it. Of these animals, three (3, 4, and 5) were treated with the benzine, and two (1 and 2) without benzine. No. 1 was left without any remedies. No. 2 was treated with large doses of Glauber's salts. No. 3 was treated with benzine, in conjunction with purgatives, from the eighth day after taking the trichinæ. No. 4 was treated with similar doses of benzine, without purgatives, from the eighth day; and No. 5 with benzine only, from the fourteenth day after taking the trichinæ. No. 5, however, died from the effects of benzine, which was carelessly administered on the very first occasion, and entered the lungs. On the 30th of April, No. 1 showed signs of the disease; he became thin, and weak on his legs; his eye became dull; he showed signs of suffering, and had fever. No such signs of disease were observed in Nos. 3 and 4, which had taken benzine; so that it was thought possible they might not have been infected. To be sure of this, on the 7th of May (twenty days after the trichinæ were swallowed), Professor Mosler cut a small bit of muscle from the pectoralis major of the animals, which, on microscopic examination, was found to contain numerous trichinæ. In the muscle of No. 1, however, trichinæ were far more numerous than in Nos. 3 and 4. The diseased symptoms increased in No. 1 up to May 7th; and benzine was then given to him; so that, up to May 27th, he had taken in all four ounces. The symptoms had almost disappeared. Professor Mosler gives further full details of his carefully conducted experiments; and tells us that, through the administration of the benzine, a large portion of the trichinæ were destroyed in the intestines, and so only a limited quantity of the embryos found their way into the muscles, and not enough to produce symptoms of disease.

We have been requested by Dr. Fowler, the treasurer of the Griffin Testimonial Fund, to announce that the Committee have decided on shortly closing the subscription-list. Dr. Fowler is, therefore, desirous of making a final earnest appeal to his colleagues of the Poor-law medical service on behalf of the fund. He begs "that all intending subscribers will *at once* remit to him their contributions"; so that the Committee "may have a well filled purse to present to their champion at the public dinner to which it is intended to invite him, in a few weeks, at the Freemasons' Tavern." We hope that our associates will respond to Dr. Fowler's appeal. The sum contributed up to the present time, amounts to a little above £68; but surely the arduous and disinterested labours of Mr. Griffin on behalf of his brethren will, before the fund is closed, receive a fuller recognition.

The Health Department of the Social Science Association, under the presidency of Sir Charles Hastings, has been very successful. The plan adopted this year at York, of setting apart certain days for the discussion of selected subjects, has answered uncommonly well. The discussions have been animated, and well kept up. On the 23rd ult., was brought before the Health Section, the subject of the Disposal of Sewage. The unanimous feeling was that government should not allow sewage to be discharged into and pollute our rivers; and that it is the duty of the authorities of towns to dispose of their sewage as best they may, without injury to the health of the community. On the 24th ult., Mr. Godwin brought forward the subject of Crowding in Houses; and pointed out the great increase of mortality resulting therefrom. On the 26th, Mr. Husband, of York, introduced the discussion of the Causes of Infant Mortality. These were the questions discussed. Numerous papers on other subjects were also read to the Health Section.

The case of Mr. Bearnard, which we mentioned last week, was again brought forward at the Marlborough Street Police Court on Wednesday last. Mr. Tyrwhitt, in deciding on the case, said that since the last hearing,

"He had found a case which might or might not materially bear on Mr. Bearnard's case; but he felt there was so much doubt about the matter, though he had not much doubt himself, that he should not enforce the penalty of £20, until compelled to do so by *mandamus*. His own opinion was against Mr. Bearnard; but he should decline to enforce the penalty for the present..... If Mr. Talley chose to take proceedings against Mr. Bearnard on some future occasion, he would then grant a case."

The case of Mr. M. C. Rogers, a dentist, of 18, New Burlington Street, was then entered into. Mr. Rogers had been summoned by Mr. Talley for infringement of the Medical Act in describing himself as a surgeon. It came out, however, that Mr. Rogers was a member of the Royal College of Surgeons; the summons was, therefore, dismissed, and Mr. Talley was ordered to pay the costs. A summons against Dr. Kahn, of museum notoriety, was also dismissed, on the ground that it had never been served on Dr. Kahn, who, it was said, had been absent from England for a considerable time.

A case of much interest to the profession was last week decided before the Central Criminal Court. The result defines accurately the position in which medical gentlemen are placed who receive under their roof, for treatment, patients who, though not what is called lunatic, are yet so imbecile as to require a certain degree of restraint, or who are so weak in intelligence as to come under the term of imbecile. In this case, Mr. Henry Wilkins, of Ealing, was charged with contravening a provision in the Act 8 and 9 Victoria, cap. 100, for the regulation of the care and treatment of lunatics. The particular section under which the charge was laid enacts that no person (unless he be a person who derives no profit from the charge, or a committee appointed by the Lord Chancellor) shall receive to board or lodge in any house other than an hospital registered under the Act, or an asylum, or a licensed house, or take the care or charge of any one patient as a lunatic, or alleged lunatic, without the like order and medical certificates in respect of such patient as are required on the reception of a patient (not being a pauper) into a licensed house. A young lady, who had been for some time previously placed by her father under Mr. Wilkins's charge, and who lived with, and was treated as one of his family, was found wandering at night in the Edgeware Road by a policeman, who took her to the Marylebone Workhouse. There she was examined by Dr. Randle and Mr. Wilks, a Commission of Lunacy, and pronounced to be of unsound mind. Further investigation showed that she had been living at Mr. Wilkins' house, and that she was not a certified lunatic. Hence, was instituted, by the Commissioners of Lunacy, this charge against Mr. Wilkins. Abundant evidence was given to show Mr. Wilkins's proper and kind treatment of the young lady. Indeed there was no pretence of his having shown unkindness to her. The main point at issue will be found in the judge's charge.

"Baron Pigott said, whether the present charge involved an imputation of moral turpitude against Dr. Wilkins, or whether his conduct had been marked by the utmost humanity, was immaterial to the question which the jury had to decide. No medical man was at liberty to say, "Because I am a humane man I am at liberty to do that which the law says must not be done." What the law required must be observed; and, supposing that the verdict of the jury should be against him, the humanity of Dr. Wilkins would not thereby be called in question. It had been said that legislation itself had run mad in the making of this Act. He knew not whether that was the opinion of the jury; but he himself thought there were few Acts in the Statute-book more called for than that which legislated for the care and management of lunatics and persons of unsound mind. The Act in question said that no person (unless he were a person who derived no profit from the charge, or a committee appointed by the Lord Chancellor) should receive to board or lodge in any house other than a hospital registered, or an asylum licensed, or take the care or charge of any one patient as a lunatic, without a certain order and certain medical certificates. In the first place, Dr. Wilkins received £180 a year for the care of this young woman; therefore, his case was not in compliance with the law; and then it was proved that his house, in which she was received, did not answer the conditions of the Act. Being, then, not a person who derived no profit, and not being appointed a committee by the Lord Chancellor, and not having a hospital, an asylum, or a licensed house, if he took possession of a lunatic, he must do so with the order and medical certificates prescribed by the statute. Had Dr. Wilkins any such order or any such certificates? He had not. Then what followed?

he same section enacted that a person not complying with the requirements of the statute should be uilty of a misdemeanour; and it was proved that r. Wilkins had not complied with any of those requirements. The defence was that this young person d not come within the definition of a lunatic at the me she was sent to his house. But to this it was plied that he had, during the last twelve months, ken charge of her after she had become of unsound ind. The words of the Act were, 'Every person eing idiotic, or lunatic, or of unsound mind.' Even upposing this person was not of unsound mind when he was first received by Dr. Wilkins, still if she terwards became lunatic, it was equally necessary hat the requirements of the Act should be complied ith as soon as she so became lunatic or of unsound ind. The learned Judge concluded by leaving it to he jury to say—first, whether the young person reived by Dr. Wilkins was of unsound mind when he first entered his house; or, secondly, whether she ecame of unsound mind during the time she was nder his care. In either case, if they found in the firmative, their verdict must be that of guilty; beuse it had been shown that he was not a committee ppointed by the Lord Chancellor, nor a person who d not derive any profit from the charge, nor was is house a hospital, or an asylum, or a licensed ouse, nor had he obtained the order and certificates equired by the Act.

"The jury, after consulting together for a few inutes, returned a verdict of guilty generally.

"Dr. Wilkins was then bound on his own recogisance to appear at the next sessions to receive the dgment of the Court."

REAT indignation has been excited in the profession t Sydney by the appointment of a homœopath to he office of Visiting Medical Officer to a lunatic sylum there. A correspondent thus writes to the *ustralian Medical Journal*.

"I send you a copy of the *Empire* newspaper, to raw your attention to an appointment that has been ade by our Government, unknown before in any art of her Majesty's dominions; viz., that of a pracioner of homœopathy to the important position of isiting Medical Officer to the Tarban Creek Lunatic sylum; and, further, that the Ordinary Visitors his being an extra appointment) have never taken ny notice of it in the way of remonstrance, or otherise. Now, sir, I think it but right that such an inignity cast upon the profession should be freely ommented upon by the medical press; and as we ossess no medical periodical in this colony, I take he liberty of drawing your attention to the circumtance, in the hope you will give us a little of your ind on this subject in your next issue. I have scertained that the appointment has been made. I ay also inform you that our present Minister for ands, although not a medical man, got his living by his homœopathic system, before his present elevaion. Our leading journal, the *Sydney Morning Herald*, s so tainted with this system, that they refused inertion of a letter on the subject, since published in he *Empire*. The name of the person appointed is Dr. Brereton, the Turkish-bath man."

The *Journal*, commenting on this, very properly oints out to the other Medical Visitors that their uty is at once to resign an office which forces them nto professional intercourse with a homœopath.

"Dr. Douglas, Dr. Boyd, and Mr. Alloway, have eservedly enjoyed the esteem and confidence of their professional brethren for many years; and, in order to maintain this regard, there seems to be no course open to them save that of immediately resigning their appointments. Their doing so would be the most dignified mode of indicating their own sense of the affront that has been offered them; and it would very fitly represent the general feeling entertained by the profession on the subject of the monstrous imposture which, singularly enough, finds its most powerful advocates among the educated and otherwise intelligent."

We shall be glad to hear that these gentlemen have done what they cannot but feel is required of them as members of our profession. We are not aware that any appointments of this kind have ever been made by any person of high position in this country. The only instances of the kind which have come to our notice is the one here referred to and the case which occurred in the Isle of Guernsey. It seems that silly tricks of this kind are only played by some stupid, puffed-up, hypochondriacal general, or dyspeptic antipodal governor, who thinks to show his wit and knowledge by patronising quackery and giving the doctors a lesson.

In a discussion on Iridectomy now going on in Paris, M. Follin thus criticises Mr. Hancock's operation; viz., cutting the ciliary muscle.

"Mr. Hancock has induced many English surgeons to follow his example; but in France M. Serre only. *A priori*, it is difficult to understand the uses of this operation. The ciliary muscle, a tensor of the choroid, is composed of two sets of fibres, longitudinal and circular; the latter sort, inserted into the capsule of the crystalline lens, must necessarily be avoided, or the capsule would be opened; and, as regards the longitudinal, they cannot be cut, but are only separated by the cataract-needle. Mr. Hancock's operation, therefore, is illusory; and has neither theory nor satisfactory observation in its favour. But iridectomy in glaucoma is a perfectly rational proceeding. Glaucoma results from tension of the eye-ball; and iridectomy diminishes the tension. Yet we know not how iridectomy acts; the explanations hitherto given are pure hypotheses. M. Follin's conclusions are: that iridectomy is an operation generally indicated in all cases of ocular tension; in glaucoma; and in a certain number of acute and chronic affections of the eye; rendering great service as a curative or preventive remedy. We have already (he adds) obtained great and numerous proofs of its value; and we may safely affirm that it is an agent which will henceforth remain fixed in our list of operations."

M. Perrin followed M. Follin, and suggested a few doubts and difficulties relative to the value of iridectomy. M. Houel went further, and showed the reverse of the medal. In his opinion, the chief cause of failure of the operation is hæmorrhage, of which M. Follin made very light. The discussion so far brings before us the fact of three skilful surgeons standing in direct opposition on a point of fact in surgery. On one side, MM. Follin, Richet, and Le Fort; and, on the other, MM. Demarquay, Houel, and Perrin—one set affirming, and the other denying, the danger of hæmorrhage in iridectomy. But in

this matter, they mainly referred to iridectomy as performed in connection with cataract. M. Perrin, however, admits iridectomy in glaucoma to be a "magnificent operation." M. Foucher expressed the opinion that iridectomy would have done even greater services than it has, if surgeons had been more careful in the study of the right performance of the operation, and were more careful in the proper selection of cases fitted for the operation. Throughout the discussion, the speakers have shown the greatest reserve concerning the theory of the results of iridectomy. MM. Foucher, Giraldès, and Perrin, said not a word on the subject; M. Follin just alluded to it; and as for M. Richet, he declared that, in his opinion, all the explanations hitherto given were illusory. M. Meyer, however, a pupil of Von Gräfe, says *L'Union Médicale*,

"Did not follow this reservation so characteristic of the French. German science is not contented to stop at the boundary between light and darkness. It delights in launching out into the regions of the unknown; and herein German is essentially distinguished from French philosophy."

M. Meyer's theory is this. In glaucoma, the communication which exists naturally between the aqueous humour and the vitreous humour is interrupted; and iridectomy restores the communication, and so causes cessation of the glaucoma. M. Meyer, in his remarks, stated that Von Gräfe had practised iridectomy more than four hundred times. This brought forward M. Velpeau, who protested against the acceptance of such an enormous number of operations by one man. Glaucoma, according to his own experience, was a rare disease, which he had, in fact, comparatively rarely met with in the course of a very large practice. Without doubting the word of M. von Gräfe, we must not accept this number of four hundred without further details. M. Giraldès, on behalf of M. von Gräfe, replied that, considering the large practice of M. von Gräfe, the figure of four hundred seemed to him in no way exorbitant. M. Le Fort added,

"That hospital statistics in Germany were perfectly trustworthy. Observations are written in Latin at the head of the bed of every patient, without exception, in Germany as well as in Russia, where, in fact, the practice is ordered by law. Mr. Le Fort, who had attended Von Gräfe's practice, said that it was immense. M. Velpeau never doubted M. von Gräfe's veracity; all he wished to state was that, from the immense number of operations stated, he was inclined to think it possible that some of them had been performed in cases which did not come under the title of glaucoma."

We should fancy that the cheeks of the great combatant gentlemen who manage our army medical affairs, and who so serenely dub the army medical officer a non-combatant, will tingle when they read the following published in last week's *Gazette*.

"The Queen has been graciously pleased to signify her intention to confer the decoration of the Victoria Cross on the undermentioned, whose claims to the same have been submitted for her Majesty's approval, on account of acts of bravery performed by them in New Zealand, as stated against their names; viz.: Assistant-Surgeon William George Nicholas Manley, Royal Artillery, for his conduct during the assault on the rebel pah near Tauranga, New Zealand, on the 29th of April last, in most nobly risking his own life, according to the testimony of Commodore Sir William Wiseman, C.B., in his endeavour to save that of the late Commander Hay, of the royal navy, and others. Having volunteered to accompany the storming party into the pah, he attended on that officer when he was carried away mortally wounded, and then volunteered to return in order to see if he could find any more wounded. It is stated that he was one of the last officers to leave the pah. Assistant-Surgeon William Temple and Lieutenant Arthur Frederick Pickard, Royal Artillery, for gallant conduct during the assault on the enemy's position at Rangiriri, in New Zealand, on the 20th of November last, in exposing their lives to imminent danger in crossing the entrance of the Maori keep, at a point upon which the enemy had concentrated their fire, with a view to render assistance to the wounded, and more especially to the late Captain Mercer, of the Royal Artillery. Lieutenant Pickard, it is stated, crossed and recrossed the parapet, to procure water for the wounded, when none of the men could be induced to perform this service, the space over which he traversed being exposed to a cross-fire; and testimony is borne to the calmness displayed by him and Assistant-Surgeon Temple under the trying circumstances in which they were placed."

In England, doctors are made in *four* years. In Italy, under the present reorganisation of Instruction under Matteucci, *six* years of study are required of the medical student. His studies are divided as follows. In the first year, Botany, Zoology, Physics, and Inorganic Chemistry; in the second year, Physics, Organic Chemistry, Human Anatomy, Comparative Anatomy, Practical Chemistry, and Anatomical Demonstrations; in the third year, Human Anatomy, Physiology, and Physiological Exercises; in the fourth year, General Pathology, Materia Medica, Toxicology, Special Pathology and Surgery, and Toxicological Exercises; in the fifth year, Special Pathology and Surgery, Operations, Midwifery, Diseases of Women and Children, Pathological Anatomy, Hygiene and Medical Jurisprudence, Exercises in Topographical Anatomy, Pathological Anatomy, and Operation; in the sixth year, Ophthalmology, Clinical Medicine, Surgery, Midwifery, Clinical Studies of Mental and Syphilitic Diseases, Exercises in Surgical Operations, and in Operations on the Eye. At the end of each year, oral examinations are held on the subjects studied; and practical demonstrations in chemistry, anatomy, etc., demanded of the student. He must perform *post mortem* examinations; practise operations in surgery, eye-surgery, and midwifery, on the dead body; and make clinical diagnoses in hospital. At the end of the six years, and after all these preliminary examinations have been satisfactorily passed, he can offer himself for his doctorate, when he is required to make two reports on patients, give a dissertation on some practical point in medicine or surgery, and then defend the same.

Association Intelligence.

WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETING.

A MEETING was held at the Pavilion Hotel, Folkestone, on Thursday, September 22nd, at 3 P.M.

Papers. The following communications were read.

1. Placenta Prævia in Twin Birth. By F. W. Pittock, Esq.
2. A Case of Suicide. By F. W. Pittock, Esq.
3. Fracture of the Skull. By W. Bateman, Esq.
4. Treatment of Autumnal Diarrhœa with Fruit. By H. Whitfield, Esq.

EAST YORK AND NORTH LINCOLN BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held at the Queen's Hotel, Withernsea, on Thursday, September 22nd, 1864; OWEN DALY, M.D., President, in the Chair. The following members were also present: Drs. Bell (Hull); Sir H. Cooper (Hull); Hay (Hull); Dunn (Hull); H. Sandwith (Hull); and Messrs. Anderson (Hessle); J. Brownridge (Hull); Craven (Hull); Dadley (Patrington); Dix (Hull); H. Gibson (Hull); Hodson (Hornsea); Holden (Hull); T. Jackson (Welton); Locking (Hull); Nicholson (Hull); and Sleight (Hull). J. A. McManus, Esq. (Withernsea), and Dr. Aicheson (Staff-Surgeon H.M.S. *Dauntless*) were present as visitors.

New Member. J. Walker, M.D., Frodingham, was elected a member of the Branch.

The Provident Fund. Sir H. Cooper, M.D., was elected to represent this Branch at the Directorate of the Provident Fund.

Paper. Sir H. Cooper, M.D., then read a very instructive and interesting paper on Pyelitis and Purulent Infection.

An unfortunate detention of nearly an hour on the rail between Hull and Withernsea rendered it necessary to omit the reading of other communications which had been promised.

Dinner. When the business of the meeting was over, the gentlemen dined together, and spent a most agreeable evening.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Bath, September* 1864.]

Sanitary Statistics of Clifton. By J. A. SYMONDS, M.D., F.R.S.E. The Registrar-General's quarterly report, last August, had produced a feeling in Clifton very like what would thrill the inmates of a nunnery were they to be told that high authority outside the walls had declared the virtue of their institution to be at no higher a level than that of a penitentiary. The figures of the Registrar-General's report were as plain as the "Mene, mene," on the walls of Babylon, and yet as much in need of interpretation: 24 in 1000 was the annual rate of mortality in Clifton. The Isle of Wight had only to answer for 15 in 1000; Newton Abbot, including Torquay, for 16; Cheltenham for 17. "Why," asked the Registrar-General, "is the mortality of Clifton 24 in 1000?" And the terrible question was asked about Clifton as one of the watering-places. The question would be startling enough to one who had taken only a superficial view of Clifton; and it was still more startling to one who observed how large a proportion of houses must belong to persons in possession of the comforts and luxuries of life, and of the means of preserving health; not less startling to one who knew that a thorough system of public sewerage had been completed, and at no small cost to the community; and most startling of all to those who had been for many years familiar with the diseases of the locality, and who knew that in what was understood by Clifton the watering-place there were no diseases that could be called endemic; that typhoid and typhus fevers were of rarest occurrence, and that, when they occurred, they were of extrinsic origin; that cholera, dysentery, and erysipelas were unknown in their zymotic forms; and that, in short, zymotic diseases, with the exception of measles, scarlatina, and whooping-cough, were rarely met with. But Clifton, in the Registrar-General's report, meant Clifton the watering-place, together with a very destitute district in the parish, and also with a Poor-law district, including five other subdistricts scattered at considerable intervals over an area of 27,199 acres, in some parts densely crowded with the poorest of houses and inmates. It was true that there was a table in the Registrar's report (which was not published in the *Times*), which stated the annual rate of mortality in several watering-places, and of Clifton among them, and in which there was inserted the parenthesis in reference to Clifton including a part of Bristol city and Bristol workhouse. The Registrar-General's Clifton was Clifton the name of the Poor-law union. Dr. Symonds proceeded to point out the injustice of estimating the rate of mortality in the Clifton union, and publishing it as the rate of mortality of Clifton the watering-place. The number of deaths in Clifton parish in the whole year of 1863 was exceptionally high, for it was 465. That was at the rate of nearly 21 in 1000; but in 1862 it was only 365, which, reckoning the population at 22,000, would make a death-rate of only 18 in 1000. In the year before, the deaths were only 329; and that would give a proportion of the population of only 15 in 1000. The paper pointed out the character of the various parishes which were included in the parish of Clifton, re-

ferring to the crowded nature of the dwellings in the out-parish of St. Philip and St. Jacob, and to the existence in the parish of Stapleton of the Clifton union workhouse, the Bristol workhouse, and the Bristol lunatic asylum; and Dr. Symonds urged that it was unfair to associate the watering-place of Clifton with such districts as those to which he had referred; and that the numerical death-rate of a watering-place should be neither complicated with the mortality in distant rural retreats, nor burthened with that of the sickly suburbs of a crowded city.

On the Mortality of Bath. By R. T. Gore, Esq. The author said the population of Bath, based on the census of 1861, was 52,000; the mortality for the year ending June 30, 1864, 1350; the ratio of mortality, 25.714 to 1000, ranging from 17.28 in the Bathwick district to 27.09 in the Abbey district. Of the total deaths, there were under 60 years, 41.65 per cent.; from 10 to 60, 29.25; from 10 to 100, 28.82. In the surrounding country districts, the population is 15,808; the ratio of mortality, 20.93—namely, under 10 years, 47.9; from 10 to 60, 22; from 60 to 100, 30. The statement made by the Registrar, as to the high rate of mortality, had had a beneficial effect on the corporation of Bath, in putting them in action as to getting rid of cesspools and other nuisances.

Sanitary Statistics of Salisbury. By A. E. Middleton, Esq. The death-rate of Salisbury in the year 1775 was 30 in 100. After the year 1850, the city was placed under the Public Health Act, and a sum of £27,000 was expended in drainage. For the nine years previous to the drainage, the average death-rate was 27 in 1000; and for the nine years after the drainage, it was 13 in 1000, or about one-half. For the close of Salisbury, the average death-rate for the same period before drainage was 20 in 1000; and since drainage, 13 in 1000. Deaths from consumption for seven years before drainage, 286; for seven years since, only 143. For the last year (1863), the deaths from consumption were 11, or 1 in 818 of the population; whilst for the whole kingdom the deaths from consumption were 1 in 376.

Inhalation of Oxygen Gas. By B. W. Richardson, M.A., M.D. The author said that his experiments on the inhalation of oxygen had led him to an almost precise knowledge of the condition under which oxygen would most freely combine with blood. The influence of oxygen in inhalation was modified, 1, by dilution of the oxygen; 2, by dilution of the blood; 3, by the activity of the oxygen; 4, by the presence or absence in the blood of bodies which stop combination. On the point of dilution of oxygen, Dr. Richardson stated that a certain measure of dilution was required, not because the body consumed too quickly in pure oxygen, but because neutral oxygen would not combine with the carbon of the blood unless it were diluted. In atmospheric air, the dilution is just sufficient; and the quantity of oxygen may be increased, with absorption at 60° to 65° Fahr., if the oxygen be raised in amount to three parts of the gas to two of nitrogen. Beyond this, the combining power is reduced, and oxygen is not absorbed. Hence, animals die in the gas as it approaches the pure state; they die not by a narcotic process, but by a process of negation. On the point of dilution of the blood, the author said that blood possessing a specific gravity of 1053 seemed to have most steady power in absorbing oxygen, as it existed in common air; by increasing the quantity of water in the blood to a limited extent, the absorption of oxygen is increased to a maximum; while by further dilution it is diminished. Below 1055, the absorption of oxygen steadily declines. In respect to the activity of the oxygen, the most differing results are obtained. If the oxygen be made fresh from chlorate of potassa, it sustains life even in the pure form, and the activity of the functions is increased; if electric sparks are passed through the gas, or if the gas be heated, the same is the fact. On the other hand, if the gas be exposed to ammonia, to decomposing animal matter, or even to living animals, over and over again, it loses, even when diluted, its activity, and no longer combines with the blood. Dr. Richardson said that there were conditions of blood in which the power of absorption was limited. Alcohol, chloroform, opium, and certain alkaline products, formed in the blood in disease, prevented absorption of oxygen; and death not uncommonly took place from this cause. Great increase of water did the same. The question had often been put, whether the inhalation of oxygen could be usefully applied in the treatment of disease? Priestly, Beddoes, Hill, and many of those who lived when oxygen was first discovered, had formed the most sanguine expectations on this point. Since then various opinions of the extremest kind have been expressed; the differences having arisen from the entire want of order that has been followed in the inquiry. One man has used pure oxygen, another diluted; one active, another negative oxygen. One has given the gas to anæmic people, whose blood is surcharged with water; another to diabetic or choleraic persons, whose blood is of high specific gravity; the one has given it heated, the other at the temperature of the day. If even a stick of phosphorus were exposed to oxygen under such varying conditions, the phenomena obtained would be as variable as those that had been registered in physic regarding oxygen as a remedy. The difficulties of arriving at uniform results, had been almost insurmountable from another cause, that of obtaining oxygen in a practical form for inhalation. Fortunately, this difficulty was now removed. The discovery by Mr. Robbins of a mode of evolving oxygen, by acting on peroxide of barium and bichromate of potassa with dilute sulphuric acid, had given him (Dr. Richardson) the opportunity of inventing a little apparatus for inhaling oxygen, which could be carried anywhere, and used at a moment's notice. The author here exhibited and described the apparatus. It consists of two glass globes, with a double-valved mouth-piece, connected with the escape-tube of one globe. The powder containing the oxygen was placed in one globe, and dilute sulphuric acid was poured on it. The oxygen gas was evolved and passed over into the second globe, which was half filled with water. From this, after being washed, in passing through the water, the gas was inhaled. The apparatus was so arranged that any dilution of oxygen—three parts of oxygen to two of nitrogen was recommended—could be secured; and, by changing the water in the second globe, so as to have hot, or temperate, or very cold, the activity of the combination could be graduated.

The Larynx of the Negro. By G. D. Gibb, M.D. The essential point of difference between the larynx of the negro and that of the white man consisted in the invariable presence in the negro of the cartilages of Wrisberg; the oblique or shelving position of the true vocal cords; and the pendent position of the ventricles of Morgagni. The cartilages of Wrisberg were either very minute and rudimentary, or wholly wanting, in the white race; whilst they were large and well developed and always present in the black or coloured races. Dr. Gibb had also dissected them in monkeys, in whom, even the smallest species, they were relatively large in comparison to the size of their bodies. Those who argued that the black race were inferior to the white, and approached the quadrumana in some of their features, would naturally lay hold of what he stated to prove the truth of this

ory; especially as regarded the Wrisbergian car- iges and the position of the ventricles. But he uld not express any opinion on the views enter- ned by anthropologists respecting the position in scale of beings occupied by black and white.

Correspondence.

RETIRING ALLOWANCE TO UNION OFFICERS.

IR,—I use the freedom of a professional man in lressing you on the subject of "retiring allowance nion officers." In the BRITISH MEDICAL JOURNAL he 17th inst., you state, in answer to a letter from union medical officer on the subject, written from singwold,

"There can, we believe, be no doubt that the bill ludes those officers who have attended to private ctice as well as parish duties." (P. 346.)

Ve, in this country, are apprehensive that the pro- , "Whose whole time has been devoted to the vice of the union or parish," excludes the medical ctitioner; and I enclose a copy of the petition we warded against this provision in the Bill Sir Robt. el, Bart., unsuccessfully introduced for this coun- . I beg the favour of your views on the subject.

I am, etc., M.D.TRIN. COLL. DUB.

Ireland, Sept. 26, 1864.

Medical News.

APOTHECARIES' HALL. On September 22nd, the fol- ing Licentiates were admitted:—

Brett, Wm. Frederick, Mecklenburg Street, Mecklenburg Square
Colthurst, James Bunter, Carey Street, Lincoln's Inn
Corbin, Thomas Wilson, Harringay Park, Hornsey
Matthews, Josiah Wright, Holgate Crescent, York

t the same Court, the following passed the first mination:—

Llewellyn, Rees, London Hospital

APPOINTMENTS.

YAL NAVY.

EN, John, Esq., Acting Assistant-Surgeon (additional), to the *ctory.*
HAN, Charles F., Esq., Acting Assistant-Surgeon (additional), to e *Royal Adelaide.*
TER, Robert, M.D., Acting Assistant-Surgeon (additional), to the *ctory.*
RT, John, Esq., Acting Assistant-Surgeon (additional), to the *yal Adelaide.*
ETNAM, Stephen, Esq., Assistant-Surgeon, to the *Excellent.*

ITIA.

INLAY, W. B., M.D., to be Assistant-Surgeon Prince of Wales's yal Renfrewshire Militia.

UNTEERS, (A.V.=Artillery Volunteers; R.V.= Rifle Volunteers):—

WFORD, J., M.D., to be Honorary Assistant-Surgeon 19th Lanca- ire A.V.
LEN, J., M.D., to be Surgeon 1st Administrative Battalion Dum- rtonshire R.V.
, J. B., M.D., to be Honorary Assistant-Surgeon 8th Cinque rts R.V.
EY, M. G. B., M.D., to be Surgeon 12th Lancashire A.V.
M. J., M.D., to be Surgeon 3rd Administrative Brigade Lanca- ire A.V.

BIRTH.

ARD. On September 23rd, at Hovingham, near York, the wife *Richard Gillard, Esq., of a son.

DEATHS.

DWICK, Frederick R., Esq., Surgeon, at Burnham, Somerset, ed 51, on September 12.

CHAVASSE. On Sept. 15, at Edgbaston, aged 29, the Rev. W. J. Chavasse, vicar of Kirtling, only son of *Pye H. Chavasse, Esq., of Birmingham.

DRUMMOND, John, Esq., Inspector-General of Hospitals and Fleets, at Dover, aged 72, on September 17.

GILL. On September 23, at Pentonville, aged 63, Mary Ann, wife of Seth Gill, M.D.

HAMERTON, Frederick A., Esq., Surgeon, at Camden Town, aged 38, on September 13.

PAINE. On September 18th, at Holloway, aged 55, Isabella, widow of John Paine, Esq., Surgeon, of Mildenhall, Suffolk.

ROGERS. On August 14, at Surat, Emma Henrietta, wife of Adam Rogers, Esq., Assistant-Surgeon 12th Bombay Native Infantry.

STANISTREET, T. D., Esq., Surgeon, at Bow, aged 49, on Sept. 19.

STEWART, Charles, M.D., Surgeon 36th Native Infantry, at Jhansi, on August 6.

TWEEDIE. On July 1, at Melbourne, David Brown Tweedie, Esq., only surviving son of A. Tweedie, M.D., F.R.S.

*WILSON, Henry, Esq., at Runcorn, on September 15.

WOOD, George E. W., M.D., late of East Sheen, at St. Germain, near Paris, aged 58, on September 9.

THE FEDERAL ARMY. Dr. J. K. Barnes has been appointed Surgeon-general of the United States armies, *vice* Dr. W. A. Hammond, dismissed the service.

BRITISH ASSOCIATION. The next meeting of the Association will be held at Birmingham, under the presidency of Professor Phillips.

STREET PERILS. According to last week's Registrar-General's Reports of deaths in London, we find that seven deaths occurred by carriage accidents in the streets.

DEATH FROM TYPHUS FEVER. Mr. Henry Wilson, surgeon, of Runcorn, Cheshire, died on September 15th, of typhus fever, caught in the discharge of his professional duties.

BRITISH ASSOCIATION. At the concluding general meeting of the Association, the sum of £2,037 : 10 was voted for scientific purposes. Among the grants, was one of £20 to Dr. B. W. Richardson, for investigation of the physiological action of amyl compounds.

A NEW THERMOGRAPH. M. Marcy has given to the Academy of Sciences a description of an instrument for marking small variations in temperature. By means of this apparatus very delicate physiological experiments on animal heat may be conducted.

DEATHS FROM ACCIDENTS. The Registrar-General's Report shows that during the week ending on Saturday last, no fewer than forty-one persons lost their lives by accidents of various kinds. Eleven persons were killed by vehicles in the street. Three children and one adult lost their lives by burning. Five persons were drowned, and five children were suffocated. A woman committed suicide by drinking paraffin oil.

SUSPENSION OF A MEDICAL JOURNAL. The *American Medical Times* of September 3rd, announces that number as being the last of that journal, for the present. The reasons for this step are: "the enormous rise and the constant increase in the cost of everything relating to the publication of a weekly periodical." The publishers hope, however, that before many months they will be again enabled to resume its publication.

EVASION OF THE MEDICAL ACT. One of the modes by which unqualified practitioners escape the risk of punishment under the Act is, it appears, by announcing themselves as "surgeons' assistants." At an inquest lately held at Ballarat on the body of a child that had died under somewhat suspicious circumstances, the evidence of one of these medicine-men was taken by the coroner. It is to be hoped that no regularly qualified medical man is so lost to the duties he owes to the profession as to lend the sanction of his name to cover the risk that is incurred in such cases. (*Australian Medical Journal.*)

Gift of a Dispensary. Mr. Staniforth Beckett, of the Knoll, Torquay, Devon, has just presented a handsome building, and £5000 for its support as a dispensary, to the inhabitants of Barnsley. The late Mr. Alderson has also bequeathed £100 to aid in the work commenced by Mr. Beckett.

Health of the British and French Armies. From an official return just published, it appears that the cases of sickness in the French army have been two and a-half times as numerous as in the British, but that the number constantly non-effective from sickness and the sick time to each soldier have been nearly identical in the two services.

Yellow Fever. The yellow fever continues to rage in Bermuda, and its ravages are lamentable; scarcely one vessel in the harbour but has had to hoist her flag "half-mast" once—twice, indeed, in more than one case—till most of the crew had succumbed to the epidemic. The captain of the *Flamingo* was reported dead; also Captain Butcher, of the *Owl*, one of the greatest Confederate navigators afloat.

A Cobra Bite. The wife of a European employed on the railway near Jempeer was bitten by a cobra a little above the heel. Her husband immediately sucked the wound until the blood flowed copiously; after which he bound a tight bandage some inches above the bite, which numbed the leg. He then applied a live coal to the part, and burnt it effectually, and then immediately took his wife to Kurrachee, where she is now under the care of Dr. Mahaffy, and is getting well rapidly. (*Sindian.*)

Defence Funds. At the Bath conference of the Pharmaceutical Society of London a proposition was made to form a fund to indemnify druggists who may have been assessed in heavy damages in consequence of having occasioned poisoning by misadventure. The proposition was, however, negatived by the meeting. The existence of such a fund would lay them open to inevitable prosecution, whereas now a man would not be proceeded against unless he were known to be possessed of a few spare thousands. Many other objections were expressed.

Medical Fees at Coroners' Inquests. At the late assizes of Roscommon one of the coroners applied for a presentment for payment of a medical gentleman, and also a professional friend who had assisted him in holding a *post mortem* examination, under peculiar circumstances, in the neighbourhood of Ballinasloe. The examination was held on an exhumed body, and was of a disagreeable and laborious character. Strange to say, the grand jury, or the committee, to whom this part of the business was allotted, threw out the presentment for payment of the principal operator, but allowed it for the assistant. The alleged grounds were, that the doctor, who had attended the deceased, was not entitled to payment for subsequent services. (*Western Star.*)

Prevention of Accidental Poisoning. At one of the meetings of the Pharmaceutical Conference, held in Bath at the same time with the British Association, a report of a Committee on Accidental Poisoning was read. The committee found twenty-five cases of accidental poisoning recorded in the *Pharmaceutical Journal*, from July 1862 to June 1864; viz., ten cases in which the mistake was committed by the administrator; two by a surgeon, one by a wholesale house, one by a grocer's wife, and eleven by retail chemists or their assistants. The committee came to the following conclusions:—1. There are 17 out of the 25 cases in which there is every reason to believe that a thoroughly effective poison-bottle would have prevented the accident. 2. There are at least three cases in which, had the poison sold been folded in black paper, and labelled properly, the accident would not have occurred. 3. Eighty per cent. of the usual cases of accidental poisoning may be prevented by the use of proper precautions. 4. Only one of the twenty-five cases was the direct result of ignorance. The committee made a number of practical suggestions; viz., that every one engaged in the practice of pharmacy, should make themselves acquainted with their profession; that a separate part of the shops or premises be set apart for dispensing prescriptions; that there should be a poison cupboard, with lock and key, in which should be kept all the concentrated and virulent poisons; that the labels upon all shop and store bottles be so placed that the whole of the label can be seen at a glance, on the plan introduced by Messrs. Ford and Shapland, of London; that, wherever practicable, every prescription be checked by a second person; that liniments, lotions, and all poisonous liquids be dispensed in bottles called "Merrikin's Caution Bottles"; that the more potent poisons should not be sold unmixed without a medical order.

Royal College of Surgeons. The library and museum of the Royal College of Surgeons which have been closed during the past month, will reopen; the former this day (Saturday) and the latter on Monday. The statue of John Hunter has been placed at a cost of one thousand guineas, subscribed by the public, in the museum. Students should remember that registration in the college commences on Monday, and will remain open fifteen days. The preliminary examination for the Fellowship will commence on the 17th inst., and the professional examination on the 22nd proximo. The primary or anatomical and physiological examination for membership will commence on the 5th proximo, and the pass or surgical on the 12th. The Council has announced their Jacksonian prizes of twenty guineas each, for competition during the present year, in addition to the Collegial prize of fifty guineas, and two for competition in the ensuing year.

Medical Prosecution. Dr. Goss was lately charged with having through negligence caused the death of a midwifery patient. Dr. Llewellin and Dr. Gervis who were called in to attend the case in consequence of Dr. Goss's absence, stated that the condition of the patient when they first saw her on the Saturday was one of great exhaustion, but neither of them was prepared to say that if Dr. Goss had procured the birth at an earlier hour of the day the final result would have been different. It appeared that Mrs. Brazier the patient, had had four other children, all of whom died either at the time of birth or within a very short period after. Mr. Sleigh submitted to the learned Judge, after the evidence of Dr. Llewellin and Dr. Gervis, that there was no case to go to the jury; and Mr. Baron Pigott having intimated that his opinion inclined in that direction, Mr. Orridge expressed, on the part of the prosecution, a readiness to relieve the jury from giving a verdict. The jury immediately returned a verdict of *Not Guilty*, accompanied, however, with the observation that they considered the defendant highly censurable for having left the lady at the time he did. Mr. Sleigh said that if the case had proceeded he was prepared to call on behalf of Dr. Goss not only a great number of his professional brethren, but also of his patients, who were ready to bear testimony to the care and skill he had invariably shown towards all who had sought his aid, and the anxiety he had always evinced for their welfare. But it should be recollected, said Mr. Sleigh, that the defendant had been from day to day in constant attendance upon other patients besides the deceased, till he was almost worn out with fatigue.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. Obstetrical Society of London, 8 P.M. "Case of Cæsarian Section", by the late Mr. T. E. Bryant; Mr. F. J. Gant, "Post Mortem Examination of Case of Accidental Hæmorrhage"; Dr. W. Williams, "Missed Labour"; "On Spondylolisthesis", Appendix by Dr. Barnes; Dr. Shortt, "Deformed Arms".

TO CORRESPONDENTS

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

OUR readers will be very pleased to hear that Mr. Syme has promised to give the Address in Surgery at the next Annual Meeting of the British Medical Association.

NEW OPHTHALMIC JOURNAL.—On the 1st October, appears the first number of *The Journal of British Ophthalmology*, under the editorship of Mr. Jabez Hogg.

DR. W. M. BANKS, in his Edinburgh University Graduation Prize Thesis, gives a complete history (as far as it is at present known) of the Wolffian Bodies of the Fœtus and of their Remains in the Adult, including also the Development of the Generative System. This thesis does great credit to its author; and will, doubtless, be received with thanks by the anatomists of this country. In it are brought together for their benefit the labours of the many foreign writers who have investigated the above subject. The thesis is illustrated with many very good woodcuts, etc.

THE LANCET *v.* THE BRITISH MEDICAL JOURNAL.—G. L.—The case is simple enough. At no time of its history has the British Medical Association been more potential than it is at the present moment; and never was its prestige greater. Its JOURNAL has become a powerful rival to the *Lancet*. Through its uncompromising voice (of course, backed by the Association's force), consultations with homœopaths were put an end to. Through its voice, reform has been initiated in the Council of the College of Surgeons. In all directions, its force and influence are acknowledged and felt in the profession. During its present management, the members of the Association have increased in numbers from 1800 to upwards of 2400, and are still daily on the increase. Its pages are crowded with papers from the leading physicians and surgeons of the country. Naturally, therefore, at such a moment does the *Lancet* rage furiously; and, by a weekly publication of false statements, do its envious worst. Naturally, therefore—*i.e.*, true to its natural instinct—does it encourage anonymous writers to discharge their tales of woe against us. By this time, however, the profession sees clearly enough, as Mr. Pope told them in our last number, that the affair is simply and thoroughly a £ *s. d.* one.

A MEMBER OF THE ASSOCIATION asks of Mr. Carter, referring to his language in the *Lancet:* "Is he really a fit and proper member of the Association?" The following, which Mr. Carter no doubt considers the language of a model gentleman, is the passage alluded to:—"The *Journal* (that is, the Editor and his crew) will fight for its life like a rat in a corner, and will only be overcome by persevering and concerted action on the part of those who, like myself, regard it as a mere nuisance, devoted to the expression of unworthy sentiments, or illiterate and unwarrantable language."

DR. ALDIS, Medical Officer of Health, has published a pamphlet, entitled *London Noises disturbing Sleep.* Therein he shows how seriously both invalids and other inhabitants of the metropolis frequently suffer from nuisances in the shape of noises—such as cow-lowing, cock-crowing, etc.

F. R.—The account of Dr. Bree's *rencontre* with a former Editor of this JOURNAL, will be found at pages 468, 492, and 796 of the ASSOCIATION MEDICAL JOURNAL for 1855.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. W. O. Markham (Clarges Street), £1:1; Dr. Geo. Yeoman (Whitby), 10s.; Drs. Lobb and Hogg (East London), £1:1; Wm. Williams, Esq. (Wareham), 7s.; Chas. Willcox, Esq. (Wareham), 7s.; Ed. Mercer, Esq. (Wareham), 7s.

Amount previously announced, £61:3:6. Received at the *Lancet* office, £3:11.

I beg to take this opportunity of informing the Poor-law medical officers generally, that at the last committee meeting it was considered advisable that the above fund should be shortly closed. It is probable that the list of subscribers published weekly in the four medical journals for the last three months, may not have been seen by all who would wish to be thus included as testifying to and appreciating Mr. Griffin's worth. I would therefore crave a very prominent position in your next issue to make this forcible appeal to my Poor-law medical colleagues on behalf of the testimonial fund. I respectfully solicit that all intending subscribers will at once remit to me their contributions. We may then have a well-filled purse to present to our champion at the public dinner, to which it is intended to invite him in a few weeks' time at the Freemasons' Tavern, and of which all subscribers will be duly notified by printed circular.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, September 26th, 1864.

PROPOSED EPITAPH FOR THE TOMB OF THE LATE BRAVE SURGEON OF THE "ALABAMA".

Weep not for him, but proudly hope that he,
Died e'en as thou wouldst in thy small degree;
Weep not for him, but emulate the brave,
Who perish nobly in the hope to save.

Confronting death, Llewellyn's bosom knew
This thought alone; his charge, the bleeding crew;
Then spoke his spirit—"'Tis not mine to fly,
My place is here—here I will stay and die."

OLD LINEN.—A correspondent writes: "Is there any chemical or mechanical process by which new linen and cotton may be converted into what is termed 'old linen?'" I ask this question, as an hospital surgeon requiring old linen in greater quantity than what can be obtained by gifts. DE SCILLY.

THE LETTERS of Mr. Jabez Hogg, E. L. O., and An Associate, shall be inserted next week.

COMMUNICATIONS have been received from:—SIR CHARLES HASTINGS; Dr. G. H. PHILIPSON; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. T. SPENCER WELLS; Mr. W. PARKER; Dr. A. RANSOME; E. L. O.; Dr. JAMES RUSSELL; Mr. T. R. HEMSTED; Mr. R. GILLARD; Mr. THOMAS PAGET; MEDICUS; Mr. R. L. BOWLES; Dr. R. FOWLER; Dr. GRAILY HEWITT; Mr. J. F. HOLDEN; Mr. I. HARRINSON; Dr. COOKWORTHY; Mr. BANGHAM; Mr. G. F. HELM; Mr. D. EVANS; Mr. T. W. CATTELL; Mr. D. STONE; Mr. JAMES RHODES; Mr. LOWNDES; and AN ASSOCIATE.

BOOKS RECEIVED.

1. On a Form of Bronchitis (Simulating Phthisis) which is Peculiar to certain Branches of the Potting Trade. A Graduation Thesis. By Charles Parsons, M.D. Edinburgh and London: 1864.
2. Photographs of the Diseases of the Skin. By A. B. Squire, M.B. Number II. London: 1864.
3. Practical Anatomy: A Manual of Dissections. By C. Heath. London: 1864.
4. Principles of Human Physiology. By W. B. Carpenter, M.D., F.R.S. Sixth edition. Edited by H. Power, M.B. London: 1864.

5. Indication of the Paths taken by the Nerve. By L. S. Beale, M.B., F.R.S. London: 1864.
6. The Plurality of the Human Race. By G. Pouchet. Translated and Edited by H. J. C. Beavan. Anthropological Society. London: 1864.
7. On the Wolffian Bodies of the Fœtus. By W. M. Banks, M.D. Edinburgh: 1864.

ADVERTISEMENTS.

Plymouth Public Dispensary.—A SPECIAL MEETING of the Committee will be held at the Dispensary, in Catherine Street, Plymouth, on Tuesday, 25th October next, at One o'clock precisely, to ELECT a PHYSICIAN in the room of Dr. SALTAU deceased.

Plymouth, 24 Sept., 1864. ALFRED HINGSTON, Treasurer.

Wanted immediately, a Resident ASSISTANT, to Dispense, Keep the Books, and Visit occasionally.—Address Mr. BANGHAM, Ashby de la Zouch, stating age, references, and salary required.

Medical Pupil.—A M.D., F.R.C.S., residing in a Country Town, whose Pupils have obtained high Collegiate honours, has now a Vacancy for a RESIDENT PUPIL. —For terms, etc., address F.R.C.S., care of Mr. RICHARDS, 37, Great Queen Street, Lincoln's-inn Fields, London.

Bath Mineral Water Hospital.—The Situation of RESIDENT MEDICAL OFFICER having become vacant by the resignation of Mr. JOHN ROBERTS, the Committee will fill the appointment on Thursday, the 20th of October next.

Candidates must have Diplomas of the Apothecaries' Company and College of Surgeons, and are requested to send testimonials of their professional abilities and moral character (under cover) to the Registrar of the Hospital, before 12 o'clock on Thursday, the 13th of October.

The Hospital is exclusively for cases requiring the use of the Bath Waters, and provides 142 beds.

The duties are, to take charge of all the patients, under the direction of the Physicians and Surgeons, keep the books in the Medical department, maintain discipline, and perform the other duties usually required of such an officer.

A Dispenser (non-resident) is also employed.

The Salary is £100 per annum, with Board and Apartments in the Hospital.

BENJAMIN STARR, Registrar.

Sept. 26, 1864.

Classical and Mathematical.—Dr. STEGGALL prepares Gentlemen for their Examinations in Classics and Mathematics at all the Medical Boards, viz., the Preliminary Examination at Apothecaries' Hall; the Matriculation Examination of the London University; Preliminary and Fellowship Examination at the Royal College of Surgeons, etc.

Dr. STEGGALL continues his Instruction for all Medical and Surgical Examinations during the summer months.—Address Dr. STEGGALL, 2, Southampton Street, Bloomsbury Square, London.

For Varicose Veins and Weak-—NESS. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and *inexpensive*, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.



ABDOMINAL SUPPORTING BELTS for both Sexes, those for Ladies' use, before and after accouchement, are admirably adapted for giving adequate support with EXTREME LIGHTNESS—a point little attended to in the comparatively clumsy contrivances and fabrics hitherto employed.

Instructions for measurement and prices on application, and the articles sent by post from the Manufacturers

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The Profession, Trade, and Hospitals supplied.

ESTABLISHED 1848.

MEDICAL TRANSFER & PROFESSIONAL AGENCY, 50, Lincoln's-inn-fields, W.C.

Mr. J. Baxter Langley, M.R.C.S. (KING'S COLL.), begs to inform the members of the Medical Profession that he has undertaken the Medical Transfer and General Professional Agency business, till recently carried on by the late Mr. Bowmer.

Mr. Langley devotes his prompt personal attention to the negotiations entrusted to him, and treats confidentially and with care all matters relating to professional business. The strictest reserve will be practised in all the preliminary arrangements, and no expense incurred (except in special cases) unless a negotiation be completed.

The General Partnership and Commercial Agency business till recently conducted by him at his City offices, and his experience in the management of large commercial undertakings, combined with his professional acquirements, enable Mr. Langley to guarantee that all matters of business placed in his hands will be carried out without delay, and with an equitable regard to the interests of all the parties concerned.

Mr. Langley can refer to the Professors of his College, Members of Parliament, Clergy, Merchants, Bankers, and others, as a guaranter of his integrity and honour in all negotiations entrusted to him.

Full information as to terms, etc., sent free on application.

Office Hours, from 11 to 4; Saturdays from 11 to 2.

Competent Assistants provided without delay, free of expense to the Principals. No gentlemen recommended whose antecedents have not been inquired into. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

Locum Tenens, of high qualifi-cations, reliability, and good address, can be despatched by an early train, after receipt of letter or telegram, stating terms, duties, and qualifications required. Fee, 10s. 6d.

Medical Assistants.—Wanted Immediately, several competent In-door and Out-door ASSISTANTS, qualified and unqualified, for Town and Country. No charge for registration, but references in all cases required. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

For Transfer, an excellent COUNTRY PRACTICE in Somersetshire, income £300 a year. Appointments £50. Only one opponent, with whom a partnership could be arranged if desired. House, stables, garden, etc. Rent £35. Vendor has received a foreign appointment and must leave. Address "990," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

For Sale, a sound Practice, in a Village containing 2000 inhabitants, within a mile of the sea, and in the neighbourhood of a good county town. Average receipts over £400. Appointments £125. One horse only required. No assistant kept. Few bad debts. One opponent, without English qualification; no other medical practitioner within four miles. Good house and excellent garden, with conveniences. Rent £26. Terms easy. Address, "S., 969," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

For Sale, a good Family and GENERAL PRACTICE, in one of the best towns in Lincolnshire. The locality is healthy and well populated (10,000). Opposition declining. Average receipts £360. Appointments £70. One horse only necessary. Commodious house, etc. Rent £40. Terms, one year's purchase, payable by instalments. Address, "S., 957," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

Unopposed Country Practice for Sale. Income over £300. Appointments upwards of £60. Established 18 years. Address "S., 991," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

Yorkshire. An unopposed COUNTRY PRACTICE for sale. Receipts £400 a year, increasing. Appointments £150. The vendor is confident that every patient can be transferred to a fully qualified man. Premium, one year's purchase, payable by easy instalments. Address, "S. 997," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

Eligible Investment. A leading Practitioner in one of the best towns in the West of England, is willing to dispose of a Branch Practice, established and conducted by him for nearly twenty years. The complete transfer of the whole can be guaranteed to a suitable gentleman, of double qualifications, a large proportion of the revenue being from appointments, the succession to which can be secured. Receipts last year, £362 : 10 : 5 Terms liberal. Address, "S., 994," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON THE NEED OF COMBINED MEDICAL OBSERVATION.

By Arthur Ransome, M.B., Bowdon, Cheshire.

Before an assembly of medical men, it will not be necessary to enlarge upon the importance of wide observation of the phenomena of disease as a basis for the most difficult though most important of the inductive sciences. Not only is this truth fully recognised, but it would appear, at first sight, that every possible effort is made by the profession to extend their researches into every branch of natural science.

It is true, that the members of our body are not wanting in that zeal and activity which at the present day animate every other department of human learning; and the results of their investigations are widely spread, for the public good, through the many channels furnished by lectures, by such associations as our own, and by the periodical press.

All the most curious and rare forms of disease are thus brought to light and carefully studied. Eminent men connected with hospitals contribute the results of their experience in the treatment of intricate or dangerous cases, and give their opinion upon difficult questions of diagnosis or pathology. In truth, our officers fight well; but the rank and file of the profession, men trained to observe, and thoroughly capable of giving material aid, yet find no direction pointed out in which they might also push on the advance of their science.

There still remain to be gathered in many items of observation, each by itself apparently unworthy of record, and too unimportant to advance the reputation of any one, which, when massed together, would form a most valuable store of evidence. It is by the patient accumulation of facts, in themselves insignificant, that meteorology has been able to advance so rapidly of late, and has reduced to laws some of the apparently most uncertain phenomena of nature. Medicine also has numerous problems of this nature awaiting solution, and needs all the help she can find. Many medical truths can only be established by the concurrent testimony of many witnesses. It is the object of this paper to suggest that the organisation of this Association should be employed for the purpose of gathering in evidence of this description. Hitherto this Association has existed, and has worked, chiefly to afford mutual support and strength to its members. I would suggest that we ought not to be content with this as our sole object; but, like an organ of the body corporate, we should labour to store up and utilise those materials which it is the special function of our profession to prepare. The objects of this inquiry would be of this kind—

1. To ascertain, by means of numerical returns, at sufficiently short intervals of time, the rise and progress of various diseases in different localities.

2. To obtain well-authenticated evidence of the duration of the contagion of the several infectious diseases.

3. To gather facts bearing upon the natural history of disease, or throwing light upon the relations existing between different symptoms.

4. To collect observations, carefully made, upon the action of remedies.

Registration of Disease. It will be allowed, that as yet we know very little about the more remote and recondite causes of disease. We know at present scarcely more than was known to the founders of medical science. It is remarkable, for instance, how truthful are the observations of Hippocrates and Sydenham upon the connexion between seasons and the various epidemics. This accuracy seems to have been attained simply by careful individual watchfulness; and so far we have done but little of greater value. Before reliance can be placed on any observations upon the rise and progress of disease, we must have much more precise and extended information than any one man could possibly collect. What is needed is a regular record, at sufficiently short intervals, of the number of fresh cases of various diseases occurring in different localities.

The returns of deaths received by the Registrar-General neither fix the time nor the place at which any particular case occurred; and thus, however valuable they may be in other respects, they avail nothing for our purpose. It would probably be impossible to obtain an exact return of all the diseases arising in a community; but, for the purpose of observing the fluctuations in the course of disease, this complete return would not be necessary. What is required is a return sufficiently steady and sufficiently extended to give approximately the relative amount of different diseases.

The following very simple method, which has already been tried for four years with complete success by the Manchester Sanitary Association, was approved last year by a Committee of the Council of the Lancashire and Cheshire Branch of this Association. This Committee considered that a weekly registration of deaths, and of the relative amount of certain kinds of disease, might be carried out without much trouble or expense in all the chief towns of the district, and they recommend the following steps to be taken.

"That, in each large town, a small committee should be formed, of gentlemen interested in the subject, who should invite the assistance of all those medical gentlemen in the town or neighbourhood who hold public appointments, whether to hospitals, gaols, workhouses, or Poor-law unions. Exertions should be made to enlist *all* such public medical officers, so that the returns might represent as accurately as possible the relative amount of disease prevailing in the community. At the same time, the co-operation of the registrars of deaths should, if possible, be secured, so that returns might also be obtained of the *total* number of deaths occurring each week.

"Each gentleman consenting to contribute to such a return should be furnished with a set of forms, to be by him filled up with the number of new cases of the different diseases therein mentioned which had come under his care in the week preceding. The deaths, also, which had occurred during the same period, should be entered in the column provided for them.

"These returns, when filled up, could then be posted to the address of any one member of the local committee who would undertake to receive them, compile them into a single return for the district, and then forward them to the central offices of the Association in London."

The Committee state, that "the expense of carrying out this scheme would be almost confined to the

printing of the forms, and their postage from the various contributors (about six shillings a year for each separate return). Many inhabitants in each town would be willing to subscribe a small sum for the sake of possessing such valuable records as these would be likely to prove."

It seemed certain to the Committee that many valuable results would follow the establishment of such a systematic registration of disease as would record weekly the relative amount and kind of disease prevalent at any one time in all the chief towns of a district. "It would show the influence upon sickness of the varying conditions of climate and season, of prosperity or distress, of the trades and manufactures, or of any other circumstances peculiar to the district. It would afford a means of speedily detecting the advance of an epidemic, and of studying its course; and thus it would be most valuable to the inhabitants of the several towns comprised within the district in which it was made, giving them exact and timely intelligence of the presence of disease, and enabling them promptly to deal with it."

It will be seen that no attempt is here advised to obtain a complete record of all the cases of disease which arise; and it might hence be objected, that the results given will be incomplete or even fallacious. It is found, however, that the constituency from which returns are sent remains for the most part tolerably constant; and thus, at least, the relative proportions between different diseases may be obtained, and compared also with the deaths from those diseases occurring in the practice of the reporters. Thus not only is the progress of disease made manifest, but its fatality can be found; and when this return of deaths is compared with the official register of *all* the deaths occurring in the community, we can both gather from the comparison an approximate estimate of the total amount of disease, and also can judge upon what classes of the community the disease presses most heavily.

Every week, for the last four years, returns of the kind just described have been made to the Manchester and Salford Sanitary Association, by the voluntary labour of thirty-nine gentlemen, medical officers to Poor-law districts, and to other public and charitable institutions in the neighbourhood. During the last three years, only one contribution to this series of returns has been omitted—one out of more than six thousand returns. Occasional delays have occurred; but usually the return is published in the week following that for which the returns are made.

These facts not only prove better than any words the practicability of the undertaking, but they are in themselves a most forcible testimony to the public spirit of the profession. I may mention, also, that Mr. R. C. Brown of Preston has commenced a similar effort in that town.

Duration of Contagion. The question of the duration of contagion is one of extreme practical importance to the general practitioner. He is frequently called upon to pronounce judgment upon the point, without any sufficient grounds upon which to base his opinion. He can only call to his aid his own experience, and that, perhaps, of a few medical friends. He has no evidence to which he can refer in case of need. The result is, that upon this subject the most various opinions are given by different medical men; and thus constant annoyance is caused to medical attendants, and loss of confidence in them is experienced by the patients.

We require to know both the possibility and the degrees of probability of contagion from patients recovering from infectious disorders, after certain periods of time have elapsed from their seizure; and it is likely that some difference will have to be noted between the duration of contagious power in the body of the patient, and in the clothes or other fomites.

These are practical points, upon which all who possessed the necessary evidence would gladly give it up to an influential, well-organised commission; and, after a time, the whole question might be settled, to the great satisfaction both of the public and of the profession.

Observations on Disease. These would constitute the most difficult part of the inquiry, and would need great care on the part of those who propounded questions on the subject, as well as accuracy in those who gave the answers. Moreover, it would only be in a limited number of cases that the method of question and answer could be of any service. Any attempt to supersede the careful noting of individual cases would be most unwise and unscientific. Still, in some instances, the questions would lead to direct observation; and, for the purpose of testing the correctness of certain views, or of ascertaining the frequency with which symptoms concur, this means of inquiry might well be adopted, and might eventually guide us to a more complete knowledge of the causes of certain symptoms, and might suggest new paths of inquiry by observation. Thus, the true gravity of albuminuria as a symptom—its meaning in different diseases; the connexion between erythema nodosum and rheumatic pains, as mentioned by Trousseau; the import of subclavian murmur as a sign of disease—all these are instances of the kind of questions which might be solved by an appeal to the experience of the profession.

Action of Remedies. The work of testing the action of remedies would be one of vast magnitude, if it were to include the proof of every agent introduced to us as a medicine. Even to try fitly a small number of the weapons of our armoury will involve a large expenditure of time and energy; and yet, unless we are content to remain in our present unsatisfactory state, and to lag behind all other sciences, the work must soon be entered upon. We are greatly in need, at the present day, of a new sect of the Empirics, who would, in the true sense of their title, bring their remedies to trial, and subject them to experiment.

Now, first, what amount and kind of evidence ought we to possess respecting the action of any therapeutic agent?

Let any one consider the difficulty that there is in ascertaining the true action of any one remedy upon the body. The complexity of the problem is so great, the disturbing forces so many, and the dangers of misapprehension of facts so constant, that experiments must be multiplied manifold before we can assume that we know how a medicine may be expected to act. Before any sound conclusion can be arrived at on this point, we must be provided with numerous observations by trained observers, both carefully made, and so widely and variously applied as to do away with the possibility, or at any rate probability, of error on the score of individual bias or idiosyncrasy on the part of either attendant or patient. Confidence in the efficacy of a remedy will only be just and well founded when its effects have been noted in many thousand cases, and when a record has been made of the distinct changes in the symptoms which can be traced to its employment.* How many of the remedies at present in use have re-

* It may be added, that this notation will be much facilitated when certain simple signs can be agreed upon as necessary to be observed in each case, and when changes in the temperature of the body, and in the amount and nature of the several secretions, can be readily ascertained.

ived this searching trial? Let any one reckon up e value of the testimony upon which he proceeds use any therapeutic agent.

It is true that there are some medicines which ave been handed down to us with eulogy from one ge to another, which have the general consent of ie medical world in their favour. Our confidence in iem is probably a most just one, and would only be nfirmed by any more searching proof than our own dividual experience; and yet we find continually iat their efficacy is challenged, not only by our pponents—the Arabs of the profession—but the accusation is echoed from our own ranks.*

The fluctuations of opinion upon the merits of different remedies show the absence of the safe anchorge of trustworthy evidence. I need scarcely adduce, as an example, the changes of opinion with espect to blood-letting; contrasting the almost error with which it is now regarded with its excessive and unjustifiable use in times past.

It may be said that, after one or two such ebbs and flows in the tide of opinion, we should gradually settle down to a rightful appreciation of the value of our materia medica. But, besides the objection, that this would be a most rude and unscientific manner of solving our difficulties, it is very doubtful whether they would ever in this way right themselves. It is the habit of the age to distrust all mere tradition, to doubt all hearsay evidence; and thus, unless the proof remains patent and incontestable, what has been considered settled in one century comes again under discussion in the next.

Our improvidence in wasting the observations of our members is especially noticeable in regard to the trial of new remedies.

A new therapeutic agent is generally introduced to the profession by some man of eminence, who publishes his own approval of it, and perhaps supports it with the record of a few cases in which it has been tried with success. If these cases had been properly selected, and noted with discretion, they would probably afford sufficient *à priori* evidence to justify the further proof of the remedy by the profession at large; but here, as a general rule, the matter ends; no more evidence upon the subject is stored up for future reference, and many valuable observations are lost.

The remedy is probably used by many men who have been disappointed in the action of the ordinary means of treatment, or by those who make a practice of experimenting with new medicines whenever they have an opportunity of doing so with safety; but these observations are seldom recorded. They are thought too scanty or unimportant to allow a special paper or treatise to be composed upon them; and the result is, either that a worthless medicine is used over and over again to the exclusion of more effectual weapons, or, if it be really valuable, it may drop out of sight, or be a very long time before its value is recognised.

The medicine may remain in repute in one district, and go out of use entirely in another, according to the temperament of the medical men of the place. There are some men so sanguine, that they will ascribe every recovery from illness to the remedies last employed; whilst there are others so sceptical that, whether of death or cure, they say alike, "'Twas Nature did it."

An attempt has already been made by the managers of our JOURNAL to carry out a Therapeutical Inquiry, and the effort demands our warmest support. But the work ought not to be left to them; it should have the sanction, and, if necessary, the active support, of the governing body of the Association. For complete success, also, it needs personal solicitation for observations. Gentlemen should be appointed to call upon the members to ask their help, and to explain the nature of the undertaking.

It is probable, that a large portion of the work now sketched out could not be performed by our own central body; part of it might be better left in the hands of the supreme Medical Council. The determination of this point, however, might well be left to the consideration of a subcommittee. I would propose, therefore:

1. That the central governing body of the Association should appoint a working committee, who should foster the registration of disease, and devise the best means of obtaining the evidence of members upon questions having a practical bearing.

2. That the Council should request the co-operation of all the members of the Association, in giving answers to the questions proposed to them.

3. That the Council should appoint certain members to visit medical men in the several districts, and appeal personally to them for assistance; and to obtain answers upon the several subjects requiring elucidation.

It may be well here to anticipate some of the objections which may be raised to the scheme now proposed.

In the minds of some there is a profound distrust of the value of any statistical inquiry into medical subjects; and although the researches now contemplated would be only partially susceptible of a numerical arrangement, yet this feeling might lead them to object to the plan.

This distrust arises from these sources. 1. Collections of figures have been handled so as to bring forth erroneous, and even contradictory, results; and 2. They have been applied to questions which could only be solved by careful individual observation.

This argument, however, only bears upon the mode in which the instrument of statistics is used. It might be, and indeed has been, applied with equal potency to discourage the use of the miscroscope. It will be found, I believe, upon examination, that the objects now sought by this means are strictly and legitimately within its scope.

Another objection springs from a doubt of the uniformity in the powers of observation in the contributors to such an inquiry. And yet this is an imperfection which clings to every form of human evidence, and it is one which must be borne by all who attempt to collect it, whether they are lawyers, statesmen, or medical men.

Our witnesses, however, are men accustomed to observe, and to test the evidence of their senses; trained to hesitate before they form their opinion. The average ability of members of our profession is at least as high as that of any other body of men, and their judgment might be relied upon with confidence. In any case, many of the objects sought after would not require much discrimination. The recognition and enumeration of the different epidemic disorders would be one of the most important of these objects, and would not need much skill.

The difficulty of obtaining the required information from men already heavily burdened, would, perhaps,

* Dr. Paris, in his *Pharmacologia*, observes: "It is impossible to cast our eyes over such multiplied groups (of medicinal substances) without being forcibly struck with the palpable absurdity of some, the disgusting and loathsome nature of others, the total want of activity in many, and the uncertain and precarious reputation of all, without feeling an eager curiosity to inquire, from the combination of what causes can it have happened that substances at one period in the highest esteem, and of generally acknowledged utility have fallen into total neglect and disrepute."

Dr. Gregory (quoted in Sir W. Hamilton's *Discourse on Revolutions in Medicine*) says: "There is no one disease nor any one remedy that has not been the subject of obstinate controversy."

be the most serious impediment in the way; but if the questions were proposed by gentlemen in whom the profession have confidence—if they were of a simple description, and had evidently a practical bearing—we should, I feel sure, again have proofs of the public spirit and self-denying energy of our profession, and a collection of true archives of medicine would be the result.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

LOSS OF SPEECH, IN CONJUNCTION WITH SUSPENSION OF CERTAIN OTHER FUNCTIONS OF THE BRAIN, FOLLOWING AN EPILEPTIFORM ATTACK.

Under the care of JAMES RUSSELL, M.D.

THE following cases are presented as a postscript to my paper in the JOURNAL of July 23rd, on Loss of Speech in connection with Hemiplegia, though they offer no analogy with the cases in that paper, excepting in the prominence among the symptoms held by speechlessness; the cause of the disease, and the attendant conditions being entirely different. They exhibit a very remarkable condition of suspended activity on the part of particular functions of the nervous centres, apparently unconnected with any organic change in the centres themselves. They also afford a very striking illustration of the independence of the different functions of the nervous centres, and of the perfect limitation which may be effected in the operation of morbid action in so complex an organ as the brain; the performance of certain functions being, for a time, entirely arrested, whilst the others remained entirely unaffected.

I alluded, in my former paper, to the limitation in the action of organic disease upon the brain, as occasionally exhibited, in a still more remarkable manner than in the abolition of motion or speech; a single class of words, as a particular language, being alone forgotten; and as connected immediately with my present subject, I may adduce the following illustration, derived from the operation of disease not involving structural change.

A girl, aged 6 years, was seized with an epileptiform attack, which lasted severely for an hour; but the convulsive movements did not subside for two hours afterwards. She lay afterwards in a semiconscious state, restless, and at times partially maniacal, until the evening of the following day. As she recovered from this condition, her memory was found to be generally impaired, but especially so as applied to speech; the patient presenting an excellent illustration of that form of defect of speech which depends upon impairment of the mental element concerned in that function. The motor and sensitive functions were entire, with one exception; and her intellect, in all other respects, was speedily restored; but the period of her life antecedent to her attack was, for some time, a perfect blank; though, by degrees, a few events emerged from the darkness. During the first day or two, every desire was expressed by the words, "I want." Afterwards, as she found language, her sentences became incoherent after the first words. She also misapplied terms, unfortunately, in one particular, always calling her uncle "donkey"; her forgetfulness of appropriate words was so complete that she often did not recognise them when presented to her, so that she could not be prompted. She had always been a sharp, clever child, fond of reading, and had written two letters on the day preceding her illness; but she was now found to have lost entirely the power of reading and writing, and had to begin again with the very elements. In re-learning her alphabet, it was observed that there were particular letters at which she always halted, and she shook her head, even when they were pronounced to her, being apparently unable to catch the sound. She applied herself with much diligence to regaining her lost ground; but her progress was very slow, and ten months afterwards she had not recovered her former position. It is now eighteen years since these events occurred; the patient has continued in perfect mental health; but I am told by her father that even now she is apt to be a little confused if she speak too rapidly.

One circumstance remains to be noted, of much importance, as regards the statement by Dr. Jackson which suggested my former paper, that the attack left a weakness in the right arm; so that for some time she used the left hand in preference to the right. It must also be added, that her grandfather suffered, in advanced age, from some form of cerebral disease, which destroyed his memory for words; and that her family exhibits a marked proclivity to derangement of the brain.

But there are instances of a much wider suspension of the functions of the brain than occurred in the preceding case, associated with epileptiform disease, or independent of it. Thus, Dr. Carpenter, in his *Physiology*, quotes the case of a man in whom the entire intellectual powers were placed in abeyance "almost instantly", for a period of five years, in consequence of mental distress, and were "then recovered completely, and rather suddenly." A more extraordinary case is the one detailed by Mr. Dunn (*Lancet*, November 1845), and also referred to by Dr. Carpenter. It bears a close analogy to the cases I have to detail, though very superior to them in interest. Like them, the suspension of cerebral power immediately followed a fit of an epileptiform character, and the symptoms were much modified by the recurrence of the fits. The case also presents the limitation of diseased action to particular functions of the brain in a still more striking point of view; the mental faculties of the patient were suspended in their exercise; and of all the senses, sight and touch alone remained, constituting the sole medium of communication with the outer world. Recovery was effected in different periods of time in the case of the different functions; one or two words were spoken four months after the commencement of the illness, but the patient's vocabulary remained very scantily furnished for eight months longer, when speech was at once fully restored under the influence of emotion; the sense of hearing continued quite lost ten months after all the other senses had been regained. It is to be noted that intense emotion was concerned in promoting the recovery of the lost functions.

The following cases will be seen to present considerable analogy with those which I have quoted, retaining, however, certain points of difference.

CASE I. Samuel Price, aged 32, married, stamper. When seen on the day following that of his admission, he was lying on his back, apparently asleep; his eyelids were stuck together by dried mucus, and it was stated that they had not been opened for four days; when separated, the cornea was drawn upwards so as nearly to conceal the pupil. He had not spoken since his attack, four days before. His condition, noted on several occasions during the following forty-eight hours, presented the following remarkable characters. He evidently possessed a certain amount of conscious-

ness; he sat up in bed and fed himself when food was placed in his hands; given a cup of milk, he raised it properly to his mouth. When addressed, he directed his eyes to the speaker, and obeyed instructions immediately and intelligently; the nurse strongly enjoined him not to wet his bed, and, as she believes, in consequence of her injunctions, he gave indications of his needs. Notwithstanding this evidence of consciousness, he appeared quite insensible to pain; it was impossible to elicit any evidence of common sensation; most severe pinching, pushing the point of a knife into his skin, the application of a spoon dipped in boiling water, pulling his whiskers, thrusting a pin behind the finger-nail, produced no sign of sensibility—not the least change in the expression of face—nothing, in short, but a few inconsiderable muscular movements in the limb which was assailed. A roll of paper rested on the cornea without inducing winking; but when a pen was introduced into the nostril, or passed down the throat, considerable movement of the head and neck and attempts at retching followed. Power of voluntary movement remained, and muscular resistance was opposed to passive movement. On the day after his admission, he got out of bed when ordered; but his walk was very unsteady. He resisted the introduction of the spatula into the mouth; and whilst we were thrusting a pen into his nose, he raised his hand, as if to thrust it away. The raised limbs, when dropped, were evidently controlled by the muscles. The pupils acted freely; the right was rather larger than the left.

He was a small made man; the expression of face very deficient in intelligence; his head was small; his forehead receding. The history which was obtained was as follows. He had been subject to fits, apparently of epilepsia mitior since he was nine years old; eight years ago the fits became much more severe, and were attended by fully developed epileptic phenomena; he always fell on the left side. At that time, when the fits had assumed greater severity, he was left by one of the fits in the same state as on the occasion of his coming under my care; he then also lost power over his left limbs. He was in the Queen's Hospital for sixteen weeks, and when he left, could only speak a little; he then entered the General Hospital, but it was two months before he walked without a stick; the arm recovered before the leg. From the date of this illness to the time to which the present report refers, the fits became again much slighter, and continued so until eight days before his admission into the hospital, when three fits occurred; he continued to work during the following three days, though he was rather dull, but on the fourth day he was found speechless in bed, and then was brought to the hospital.

The day of his admission was October 28th, 1861, and it was November 16th before any distinct improvement had been effected in his condition. On October 30th, he was found waiting for his tea, having indicated by signs, the state of his appetite; after his meal had been brought, the bread was removed; he then ceased eating, but being desired to go on, he felt for his bread, picked it up, and proceeded with his meal. He signified his desire to eat by pointing to his mouth; desiring to be led to the lobby, he shook a partition by his bedside. He pointed to his throat as the seat of some supposed malady, and put my finger into his mouth, but nothing amiss could be discovered. He was told that he should have no more food until he asked for it; he held up his hands imploringly, and pointed to his throat; a day or two afterwards, an attempt was made to carry the threat into execution, but he made so great a disturbance by shaking his bed, and in other ways, that food was at last given; and on a subsequent occasion, under similar circumstances, he made some noise in his throat with great effort, pointing to that part as the seat of difficulty. All this time the special senses were active, and apprehension was quick; hearing our comment upon one pupil being larger than the other, he indicated that he had suffered a blow on the eye, by pointing first to the eye, and then to a bottle, supposed to be the instrument with which the blow had been inflicted.

His sensibility to tactile impression was again tested, by pinching till a blush of inflammation appeared, and by as strong a shock as could be procured from a battery; asked if he felt anything? indicated yes; if he were hurt? shook his head. The earliest approach towards speaking was in some guttural sounds on Nov. 3rd; and during the utterance of these sounds, his face wore an expression of great anxiety to succeed; four days afterwards, an attempt to alarm him by ordering his back to be fired, caused much apprehension, and a fair imitation of the words, "I don't want it"; but his conversation was merely a series of "Tut" "tut" "tut," uttered with great gesticulation, and a very earnest expression of countenance. On November 16th, he said distinctly, "Getting better, thank you," and on the 28th talked freely, and almost intelligibly. The last notice of sensation is on November 7th, when it remained defective on the left side of the body, and to a slighter degree, on the left side of the tongue and face. His left leg was unable to support his body in walking, though he moved it freely when lying down; its girth was below that of the right. He left the hospital on December 28th, using a crutch, but some time afterwards was seen walking in the street actively and well.

His urine deposited phosphates on boiling.

The following case, which affords an interesting companion to the preceding, occurred under my notice in King's College Hospital, in the year 1843, in the practice of the late Dr. Todd, at the time when I was physician's assistant at that institution.

Case II. Thomas Russon, aged 13, was brought to the hospital by the police, in the middle of the night; he had been found in a coffee-house, speechless. I afterwards learnt that he had suffered from an epileptic fit two years before, that he remained unconscious for four days after that fit, and was unable to walk or to speak. He then recovered perfectly, and had no return of his malady. The circumstances attending the second attack were never known.

I found him upon a chair, with his eyes open, but his countenance void of expression, and quite motionless. He had walked to the hospital between two policemen, and walked up to bed, supported in the same manner, though his legs seemed scarce able to support his weight, and his feet were hardly raised from the ground; but so long as he remained in the surgery, he did not make the slightest change in his posture. His pupils were somewhat dilated and undulated when a candle was held near the eye; his conjunctiva was rather injected. The functions of circulation and of respiration were performed naturally.

No stimulating had the slightest power to rouse him, nor were we able to elicit the slightest proof of sensibility, though he winked his eyes naturally, occasionally moved the globes from side to side, and opened and closed his jaws at regular intervals.

On the next morning, he was rolling about in bed, and occasionally moved his arms as if fighting; the sole evidence of consciousness was afforded by his turning his head towards the speaker, and opening his eyes with an unmeaning stare, except that he winked when his eye was touched, but not when an object was held before it. He had not uttered a

sound. His bladder was distended, and required the use of a catheter; and in the evening, a stool was passed involuntarily. His urine was natural in its character. He assumed for the night a comfortable position, with his hands under his head, and occasionally aimed a blow with considerable force.

On the second morning, a catheter was again needed. The same complete insensibility to impressions on his skin was manifested, though he made wry faces at a senna draught, and tried to spit it out. He winked when his conjunctiva was touched, but seemed insensible to the heat of a candle, and to other tortures. He endured strong ammonia beneath his nose for some time; then turned aside his head, and his left eye watered. Various expedients to test the reality of his symptoms entirely failed in affording any justification for doubt. When placed on his feet, the body and limbs became stiff; he made automatic movements of his jaws and tongue, as though he were chewing; occasionally his eyes became fixed, his head was raised, and his jaws were snapped; or he struck wildly about him. His pupils remained as at his admission. In the night, he passed urine and stools involuntarily.

On the following morning, the patient unexpectedly made signs that he wished to write; and, having been provided with materials, he proceeded to give an account of himself, told us that he was subject to fits, and inquired where he was. He appeared to write mechanically, for his gaze was perfectly inexpressive; and, when a book was placed between his eyes and the paper, writing went on precisely as before. It is added to the report, that he neither saw nor heard, and trusted entirely to touch; the evidence is not given, but it satisfied Dr. Todd. He begged for food in writing, snapped at it, and devoured it most voraciously; but he also ate and swallowed paper in the same manner, when substituted for the meat. Nevertheless, he gave evidence of greater sensitiveness to tactile impressions, struggling violently when flipped with a towel, and striking aimlessly about him. When, at his own desire, he was placed on his feet, he tried to advance his legs but fell heavily on the bed.

In the evening of the same day, he had recovered vision; and in the following morning was found reading, making frequent reference to another book connected with the one he was perusing. He kept up an active conversation by means of a slate, and related the particulars of his former attack, informing us that on that occasion also he lost his voice. He was visited by his father for the first time since his admission, but he showed little emotion; nor did he appear much affected by his condition, excepting on one occasion, when he burst into tears at being asked if he could speak. He had recovered fully the power of walking; he was, however, childish in his manner, laughing, and looking at everything, apparently with great surprise, and his memory appeared defective.

He was discharged on the seventeenth day, not having spoken a single word when awake, though he had been heard repeatedly to talk in his sleep. No artifice succeeded in obtaining a single sound. "He was desired to roar, to squeal, to make any noise he liked: he merely opened his mouth, expired rapidly and forcibly, and shook his head." He seemed to have forgotten the mechanism of speaking, and not to know how to set the vocal apparatus in action. He was also perfectly deaf. Various plans were tried to ascertain if any portion of the sense of hearing were present, but with an entirely negative result: he did not even *feel* when one roared in his ear.

It was reported afterwards that the patient recovered the power of hearing during a Mesmeric *séance*, and, in three-quarters of an hour after, speech also. Some time subsequently, I was told that he had died in a fit.

In speculating on the cause of the remarkable symptoms present in the foregoing cases, we are led, both by analogy and by the nature of the attack which introduced the disorder, to refer to the cerebral disorders which present themselves in the course of epileptic disease. Here impairment of function is more liable to occur than perversion. Memory is the function most frequently affected in the course of epilepsy, though the result of my own experience quite agrees with Dr. Reynolds's opinion, that if we exclude epileptic cases associated with organic disease, and also those which deviate in some marked manner from the ordinary type, serious loss of memory occurs in a minority only of cases of epilepsy. In explaining the suspension of cerebral function which I have been describing, we cannot help referring to the complete and instantaneous annihilation of consciousness which forms so striking a feature in the epileptic fit, and to the cause on which this phenomenon is supposed to depend; namely, the spasmodic contraction of the minute arteries. Dr. Jackson has suggested the probability of there being definite arterial regions in the brain which may be separately affected in a fit of epilepsy. The cases I have now quoted point also to what is a very probable sequence of Dr. Jackson's hypothesis—definite functional regions, associated with the particular arterial divisions.*

But some more permanent change in the nutrition of the ganglion groups involved in the disorder, beyond the passing condition connected with the epileptic paroxysm, is necessary fully to explain all the phenomena in these cases; such a change doubtless arose out of the spasmodic contraction of the cerebral vessels incident to the fit. Dr. Brown-Séquard, indeed, seems to contemplate the possibility of very protracted spasm of the blood-vessels under certain irritations;† but even should we admit such an explanation in the two principal cases I have narrated, it could hardly apply to the one with which I commenced this paper, in which the nutritive change was permanent.

It is, however, open to doubt, whether the will may not have been in part in fault in the last case, at least in the later stage, since the patient recovered speech in sleep, and plainly preserved his memory intact, whilst no paralysis was present to prevent articulation. It is also to be noticed, in re-

* The following description of an epileptiform attack, given me by one of my hospital patients, has a direct bearing on the suggestion of Dr. Jackson. It would even seem in this case as though the spasm affected single arterial branches of the smallest order, distributed to particular ganglion groups, passing in succession from one branch to another. The fit here described was the only one from which the patient suffered, but it had recurred with some frequency for many years.

He is "seized with the wind" very badly; then dimness comes in his left eye, and on closing it, the dimness passes to the other eye. As the dimness of vision ceases, the patient feels numbness in the little and ring finger of the right hand; the numbness then leaves these fingers, passing up the arm to the lips, which feel as though a string were tied round them, drawing them together. Then the numbness leaves the lips, and affects the end of the tongue. From the tongue, the sensation proceeds to the left temple, extending thence to the back of the head. During the time the fit is upon him, he does not lose consciousness, but cannot speak; it leaves him drowsy, and unable to walk steadily.

† "The blood-vessels, like muscles of animal life, may have spasms, as well as they may be paralysed..... A section of a lateral half of the spinal cord near the medulla oblongata produces this curious effect; on the side injured, the blood-vessels of the extremities are paralysed; while on the opposite side they are spasmodically contracted. Very often the spasm persists for days, and after temporary relaxations it usually reappears for many hours..... If we have time, we will try to show, in another lecture, that this spasm of blood-vessels is the cause of the coldness of the feet and hands in epileptics and certain paralytics." (*Lancet*, 1858, vol. ii, 443.)

ference to a previous question, that in the first case, with speechlessness, there was paralysis of the *left* leg; but, on the other hand, there was no proof that the loss of speech depended on defect of memory. In the case which I described at the commencement of this paper, with impaired speech from defective memory, paralysis was present on the *right* side.

Introductory Lectures.

ST. THOMAS'S HOSPITAL.

Dr. Clapton, Dean of the School, delivered the Introductory Address, on October 1st.

After a few remarks, the lecturer paid a high tribute to the memory of Mr. Joseph Henry Green, the late consulting-surgeon to the hospital. He then addressed himself especially to those gentlemen who were about to commence their hospital career, and gave them much good advice and exhortation. He did not disguise from them that they had before them many a laborious and tedious day, many a night half spent in study, and many an anxious hour before presenting themselves for their examinations; and, at the same time, he impressed upon them the necessity of avoiding that undue ambition and immoderate ardour in their studies which too often lead students to neglect and injure their own bodily health. He recommended them to take advantage of the opportunities afforded them of obtaining healthy recreations and manly amusements in the intervals of their studies, as well as agreeably recruiting their minds by various scientific and literary pursuits, as conducing, both to a healthy state of body, and to that vigorous exercise of the mental faculties for which there is such a heavy and continuous demand in every medical man.

The lecturer then entered into details relative to the duties of first-year's students; recommending them in what way they should pursue their studies, and make the most of the great advantages and opportunities which the hospital offered them. The subjects of the first winter's course of lectures were more particularly alluded to; viz., Anatomy, Physiology, and Chemistry. He urged them, even from the first, to pay earnest attention to the bedside and the practical part of their profession; for that it is only by properly combining principles with practice that one can ever hope to become a scientific and successful practitioner. The students were then exhorted to work together as much as possible; and, at the same time, were warned against forming friendships with the vicious and idle. Nothing was more gratifying than the immense improvement in the character and *morale* of medical students of late years—a circumstance which was, in some degree, attributed to the gradual alterations in medical education.

The lecturer then spoke to them of their future path in life. After alluding to the many anxieties, responsibilities, and uncertainties, connected with private practice, he turned to the brighter side, and explained the many circumstances which made it one of the most interesting and intellectual, as well as the most noble and useful, of professions.

In respect of the public services, Dr. Clapton made particular reference to the present deplorable state of the Army Medical Department. He said: It is most unfortunate, to say the least, that the terms of service are so unsatisfactory, that good men will not accept them; and the authorities are at their wits'-end to devise some means by which they may secure indifferent men. There must be something radically wrong, when the army, in time of peace, urgently needs medical officers, and cannot obtain them. There are plenty of medical men, and good men too, who would be willing and glad to enter the service, if only the terms of inducement were such as gentlemen could accede to. I have taken some pains to learn, by personal inquiries amongst present and past army surgeons, as to what the grievances really are. It seems to me, that the fundamental evil is that the Medical Department is, as it were, between two enemies. Each is willing to grant what the other refuses to give. The Horse Guards have no objection to the department being better paid; but is most jealous of granting any increased rank. The Treasury would be willing to see every doctor with the rank of general, provided he got no increase of pay; and so the poor doctor falls to the ground. The Horse Guards especially have shamefully treated the department, and will no doubt continue to do so, if by such means as they are now attempting, they can induce any sort of candidates to fill the large number of vacant appointments. If they attract only second-rate men, let them, at all events, not complain if these do not turn out first-rate. They offer no inducements or advantages to the good and able ones; and now, failing such, they are trying to secure the idle and unsuccessful;—men who are what is called in the army "her Majesty's hard bargains", who draw the same pay as the really good men, enjoy the same privileges, and from their known incapacity are never given any harassing work, and in consequence get more leave. Among the older surgeons in the army, a great grievance is that they can never feel settled anywhere, and are never consulted as to where they would like to be ordered. As a recent instance, an Inspector-General of Hospitals, a very able man, with a large family, had scarcely been settled at Aldershot six months, when he was ordered off suddenly to Malta. He could not afford to be on half-pay; and, though feeling acutely his hard lot, after nearly forty years' service, he went, and almost immediately died of fever. His widow is now grateful for the gift of £5 from a charitable society. It is certainly a great drawback to the Medical Department, that there is so little occupation found for surgeons wishing to retire from foreign service, but very willing to do any fixed work at home. The other departments of the army have an immense number of appointments to retire to; such as those of militia adjutants, recruiting officers, volunteer instructors, governors of prisons, superintendents of police, and so on; but there are no similar appointments for surgeons; so that many of the older men, who would retire if they had anything to fall back upon, stay on, and so stop the promotion of their juniors. It would really be good economy for Government to make a number of civil appointments for half-pay medical officers; such as those of inspectors of prisons, of vaccination, and the like, who should be bound to go abroad, if needed, in the time of war, but should not be liable to be moved for any other cause. Then, again, a glaring grievance in the Army Medical Department is, the almost total denial of leave of absence. The medical officers should get at least one month in the year; other officers get nearly three. A former student of this hospital, a most able and accomplished man, Mr. Edward Wrench, who served with great distinction throughout the Crimean War and the Indian Mutiny, informs me that, during the eight years he was in the army, he only got two months leave of absence, except when he actually paid a civil surgeon to do his work. All these just causes of complaint are bad enough, but worse remains behind. It is that of a positive breach of faith on the part of the authorities in reference to the Warrant of 1858, upon the points of seniority,

precedence, choice of quarters, presidency of boards of inquiry, allowances in the way of forage, etc. The fact is that, when the warrant was issued, all these concessions were very enticing, and worked very nicely on paper; but when they came into operation they were found not to work evenly, and, in short, were virtually cancelled by what amounted to nothing more nor less than breach of faith on the part of the Horse Guards. And now look at the recent device of making acting assistant-surgeons—now, in profound peace! The authorities choke off promising men from the service by their previous want of faith, and then, to improve matters, have recourse to this expedient, at the expense of all (especially the junior officers) already in the service, condemning them, of course, to foreign service. In the present attitude of the rising generation of medical men, it is impossible but that these things must be set right before long, and the just expectations of the medical profession satisfied; for, if not, it will assuredly be found that no well educated gentlemen will be induced to enter the army. It cannot be right that they should have to submit to all its dangers and discipline, with but very few of its honours, and with so many just grievances. Happily, not even the worst enemy of the medical profession can say that its members are not patriotic, as well as brave and enduring. As a class, I will venture to say, none are more so. If one seeks a monument of those who fell in the Russian war, he will find it in that Gothic Cross now being erected at Netley, and recently inaugurated by the Prince of Wales. There he will view a tablet dedicated to the memory of no less than fifty-four medical officers who, in their noble mission, heroically sacrificed their lives. Amongst them are two past house-surgeons of this hospital; and they also include such men as Thompson, who, after the battle of the Alma, worn out by fatigue, paid with his life the penalty of heroic devotion to the performance of his duty; and O'Leary, who, before Sebastopol, was cut in two by a cannon-ball. It would be as well here to warn the authorities that they must not reckon too much, as they profess to do, on the medical profession being overstocked; and that, if a war were unhappily to break out, they will again be able to secure the services of two or three hundred volunteer surgeons; for it must be borne in mind that, whereas the number of medical men under forty was 11,105 in 1851, in 1861 there were only 9,910; and this notwithstanding the great general increase of population.

Referring again to the proof of the manner in which a medical man will conduct himself in the midst of danger and slaughter, perhaps no better instance can be found than the recent one of poor young Llewellyn of the *Alabama*, who, rather than leave to their fate the wounded and shattered men under his charge, and escape, as he might have done, chose to tend them to the last, and to sink with them. Again, only last year, one of our own students, Mr. Chaffers, actuated by laudable motives, proceeded to the Southern States of America; and this is what we read of him in a recent impression of the *Memphis Daily Appeal*: "We have heard frequent mention of this young surgeon, who will carry back to England a scar in the face made by a Federal sabre at Shelbyville; and many are the gratefully eloquent eulogiums upon his skill from those whom the fortunes of war submitted to his knife. He is now acting chief surgeon of Hume's Cavalry Division. Since his assignment to duty, he has devoted himself to its discharge with an assiduity and untiring faithfulness which reflect the highest credit on him as a man, and with a skill which does honour to the ancient foundation which gave him his degree." The last instances which I shall mention are to be found in last week's *Gazette*. Her Majesty has been graciously pleased to confer the Victoria Cross, in recognition of acts of distinguished bravery in the field, upon two medical officers—Assistant-Serjeant Temple, and Assistant-Surgeon Manley—the latter, I am proud to say, a St. Thomas's student of my own year, and well known to many now present.

The subject of the future site of St. Thomas's Hospital was then commented upon; and a warm eulogium was passed on Mr. Baggallay, the ex-treasurer, followed by congratulations to his successor, Mr. Hicks, and cordial wishes that he might long live to watch over and advance the future destiny of the institution. Alluding to the removal of the hospital, Dr. Clapton said that it had been but a question of time. Many obvious circumstances, besides railway encroachments, had long pointed to this necessity. Even as long ago as 1832, the question of the removal was under consideration. The physicians and surgeons at that time addressed a circular letter to the governors, and earnestly requested their attention as to whether the hospital might not be rendered more extensively and efficiently useful by its removal to a more eligible situation than that which it then occupied; and ever since the same thing had been agitated in some way or other.

In conclusion, he begged the students to strive to emulate the earnest zeal, the high attainments, the noble qualities, of the many great and good men whose names and fame are associated with their *Alma Mater*.

WESTMINSTER HOSPITAL.

The Introductory Lecture was delivered by Dr. Basham. Referring to the circumstance that it was twelve years since he gave the introductory address of 1852, he remarked that such an interval, insignificant as it was in the history and progress of science, was, in the life of an individual, an integral part of his career, filled, possibly, with momentous consequences to his social or domestic happiness, or perhaps charged with the elements of his professional success or failure. Nevertheless, infinitesimal as such an interval might be in the history of science, the circumstances or discoveries of the time might mark it as an epoch of distinction and celebrity. The student of history could recall such periods, when, either from the splendour or magnitude of the discoveries made, or by the successful application of principles to the requirements of every day life, a characteristic stamp was left on that page, and it remained pre-eminent in the influence it exercised over succeeding generations. He thought it would be an interesting task to glance over the interval between 1852 and 1864, to determine by what scientific feature it had been distinguished. Such a retrospect would afford abundant evidence of the untiring, ever-productive energy of the human mind, and the rapid development of agencies and means tending to the increase of human comfort, health, and enjoyment. After describing some of the more prominent discoveries in physical and chemical science, particularly the method of the spectrum analysis and the valuable results already obtained by it, furnishing, as it has done, an explanation of the efficacy of the Bath waters in gout, by demonstrating the presence of lithium in those waters—a metal they were hitherto not known to possess—and mentioning one or two interesting facts in physical science brought to light in this interval, Dr. Basham remarked, that it became very evident that in every department of science, in every branch of engineering and mechanical skill, the same activity,

the same progress, the same untiring, inexhaustible energy, were displayed. The full exposition of such a subject was far beyond the limits of a lecture; but he alluded to them for the sake of comparison—for the sake of asking whether, in this short interval, the medical mind had been equally progressive; whether the same activity of thought, the same independent methods of inquiry, had prevailed in our pursuits, which had so eminently distinguished all the collateral sciences. He would endeavour to determine whether there had been a similar activity—whether, even in a subordinate degree, medical and surgical science had contributed, not to the wealth, but to the amelioration of disease, and consequently to the comfort, health, and duration of human life.

He thought that those comprehensive schemes applied to the sanitary condition of towns, and particularly of this metropolis, had their origin in medical suggestions. But he would turn from this Branch of the subject, to attempt an estimate of the state of professional opinion on several fundamental points, which might afford a key to the state of medical progress at the present time.

The gradual decay of old theories, the development of doctrines in relation to the pathology of inflammation and disease in general, might be traced to a firmer reliance on fact and observation, originating, doubtlessly, in the marked change from dogmatic to practical teaching which had for some years characterised our schools. At the period when he last stood there, opinion in reference to the theory of inflammation was already beginning to change; and the marked alteration in the principles of treatment, which was now so general, was then only beginning to be manifest. To what influence could this salutary change be traced? It arose from the development, it might almost be said simultaneously, in many minds, of the fruits of more extensive observation. Minute researches, with improved instruments, had led to a more correct knowledge of the structural elements and functions of the tissues. It was, therefore, to a more enlightened physiology—to a clearer appreciation of the circumstances which regulate development, nutrition, and secretion—that the great changes in certain fundamental pathological doctrines might be traced. Paying a just tribute to the labours and opinions of the great John Hunter, admitting that his facts were indisputable, for he was a faithful recorder of what he saw, we had, nevertheless, been compelled to differ from the conclusions he had formed regarding the nature or essence of inflammatory action. The Hunterian doctrine was, that inflammation represented an increased activity of the power which a part naturally possessed. This idea of an increased activity of the vital energies of an inflamed part was derived from what was supposed to be the increased activity of the capillaries, as seen in the augmented redness and heat. It was on this point that the modern pathologist joined issue with the followers of the great master of English surgery. Improved instruments of observation, and their application to the state of the minute vessels in inflammation, had led to the conviction that the redness, congestion, hyperæmia, by whatever term expressed, was brought about by a want of power—a paralysis in the minute vessels; that the accumulation of blood was due to a passive dilatation, a diminished power to transmit the blood forward; and stagnation of the current followed. The phenomena of inflammation, wherever located, represented defective nutritive conditions; the relation of supply and waste was lost, or, at any rate, disturbed. Inflammation, therefore, as we now view it, was a process of exhaustion; for, if it were as the Hunterian school considered it, evidence of the increased activity of the power which a part naturally possessed, then nutrition, nerve-supply, vigour of circulation, activity of secretion, exaltation of function, should severally be augmented. But, on the contrary, they were observed, either separately or collectively, to be depressed, defective, or deranged. Reference was then made to the researches of Professor Virchow, and the influence which the cellular pathology was exercising over the pathology of our time. The principles of treatment, the therapeutics of the day, had necessarily followed the more rational views of the nature of diseased action; and the great revolution which the last few years had witnessed in the management and treatment of inflammatory disorders and fevers was traced to a similar cause. Improved methods of research, pursued independent of previously formed opinion, a firm reliance on fact and observation, had led to this wholesome revolution of opinion; and he was, therefore, led to the conviction that a similar activity of thought, the same restless spirit of inquiry, the same devotion to patient observation, which had so eminently distinguished the collateral sciences, was also found active, energetic, and productive, in medicine and surgery. To prove this proposition more clearly, it would be necessary to call in evidence the works and labours of those who during the last ten or twelve years had won some victory over error, or had contributed to the progress of medical and surgical science. There was not a hospital or medical school in this metropolis, from among the physicians, surgeons, and lecturers of which one or more could not be selected who had contributed to the progress of medical and surgical science. The limits of an introductory lecture would not permit him to enumerate their labours. At the same time, he was not unmindful of the labours of others unconnected with medical teaching, who had also successfully cultivated observation, and lent their aid to the general progress.

There were two works—the one surgical, the other medical—which he thought might be selected as criteria of the tendency to original observation, and an entire freedom from all speculation or theory—redolent with fact, and instructive, fair examples of the present aspect of medical and surgical science. The first was Mr. Hilton's *Influence of Mechanical and Physiological Rest in the Treatment of some Surgical Diseases*. It was a work full of interest and instruction; and the deductions on the therapeutical influence of rest, drawn as they were from fact and example, entirely free from theory or dogma, entitled the author to the most honourable place among the surgeons of our time. Dr. Anstie's work on *Stimulus and Stimulants* was equally characteristic of that originality of observation which was rapidly gaining victory over error, supplanting the vague and unsatisfactory doctrines of the past, and promising a more rational explanation of the *modus operandi* of medicinal and other agencies.

The limits of a lecture would scarcely permit him to do more than name the most distinguished authors of the last ten years who had ministered to the advancement of medical science. The influence of the labours of many of them would be felt and appreciated in the improved treatment of both medical and surgical diseases; and to them might be traced our more rational and less theoretical conception of the nature and consequences of disease.

In conclusion, he desired to addressed a few words more particularly to those gentlemen who were studying, or were about to commence their studies, at this hospital. He had particularly dwelt that evening on the marked change which the last twelve years had effected in theoretical medicine. He had mentioned the agencies by which that had been accom-

plished, and he had cited the writings and labours of those who had most ministered to its progress. They, like the young gentlemen before him, were once students. They had used their time usefully and practically: they observed, they thought, they inquired for themselves. The youngest there might do the same; and they, in their generation, by cultivating similar habits, might become instrumental in still further securing and strengthening the foundations of medicine and surgery in fact and observation.

Dr. Basham, in conclusion, observed upon the importance and influence of the preliminary education of the student. The elements of a good classical education were paramount and indispensable; but he considered an elementary knowledge of physical science equally so. The great Bacon had, with his characteristic force, said that, if medicine be destitute and forsaken of natural philosophy, it is not much better than an empirical practice. Some knowledge, therefore, of the powers and properties of matter, such as was obtained by an elementary knowledge of hydrostatics, pneumatics, mechanical force, electricity and galvanism, theory of heat, was most essential. Thus prepared, the student commenced his studies of anatomy and physiology with the greatest advantage; and his progress would be proportioned to the amount of this necessary groundwork. Glancing hastily through the branches of special study which he would be required to follow, he was urged to habits of industry and observation—habits which, once formed, would never forsake him, and be most valuable to him when the time arrived for the exercise of his professional acquirements; and though, from the demands on his time, he might never be able to give publicity to the results of his experience, he would be scarcely less instrumental than those who had been named to-night, who had contributed to the advancement of medical science, and thus fulfilled their useful mission—the mitigation and relief of the diseases and sufferings of the generation in which they lived.

At the conclusion of the lecture, the visitors and students assembled in the board-room, where many articles of scientific interest were exhibited. Refreshments were served in the corridor.

MANCHESTER ROYAL SCHOOL OF MEDICINE.

The Introductory Address was delivered by Mr. Stone. He said that the life of a medical man was an arduous one. It was the depository of large trusts, and peculiar responsibilities hedged round the whole course of his career. The student did wisely who surveyed the sphere of his future labours in the sunlight which its worthies had shed around it. Certainly, no walk of life had been more abundant in disinterested labours. Its benevolence to the poor was witnessed in private practice, no less than through the hospital. It shrank from no danger; but carried its life in his hand as it combated with contagious diseases. It mingled with the ruck after battle, but not to leave the wounded and dying. Before the dust of the fatal mine which was lately sprung at Petersburg fell again to the ruptured earth, the army-surgeons began their labours; and while the Netley monument is rising to the honour of the surgeons who fell in the war of the Crimea, the students of Charing Cross Hospital are committing to a granite tablet the name of the brave Llewellyn of *Alabama* story. Benevolence, heroism, duty, formed the tricolour of the medical profession; and through every year noble deeds succeeded to noble inspirations.

> "And so it runs, in our fair island story,
> The path of duty is the path of glory."

Mr. Stone then commented on the study of anatomy, as the sure foundation of medical learning; and on the value of physiology, as the vestibule to the temple of medicine. Men out of the pale of the profession were drawn to physiology; and able writings attested that the secular intellect could find fascination in the subject, and, from a lay standpoint, could offer solutions which were admitted to have their weight in helping to the elucidation of the laws concerned in vital phenomena. The mine was worked from many shafts.

Mr. Stone then dwelt on the influence the microscope had had, and to the other facilities for study. Graham, the Master of the Mint, had put in circulation a mode of investigation and analysis which had the genuine ring of a prime discovery. Dialysis was of infinite assistance in commercial analysis; and no less than in solving questions connected with complex organised compounds. The per centage composition of animal or vegetable structures shed but little light on the mysterious interchanges which life in the plant and animal carries profoundly on; and to this revelation, Graham's most recent experiments pointed the way.

Mr. Stone then urged on the students the value of chemistry in its relations to medicine, pointing out how chemistry and medicine were intimately woven, and what valuable results had sprung from the labours of their illustrious townsman, John Dalton, who, sixty years ago, lifted up chemistry to the dignity of a true science.

The literature of modern medicine could not be understood unless the reader knew chemistry. "It walks your hospital, and modestly contributes to your clinical facts. In the operating theatre, it hands you the phial of chloroform; and while, for the patient, it assuages the terrors of the knife, it permits surgery to draw very near the citadel of life. In her gifts are healing medicines; and there is a belief amongst chemists that, as she has eliminated new dyes of magic beauty from coal products, so will she, in the plenitude of her power, evolve more active forms of drugs than the world has yet seen."

Mr. Stone briefly hinted at the remarkable labours of Dr. Frankland; and then commented on the new *Pharmacopœia*, hoping that in the next edition the *centigrade* system of valuing drugs might be more boldly put forth than in the appendix.

After a passing notice of botany and other subjects of study, Mr. Stone advised the students to cultivate the amenities of life, and thus prepare for their exercise when in practice. The element of character was no less essential than acuteness and perception; and there was a moral as well as mental advancement to be sought after. Books and reading were next commented on; and the student was warned to resist the temptation to lessen his devotion to the pen in note-taking.

Mr. Stone then explained that their prizes and certificates of honour were for general proficiency in medical learning as a whole, and not rewards for merit in any one department, which a student might display merely because he had a taste and special fitness. The lecturer feared that elsewhere there was a disposition to call out an intellectual or theoretical study in students, rather than to lead them to prepare for the positive duties of medical practice. The examinations of the public boards were, to his view, drifting from the practical to the theoretical; and, perhaps, the London University exemplified this more than the Hall or College. If this were pushed

too far, a student would be led to consider the examinations the "be all and end all" of his pupilage; and the obtaining of a "diploma" would become a second edition of the "preliminary examination", when books and severe cram would win the day.

Mr. Stone then proceeded to comment on the fashionable deliraments of the day, and the empiricism which blackened the weekly paper of little towns with unblushing effrontery, and under more select phrases got admission into other papers and journals. Faraday had rebuked the age for its belief in spirit-rapping; and exposure and ridicule had been tried on the race of quacks; but the mountebank was still in the ascendant.

Mr. Stone urged that physiology should be taught educationally to the masses of the people. Might it not be that professional reticence had ignored the rights of the public to be instructed in the laws of health? There was a strong desire to know the why and wherefore when disease shut a man in his chamber; and troublesome questions were sure to be put by an irritable patient who had had no previous education to admonish him "to suffer and be still." Mr. Stone was of opinion that many patients grew disloyal to legitimate medicine, from sheer ignorance of the simplest facts in the laws of life and disease; and when advertised specifics came before them, promising a speedy cure, how many left the lines, and reported themselves to the chiefs of the rebel army of quacks. "Poverty of ideas on the laws of health" (continued Mr. Stone) "leads to a misguided trust in advertised specifics; and I hold the belief that, if medical men would bring the lamp of knowledge into the outer darkness, the evil spirits which torment the life of credulity would pass away."

Mr. Stone then reminded his audience of the sacred relations which a conscientious medical man had in the house of mourning; and the needful preparation to meet those exigencies where the man more than the physician is wanted to soothe the dying and comfort the bereaved.

Mr. Stone wound up his address with pointing out the long standing of this provincial school; and a hearty wish that its founder (Mr. Turner) might live to see the coming jubilee of their institution.

ST. BARTHOLOMEW'S HOSPITAL.

After some introductory remarks, Mr. Callendar stated that his object was to place before the students their work side by side with suggestions for its pursuit, and with sureties for their ultimate success. Especially he desired to tell them of certain aids to study, which they must practice, each one for himself, because they were self-aids. As all our knowledge and all our progress had been gained direct from Nature herself, and as she revealed her secrets only in return for real hard work, so their success with her would be much less if they were not trained in youth to their task. This mind training was considered of such firstrate importance, that every encouragement had been given them to make its cultivation an attractive task. Their real work now commenced in earnest; they now entered upon the studies which revealed to them medicine as a grand and noble science. They might not indeed all excel, but they would all learn a great deal; and he could promise them that, if they worked now with industry and with determination, they would not fail to attain to that which all naturally covet, modest it may be, but substantial and honest success.

After a reference to the importance of scientific studies, those sciences with which the profession of medicine were more immediately concerned, and after referring to the importance of the study of anatomy, physiology, and of pathological anatomy, Mr. Callendar told the students that, after all, their chief difficulty lay in learning how to treat disease. Here they must bring to bear what was known as practical knowledge, the wisdom which experience gave, that experience of which Carlyle wrote, "She doth take dreadful high wages, but she teacheth like none other." Nor was it difficult to explain to them what was meant by this practical knowledge. A physician, for example, might know all about his subject, man—his diseases, their causes, their effects, and their recognised treatment, but above all this was the facile and dexterous handling of his knowledge and of his remedies, so as to fence and parry, and, if possible, get the better of disease; and, be it how it may, this was a possession few had excellently well, and which, despite all its training, the scientific mind sometimes failed to grasp. At the same time, the value of scientific knowledge was great. They lived, it was said, in a practical age. By all means let them be practical, but let them none the less possess the scientific knowledge which fitted them to be so. Practice alone could give them experience in treatment. Books could not do more than teach general principles; for man's body was so moulded and conformed to the mind which controlled it, that influences of education, habits, associations (the accompaniments of health), gave rise to endless variations in the progress of, and, consequently, in the management of disease, which no book yet written could even pretend to indicate. They should learn to recognise means of cure other than those tabulated in the *Pharmacopœia*. Fresh air, diet, cleanliness, mind-occupations, and the like—these were the remedies with which to assist nature in throwing off disease; they should never forget that nature effected, if possible, the cure; and that the physician was best skilled who, by judicious selections from his materia medica, so lightened her task as to relieve the passing pain, who supported, and, if needs be, stimulated her efforts, or who transferred the stress of a disease to where it could be better borne by the system.

He advised the students to strengthen themselves for work with materials which were always ready to their hands. They should practise control and discipline. The self-discipline of the mind was a voluntary restraint—the discipline which resulted from willing nothing until it had been well thought over, and the order which must ensue as the outward sign of such methodical, business-like self-control. The intellect, too, must be tutored in obedience to moral control; for, although man might reason well and possess the will to carry his purposes into practice, yet he would systematically err if there was not over all this higher influence, the absence of which the world was a sharp censor to detect. Subject to moral control, to be well drilled in self-discipline, they must habitually reflect and think over all matters which engaged their attention, and thus utilise another of their possessions—the power of concentrating thought. Nothing was more difficult to strengthen than was this faculty, none more to be regretted in its weakness. In the pursuit of discipline they acquired thoughtful habits, and by thus reflecting and meditating they ripened another of their possessions—memory, which required this exercise to enable them to put forth its fulness of power. We were much in the habit of speaking of memory as a gift specially to some, but in truth it belonged to all, and only needed calling upon to respond. Memory, however, was often found to be more subtle for one thing than for another. This was the case in most instances of remarkable calculators, in whose reckonings memory played so important a part; as it was too with Charmidas the Greek, of

whom Pliny wrote that he could repeat from memory the contents of the largest library; so, too, with great linguists, as the Cardinal Mezzofanti. They might be quite sure he was a bad workman who complained of his memory, and that by work and by degrees they would certainly remember better and better, and as their knowledge lived in their memory, so it would be ready for use and for application on every apposite occasion. The impressions would be most sharply and durably cut in the mind which made their marks through congenial tastes; and knowing this, he would not press routine too closely, but, whilst endeavouring to interest them in their studies, and to make their minds work with intensified vigour, he would leave them to apply themselves to the acquisition of knowledge through those channels in which they were best aided by their memory.

To practise control and discipline, to exercise thought and memory, required patience and perseverance. As perseverance, however, was a term of general significance, honest industry should rather be their watchword. They should set down in the very beginning their resolve to be faithful to it; for without it there was no hope of success or of future distinction. Originality, new thoughts, came only through patient work. Although it was a twice-told tale, he could not refrain from warning them against relying upon fortune. No such thing as luck or chance, as they should understand the term, virtually existed. It was confused with the clear sight which seized the right moment for action. The battle of Marengo was won by a charge of the French cuirassiers, and the world said, "by what a lucky chance"; but General Kellerman described his exploit, "I see it—I am in the midst of them!" To avail themselves of so-called fortune, they must be well trained through habits of industry and observation to be ready to make good use of opportunities.

Much as they might learn, their work knew neither halt nor stop; they must continue at all times and in all seasons in attentive observation upon nature, striving to get as near truth, or truth's likeness, as they could; they must bear in mind that, after all, the acquisition of knowledge was not the only or indeed the chief aim of their intellect, for knowledge and wisdom, far from being one, have ofttimes no connection. And wisdom was not to be mastered by work alone, like knowledge; it came only, assisted, it was true, by knowledge, as the growth of time. Wisdom was the sum total which resulted from the moral control, the self-discipline, and the industry of which they had been told. Yet he scarce expressed himself aright in naming wisdom to them as a sum total, for whatever share of wisdom they might possess, they must still pursue, restless for more. He considered that their work must increase with the advance of knowledge generally, and that more would be required of them if they were to maintain their position in advance. Let them remember, however, that perseverance was irresistible; before it their difficulties would imperceptibly disappear, and their work was sure to be crowned with the desired success, if only they would act up to the advice given by the Wisest of the wise—"Whatever thy hand findeth to do, do it with thy might."

Had they seriously thought about the work which, as physicians and surgeons, they would hereafter be responsible for? Was it to heal the sick? Was it to stand, not unfrequently—he said it with all humility—between life and death? It was more even than this. It was to do this better, more wisely, more surely than heretofore. This had been our work in the times gone by—we toiled for it now; and for this it was that men would look to them in the times to come.

THE LONDON HOSPITAL.

Dr. Langdon Down, Assistant-Physician to the hospital, delivered the Introductory Address. He remarked that they were that day inaugurating the Seventieth Session of the London Hospital College, and dwelt on the advantages which resulted from the connection of the hospital with a medical school.

Dr. Down referred briefly to the medical politics of the last ten years. He felt that the Medical Act, if carried out in good faith, would tend to raise the *status* of the profession; but lamented the conduct of some of the corporations, who were doing all they could to perpetuate mediocity. He congratulated the profession that the Royal College of Physicians had undertaken the examination of the general practitioner; and that the University of London had added Master in Surgery to the list of her brilliant degrees.

Dr. Down then referred to the discussions which had taken place of late years with reference to the Naval Medical Service, the Medical Treatment of the Poor, and the Army Medical Department. He thanked the London daily press for the able manner in which they had enlightened the public on the suicidal policy which is being practised, in reference to the medical service of the army, whether in India or that of Her Majesty. He felt sure that, under the present arrangements, the accomplished medical student would dismiss from his consideration a department in which the glory of killing eclipses entirely the honour of healing; that the best men would seek for success in civil life, rather than tolerate official insincerity or compromise their self-respect.

Dr. Down then dwelt on the enlargement of the hospital, which was then progressing, and of the advantages which would follow to the medical school. The unparalleled subscriptions which had poured in were accounted for by the peculiar claims of the locality, the deserved repute of his colleagues, the popularity of the hospital, and the perfection of its civil management.

He then addressed himself to those who were returning to their studies, and encouraged them to come with earnest hearts to the renewal of the struggle. If in past times they had allowed precious opportunities to pass unregarded, let the future be the compensation of the past. If zealous had hitherto been their work, and increased tension not possible, their season of rest had been a joyous one, because it had been nobly earned. They had realised the vantage ground of effort; let not their past success be marred.

He then directed his observations to those who were commencing their academical course that day. In their choice of a profession, had they thoroughly considered the requirements it demands, and the sacrifice it claims? Had they, by a process of introspection, well satisfied themselves that they came with holy purpose and high resolve to be true to themselves and to their race in the exercise of a vocation, to which, if they did not bring a loving heart and a vigorous mind, it were better that they came not at all? They were embracing a profession which does not hold out the prospect of unlimited wealth, or of political renown. The coronet was not a prize, nor the marshal's baton a possibility for them; the mitre was not the termination of their career. Yet he congratulated them on their decision. They might readily insure a competency without the risks of mercantile life. Their capital would be knowledge, which no bankruptcy could take away. Their arena would be the chamber of sickness; and their eloquence would be called upon to stay the torrent of human sorrow and mingle in the cadences of human joy.

Their clients would rarely present a case in which their honour would be sacrificed in advancing to the rescue. Their battle-fields would be mighty and varied ones. They would need all the sagacity which intrepid exploits require—all the fortitude which daring deeds demand. They would have to stand in the breach unruffled when all around was turmoil, to keep serene their judgment amid scenes of agonising pain and the wanderings of alienated mind. They were embracing a faith which was catholic—a creed which was wide as humanity. They would not be bound down to musty formularies or worn-out dogmas. Progress and truth seeking would be the articles of their belief and the stimuli of their lives. Their homilies would have to be addressed to the consciences and hearts of men of every variety of creed, and perhaps with no creed at all. Their work would be in the spirit of Him who went about doing good, and of His Heavenly Father who "sendeth rain upon the just as well as upon the unjust." The opportunity would ofttimes present itself of pointing a moral, and enforcing a religious truth; of shewing the rightness of virtue and the folly of vice; of teaching in a spirit not self-righteous, the "beauty of holiness" and the deformity of sin. Their counsel would be sought in the intricate difficulties of private life. Revelations would be made to them of the frailties as well as of the nobleness of humanity. They would ofttimes become the depository of secrets sacred as the whisperings of the confessional. It would be theirs to minister to a mind diseased, and dispel the mists from that bright mirror which ought to reflect the image of divinity. Such being their mission, what during their student period had they to do? How were they to do it?

Dr. Down insisted on the value of preliminary training, and expressed himself as of opinion that no youth destined for the medical profession should leave scholastic work until he had matriculated at the University of London. He dwelt on the importance of giving much time to anatomy and chemistry, and traced the mode in which these subjects ramified in the other departments of medical knowledge. Physiology was of essential importance to the right appreciation of disease. Histology, vegetable physiology, and comparative anatomy, had each important claims on their regard. The study of systematic botany and systematic zoology cultivated the faculty of observation which was so essential to a practitioner in their art. Materia medica and therapeutics should secure some share of their attention. The more thoroughly they made themselves acquainted with the subjects he had enumerated, the more successful would be their efforts in the attainment of what should be their great end—to become successful and cultivated practitioners in medicine and surgery. To be practical, should be the culminating point of their desire; but they should view with suspicion those who are ever throwing doubts on the man of culture, and who were pluming themselves as being practical men. They would find that, they were for the most part those who would soon dwindle down to the merest routiniers, ignoble workers in a noble calling. He urged them, on the basis he had indicated, to raise a fitting superstructure. The hospital they had selected presented a field for surgery which was perfectly unrivalled. The wards and waiting halls would afford them the means of becoming accomplished as physicians. Forensic medicine, and the diseases of women and children should share much of their attention. He combated the tendency in the present day to disregard oral teaching; and gave as the result of his observation, that the gentlemen who despised lectures were usually those who would never reflect credit on the school or profession to which they belonged. His advice was to read vigorously; but also to attend the dissecting-room, the demonstrations and lecture-room no less assiduously. Where the professors examine as well as lecture, the student should never lose the opportunity of being questioned. On the commencement of their studies, it was very important that they should have a well defined aim, and they should take care that they aimed high enough. There were numerous examining bodies, full too numerous in the lecturer's opinion; many of them, to their disgrace, had been trying to solve the problem: with how little of this world's knowledge a medical man might set up. Dr. Down advised the students to aim for the degrees of the University of London. They had the undisputed reputation of occupying the highest position in the United Kingdom. If they obtained them, they would have titles that would never cause them to shudder lest their source should be discovered; they were degrees which, on account of their veritable character, commended themselves to the public and the profession in a way which makes them most desirable objects of their ambition. Succeeding in these, any other qualification they might deem it desirable to obtain would be taken by them as mere by-play. Dr. Down emphatically insisted that however important were reading and lectures, they must be subsidiary to their work in hospital. The out-patients department would offer vast fields for diagnostic culture. The receiving room would supply abundant opportunity for acquiring manipulative skill and ready tact in grave emergencies, while the wards would demand a devotedness which would secure a rich return, and for which nothing could be substituted. But in their acquisition of knowledge, they should ever cultivate a regard for the feelings of the patients. Their walkings would be amongst the sickened and the sad. They would have to deal with sensitive spirits as well as injured bodies. Their education as medical men was to be valued inasmuch as it cultivated not one aspect only, but the entire man. It would, therefore, be sadly incomplete, if while storing their minds with knowledge, it failed in educing sympathy with suffering and tenderness to the troubled.

Dr. Down could not inform them of any royal road to medical knowledge. He knew only the steep but well trodden one of earnest and persistent work. Their mountain journey would be aided by guides at every pass, guides who had made successful ascents themselves, and who had not lost sympathy with new adventures, whose aims were high, but whose courage faltered. Their guides were conscious of dangers of which they would in all earnestness warn them; they recollect some whose ascent was not a success, others whose attempts ended in disappointment.

The lecturer thus concluded. "The guides remembered, however, other than doleful tales and miserable failures. They preserved fresh in their memories the names of some of the companions of their own first ascent; others who, before and since, had scaled the difficulties, and who were now far away from leading strings, making explorations where no human foot had been; who were ascending higher and yet higher with no assistance of chart, for their labour was in order to provide one; who are daily collecting facts and recording observations; who are permeating mankind with their thinkings; who are carving their names in enduring characters, and are spending, and being spent, for the glory of God and the good of man.

"Let these animate you. Let the student's life, which you commence to day, be a fitting prelude to your work beyond the stage of pupilage and to the higher life hereafter. Let it be characterised by all that is earnest, true, and noble. Let it be honest, despising all seeming in lieu of reality. Let it be gentle, blossoming with kindly acts and genial sympathies. Let it be generous, crediting to the full

the goodness of your fellows, and hesitating to sully their fair fame. Let it be brave, meeting trials with fortitude, and sharing the burthens of others. Let it be wise, redeeming the time, and adding knowledge with increase of days.

"I have already furnished you with the formula to aid you in the solution of your problem, the secret that will command success, the talismanic charm which turns everything into gold, the potent spell at which all difficulties vanish. It is earnest and persistent work.

"Let it be supplemented by a gentle, Christian life, terminated by a peaceful, hopeful death."

ST. MARY'S HOSPITAL.

The Introductory Address was delivered by Mr. Toynbee, F.R.S. The lecturer began by referring to the many subjects of interest which suggest themselves to the mind of the medical man as he reviews his professional experience, and which might serve as the theme of such a discourse as the present; but, he said, he passed them all by for one which to men engaged in the practical medical life must be of greater interest than any—the Philosophy, or, as he preferred to call it, the Significance of Disease. By this term he meant the end or object which diseases served in reference to the animal economy; and he should endeavour to maintain the position, that disease was in all cases not a destructive, but essentially a reparative process, illustrating his argument by cases drawn exclusively from his own—the aural—department of surgery. He combated the current views on this subject, which regarded disease as a process the tendency of which is to injure the frame; and, referring to the words of Hunter, set out the propositions, that every disease is preceded by some injury; that the disease is essentially a process tending to repair that injury; and that its object is to reinstate the normal condition. Even in cases in which its result is fatal, the tendency of the disease is to repair injury; though, owing to the circumstances present, it may take a form or affect an organ that renders it destructive to life. For the injury may be either local or general; and a local injury may bring about an attempt to remedy a general one, in a way that fatally involves a vital organ. Thus an injury to the meatus of the ear in a healthy man induces a disease—inflammation and suppuration—which repair the damage; but even a less injury to the same part in a person labouring under the poison of gout—a general injury—may bring on a more intense and wide-spread inflammation, which involves the brain, and issues in death. But this more extensive inflammation is equally an attempt to repair an injury—the general injury of gout. If the inflammation occur in a less vital organ, say the ball of the great toe, its character as relieving the system, as repairing its general injury, is recognised. Many more examples were given, with illustrations of the principles and mode of practice which this view of the nature and meaning of disease enjoined; and the lecturer concluded in the following words.

"I cannot but think that, if the view of the philosophy of disease indicated, barely indicated, to-day has a foundation in truth, it may, in some respects at least, be more acceptable to the human mind than is the view commonly entertained. To my own mind, at least, the thought is not acceptable, that God, having given to man life with its marvellous attributes, sends disease for the purpose of taking that life away. No! I cling rather to the belief that man, placed on this wonderful globe to battle with and live by its elements, finds it his destiny, as he struggles upwards in ignorance and in weakness, to encounter difficulty upon difficulty, to suffer injury after injury; that, although to endure injuries is thus the inevitable lot of man, still in disease is found at once a warning of the presence of an injury, and at least an effort towards a remedy. And because man, in the great battle of life, is oftentimes so deeply injured as to be beyond the possibility of a cure by either Nature or by Art, still let him not repine; for even sickness has its blessings and its hopes, and through its trials and its sorrows is held the sacred boon of life. So, too, when our spirits are cast down by a view of the sad amount of misery inseparable from disease, let us take heart from the conviction that even our limited ken must recognise beneficence in it; and, further, let us trust confidently that, as each succeeding generation of mankind learns better how to live, how to gain the good of life without encountering its injuries, so will disease become less necessary, and will diminish in the land."

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THE DEGENERATION AND REGENERATION OF NERVES.

M. Vulpian has lately discoursed on this very interesting subject in his lectures at the Museum of Natural History in Paris. The physiological property of motor and sensitive nervous fibres is the property of undergoing certain modifications under the influence of some agent. This property belongs to the nerve-fibre, independent of the nervous centres. "I am thoroughly convinced," says M. Vulpian, "that the origin of this property of the nerve is to be sought for in the nerve-fibre itself. Our classical works tell us that the nerves borrow their force or property from the nervous centres; but this is a complete error. If a motor nerve received its properties from the spinal marrow, it ought to lose them when cut; but it does nothing of the kind; for, when the peripheric end of the cut nerve is excited, the muscles contract; and, more than this, when its nerve-force has been exhausted by long and continued excitation, it recovers its force under repose. It is strange that this simple demonstration has not convinced every one.

In considering the phenomena attending the disappearance of the nerve-force, we have to observe—1. The duration of the excitability of the nerve after section; 2. The mechanism of its disappearance.

In 1838, Müller investigated the first of these questions—the duration of the excitability of the nerve; and he concluded that it disappeared after some weeks. In 1840, Gunther and Schön made similar observations; and in 1841, M. Longet obtained similar results. It was also noted, that when, after section, the nerve had lost its properties, the

muscle to which it was distributed still preserved its power of contractility—showing the independence of muscular irritability. Brown-Séquard and Martin Magron have seen muscular irritability last longer than two years in certain animals, although every trace of excitability had disappeared in the nerve which had been cut and passed into the muscles. Another proof of the fact that muscular contractility is independent of nervous excitability has been given by M. Bernard. He has demonstrated that, when the action of the motor nerves over the muscles is absolutely arrested, muscular irritability, contractility, may still exist.

The question as to how the nerve loses its properties is of the highest interest, and its answer will give us a key to some of the most interesting phenomena which have exercised the sagacity of physiologists.

The force or property of the nerve disappears as a consequence of alteration of the nerve-substance; but this alteration is not appreciable by our means of investigation until the nerve-force has completely disappeared. The changes of degeneration which go on in the cut nerve are influenced by different circumstances. Thus the changes go on more rapidly in a young than in an old animal. In the young, the complete change is effected in about two months; but in an old animal, not before six or seven months. The species of animal and season of the year also modify the result.

According to M. Waller, the change of structure of the nerve is due to interference with the nutrition of the nerve-fibres. The spinal marrow, in his view, is the centre of nutrition of the nerves—of the motor nerves, at least; so that, when the nerve is cut, its nutrition is disturbed, and change in structure results. M. Waller cut both the roots of a spinal nerve; and he found that change of structure did not occur in both of the so cut nerves. In the anterior root, he found the peripheric end alone degenerated; and in the posterior root, the central end. Hence he drew the conclusion, that the sensitive fibres have for their nutritive centre the ganglions of the posterior roots. This deduction is strengthened by the fact that, when the posterior root was ligatured beyond the ganglion, the outer end—the peripheric—was altered in structure.

On the same basis of facts, M. Schiff has made many interesting researches concerning recurrent sensibility. He cut the anterior root, and found, as Waller had done, that the peripheric nerve-fibres were changed, and that the central ones remained healthy. But he also found that some of the fibres in the peripheric cut end of the nerve remained sound; and that some in the central end were altered. And of these fibres, those which remained unchanged in the peripheric end, and those which were altered in the central end, were evidently fibres emanating from the posterior root. Hence the conclusion that recurrent sensibility is due to recurrent nervous fibres. How the grey substance can have a nutritive influence over the anterior root, and the ganglion over the posterior root, remains to be shown; but the fact appears certain.

In this way Waller has discovered an excellent means of studying the distribution of nerves by alteration of their fibres, and of recognising in a mixed nerve the fibres which are sensory, and those which are motor. To this method of observation Waller has given the name of "new anatomical method".

We may, indeed, expect great results from this "method" of observation. Thus, for example, we know the union of the spinal accessory with the pneumogastric nerve. Well, if we divide the roots of the spinal accessory, wherever we find in the divisions of the pneumogastric altered nerve-fibres, we may safely say that they are fibres of the spinal accessory. If, again, we wish to know whether the nervus petrosus is a branch of the facial or of the fifth pair (through the spheno-palatine ganglion), we cut the facial nerve, and examine the petrous nerve, in the course of ten to fifteen days. We then find in it a mixture of healthy and changed nerve-fibres, and from this fact are justified in concluding that the petrosal nerve has a double origin. Again, does the chorda tympani go to the tongue? No; because, after cutting the facial, there is not found in the lingual a single fibre changed, beyond the fibres the submaxillary ganglion furnishes to the gland. These are examples of the value which this new method of observation renders to physiology and pathology.

At a meeting of the Royal College of Physicians on the 30th ultimo, it was decided that in future the Harveian oration might be delivered either in Latin or English, at the option of the orator; and that the nomination of the orator for the year should be in the hands of the President of the College. As our readers are aware, the Harveian oration has hitherto been invariably delivered in Latin. It was, moreover, the duty of each senior Fellow in succession to deliver it; and if he declined doing so when his time arrived, he paid a penalty of £10. The days of College Latinity are now, however, numbered by this new regulation. Some will mourn over the departed classical glory of the College; but more will rejoice that the praises of Harvey may, for the future, be sung in his mother tongue; so that all the Fellows may be enabled, when called upon, to sing, and all to understand them when sung. The Enabling Bill, under which a lease for 999 years is to be granted to the College by the Crown, of the premises in Pall Mall, has passed the legislature. The College, on the motion of Dr. Markham, also appointed a Committee to consider the condition of the Army Medical Officers.

Dr. Chambers, who has lately been withdrawn from practice in consequence of the loss of a leg, has, we are happy to see, again assumed the duties of professional life. On the 1st instant, at the delivery by Mr. Toynbee of the opening address at St. Mary's Hospital Medical School, Dr. Chambers took his usual place amongst his colleagues, and, we need hardly add, received from them, and from the large assembly of medical men and students who were present on the occasion, unmistakeable signs of the warmest congratulations.

Our readers will have been prepared for the reply of the College of Physicians to the memorial addressed to them by certain Licentiates of the Society of Apothecaries. The College could have scarcely sent any other reply. It may be, and we think it is, a great misfortune, that there is no one uniform standard of examination adopted by all examining boards throughout the country—a standard of examination which should fit the successful applicant, without any further trial of his knowledge, for admission to the licence or degree of any of our medical corporations. There certainly is something repulsive to common sense in the idea of subjecting a practitioner of mature age and large experience and practice to examination; but, in the present state of our medical bodies, it seems impossible to avoid doing so. We have had of late only too many and very uncomfortable proofs of the fact that the mere passing of examination, and of obtaining a certificated right to practise medicine and surgery, do not ensure the letting loose on the public of really qualified men. We need only refer to Dr. Parkes's famous speech given in the Medical Council of last year, and to the hundreds of *legally* qualified members of the profession who replied to the famous advertisement of the Director-General of the Army Medical Service. What answer, indeed, could be made to the Director-General, when he told the deputation, who insisted against the admission into the service of incapable men, "Why! gentlemen, these, who have responded to my advertisement, have all got double licences from your medical and surgical examining boards!" In the present perplexed state of medical examinations, it is evident that every examining and licensing board must defend its own position, and fix its own standard of requirements. The College of Physicians feels in honour bound to admit no one of whom it does not possess the proofs of sufficient capacity for receiving its licence. The College says distinctly that it does not consider the mere possession of the licence of the Society of Apothecaries a sufficient guarantee, and therefore feels bound in honour not to accept it. It is a complete error to suppose that the College does this out of any sense of pride or of gold-headed-cane reminiscences. It acts thus out of pure conscience, and, as it believes, for the good of the profession. It has invited the rising generation of students and the existing generation of practitioners to come and join its ranks, and take the honourable title of physician. From the student it requires a stringent proof of capacity; and to the competent practitioner it has left open a means of ready entrance, by an examination adapted to his circumstances. We sincerely trust the day will come when, as we have said, the requirements of all examining boards will be equal, and when a successful candidate at any one board may (without further medical examination) seek admittance into any of our medical corporations. The only tests which would then be demanded of the applicant would be proofs of a certain age and standing in the profession, according to the standard fixed by the particular licensing board. The following is a copy of the reply of the College to the memorialists, above referred to.

"The Royal College of Physicians of London accepts the desire of the memorialists to become affiliated to the College as an evidence of the high estimation which they entertain of the College licence. The College has been induced, for various reasons, to grant its licence to those who should prove their competency to practise medicine and surgery, although not possessing university degrees; but it never contemplated the granting of its licence until the sufficiency of the candidates had been tested and approved by its own Examiners; nor does the College consider that it could, in justice to those who have complied with its full requirements, grant the request contained in the several memorials addressed to the President and Fellows."

Our opinion has been asked in reference to the course which a medical practitioner should follow under the following circumstances. If he be engaged to attend, and is actually in attendance upon, a woman during her confinement, is he justified in leaving the woman on account of any insults which he may receive at the time from the husband or the mother of the woman? The course which, it seems to us, he should follow in such a case is this. If the insults are of a kind to make him resolve to have no further dealings with the case, he should insist that another practitioner be immediately sent for, and should deliver the case into his hands; but supposing the woman to be at a stage of delivery which requires the constant attendance of a medical man, he should not leave her until he has so delivered up the case. We cannot doubt, for a moment, that this is the proper way to proceed under such circumstances. The medical man, it must be remembered, is in attendance, not on the husband or mother who insult him, but on the wife who is blameless. Why, then, should she suffer injury, or the chance of injury, through their faults? Assuredly, the medical man is bound to maintain his position, in order to retain proper respect from his clients; and in no way could he here do it more effectually, than by demanding to be relieved of his charge, and of delivering his pa-

nt over into the hands of another practitioner. ich a procedure would give all parties time for re- ction; and we have little doubt would, in most ses, elicit from the husband or mother an apology r their behaviour, and so secure a moral triumph r the medical man. Besides, we all know, that it es not do to take *au pied de la lettre* the words of ople of not over-refined ways of speaking and ing. Our learned judges have more than once led that sea-captains, for example, may have ac- rded to them a liberty of speech, which would not granted to those who have to deal with a less isterous element, and live in smoother waters. In ying down, however, the rule which we think ght to be followed in such case, we can make ex- se for its infringement in particular cases. Nothing ore is wanting to show the propriety of the rule an the consideration of this plain question, What egree of responsibility would attach to the medical an who thus absented himself, if any serious alamity, such as the skill of a medical attendant ight have prevented, were to happen to the woman uring the interval which elapsed between his de- arture and the arrival of another medical at- ndant?

THERE is one kind of marking of the British oldier to which attention has not been called; we nean the marking of him, when discharged from the ervice, by means of *remedial agents*, and for the urpose of preventing his re-admission into the army. We are satisfied the profession will agree with us, hat so to mark a soldier is as great a degradation to he medical officer as performing the operation of attooing. The tattooing is admittedly a punishment; ut the kind of marking—cross-cupping—to which we now allude, is the practice applied to soldiers who re discharged from the army through no fault of heir own, but through the infliction of disease. We know not to what extent this practice is carried at the present; but we do know that, in 1859, a general notice was issued by the late Director-General calling the attention of medical officers to the fact, that many soldiers who were sent to Chatham for their discharge "did not bear marks of medical treat- ment"; and informing them that every soldier brought forward "for discharge on account of medi- cal disability must bear marks of the treatment usually adopted in practice, to show that proper me- dical means have been used to restore to health before he is pronounced to be unfit for service." The Director-General then goes on to call the attention of the medical officers to the point that, "in the early stages of lumbago, epilepsy, diseases of joints, and visceral affections," the patients would be much benefited by local depletion; and he advises, as most efficacious and economical, that the blood be ex- tracted by cupping, instead of by leeches. We be- lieve that it was understood, in all such cases, that the cupping should be done crosswise, and so leave a distinctive mark on the skin of the soldier. We sin- cerely trust that, at the present day, no army sur- geon ever performs a cupping operation for the sake of permanently marking the soldier whom he is going to invalid. The practice is manifestly one which is repugnant to modern ideas of humanity and to the honour of our profession.

THE *Times* has introduced to the especial notice of the British *gobemouches* a fresh American importation —in fact, the last new thing in spirit-stirring. The Brothers Davenport are the performers on the pre- sent occasion; but these gentlemen are philosophi- cally modest. They write to the *Times*, and repu- diate the idea that the phenomena of which they are the representative agents are of "spiritual agency." All they know is, that they know nothing whatever of the springs which impel them into such exhibi- tions.

"We beg to say that we do not assert that our ex- periments are attributable to 'spiritual agency', nor can we tell how they are produced. We are as anxious as the spectators can be to discover the cause of the phenomena. We profess to exercise a power of the nature and extent of which we know nothing beyond the fact that we have it. We believe that it is capable of much greater extension than we have given it; and feel not only willing but desirous of submitting ourselves, without reserve, to investiga- tion. But in doing so, we hope that this candour on our part will be met with a fair and gentle exercise of scientific agency."

At all events, their offer to subject their manœuvres, or whatever œuvres they exhibit, to scientific eyes and intelligence, sounds candid in theory. In the meantime, we would ask how it is, that a paper which is supposed to represent the trained intellect of the country is invariably the first and foremost organ of publicity in bringing before the public, in a semi-official form, popular delusions of the character of table-turning, spirit-rapping, and so forth? How comes it that the quack gets a better hearing in that quarter than the orthodox man of science.

WE frequently read of Indian authorities accusing the apathy, and ignorance, and dirty habits of the natives, as being at the root of the fevers which so frequently decimates districts of that peninsula. But what are we to think of the apathy, and ignorance, and habits of a civilised community which, in its very heart, permits of the following state of things. Here is an official report of the state of the gaol at Calcutta:

"Mr. Strachey thus reports to the Bengal Govern- ment. 'The only means of ventilation were afforded by a window with an iron grating at one end of the room. In front of this window, and in the open ward, were placed porous earthenware vessels, without any covers, which were used for necessary purposes.

These vessels became so filthy that many prisoners are unwilling to use them; and the result of this, and of the little care taken in cleansing the vessels, is that the whole floor, which is paved with brick, has become perfectly saturated with filth to a distance of some yards from the window; and, as before stated, the only fresh air that can enter the ward must pass over this filth before it can reach the prisoners.'

"The medical officer of the gaol told Mr. Strachey, 'the atmosphere of the hospital is such that no one ought to get well in it.' There is a sort of sewer which discharges itself into the streets; and with regard to this, Mr. Rayner, executive engineer, says, 'If Calcutta were the cleanest and healthiest place in the world, that place alone would generate enough disease to sicken the whole country. And, he adds, the gaol 'has impregnated the earth round it, until a stench arises which reaches the cathedral.'"

M. Dolbeau, in the discussion on iridectomy at Paris, takes the part of Mr. Hancock's operation. His general conclusions are: that iridectomy is not required, except in subacute glaucoma; in which disease, however, it is inferior to Mr. Hancock's operation, which produces the same results with less danger. In chronic affections of the eye, with more or less complete loss of vision, iridectomy is a purely empirical proceeding. In fact, the value of iridectomy has yet to be proved. Let us, therefore, he said, not pronounce at present on the value of iridectomy, and refrain from falling into an exaggerated Germanism. M. Giraldès, in reply, affirmed that the indications for iridectomy in acute glaucoma were clear, well marked, and defined with all the rigour of a geometrical theorem. It has produced marvellous results; it has been successfully employed by eminent surgeons of European fame; and it would indeed be astonishing if, after all this, the operation were a pure illusion.

M. Pasteur presented to the Academy some "charming" Mexican insects brought to France by the captain of the *Florida*—pyrophoræ. They have two small phosphorescent capsules placed behind the head, which give a magnificent light. With a single one of these insects, a person may read during the night. Mexican ladies wear them as ornaments, tied up in little bags of lace. The light emanating from them yields no rays to the spectroscope.

A new method of applying the judicial question has been suggested by M. Sédillot. Wishing to ascertain if chloroformised patients recovered the power over their volition at the moment of returning to consciousness, M. Sédillot requested several of his patients—people of intelligence—to endeavour not to reply to questions put to them on coming out of the chloroformic state. The experiment has invariably given similar results. The patients invariably forgot their promise, and answered the questions put to them. He is, therefore, satisfied that no person coming out of the state of asphyxia, whatever its cause, is able to simulate mutism, if questioned at the moment referred to. Legal medicine may, therefore, take advantage of this fact. If it should ever do so, let ether, he says, be employed, instead of chloroform. "Ether is expansive, joyous, indiscreet, and talkative; whilst chloroform is melancholy, morose, and silent."

Dr. Petroff (Virchow's *Archiv*) has repeated Frerichs's observations respecting the transformation of urea into carbonate of ammonia in the system. He removed the kidneys of dogs and cats, to produce uræmia; and then examined the blood, taking all possible precautions to prevent errors. The results are: that when the function of the kidneys is suppressed, carbonate of ammonia is formed in the blood; that injections of carbonate of ammonia into the blood produce phenomena precisely similar to those of uræmia; that the degree of intensity of the symptoms produced, and their character, depend upon the quantity of ammonia contained in the blood, and upon the state in which it exists in the blood.

M. Grisolle has been appointed Professor of Clinical Medicine of the French Faculty, in place of M. Rostan, who has retired therefrom. M. Trousseau gives up his chair of clinical medicine, and returns to his old chair of therapeutics, vacated by M. Grisolle. M. Trousseau gives an interesting account of the reasons of this change, so far as he is concerned.

"During twelve years I have been clinical professor. Last year, I begged permission to retire from the duties of teaching; but the minister refused me, although I could have appealed to the Council, having been thirty-two years professor, and being sixty-two years of age. I therefore consented to remain one year longer clinical professor. The easy speech and lucidity of discourse attributed to me, it is true, are natural gifts, perhaps; but they have not been obtained without great labour. Every morning at six I am at work, and so again in the evening. I consider clinical instruction a serious business, and therefore make myself acquainted with everything that is going on. This work has injured my sight; and, after much correspondence with the Dean and the Minister, I have consented to return to my old chair of therapeutics, and remain physician of the Hôtel-Dieu; and hope that a few years more of my active old age may be of service to the students. Much would I have preferred a retreat, for I have well earned it; but I could not resist the entreaties of the Dean."

Never, says M. Diday, has constitutional syphilis been seen to follow a *chancroid* ulcer; that is, a primitive ulceration, which appears to be soft, which is without incubation, is reinoculable, and not indurated. Syphilitic infection never occurs unless the chancre which produced it is accompanied with specific glandular action.

In an article in *L'Union Médicale*, on the Hospitals of London, we read:

"The offices of assistant physicians and surgeons are not honorary. The emoluments attached to them are often greater than that of the physicians and surgeons—a fact which is readily explained by the large amount of time occupied in their consultations"!

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General.]	Birmingham Library, Birmingham.	Thursday, October 13th, 6 P.M.
Metropol. Counties. [Special General.]	37, Soho Square.	Thursday, Oct. 13, 4 P.M.
West Somerset. [Quarterly.]	Clarke's Castle Hotel, Taunton.	Thursday, Oct. 13, 7 P.M.
Bath and Bristol. [Ordinary.]	Victoria Rooms, Clifton.	Monday, Oct. 17, 7 P.M.
South Midland. [Autumnal.]	Buckingham.	Tuesday, Oct. 18, 1 P.M.

SHROPSHIRE ETHICAL BRANCH: SPECIAL NOTICE.

In consequence of the illness of the Honorary Secretary, the annual meeting is unavoidably postponed until further notice.

The members will please to accept this intimation in lieu of a circular note.

S. B. Gwynn, *President.*

October 4th, 1864.

WEST SOMERSET BRANCH.

A Quarterly Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. Kelly, M.D., *Hon. Sec.*

Taunton, September 1864.

METROPOLITAN COUNTIES BRANCH: NOTICE OF MEETING.

A Special General Meeting of the Metropolitan Counties Branch will be held at 37, Soho Square, on Thursday, October 13, at 4 P.M.

Business: To elect three Directors of the Medical Provident Fund.

A. P. Stewart, M.D. } *Hon.*
Alexander Henry, M.D. } *Secs.*

London, October 6th, 1864.

BATH AND BRISTOL BRANCH.

The first Ordinary Meeting of the session will be held in the Victoria Rooms, Clifton, on Monday evening, October 17th, at 7 o'clock; R. W. Falconer, M.D., President, in the Chair.

The first business of the meeting will be to elect two members of the Branch as Directors of the Provident Relief Fund of the Association.

H. Marshall, M.D. } *Hon. Secs.*
R. S. Fowler. }

Clifton, October 1st, 1864.

SOUTH MIDLAND BRANCH.

The Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. Veasey, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

John M. Bryan, M.D., *Hon. Sec.*

Northampton, September 1864.

MEDICAL PROVIDENT FUND.

The Chairman of the Directorate has received intimation of the following appointments of Directors by the Branches.

South Midland Branch. Henry Veasey, Esq. (Woburn); Edward Daniell, Esq. (Newport Pagnell); John M. Bryan, M.D. (Northampton).

Reading Branch. George Pound, Esq. (Odiham, Hants).

Lancashire and Cheshire Branch. George Southam, Esq. (Manchester); Edward Waters, M.D. (Chester); Lorenzo E. Desmond, M.D. (Liverpool).

East Anglian Branch. Edward Copeman, M.D. (Norwich).

South-Eastern Branch. John Armstrong, M.D. (Gravesend); Edward Westall, M.D. (Caterham, Surrey); Henry Collet, M.D. (Worthing, Sussex).

Shropshire Scientific Branch. Samuel Wood, Esq, (Shrewsbury).

East York and North Lincoln Branch. Sir Henry Cooper, M.D. (Hull).

South-Western Branch. Joseph C. Cookworthy, M.D. (Plymouth); Philip C. De la Garde, Esq. (Exeter); Thomas L. Pridham, Esq. (Bideford).

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

The first meeting for the eighth Session, 1864-5, was held at Rochester, on Sept. 30th; Adam Martin, M.D., in the Chair. Nine members and visitors were present.

The Treasurer and Secretary were re-elected.

New Member. Alfred Monckton, Esq., of Brenchley, Kent, was elected a new member.

Communications. The following communications were made:—

1. Difference in the Susceptibility of Joints. By J. V. Bell, M.D.

2. Specimen of Ossification of the Larynx, and Death by Dysphagia: with Remarks. By J. Armstrong, M.D.

Discussions. 1. Respecting the Provident Fund, it appeared that the appointment of three Directors instead of two by the South-Eastern Branch was owing to the increase of members brought about by the district meetings held in Kent (East and West).

2. The consideration of the following questions was adjourned to the next meeting:—

Advisability of diminishing the amount of district subscriptions (now 2s. 6d.)

Advisability of holding meetings (few or many at will) at the hospitals within the district.

Advisability of limiting the number of dinners to one or two in the session, and of diminishing the charges of dinners.

Dinner. After the usual vote of thanks, the members and visitors adjourned to dinner.

The Medical Act. Mr. Paget, of the Thames Police Court, has considered his decision in reference to the Medical Act. Mr. Fentiman, a chemist, was charged before him with a breach of the Act in having described himself as a surgeon; and Mr. Paget ruled that the matter complained of was not a breach of the Act. Subsequently, however, his attention was called to another report of the case to which he had alluded, and after reading it he decided that Mr. Fentiman had been guilty of a breach of the Medical Act. Mr. Fentiman promised not to offend again, and on this understanding the case was adjourned for a month, when it is to be brought forward again should the defendant not have kept his promise.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Bath, September* 1864.]

The Dietary Question: the President's Address in Sub-Section D (Physiology). By EDWARD SMITH, M.D., LL.B., F.R.S. The author adverted to the fact that, out of 700 poor-law dietaries of paupers in workhouses, not two were alike. The condition of the dietary of the army and navy was until recent years most deplorable. At the latter end of the last and early part of the present century, scurvy was rife in our national navy; and inquiries made by Dr. Budd twenty years ago, and by Dr. Barnes this year, had shown that this disease was still not unfrequent in our merchant navy amongst the ill-fed seamen. The state of the dietary in our prison population was very unsatisfactory. In several instances it had been found requisite to diminish the allowance of food to convicts; while in others it had been increased. These changes had been made on insufficient grounds; and he suggested that a government officer should be appointed to make the requisite scientific inquiries. With regard to dietary in hospitals, at the present there was a great difference. There was the best reason to believe that the dietary of private schools and colleges and charitable institutions for the maintenance and education of the young, had greatly improved; but it was a subject which should demand public attention. There were many cheap schools in the country, in which the sum paid with the pupils was manifestly inadequate to remunerate the proprietors. A consideration of the dietary of the general community must have regard to two classes at least—the middle and higher classes and the labouring classes. With regard to "Bantingism", he said that he was not concerned in the medical question as to whether it was desirable to reduce the bulk of a given individual; but he thought it would be an evil to this nation, both bodily and mentally, if the system of reduction were to become at all general; and that, on the contrary, regarding the whole population, we needed to add to rather than take from the weight of the body. Even in the well-fed classes, he had seen very serious diminution of both bodily and mental vigour follow the working out of the plan. There was no necessity for the absolute excision of fat and sugar, and the extreme reduction in the quantity of bread, any more than for the great increase in the quantity of meat. The bulk of the body might be reduced, with less danger to health, by gradually lessening the amount of the kinds of food usually taken. An inquiry had just been completed by him for the government, which would afford a clearer insight than had hitherto been obtained into the dietary of our labouring population. It had been made at the houses of the agricultural labourers in every county in England, in Wales, the west and north of Ireland, and the west and south of Scotland, at the houses of certain town populations, silk and cotton weavers, etc. The coarse kinds of bread which were in ordinary use by our forefathers, even to the early part of the present century, were now very rarely eaten. Barley-bread was still eaten in the houses of labourers in South Wales, and in the farm-houses of North and South Wales; also, in Northumberland and Cornwall and Devon, and in the southern parts of Scotland. Rye-bread was nowhere eaten alone. Oatmeal was used by twenty per cent. of the farm-labourers in England. Indian corn was used exclusively in the south of Ireland. Pea-meal was never eaten alone as a bread; but in the north of Scotland it was sometimes added to oatmeal. Rice was used by about fifty-eight per cent. of the population; but never as a breadstuff. The average weekly dietary of farm-labourers was—for each adult and child, 13¼ lb. of breadstuff, 6½ oz. of sugar, 5 oz. of fat, 14 oz. of meat, 52 oz. of milk, 5 oz. of cheese, and ½ oz. of tea; whilst in-door labourers obtained 9½ lb. of breadstuff, 8 oz. of sugar, 5 oz. of fat, 13½ oz. of meat, 18 oz. of milk, and ¾ oz. of tea for each adult weekly. In reference to public institutions, he was of opinion that there should be a government officer of the highest repute upon dietary questions, to whom such questions should be referred by the government; that in the dietaries of the poor, the wives and children are ill-fed, much more so than the husbands; that a large part of the infant mortality and the deaths at puberty from consumption, is due to a deficient supply of milk and of other good food, and the almost exclusive use of slops. A man's first duty was to provide sufficient nourishment for his family, even if it were only dry bread; and until this had been effected, nothing should be spent merely to please the taste; and in order to turn the labourer's overtime to profitable account, it was very desirable that he should have the opportunity of growing plenty of potatoes.

Nutritive Value of Foods: Dietary of the Labouring Classes. By EDWARD SMITH, M.D., F.R.S. There were four methods in use in estimating the nutritive value of foods; 1, the weight of the food; 2, the nitrogenous and carboniferous elements in food; 3, the nitrogen, carbon, and hydrogen (reckoned as carbon) in food; 4, the nitrogen and carbon in food. *Weight.* To estimate the relative nutritive value of dietaries by the gross weight of the food supplied, assumes that there are no material differences in the nutritive elements of food, or, if there are material differences in the construction of dietaries, there is such an uniform relation between the quantities of the several kinds of food of which they are composed, that no important fallacy will be admitted. It is also usual in this method to omit all reference to fluid foods, and to limit the calculation only to the so-called solids. In each of these there is great error. Thus, one pound of potatoes is only equal to one-third pound of bread in carbon, and to one-fifth pound of meat in nitrogen; and one pound of meat is equal to two pounds of rice in nitrogen; and one pound of peas is equal to one half-pound of fat in carbon, but contains as much nitrogen as is found in five pounds of rice, whilst the fat contains none. Again, it is absurd to place milk and beef-tea and gruel in the same class with water and tea, and omit reference to all alike, because they are fluids; whilst one pint of new milk contains as much nitrogen as is found in nearly half a pound of bread, or five ounces of meat, and as much carbon as is found in three-quarters of a pound of potatoes. 2. *The Carboniferous and Nitrogenous Elements.* When the estimation is made upon these bases, it is not indicated that these two elements are separately found in foods, so that some foods are purely carboniferous, and others purely nitrogenous, but in most kinds of foods both elements are found in combination. It is, however, true that, whilst there are no foods composed of nitrogen only, there are some into which nitrogen does not enter, such as fat and sugar; and starch contains carbon very largely, and may be artificially obtained without nitrogen, but in nature is always associated with nitrogen. Hence, before we can value this mode of estimation, we must know

hat amount of these two classes of elements exist in ach separate food. The calculation, however, was ne of so great complexity, that Dr. Smith thought it ould give place to an easier and more complete me- od of estimation. 3. *The Carbon, Nitrogen, and ydrogen (Reckoned as Carbon.)* In this method the rbon and nitrogen contained in all the elements of hich a given food is composed, have been calculated the percentage quantities; but, in addition, the ee hydrogen, viz., that quantity of hydrogen, which in excess of the oxygen in the food with which it ould have entered into combination, has been calcu- ted and added to the carbon, and the whole entered s if it were carbon. This has been done upon chemi- al grounds, and based upon the two great distinctions f action which chemists have assumed to exist in he heat-generating and the flesh-forming; and as oth carbon and hydrogen, when combined with oxy- en, give out known quantities of heat, the heat- enerating powers of the free hydrogen have been dded to those of the carbon. The free hydrogen reck- ned as carbon in fats is very considerable, whilst in tarchy food it is small. Thus, in butter, suet, lard, acon, and mutton, it is in their order 27, 28, 31, 23, nd 14 per cent., and in wheat, flour, bread, maize, atmeal, and rice, it is 0·3, 0·25, 1·8, 1·6, and 0·24 per ent. If the sole object which could be had in view, n determining the amount of carbon in food, were to scertain the quantity of heat which they could gene- ate, this method might be allowed; but even then it would be much more satisfactory that the term carbon should represent carbon only, and not the free hydro- gen also. But the object of a physiologist when esti- mating the value of a dietary, is to compare the quantity of the nutritive elements in the food with some standard requirement, such as would be derived from a knowledge of operations, proceeding in the body of the person to be fed; a knowledge of the ne- cessary quantity of heat might probably be such a standard, if it existed, but no one pretends to have discovered it. The free hydrogen probably chiefly unites with oxygen and forms water; and, if we knew the quantity of water thus generated, it might be used as a standard wherewith to measure the require- ment for hydrogen; but we cannot tell how much water is retained in the body, or how much water leaves the body; and of the water leaving the body, how much was taken into the body as water, and how much is thus generated. The carbon itself, which is required, can be estimated from the quantity of that substance which leaves the body—as carbonic acid by the lungs and skin, as unassimilated compounds of carbon in the fæces, and in saline compounds in the urine; and so of the nitrogen, which is eliminated chiefly as urea in the urine, and as unassimilated compounds of ni- trogen in the fæces. The only source of fallacy in these estimates is the amount of these substances which are retained by the body. 4. *Carbon and Nitro- gen.* The most complete, as well as the simplest method of estimation of the nutritive value of foods, is to calculate the carbon and nitrogen in the whole of any food, without reference to the compound ele- ments which the food may contain. Dr. Smith had constructed tables which show at a glance the quan- tity of each element which is found in every weight of food; from such tables, the total nutritive value of a dietary may be calculated on in a few minutes in- stead of a few hours. He earnestly recommended this method for universal adoption by scientific men. He had not referred to all the constituents of foods, as, for example, the saline substances; because in mixed dietaries which contain a sufficient amount of carbon and nitrogen, there is almost universally a sufficient amount of saline ingredients, except com- mon salt, and this is as universally supplied in addi- tion to foods. Dr. Smith then proceeded to consider upon what basis dietaries should be calculated.

The Physiological Effects of Tobacco. By B. W. Richardson, M.A., M.D. Without being a devotee to tobacco, Dr. Richardson had for many years often smoked. He did not come before the section biassed in any degree; but simply as a man of science, who had tried to comprehend the facts of the whole ques- tion. He referred to the following subjects. 1. The composition of the products of combustion of tobacco, chemically and physically. 2. The physiological ac- tion of the various compounds thus derived. 3. The effects of ordinary and excessive smoking on the organs of the body. He gave the following summary of the conclusions at which he had arrived. 1. The effects that result from smoking are due to different agents imbibed by the smoker; viz., carbonic acid, ammonia, nicotine, a volatile empyreumatic sub- stance, and a bitter extract. The more common effects are traceable to the carbonic acid and ammonia; the rarer and more severe to the nicotine, the empyreum- atic substance, and the extract. 2. The effects pro- duced are very transitory, the poisons finding a ready exit from the body. 3. All the evils of smoking are functional in character, and no confirmed smoker can ever be said, so long as he indulges in the habit, to be well; it does not follow, however, that he is be- coming the subject of organic and fatal disease be- cause he smokes. 4. Smoking produces disturbances: (*a*) in the *blood*, causing undue fluidity, and change in the red corpuscles; (*b*) on the *stomach*, giving rise to debility, nausea, and, in extreme cases, sickness; (*c*) on the *heart*, producing debility of that organ, and irregular action; (*d*) on the *organs of sense*, causing, in the extreme degree, dilatation of the pupils of the eye, confusion of vision, bright lines, luminous or cob- web specks, and long retention of images on the re- tina: with other and analogous symptoms affecting the ear—viz., inability clearly to define sounds, and the annoyance of a sharp ringing sound like a whistle or a bell; (*e*) on the *brain*, suspending the waste of that organ, and oppressing it if it be duly nourished, but soothing it if it be exhausted; (*f*) on the nervous filaments and sympathetic or organic *nerves*, leading to deficient power in them, and to over-secretion in those surfaces over which the nerves exert a control- ling force; (*g*) on the *mucous membrane* of the mouth, causing enlargement and soreness of the tonsils (smoker's sore-throat), redness, dryness, and occa- sional peeling off of the membrane, and either unna- tural firmness or contraction, and sponginess of the gums; (*h*) on the *bronchial surface of the lungs* when that is already irritable, sustaining the irritation, and increasing the cough. 5. The statements to the effect that tobacco smoke causes specific diseases, such as insanity, epilepsy, St. Vitus's-dance, apoplexy, organic diseases of the heart, cancer and consumption, and chronic bronchitis, have been made without any suffi- cient evidence or reference to facts, and can never accomplish the object which those who offer them have in view. 6. As the human body is maintained alive and in full vigour by its capacity, within cer- tain well defined limits, to absorb and apply oxygen; as the process of oxydation is most active and most required in those periods of life when the structures of the body are attaining their full development; and, as tobacco smoke possesses the power of arresting such oxydation—the habit of smoking is most dele- terious to the young, causing in them impairment of growth, premature manhood, and physical degrad- ation.

The Various Forms assumed by the Glottis. By G. D. Gibb, M.D. The author stated that it had been an accepted axiom that, for the most part, the glottis assumed a triangular form; and this view was taught

almost to the present hour. He briefly considered the relation that subsisted between the true vocal cords and the thyro-arytenoid muscles; and he then made some observations upon, and described the arrangement of, the muscular fibres, especially as lately made out by M. Battailhe. He adopted that author's division of the muscle into three bundles, and approved of the name of triceps laryngea, which he had given to it. He then described the manner of action of the various fibres, and their influence in giving a form to the glottis. This varied from an isosceles, equilateral, or right-angled triangle, to a lozenge or barrel, circular, oblong, lanceolate, elliptic, pyriform, or arched and linear form. The commonest of these was an isosceles triangle; and a rare form was a right-angled triangle, which he had never met with unless in women, when the larynx is shallow from below backwards. A parallel or oblong glottis he explained; he had seen it several times, but necessarily narrow, because the vocal cords, under such circumstances, could not be separated more than one or two lines at their point of origin. A more remarkable form than any other was the reversal of the triangle; the glottis during the utterance of continuous falsetto sounds assuming the shape of a narrow Y, then a narrow V, and then a narrow oblong, before the termination of the experiment. A pear or bulbous shape, and an arched form, composed of the narrow segment of a circle, were other forms noticed. He concluded with some observations on the form of the glottis seen in the chest and falsetto registers, and the parts in action.

Valves in the Abdominal Veins. By Edwards Crisp, M.D. All physiologists, Dr. Crisp said, up to the time of his discovery of valves in the splenic vein of the giraffe in 1852, had denied the existence of these valves. Kölliker, in his article on the Spleen, in Todd's *Cyclopædia*, says that the abdominal veins contain no valves; and Dr. Carpenter had made the same assertion. The physiological import of these valves in the abdominal veins of many animals was most important; and it was strange, considering their abundance, that they had not before been discovered. Dr. Crisp had not only in 1852 described these valves, but in his book on the use of the spleen, and in other places, he had pointed out a valvular arrangement in the abdominal veins of man and the lower animals. A diagram was shown of one of the mesenteric veins of the raindeer, which contained forty-two pairs of valves; of the left renal vein of the nylghau, which contained ten valves, two single and four pairs; of the renal vein of the Sondial ox (*Bos sondiacus*), from Pegu, the only specimen brought to Europe, in the renal vein of which there were two pair of valves. Unlike our ox, this animal had a non-lobated kidney. A drawing of the stomach and spleen of the horse was also exhibited. Dr. Crisp had found valves in the abdominal veins in various carnivora, marsupialia, pachydermata, and ruminantia; which he enumerated.

A Supplemental System of Nutrient Arteries for the Lungs. By William Turner, M.B. An arterial plexus was described on the side of the pericardium beneath the mediastinal pleura. It was formed by the junction of the pericardiac, mediastinal, and phrenic branches of the internal mammary artery with each other, and with numerous fine branches derived from the trunks of the intercostal arteries. From it a number of slender thread-like arteries passed to the lung, some in front of its root, others behind, and others between the layers of the ligamentum latum pulmonis. Some of these arteries were distributed in the substance of the lung, others on its surface beneath the pulmonic pleura. Through the agency of this subpleural mediastinal plexus, an arterial communication is established between the vessel of the lung and the arteries which supply the wall of the chest.

Correspondence.

THE LANCET, AND THE BRITISH MEDICAL JOURNAL.

Sir,—I have only this afternoon seen the *Lancet*, and fear I may be too late with the few hurried observations I should wish to make on the letters it contains respecting the British Medical Journal.

You will, no doubt, if you think it worth the trouble, reply to the leading article; I will confine my remarks to the correspondence; but, as the *Lancet's* rendering of the motto, "*Audi alteram partem*," with which that department is headed, is "Hear *our* side," I shall indirectly be answering it. The case is simply this. Every year the Association is joined by many new members. A certain proportion of the new associates, looking over their Journal, will come to the conclusion that the *Lancet* is a luxury they can dispense with for the future. The *Lancet*, seeing this, with the instinct of self-preservation, raises the cry, "Down with the Journal." Well; the *Lancet* pipes and the correspondents dance—each his own *pas*, perhaps, but all to the same tune.

The antics of Dr. Bree are the most entertaining. He seems to have taken up the notion that he is to attain an immortality of fame as the founder of a new Association; and I think it has got into his head, as we say of wine. He is evidently quite above anything like logical precision in his statements. Every sentence in his letter would pay for analysis in the amusement it would afford; but to discuss with him would be to beat the air. The Association which is to combine "science, justice, and charity," is certainly too good for this world; and I have not time to follow Dr. Bree into the clouds.

Mr. Carter has a penny whistle of his own—his view on the Provident Fund question; to which one would have been inclined to pay more attention, had he not taken up the *Lancet* tune of "Down with the Journal." He, too, has a scheme. The Journal is to be replaced by a quarterly; the editor to be able, learned, judicious, well known, etc.—suppose we say Mr. Carter himself. The contributors to be well paid—who might not hope to put a hand into the Association purse? The articles to be on matters of interest and importance to the profession; and a list of subjects is already suggested, singularly corresponding with those discussed in the Journal during the past year. But you go too fast, Mr. Carter! The Journal is not yet strangled; and, in spite of your threatened denunciations at the next meeting, and the next, and the next, I do not think you will have the satisfaction of "tooting" your whistle over its grave. When that comes to pass, it will be time enough to issue the prospectus of your quarterly.

Then comes "Adsum", or "Here we are again", if I may be permitted to give a free but apposite translation of the signature. He gravely announces that he is not a member of the Association, and proceeds to meddle in its affairs; thus he goes through his paces. This letter looks like an article supplied to order.

"Our Mutual Friend", as the next on the list may be called, challenges the editor of the Journal to some curious sort of poll; for which he is patted on the back by the editor of the *Lancet*. He offers to pay the expenses incurred, should the result be against

imself; but it is amusing to see that he becomes larmed lest his proposal should be taken *au sérieux*. What a joke! and, in a postscript, he inserts a saving lause through which he might sneak out in case this hould happen. The scheme does not require even a nomentary consideration.

The last on the list of correspondents takes a line f his own, which has no real bearing on the question f JOURNAL or no JOURNAL. It is a personal attack n you, sir, of the vilest kind, and made in the most owardly way. There is no straightforward statenent in the letter; and the insinuations, though dark nough, are most clumsy. Such is my abhorrence f so unmanly an attempt to take away the good ame of any one, that I would at once cease to take n a paper which admitted it. I have often heard t stated, as one of the main qualifications of the preent editor of the *Lancet*, that "he has a fine scent or a libel." This letter smells abominably of somehing; whether it is the exact odour of a legal libel, am not prepared to say.

Leaving this unpleasant topic, let me say one word n the question at issue. The object of the British Medical Association is not, and never was, to succour lecayed medical men, or to protect individuals gainst iniquitous law-suits, or to prosecute quacks; nd it is simply absurd to talk about the good that night be done in these ways with the Association unds, were they so applied. Gentlemen who are so nxious on these points can subscribe to the Medical Benevolent Fund, or to any special funds they like. The *Lancet* is, of course, prolific in suggestions. Encourage science; pay a barrister to protect the interests of the profession in the House of Commons; do anything but support a JOURNAL. Why, a JOURNAL offers the only means of carrying out the objects of the Association—to band the profession together; to unite the scattered members in common action for great purposes; to create and keep up a professional public feeling. How many of our members can attend the great meetings? and who would feel that he belonged to a great Association, if all he heard of it was a quarterly volume of dry *Transactions?* The JOURNAL brings this home to us week by week; and is it not a well known fact that the prosperity of the Association has varied according to the vigour with which the JOURNAL has been conducted? Let me say, in conclusion, sir, that our increasing numbers and the outcry of the *Lancet* are equally testimony to the value of your services. I am, etc.,

AN ASSOCIATE.

Sept. 28, 1864.

OPERATIONS ON THE EYEBALL.

LETTER FROM JABEZ HOGG, ESQ.

SIR,—I trust you will permit me to offer a few remarks, on the latter part of Mr. Solomon's paper, as it appears in your JOURNAL of Saturday last. This gentleman has made it appear that his object in referring to a correspondence in the *Lancet* so far back as 1862, is solely that of setting himself right with the members of the Association; but, as he could not accomplish this without very gravely impugning the statements contained in that correspondence, he does it, and leaves the person to his remedy, an appeal to your pages. It is, perhaps, generally known that I wrote the letter in question; and it is equally well known that I did so in vindication of the just right and claim of my friend and colleague, Mr. Hancock. My object is tolerably clear, also; that of maintaining the truth as to who is to be considered the originator of *division of the ciliary muscle*. I am, therefore, not a little surprised, that Mr. Solomon should refer to that correspondence at all; and more to mystify than to bring out the truth in bolder relief. He certainly mystifies, when he mixes it up with talk about "his claim to priority," etc., because he published a something in your columns on May 26th. By taking such a course, he is very likely to be still misunderstood, as meaning to imply that he lays claim to priority of performing the operation, rather than that of *applying the operation of another in cases of myopia*, which he publishes on the 26th of May, 1860.

I must here observe, however, that I am exceedingly glad to find Mr. Solomon now so reasonable, that I would rather take the opportunity of helping to set him right, than the most unpleasant one of finding fault; and can assure him, if the claim he now makes for priority adds in the smallest degree to his happiness, I shall not attempt to disturb it. Nevertheless, he might have made all this apparent to your readers, without in any way appearing to impute motives to me, and talking of "producing evidence in refutation of statements," etc., because what I stated in the pages of the *Lancet* in 1862 can be supported by trustworthy evidence, *his own letters*. At that time, I promised to publish more of these letters if he called for them; to show that Mr. Solomon is entirely indebted to Mr. Hancock for putting him into possession of certain facts with regard to his operation of division of the ciliary muscle; and even all his knowledge, that of its application, was suggested by these letters, and by the papers published in the pages of the *Lancet*, September 7th, 1859, and February 11th, 1860; previous to which such an operation, or its application in cases of myopia or any other disease, never so much as entered the brain of Mr. Solomon, or any other man.

Therefore, it becomes quite clear, that the production of subsequently written letters, dated May 17th, 18th, etc., in no way invalidates my former statement; and with regard more particularly to the publication in your JOURNAL, on May 26th, 1860, of Mr. Solomon's paper, it in no way goes to prove that he was entitled to be considered the originator of any new operation for the relief of myopia; nor does it at all extenuate the studious omission of all reference to Mr. Hancock's name or operation, and subsequent invention of another term to express the then already well known division of the ciliary muscle.

With regard to Mr. Solomon's accusation, that I purposely omitted the date from a letter of his which I published in the *Lancet*, that I most positively deny. I send you the letter herewith, that you may see the omission was his own. The letter bears no date.

I can only add, in conclusion, that, if by stubbornly maintaining my point I have made myself at all disagreeable to Mr. Solomon, I am sorry for it. He has, however, himself to blame, for not having, in his reply to my first letter, put the matter in the light he now puts it; viz., that of *a claim for priority of application of Mr. Hancock's operation in cases of myopia*.

I am, etc., JABEZ HOGG.

1, Bedford Square, Sept. 27th, 1864.

MEDICO-LEGAL POST MORTEM EXAMINATIONS.

SIR,—In the JOURNAL for September 17, you copy from the daily press, a statement made by Dr. Lankester, in the capacity of coroner, to the effect that, "when he ordered a *post mortem* examination to be made, it was to be a thorough and not a partial examination; all the organs were to be tested, as poison had frequently been found when there was no suspicion of the kind having existed." I quote the statement as it stands.

I am rather surprised that this statement has elicited no comments; and would ask a little space to make a few remarks on it.

With regard to the coroner's authority to order the profession in these terms, I do not know that that stands for much. Speaking under correction, I believe it would be merely a question whether any one would forego his fee for making the examination, or incur the expense, which his fee would not cover, of testing all the organs for poison. The general observation of this order would not have the effect of aiding justice. For, I suppose that, in nine-tenths of the cases, the organs would be so spoiled by inexperienced hands, as to prevent any safe conclusions from being drawn from their condition, in really important cases, by practised analysts.

If Dr. Lankester would direct a policeman to attend at each *post mortem* examination which he orders, provided with proper jars and bottles in which to take any organs or secretions away for special analysis, this would be a very useful measure. And if he would make a point of asking particularly about the condition of the several organs, in cases where the cause of death was not quite obvious, he would ensure all examinations being strictly and thoroughly made; the more so, if the services of a skilled analyst were known to be always readily available. And if, besides this, Dr. Lankester would, at his leisure, carefully draw up a short set of rules for medico-legal examinations, he would confer a great service on his less accomplished brethren. For it must be remembered, that the bulk of those inquiries do not fall to the lot of those who have varied knowledge and leisure and money to spare; but to the hard-worked parish-surgeon, who has neither the time or knowledge for abstruse chemical inquiries, nor the money to spend in employing others to do them for him. By so doing, Dr. Lankester would earn the gratitude of his profession, the ends of justice would be aided, and the scientific character of the coroner's court would be much raised. I am, etc.,

E. L. O.

Sept. 26, 1864.

SCARLATINAL RASH AFTER OPERATIONS.

Letter from Samuel Wilks, M.D.

Sir,—Mr. Harrinson, of Reading, asks, in your Journal, for further information respecting a scarlatina-like rash which is sometimes seen to follow operations.

I regret that I cannot furnish him with the details of any cases; but the numerous instances which have come before me lead me to believe that the fact must be well known to every surgeon. Ever since I have known the practice of Guy's Hospital, I have constantly visited the surgical wards to give an opinion about a rash in a patient who has recently undergone an operation; and this rash generally resembles scarlatina.

It is, also, well known, that puerperal women are often said to die of scarlatina taken soon after labour; and here it may be suggested, whether the rash be not due to some special condition of the system existing at that time.

I do not allude to eruptions which may be seen in cases of pyæmia and other blood-poisons; for these are generally of an erythematous or roseolous kind; whilst the scarlatina-like rash occurs soon after operations, and before there is any evidence of pyæmia.

Mr. Harrinson relates a case which he treated in conjunction with Mr. Hutchinson. I think the last-named gentleman could mention several cases where an eruption followed the operation of lithotomy in the London Hospital not many months ago. The subject is one of much interest; and I hope Mr. Harrinson will be able to collect several well reported instances of the affection. I am, etc.,

Samuel Wilks.

11, St. Thomas Street, Southwark, S.E., Oct. 3rd, 1864.

SCALP-WOUND, FOLLOWED BY SCARLET RASH.

Letter from George May, jun., Esq.

Sir,—On the 27th of last September, H. R., aged 10, was brought to me with the following history. On Saturday, August 27th, he fell, and struck the back of his head, causing a wound about an inch long. This was closed by strapping, and he seemed to be perfectly well until six days after the injury. He was then found moaning in bed, with much pain and tenderness in the back of the neck. The following day, he was very feverish, with a scarlet rash, but without sore-throat. On the wound being opened, some offensive pus escaped. The rash lasted a few days; and complete desquamation of the skin followed. He gradually recovered; but on September 24th, he again became feverish; and on the 26th, he complained of great pain in the left foot, with inability to stand.

I found him pale and feeble, with a frequent pulse, and the skin still rough and desquamating. The glands on the left side of the neck were swollen and tender. He complained of much pain when the tarsal bones of the left foot were pressed; but there was no swelling. I believe the patient had previously suffered from scarlatina; at all events, there was not any case in the village at the time of his illness; neither was any one in the house affected by it. The illness was attributed to scarlatina; but was more probably due to the absorption of poisonous matter from the wound; and at the time I saw him, he was threatened with secondary abscesses.

I am, etc., George May, jun.

Reading, Oct. 4th, 1864.

Hospital Nuns. Miss Nightingale seems to infer that if the entire establishment be administered by hospital nuns, Protestant or Roman Catholic, there will be lower average care of the sick, as "the idea of the 'religious order' is always more or less to prepare the sick for death." This opinion I cannot support; for I, in common with all other medical officers of hospitals under the care of religious orders in this city, have certainly never had to complain of want of anxiety for, or attention to, mundane matters on the part of these sisters. (*Dr. Mapother.*)

Healthy Stables. In the annual review of the progress of hygiene presented to the Army Medical Department by Professor Parkes, and just issued, notice is taken of the recent report on cavalry stables, made by the Barrack Improvement Commission. The question is entirely solved whether or not the men should be placed over the stables. The stables cannot be properly ventilated or lighted if the men's rooms are overhead. In some of the cavalry stables examined, the air was so foul that it was matter of surprise how animals could breathe it and retain any measure of health. In the old troop stables at Hounslow each successive horse, from the corners to the centre, is supplied with air fouled more and more by the other horses. The inquiry has shown beyond question that the best form of building is a one-storied stable and only two rows of horses, the ventilation to be by the roof, carried from end to end, and giving four square feet of ventilating outlet for each horse. The stables recommended to be built in future would give each horse 100 feet of superficial area and 1,605 cubic feet.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a ieral meeting of the Fellows, held on Friday,)tember 30th, 1864, the following gentlemen, having dergone the necessary examination, were duly ad-tted members of the College:—

Fox, Cornelius Benjamin, M.D. Edin., Truro, Cornwall
Stevenson, Thomas, M.B.Lond., Guy's Hospital

At the same meeting, the following gentlemen re reported by the examiners to have passed the eliminary Examination in the subjects of General ucation:—

Boyd, William Bernard, Wells, Somerset
Fox, Alexander, Stoke Newington
Gittens, Thomas Joshua, Barbadoes
Guy, Frederic George, Shoeburyness
Henley, Anthony Alfred, Ringwood
Minter, Edward Withers, Southsea
Parker, George Hargrave William Broughton, King's College
Sutcliffe, Henry, Rochdale

APOTHECARIES' HALL. On September 29th, the following Licentiates were admitted:—

Birt, Joseph, Grove House, Leamington
Bush, Henry John Ryder, Warwick Street, Regent Street
Fowler, George, jun., Newington Terrace, Kennington Park
Metcalfe, Fenwick, Wisbeach, Cambridgeshire
Owen, David Charles Lloyd, Smethwick, Birmingham
Phillips, George Richard Turner, Leinster Square, Hyde Park
Ryder, Henry Thomas, Upper Fitzroy Street, Fitzroy Square

At the same Court, the following passed the first amination:—

Rogers, Charles E. H., West Meon, near Petersfield

APPOINTMENTS.

WNES, James Badger, Esq., appointed Resident Surgeon to Christ's Hospital, New Zealand.

BIRTH.

BSON. On September 28th, at Birtley, the wife of *George Gibson, M.D., of a son.

DEATHS.

RRY. On September 29th, at East Rainton, Durham, aged 28, the wife of *William Curry, Esq.
CHARDSON. On October 5th, at 12, Hinde Street, aged 3 years, Kenneth Benjamin, second son of *Benj. W. Richardson, M.D.

PROFESSOR OWEN is to deliver four lectures at the rmingham Institute.

THE LATE DR. VOGEL. The British government s given £500 to the sister of the late Dr. Edward)gel, who lost his life in Central Africa.

THE CAMBRIDGE BOTANIC GARDEN. The Curator-ip of the Botanic Garden at Cambridge is now cant. The pecuniary emoluments are supposed to somewhere about £120 a year.

DR. BRADY, M.P. Owing to the death of Mr. Henry yner, of the Isle of Ely, the daughters of Dr. Brady, .P. for Leitrim, have inherited a fortune of upwards £1,000,000.

PAY OF DOCTORS IN TURIN. The *Medical Gazette* Sardinia states that, of the two hundred doctors at rin, there are not a hundred and twenty who gain *francs* a day!

SKILFUL SURGERY. The surgery of this (the Fede-l) army is reaching an extraordinary high scale as apons reach perfection. Men wounded in the head neck are fed for weeks through silver or rubber bes. Such is the progress made by the medical de-rtment in these parts that half a man's face demo-hed by a ball or piece of shell is replaced by a cork ce. (*Springfield Republican.*)

UNIVERSITY OF CAMBRIDGE. Dr. Humphry's lectures on Human Anatomy and Physiology will commence on Friday, October 14th, at one o'clock, and be continued daily.

ACTION FOR MEDICAL FEES BY A NON-REGISTERED HOMŒOPATH. Lately, in the Westminster County Court, one Scheibler sued one Harding for medicine and medical attendance; but Scheibler was not registered, and therefore the judge decided that he could not recover. The plea put in by his counsel was, that Scheibler was in the homœopathical line, and therefore did not consider it necessary to register.

CAMBRIDGE EXHIBITIONS. There will be an examination at Sidney Sussex College on Tuesday, Oct. 11, of students who intend to commence residence; when, provided fit candidates present themselves, the following scholarships will be filled up: One for classics and mathematics combined, £80; one for classics only, £40; two for mathematics only, £40; two for natural science or mathematics, £40; one or more Johnson exhibitions, £32. The subjects of examination are, classics, mathematics, and natural science, including electricity, chemistry, geology, and anatomy.

YELLOW FEVER AT BERMUDA. The *Montreal Gazette* says:—"We regret to learn that seven of the military surgeons who recently left the North American Provinces for Bermuda were at last accounts sick with the yellow fever. Drs. Ewell and Mellery are dead, and Dr. Lloyd not expected to recover." The *Montreal Herald* of the 17th says:—"Captain Lockhart of the Royal Engineers was also dead of the fever; and several officers of the Queen's Royals, Dr. Harrison, of the Royal Artillery, and others, have also fallen victims to the disease."

ACTION FOR MEDICAL FEE. Bath County Court. Parker *v.* Fisher. This was an action brought by Mr. Parker against Mr. Fisher, to recover £15 : 15 for medical attendance upon the defendant's wife. It was contended for the defence that, in consequence of the defendant having volunteered his services (which were admitted to have been rendered) he undertook the matter gratuitously; and that the account was excessive, the plaintiff having attended more frequently than was necessary. In support of this latter view Mr. Spender and Mr. Gore were called for the defendant. The jury found a verdict for the plaintiff for £4 : 4. (*Bath Journal.*)

HIPPOPHAGIC BANQUET. The following is the invitation issued to the members of the Congress at Lyons:—"The use of horse-flesh for food is an immense benefit to health and public fortune. Adopting it in France, we should introduce 40,000,000 kilos of flesh—as good as beef—more succulent than pork, and a third of the price of other butcher's meat. But is the taste of horse agreeable? The Hippophagi say: 'Yes,' their adversaries 'No!' because they have not yet acquired the taste. MM. the members of the Congress are earnestly requested to give the experience of their tried palates, in order to do away with this prejudice, and to favour us with their company at this great hippophagic demonstration. The banquet will take place at the restaurant 'Neyret.' A *menu* of twelve dishes will be prepared for the guests. There are only 120 tickets. Dr. MUNARET QUIVOGUE, Veterinary Surgeon, Promoter of the Festival."

THE LATE PROFESSOR QUEKETT. A handsome polished granite tomb, with ornamental railings, has recently been erected to the memory of Professor Quekett within the churchyard of Pangbourn, in Berkshire, where he died in 1861, while residing there for the benefit of his health. The following in-

scription encircles the tomb :—"In memory of John Thomas Quekett, F.R.S., P.L.S., M.R.C.S.E., etc., Professor of Histology, and Conservator of the Hunterian Museum of the Royal College of Surgeons of England. Born at Langport, Somerset, 11th August, 1815; died at Pangbourn, 20th August, 1861, aged 46 years. 'There is a spirit in man, and the inspiration of the Almighty giveth them understanding.' His memory will for ever be cherished by all who knew him, and by the thousands who have profited by his wonderful stores of science."

Honey as an Excipient for Pills. M. Thibault (*Bulletin de Therapeutique*) believes that much of the disappointment following the employment of pills arises from their, as ordinarily prepared, acquiring a degree of induration that prevents their solution, and enables them to traverse the alimentary canal unchanged. To prevent this he recommends the employment of honey; pills prepared with it always remaining soft, however long they might be kept.

Liverpool Royal Infirmary School of Medicine. The annual distribution of prizes to the pupils of the above institution took place on the 3rd inst. Dr. Long delivered the introductory address. Prizes in the following classes were then delivered to the successful students :—*Surgery:* Mr. Warburton, medal. *Medicine:* Mr. H. G. Samuels, medal; Mr. H. F. Fisher, certificate. *Junior Anatomy:* Mr. D. Evans, medal; Mr. L. V. Mapei, certificate. *Chemistry:* Mr. R. Hughes, medal; Mr. R. A. Mowll, certificate; Mr. H. F. Fisher, certificate. *Materia Medica:* Mr. H. F. Fisher, certificate. *Midwifery, etc.:* Mr. J. E. Burton, medal. *Practical Chemistry:* Mr. H. F. Fisher, books. *Medical Jurisprudence:* Mr. H. F. Fisher, books.

A Herbalist's Pathology. At a late inquest on a child which had been treated by a herbalist, and prescribed for by Dr. Coffin, it came out that Dr. Coffin had sent a certificate by post to the effect that the child had died of phthisis. Mr. Gant, who made a *post mortem* examination, stated that the lungs and other organs were quite healthy. Thereupon the jury returned the following verdict :—"That the deceased died from exhaustion from diarrhœa from natural causes; and the jury are of opinion that the legislature ought to put a stop to the practice of unqualified practitioners giving certificates, as it was calculated to facilitate child murder and irregularities of registration."

Mr. Syme's Clinical Method. Mr. Syme thus describes his mode of instruction : "The plan, therefore, which I introduced into the Edinburgh school thirty-five years ago, and still pursue, is to bring the cases, one by one, into a room where the students are comfortably seated, and if the patients have not been seen previously by the surgeon, so much the better; then ascertain the seat and nature of their complaints, and point out the distinctive characters. Having done this, so that every one present knows distinctly the case under consideration, the teacher, either in the presence or absence of the patient, according to circumstances, proceeds to explain the principles of treatment, with his reasons for choosing the method preferred; and, lastly, does what is requisite in the presence of his pupils. The great advantage of this system is, that it makes an impression at the same time on the eye and ear, which is known from experience to be more indelible than any other, and thus conveys instruction of the most lasting character. Every season I have from a dozen to twenty of my old pupils, who, having been employed for many years in the public service, and not unfrequently attained the highest rank, yet attend the whole course without missing a lecture, and often bring to my recollection cases seen or remarks heard long before the bulk of the class were born. I may add, that the Edinburgh College of Surgeons, in their curriculum of study, have wisely taken a second course of clinical surgery instead of a second systematic course at option of the student; so that, instead of hearing the same story told over again, not always in the most lively manner, he may read his books and store his mind with valuable facts for future guidance and practice."

Vaccination. The report of the medical officer of the Privy Council furnishes reliable *data* on the subject of vaccination. The inquiries made into the progress of vaccination are very partial, arising from the circumstance that the only returns which can be relied upon are those made to the registrars and to the Poor-Law Board. Dr. Seaton stated "that as a rule returns of successful vaccination are not made by private medical practitioners"; and that the "certificates of vaccination were rarely sent by any medical man who was not a contractor, and often neglected by those who held contracts." Dr. Buchanan's testimony is to the same effect. Dr. Stevens, in his report, shows: that one registrar had not kept his registry of vaccination since 1854, another since 1855, another since 1857, and three since 1859. From this it is evident that a complete return of successful vaccination is not made, and that, therefore, the inquiries carried on by the medical inspectors could only give the result of vaccination tabulated in the different unions. It is desirable that the inspectors should, in addition, examine the children in the schools. From these two sources—the tabulated union returns and the returns of the inspectors with reference to the children in schools—we can form a very fair estimate as to the progress of vaccination. The returns, taken from the reports, show that the Act of Parliament has failed entirely in procuring vaccination returns from private medical practitioners, and that, while all praise is due to the authorities in certain districts, such as Eton, for their diligence, in others it is impossible to speak too severely. We, therefore, are compelled to consider the Compulsory Vaccination Act, as it at present stands, very imperfect. It fails to secure the general return of vaccination certificates. The Boards of Guardians do not perform their duty with reference to the promotion of vaccination, and taking proceedings against those who fail to comply with the Act. The remuneration to the union medical officers is generally fixed at so low a scale as to make every case vaccinated almost a dead loss to the doctor. A suggestion is made that, instead of medical men being required to give two certificates, one to the parents and the other to the registrar, there should be delivered to every medical practitioner a quarterly form for him to fill up of persons vaccinated, and that he should be paid for his return nearly in the same manner as clergymen are paid for their marriage returns; and that if they—*i.e.*, the doctors—failed to make their returns within a limited time proceedings should be taken against them before the magistrates. It must be conceded by everyone that to enjoin upon a union medical officer to vaccinate a child within a radius of two miles for 1*s.* 6*d.*, to visit it again on the eighth day, then to have to fill up four distinct forms, and to be paid only for the successful cases is more than ought to be required of any one. Two returns, one to the Board of Guardians and one to the registrar, might be held to be sufficient; and if the payment were fixed at 2*s.* 6*d.* within two miles, and 3*s.* 6*d.* beyond, would any one say that the parish would be a loser?

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LINCOLN COUNTY HOSPITAL.

CASES OF FEMORAL ANEURISM.

Reported by C. HARRISON, M.D., House-Surgeon.

CASE I. *Femoral Aneurism: Compression: Ligature of the External Iliac Artery: Superficial Gangrene of the Foot, and Suppuration of the Sac: Death by Hæmorrhage from the Sac on the Seventeenth Day after the Separation of the Ligature.* (Under the care of Septimus Lowe, Esq.) Samuel P., aged 28, a thin, cadaverous-looking man, labourer in a cake-mill, was admitted August 20th, 1863. He stated that, seven years previously, he had an attack of continued fever, since which he had not been so strong and active as before. He had noticed for the last six or seven years a small swelling on his left groin; but, as it caused him neither pain nor inconvenience, he took no notice of it. About six weeks before admission, he was wheeling a barrowload of cake; the cake slipped, and struck him in the groin. After this, he had pain on the upper part of the thigh, and soon noticed a tumour, which slowly increased in size and throbbed slightly.

On examination, there was found an oval tumour of about the size of a hen's egg, situated in the upper part of Scarpa's triangle, over the region of the left femoral artery, pulsating synchronously with the radial artery. Steady firm pressure caused the tumour to disappear; but, the pressure being removed, the tumour regained its former size. Pressure on the iliac artery stopped the pulsation, and caused the tumour to diminish in size (he was a thin man, and the external iliac could be pressed with facility and with little pain to the patient). The heart's action was feeble. There was no swelling in the region of any other artery. He had not much pain in the tumour; there was no œdema; and the sensation of the leg was not impaired. The stethoscope detected no *bruit*.

It being considered a favourable case for the application of pressure, on August 27th, a Signoroni's tourniquet was applied, and the external iliac compressed, so as nearly to arrest the flow of blood through the aneurism. The instrument was kept on, and the amount of blood allowed to pass through the aneurism was varied, the flow being sometimes nearly arrested altogether. He bore this very well for two or three days, and the aneurism seemed to become smaller and firmer; but, in consequence of the pain and inconvenience he began to experience from the pressure, he became restless and irritable, and would unscrew the instrument and remove it altogether. The consequence was, that the aneurism increased in size considerably; a *bruit* could be distinctly heard; and the tumour became conical in form, and inflamed on its surface.

Under these circumstances, on September 14th, chloroform having been administered, Mr. Lowe ligatured the external iliac artery in the method adopted by Sir A. Cooper. No blood was lost; and the operation was quickly performed. He was placed in bed, the limb being enveloped in cotton-wool and flannel bandages.

In the evening, the bladder was relieved by the catheter. He had no pain; the foot was warm; he had feeling on the dorsum of the foot, but not in the toes.

Sept. 18th. The tumour was smaller; the foot was warm; there was no œdema of the leg. Tongue clean. Pulse 84. He had a slight discharge from the wound; and a slight erysipelatous blush on the tumour, noticed the previous day, had disappeared. He was ordered eight ounces of port-wine.

Sept. 22nd. There had been for two days great discharge from the wound; pressure on the right side of the abdomen caused healthy pus to pour out of the wound on the left side. He began to feel very weak; and was ordered ammonia and cinchona, with sixteen ounces of wine, four ounces of brandy, and two pints of beef-tea.

Sept. 25th. There was less discharge. The great toe was discoloured; he had no feeling in the toes.

Sept. 29th. Discoloration was extending from the great toe to the anterior part of the sole of the foot. During the night, he had pain in the tumour; but now was quite easy. The shape of the tumour was considerably altered; the swelling was more diffused.

Sept. 30th. The swelling was larger, with a blush over its surface, and fluctuation.

Oct. 1st. The swelling was greater; the erysipelatous blush was extending. The skin over the tumour was very thin. An incision was made; and, a few ounces of very dark fluid blood having escaped, the wound was plugged with lint.

Oct. 4th. This morning, the incision was extended; and, after a few ounces of fluid blood had escaped, a quantity of pus followed. The gangrene was not extending.

Oct. 5th. This morning (the twenty-second day), the ligature came away.

Oct. 8th. The tumour had discharged freely, and was greatly reduced in size. Both wounds looked well. The patient's health was greatly improved; he took daily sixteen ounces of wine, four ounces of brandy, two pints of beef-tea, a mutton-chop, eggs, and arrow-root *ad libitum*.

Oct. 15th. The wound made for the ligature had healed; and the cavity of aneurism was filling up. The little toe was discoloured. After this date, he slept well, and ate well; the secretions were quite natural; and everything seemed to promise a speedy recovery; but at ten minutes past one on the morning of October 21st (the seventeenth day after the separation of the ligature), I was summoned by the nurse, and found the man lying in a pool of blood. His countenance was blanched; his eyes closed; his skin cold; and he was pulseless. The wound was immediately plugged and covered with a pad, and a consultation called; but he was too far gone to admit of any surgical interference, and died at half-past five.

It may be worth while to mention that, at eleven o'clock at night, I was startled by three loud reports. Thinking that it might be an explosion of gas somewhere, I went round the house; but, on sending out to ascertain the cause, I found that a drunken farmer, going home from the races, had fired off three barrels of a revolver close to the back-gates of the hospital. The nurse who was with the patient said he was sleeping soundly, and at the second report awoke suddenly, and jerked up his leg. At the time, it was thought that the sudden jerking up of the leg had caused the clot in the lower end of the artery to be dislodged; but at the *post mortem* examination made the next day, this was found not to be the case. The lower end of the artery was filled by a firm clot down to the origin of a small muscular branch. The profunda was given off much higher than usual, and took its origin from immediately above the aneurism, and in it no clot was formed. The external iliac was four

inches in length; and the ligature had been applied two inches from its origin. Above the ligature, a firm clot extended to the bifurcation of the common iliac; below it, was a firm clot of more than an inch in length.

Case II. *Femoral Aneurism treated by Opening the Sac and Tying the Artery above and below.* (Under the care of E. F. Broadbent, Esq.) James H., aged 33, was admitted January 31st, 1864. He was a miller by trade, of dissolute habits formerly, but had been steady during the last two years. In October 1862, he was digging some hard ground (he was in the habit of striking the spade with his foot): on one occasion, he missed the spade, and his heel struck the ground forcibly. This caused him pain in the thigh and numbness of the limb. A week afterwards, he felt a small lump, of about the size of a horse-bean, nearly in the middle of the thigh, and to the inner side. This increased very little until August 1863, when he worked in the harvest field harder than usual, causing the swelling to increase rapidly; and now he also felt a throbbing in it. The leg began to swell, and the sensation became diminished. He was under medical treatment, but gradually became worse, and was admitted the first time on January 11th. There was a pulsating tumour in the middle of the left thigh, of about the size of a man's fist, with a well defined margin and very distinct *bruit*. He had, however, not been in the hospital above half an hour before he left, and went home, some twenty miles, into the country. On the night of January 27th (the tumour having been gradually increasing in size, and having become more painful since he left the hospital), he had an attack of diarrhœa, and had to get out of bed several times. During the day also he had, whilst drawing a cork, struck his hand on the tumour. On the following morning, he found the tumour much increased in size. On the 29th, he had several rigors. On the 30th, the integument over the tumour became inflamed; the rigors continued; and on the 31st he was brought again to the hospital.

On examination, the limb presented a very different appearance from that which it had when he left the hospital about three weeks before. The whole limb was much swollen; the tumour had no defined margin, but was diffused, extending into the upper third of the thigh. The integument of the middle of the thigh was of livid colour; the leg was œdematous; and sensation was much impaired. The circumference of the limb at three inches above the knee was two inches more, and at eight inches above the knee five inches more, than on the opposite limb. He had a rigor on the road to the hospital. He had great pain; had not slept for several nights. His countenance was extremely anxious; pulse feeble and quick.

For two or three days the man refused to submit to any operation with the knife, as he had been told in the country he could be cured by pressure (but pressure he could not bear). He at last consented to any operation that might be decided upon. On February 3rd, a consultation was held; and, chloroform having been administered, the sac was laid freely open by an incision about ten inches in length over the middle of the tumour, commenced above and carried below it. This was immediately followed by a gush of blood. The contents of the sac were turned out; and the cavity, when exposed, was large enough to contain the head of a full-grown fœtus. The upper end of the artery was easily secured; its orifice was very wide and patulous, so that the ligature was placed about an inch above. There was considerable difficulty in securing the lower end, in consequence of its being just at the point where the artery enters Hunter's canal. After several ineffectual attempts to secure the vessel (during which a great quantity of blood was lost), a strong ligature was passed under the canal, and the tendinous structures and the artery tied together *en masse*. This controlled the hæmorrhage. Several small vessels were ligatured; and some very large veins were troublesome; but all bleeding was eventually arrested. The edges of the wound were brought together with long wide straps of plaister; wire sutures were introduced; and the limb was bandaged from the toes upwards.

In the evening, he vomited frequently. Pulse very feeble. He was ordered iced brandy and an opiate.

Feb. 4th. There was slight oozing through the bandage. He had no sleep; had hiccup and sickness. Pulse 135. He was ordered two grains of opium.

Feb. 5th. He slept well during the night. The sickness had abated. No hiccup. Pulse 108; skin hot and dry. He was ordered to have an effervescing mixture.

Feb. 7th. The bandages becoming rather offensive, chlorine lotion was applied; and two ounces of brandy were ordered.

Feb. 8th. The wound was dressed, and discharged a quantity of disintegrated blood and healthy pus. The foot was warm; sensation was perfect. The œdema was much the same as before the operation. He was ordered beef-tea and six ounces of wine.

Feb. 11th. When the wound was dressed to-day, a large piece of the sac came away.

Feb. 14th. The ligature came away from the upper end of the artery.

Feb. 20th. The ligature came away from the lower end. After this date, with the exception of a rather sharp attack of dysentery, he progressed favourably. On March 7th, he could walk about the ward with a crutch; and on March 21st, he went home, and walked with a stick.

HULL GENERAL INFIRMARY.

TWO CASES OF OVARIAN DISEASE.

Under the care of Kelburne King, M.D.

[*Reported by* Mr. T. M. Evans, *House-Surgeon.*]

Case I. Elizabeth Harris, aged 60, was admitted on April 2, 1864. She was in very fair health. The abdomen was much enlarged; the girth at the umbilicus being fifty-four inches. The right side was the most prominent. The superficial veins were enlarged. Percussion was dull; fluctuation distinct.

History. She was a married woman, and the mother of three children, all living. Ten years ago, she first noticed some swelling of the abdomen, menstruation being at that time rather excessive; after two years, she was tapped, and a quart of dark-coloured fluid was removed. The operation was repeated three times during the following two years; and again six years ago, when tincture of iodine was injected after the removal of the fluid. Much pain followed this operation; but she was only confined to bed for a few days. Since that time, she has been twice tapped; it being now three years since the last operation.

April 20th. Being in good health, she was removed to a small ward heated to 70°, and placed under chloroform. An incision, eight inches long, having been made, the omentum was found to be extensively adherent to the front of the tumour; these adhesions were broken down, and several large sacs came into view. Six of these, each of which held nearly a quart of fluid, were tapped; and were then found to be connected together, and to form, with a

arge number of smaller sacs, one mass, attached in he pelvis by a single pedicle about an inch thick. This was divided, and secured by a clamp with a liga-ure beneath it; and the sides of the wound were rought together with sutures. The intestines were carcely seen, and little or no fluid escaped into the eritoneum. The contents of the cysts varied from straw-coloured, thin, but viscid, fluid, to one of a rown colour and gluey consistence; and some of the luid sparkled with scales of cholesterine, which ex-ibited very perfect plates under the microscope. The vhole mass, tumour and fluid, weighed two stone.

After the operation, she suffered great pain; but vas much relieved by a drachm of tincture of opium; n the evening, fifteen-minim doses were repeated very four hours. Barley-water and tea were also aken, though several times rejected by vomiting; for vhich soda-water was given.

April 22nd. The patient passed a quiet night. Pulse 93; tongue moist. She had no further sickness; ut a rather frequent cough, and an anxious expres-ion. The catheter was passed night and morning. The opiates were continued. At 4 P.M., she was per-spiring freely.

April 23rd. She vomited several times in the night; pulse 120; free perspiration; abdomen painful. 6 P.M. She was in great pain; the pulse was failing; the extremities were rather cold; the abdomen was very tympanitic. An assafœtida enema was given; and six ounces of brandy were ordered. She died at 11 P.M.

SECTIO CADAVERIS. The stomach and intestines were much distended with flatus; and there was about a quart of bloody serum in the peritoneal cavity. The small intestines were deeply injected; and their folds were agglutinated by recent lymph. The pedicle was quite free from any signs of inflam-mation. The uterus and left ovary were healthy. There was no other disease.

CASE II. Elizabeth Cherry, aged 39, was admitted into the Infirmary three months ago, for swelling of the legs, when two tumours were found in the abdo-men, one on each side, firm, but distinctly elastic, of which she herself was before unconscious. Her health, at that time, was not much affected, though she suffered from occasional pains in the abdomen; and, being unwilling to undergo any operation, she was discharged. After leaving, she became rapidly worse, the abdomen also increasing in size; and three weeks before her last admission, she was tapped on the left side, when three pints of brownish viscid fluid were evacuated. She was unmarried; menstru-ation ceased six months ago, having been imperfect for a year previously.

June 7th. She was re-admitted, in a very low and emaciated state. Pulse 104, feeble; tongue dry and irritable. The abdomen was much swollen and tense, and its superficial veins were enlarged. It was dull on percussion, except at the upper part; and on the left side, a firm, but distinctly fluctuating tumour, could be felt on pressure. Both legs were slightly œdematous. She was ordered to have fifteen minims of tincture of opium, with the same quantity of chloric ether, every four hours; and to have milk-diet and ten ounces of brandy.

June 9th. She was frequently sick, and much weaker; she could not lie down in the bed. Soda-water was ordered.

June 11th. She was wasting rapidly; took little nourishment, and was almost constantly sick. Ten grains of bicarbonate of potash were added to the draught. The sickness afterwards abated; but she sank and died on the 16th.

SECTIO CADAVERIS. The lungs and heart were healthy. The omentum and intestines were greatly thickened all over by a white cancerous deposit. On the left side of the pelvis, there was slight local peri-tonitis over a tumour of about the size of a cocoa-nut; and, on separating the adhesions, the mark of former tapping was visible. The tumour was so ad-herent, that it was impossible to remove it entire; and, it being torn, a viscid, reddish fluid escaped. The tumour consisted of a sac containing fluid, with a solid mass of cancer at the lower part, adherent everywhere in the pelvis, and growing freely and sprouting out, as it were, into the interior of the sac. The solid portion had in parts the appearance of soft cancer; and, in others, contained abundance of cheesy, yellow, semifluid substance, of a colloid cha-racter. The right ovary presented similar disease, but less advanced; consisting of a sac of fluid, into the lower part of which sprouted a cancerous mass, which was adherent in the pelvis, and had more of the medullary character than the other ovary.

OBSERVATIONS. The case of Elizabeth Harris ap-peared not an unfavourable one for operation, although she was advanced in age, and had been subjected to previous tappings; for her general health was good at the time, and the disease quite free from any sus-picion of malignancy. The size and number of the cysts made them rather formidable during the opera-tion; but fortunately they were all attached by a single pedicle. She progressed favourably at first; but peritonitis set in, and quickly terminated the case.

The last case was somewhat suspicious from the beginning, on account of the œdema of the lower extremities, though not sufficiently so to forbid oper-ative measures; but, on re-admission, her health was too seriously affected, and there was every proba-bility of the disease being of a malignant character; so that, though she had requested to be operated on, and had come in for that purpose, it was considered inadvisable to accede to her wishes. After death, the tumours were found to be so extensively adhe-rent, that, if any operation had been begun, it could not have been completed.

Original Communications.

FOREIGN SUBSTANCES WITHIN THE EYEBALL: THE SUBSTANCE OF A LECTURE.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

IN these accidents, I reiterate the principles pro-pounded in my last paper respecting the removal of substances from the surface of the eye. It is our duty, whenever practicable, to remove whatever is driven into the eye. When the body has passed out of sight and cannot be very readily felt with a probe, or ascertained to be superficial, the eye must for a time be left to take its chance; as likewise when the body is so small that it is scarcely possible to seize it; or when it is of such a nature as to be likely to be absorbed; or when it is soft, and, though insoluble, cannot be taken out, as gunpowder, or its residue.

As I have mentioned the probe, I must also enjoin a little caution about its abuse. A great deal of harm is often done with it. I never employ it, except I have strong suspicion of the presence of some intruded thing, and always in a light and superficial manner, for every movement of it out of the line of the injured part inflicts damage. Under all circumstances, except in

very practised hands, the patient will have the benefit from dispensing with it.

It is into the anterior chamber of the eye that substances are mostly driven. We have now sufficient evidence that iron, or steel, provided that it be but a mere fragment, will become oxidised and absorbed in the anterior chamber, leaving the eye uninjured. So long as an oxidisable bit of metal, sufficiently small, does not produce symptoms, wait and see the issue. But this does not hold good with copper or brass. These resist the saline action of the aqueous fluid, and should be taken away; and the sooner the better.

There are several examples published, to show the tolerance the eye may exhibit with bodies in this place, for days, weeks, and even years; in one peculiar instance for sixteen years; but as a rule the end is disastrous. Except the very unlikely process of encysting should ensue, the eye will perish. It is not suppuration that usually destroys, but generally subacute inflammatory action; and sometimes the function of sight is lost, with scarcely recognisable objective symptoms.

The length of time that may have elapsed since a foreign body entered the eye, should be no reason against endeavouring to extract it, if its presence be injurious; because at any time, even after the interval of years, intolerance to it may be manifested. Experience and much inquiry have convinced me that, after symptoms of irritation have set in, it is a fallacy fraught with danger to wait till they cease, for an opportunity to operate. The subsidence for the most part never arrives till the eye is destroyed, and the most threatening symptoms will rapidly end when the irritant has been removed. Except then, under very exceptional conditions, we attempt first to subdue any very acute inflammatory action, there should be no delay. But it is no easy matter to do what is required with the least possible injury, and effectively. Attempt upon attempt is often made in vain, and a well tutored hand only can be expected to be successful. It is an undertaking above all others, that needs self-possession, knowledge of operations on the eyeball, and cleverness in manipulation. Chloroform is indispensable. Emergencies will arise, and must be expected, and should be provided for.

The process of encysting, of which I spoke in my last paper, as occasionally happening on the surface of the eye, is still more rare here, in the anterior chamber. Except for very cogent reasons, I should be disposed to leave an encysted body alone. I should not interfere so long as vision was not interrupted, or likely to be damaged by this conservative effort. But a substance so tied down, is not altogether, and for ever, out of reach of harm. Effusion of lymph, or a capsule around it, does not absolutely secure immunity from future disturbance. The cyst may be spontaneously opened, or be broken by violence, or become injurious in itself.

A foreign body may be impacted in the iris, and be apparent, and yet it might be prudent not to interfere. Except it project, and can readily be seized, the difficulty of extraction is very great, and the operation is likely to be injurious; therefore, in general, and in the absence of symptoms, and especially when it is very minute, I should be inclined to wait, as by so doing there is afforded an opportunity for encysting, which is so likely to happen in this position. I suspect that oftentimes, when an operation is imperative, the better plan would be to excise the bit of the iris, rather than what has so often proved a most tedious and fruitless process—that of picking out the fragment, particularly when more or less covered by exudation. Even on this part an encysted body may become loosened, and produce all possible ill effects. In the *Dublin Quarterly Journal of Medical Science*, 1848, page 210, is recorded an instance of a very minute scale of copper-cap in the iris becoming encysted, and remaining so for eight years; during which time it produced repeated attacks of inflammation of the eyeball, and, ultimately, it exfoliated through the cornea.

When the posterior chamber of the eye has been entered, the same rule must, if possible, be followed. If the lens have lost its transparency, a better search may be made by removing it.

I have not seen anything impacted in the crystalline lens; and I find but few such accidents recorded. I suspect that opacity is the inevitable consequence. According to the position of the body, must it be decided whether it shall be better to attempt the removal of it in the first instance, and the opaque lens afterwards; or to take it away with the lens. Under all circumstances, the removal must be undertaken; for if even no immediate irritation be produced when the lens becomes absorbed, as it surely will, the offending body will fall into the posterior chamber of the eye, and act injuriously.

The records of ophthalmic surgery teach us that, even when the vitreous humour has been penetrated by a bit of metal it can be explored, and the metal removed, and the eye saved. A metallic chip was driven through the eyelid and the sclerotica, near to the cornea. Several days after the injury, and while the ophthalmoscope was being used, at a sudden turn of the eyeball, there started from behind the inner portion of the iris an oblong, black body, which was instantly recognised as a chip of metal. It was entangled in a few thread-like remains of clot, which kept it suspended in the vitreous humour, and allowed it to move freely backwards and forwards. After due deliberation, the operator determined to penetrate the vitreous humour from below, and endeavour to extract the body. Standing behind the patient, who was seated in a chair close by the window, the eyelids being separated with a spring retractor, he fixed the globe of the eye by nipping up a fold of conjunctiva just above the cornea. A Jäger's lance-knife was then thrust in a little distance from the margin of the cornea, and the point directed backwards, to avoid wounding the lens. The knife was now withdrawn, and Assalini's iris-forceps introduced, with which, after one or two unsuccessful attempts, the body was grasped and extracted. It proved to be a part of the edge of a chisel, about one-tenth of an inch long, and weighed a quarter of a grain. In a remark appended to the case, in the *Ophthalmic Hospital Reports*, it is truly said that in such cases there is a certain lucky chance, without which the most skilful manipulations may fail of success. I may add, that such a fortunate result can fall to the lot of but few operators, nor is a parallel case likely to occur. Still, in allied accidents, the circumstances should be studied with a view to similar treatment.

When there is any reason to suppose that the posterior part of the eye retains any extraneous material, and the symptoms are severe, the eyeball ought to be extirpated; for, irrespectively of the likely injurious direct effect of the accident, sympathetic implication of the other eye is imminent.

In the following case of gunshot injury, it was not at all clear whether a shot had entered the eyeball.

A farmer, with one only available eye, was unfortunate enough to be shot by a boy a few yards in front of him. The greater part of the charge went through his hat, but several shots lodged in his scalp, his forehead, and in the eyebrow, and he was blinded. The anterior chamber seemed occupied by blood. The eyeball was very hard and tender to touch. There was no evidence of shot having entered it, yet its

tate could not otherwise be accounted for. Vision was quite destroyed. I was consulted by the recommendation of Mr. Marriott, of Kibworth, for the intense pain in the brow, frequently associated with pain in the orbit, and in the eye. Other surgeons had been consulted, and the conclusions arrived at were different from my own, which was to leave the eye alone, and to remove the shot. I extracted all that I could get at—that is, all that I could feel. Some were embedded in the bone. My patient being a very large and a remarkably fat man, they were the more concealed. Every wound healed by the first intention. Considerable relief followed; but pain in the old situations at longer intervals still tormented him; and some months later, when the position of a few more shots could be traced, I removed them with advantage. Once again he came to me, as two that yet annoyed him could be felt, and they were the last. There was no return of pain after I extracted them.

It is a great satisfaction to me that I avoided extirpating the eye, which would have been useless, and must have further spoiled a fine and benevolent countenance; for, notwithstanding the front of the eye is not quite natural, the pupil being closed and the iris discoloured, there is no marked disfigurement.

Introductory Lectures.

MIDDLESEX HOSPITAL.

The Introductory Address was delivered by Dr. Greenhow. He said that he should specially adapt his address to the young men who already were, or who were about to become, students of the Middlesex Medical College. He would remind these gentlemen that this day was the commencement of a new era to them all; it was the landmark of their past progress, the starting-point of their future course; and a few practical counsels, that might help to guide them on their course, and to assist their progress, were what he proposed to offer them during the remainder of the time at his disposal. With this purpose, he proposed to consider—1. The object with which they had entered themselves as students of the college; 2. The studies that would be necessary to secure this object; 3. The manner in which they could pursue these studies to the best advantage; 4. The spirit and aims with which they should pursue the calling for which these studies were to qualify them.

With regard to the first point, there could be no question that their object was to qualify themselves for the practice of medicine; and he trusted that their real object was to render themselves useful and competent members of the profession, and that none of them had in view either the partial object of studying merely some one branch of medical knowledge, or the degrading object, as he could not but consider it, of merely securing their diplomas. No excellence was to be attained in any one speciality, unless a broad and solid foundation of general medical knowledge were first laid. But far more strongly he must denounce the indifference to all branches of medical knowledge alike, which led some men to be satisfied with barely passing the examinations of the several boards, whose standard of proficiency was necessarily a low one; for deliberately to place one's self on a low level, and aim at a low standard, was, in his opinion, degrading to any man's self-respect.

He then enumerated the studies necessary to secure their object; and said they must never forget, in the wide and interesting fields of knowledge which these would open to them, that, as intending medical practitioners, they must study every science with reference to its applicability to the purposes of medicine, including every branch of the healing art. They might master all these sciences perfectly, and even their practical applications to the purposes of medicine, without becoming competent medical practitioners; for medicine was an art, no less than painting or music, and required long practice to attain even moderate proficiency. But medicine differed from every other art, in that it was exercised upon living fellow-creatures, to whom bungling might prove fatal. The tyro in painting or music might spoil the materials or instruments of his art, and yet do no worse harm than that of offending the taste or the ears of his neighbours; but the tyro in medicine might destroy precious lives in his crude experiments upon human subjects, and must therefore be content to learn his art in the first instance by observing the practice of others, and only begin to practise it himself when he could do so with safety to his patients. From the day, therefore, that they entered the lecture-room as students, they should begin also to observe disease and its treatment in the hospital; and, although during the earlier period of their attendance the larger portion of their time should be devoted to the study of science, and during the latter period, on the contrary, to the study of practice, yet from first to last these studies should go on together. Before concluding the consideration of their necessary studies, he must say a few words on the education of their physical faculties. It was not merely by being shown the relation between certain visible signs and certain internal diseases, by being made to listen to the sounds in the chest which indicate certain forms of pulmonary or cardiac disease, or being told to feel the crepitus of a fracture, or the heaving expansive impulse of an aneurism, that they could educate their senses. Instruction came by precept; but education could come only by use.

With reference to the third point—viz., the manner in which they could pursue these studies to the best advantage—it would, perhaps, be more in accordance with custom, if he were to limit himself to general advice. But he had found that general counsels, however good, did not practically save medical students, especially first-year students, from wasting precious opportunities, for want of knowing what those opportunities were, or understanding their true value while the time for profiting by them remained; and he had found also that some students, even up to the conclusion of their attendance, lost the benefit to be derived from prosecuting their studies on a regular and connected plan, from sheer inability at first to form such a plan for themselves, and from drifting in consequence, during their earlier sessions, into indolent and desultory habits. He should, therefore, endeavour to lay before them the details of a scheme for the systematic employment of their time. Dr. Greenhow then explained the distribution of hours which he proposed to first year's students, in order to combine regular attendance on the prescribed courses of lectures on anatomy, physiology, and chemistry, with a diligent study of practical anatomy by dissection, and a share of attention to the study of disease and its treatment, chiefly in the medical and surgical out-patient rooms of the hospital. He was sure that a man of average diligence and ability might profitably attend all the prescribed lectures, and keep up with them in his reading, without being over-burdened with work. He strongly advised the devotion of a larger portion of time to the study of practical anatomy than was now usually given to it by medical students. He recommended that, during their first winter session, their study of disease and its treatment should be carried

on chiefly in the out-patient rooms, where the majority of cases closely resembled those they would be called on to treat as young practitioners, and also admitted of being more throughly examined by the student, without detriment to the patient, than was possible with the cases of more advanced and acute illness generally found in the wards. He further advised that they should, as a rule, devote at least three hours every evening, except Saturdays and of course Sundays, to reading at home strictly in connexion with the lectures and work of the day. He afterwards sketched out more briefly plans for the employment of the student's time during subsequent sessions; and concluded by observing that he had now gone through their three years' course of study; and that, as they had seen, each year, nay, each day, had its proper work, which could not be postponed to the next. There was no time to spare; but there was sufficient time for everything, if everything were done at the right time; and it was certain that nothing less than everything there prescribed would suffice to qualify them for the arduous duties of their profession.

Regarding the last point for consideration—viz., the spirit and aims with which they should pursue the calling for which these studies were to qualify them—he said that, in whatever line of life a man's lot might be cast, his duties were to himself, to his neighbours, and to God, and should, therefore, be performed in the spirit of self-respect, of charity towards his fellow-men, and of faith and obedience towards his Maker. There were trials and difficulties peculiar to the medical profession; and, unless they were met with the preparation of a right spirit, they might easily lead its members astray from the right aims of life. It had been truly said, that most men regard themselves too much, and respect themselves too little; and in no profession was there so much danger as in theirs that too exclusive regard to self and selfish interests would lead them to derogations from the spirit of self-respect which must lower them in their own eyes and in those of their fellows. The medical man should also especially cultivate the spirit of charity towards his neighbours—charity, not only in the restricted sense of benevolent aid to the sick and suffering, which, it must be remembered, was in accordance with their professional instincts, and seldom in even apparent opposition to their professional instincts, but charity also in its wider sense of candour and good-will towards their professional brethren, which was a rarer and a higher virtue, and one which they should cultivate for the sake of the immunity it would secure them from the painful and mistaken jealousies which equally embittered failure and poisoned success. They might almost infer the aims they should pursue from what he had said of the spirit in which they should pursue them. The aim of professional success was a necessary and legitimate aim with all of them, and one to which he would wish to see them earnestly aspire; but still he must remind them that it should never be their highest or their sole aim. They should cultivate to the utmost, and employ with their utmost energies, all the faculties and skill they might possess, with the high and conscious aims of diminishing the sum of human suffering and increasing the sum of human enjoyment, and of thereby fulfilling God's purpose in the station of life to which He had been pleased to call them. Of medical knowledge, above all other knowledge, it might surely be said, that it should be, "not a shop for profit or sale, but a rich storehouse for the glory of the Creator and the relief of man's estate."

GUY'S HOSPITAL.

Dr. J. Braxton Hicks, F.R.S., delivered the Introductory Address. He commenced by giving a hearty welcome to the students. He considered the first year the most important of all, for stamping the character of their manhood, for good, for evil, or for nonentity. He urged upon them the necessity of keeping up the character of the school; for to them, as its representatives, the world would look. He alluded to the flourishing state of the school, and the high position its students took at the examinations. He then dwelt upon the objects of the profession; its endeavour to mitigate human suffering; and its power of improving and ennobling the minds of its followers. Beyond the duty and high privilege of man to endeavour, as far as possible, to assimilate himself to the divine essence, the next end of man's life, as taught by the Great Master, was to alleviate suffering humanity; and this was the object of the medical profession. Other occupations, doubtless, held forth the promise of greater gain; nay, there were other professions which offer hopes of greater fortune and higher rank; but there was none which, while it enabled its followers to gain a competent living, would so much enable them to carry forward the great end for which they were created, and to further the designs of universal brotherhood.

He then called upon the students to acknowledge the responsibility and anxiety of a post having such noble ends in view as the profession of medicine; and appealed to them to take every advantage of the opportunities offered them, considering that upon their actions, right or wrong, the lives of others depended. Not that they were responsible for every life placed in their hands; but for the acquirement of as much knowledge as their time and abilities permitted.

Dr. Hicks then pointed out the division of medicine into principles, and their application. He was the most accomplished practitioner, who united these in their proper proportions. He advised the students to attend during the first two years to compassing the principles; taking, however, opportunities of seeing practice in the wards during that period. Chemistry, anatomy, and physiology; comparative anatomy and physiology; botany and physiological botany; would be studied in the first two years. They were, more or less, so thoroughly interwoven into the healing art, that they could be used at every moment, as aids in the interpretation of phenomena, in the explanation of facts, by close analogy, and in affording a broad insight into the bearing of circumstances. Some of these sciences were not all equally important to the healing art; but he (Dr. Hicks) was at a loss to say which was the most, and which was the least, valuable. Anatomy and physiology, perhaps, might rank highest, and botany the least. Yet animal physiology could not be understood without vegetable, or human without comparative. Having acquired a fair knowledge of these sciences, the students would then attend to the aberrations from the normal state, or disease; the mode which Nature herself undertakes to rectify these; and the means of assisting her. It was the part of modern medicine to study the natural progress of diseases; to note what kinds tended to recovery, and what forms to the destruction, of the patient; and what outward or inward causes influenced them. The study of the natural history of diseases was one of the most important he could recommend to notice. The study of pathology is as important at the bedside as its study in the dead-house. The greater proportion of diseases recover; therefore, we know but little of their *post mortem* appearances. We must study them by their temporary effects upon the state of the body,

compared with that of health, which you will have learnt by your physiology.

In speaking of the study of the effects of remedies, he lecturer said that it would be the duty of his hearers to study them very closely, in order that they might not overlook their real action, nor attribute to them effects which really did not belong to them. It would require long and patient bedside study to become acquainted with the subject; and yet this was the end of their labours. He begged them not to consider that remedies meant solely drugs; but that they included everything which could be brought to bear against the adversary. He warned them, also, not to fall into the error of denying any efficacy to drugs.

He shewed that the task before them required a mind improved by habit to the full employment of its powers in close and careful observation, energy, and continuous application; and a strict love of truth and rigid accuracy. He advised them carefully to weigh well all the remarks of their instructors; at first, taking them on trust, and afterwards judging for themselves.

He congratulated the school on the reciprocal understanding existing between the students and the school; and expressed an earnest hope that their pleasant gentle relationship might long continue. He advised the students, when they found that the opinions of their instructors varied, they should not cast them aside in despair, but weigh them all. The truth might be found in their combination. To a certain extent, they would find sure foundations and definite clear rules. Afterwards, they would find it more uncertain; and this would require more caution in order to secure the right road.

Dr. Hicks recommended, as an important help, discussion on diagnosis amongst the students themselves, and also in public in the Pupils' Physical Society, which latter would give impetus to thought and practice in public speaking. He then called to their mind the necessity of cultivating the use of the hands on every possible occasion, pointing out the requirement for delicate touch. He advocated to this end the study of drawing and painting, and particularly practice in carpentry; the latter being of especial value to the surgeon. To be successful, and thoroughly so, we must collect sands from every shore. The difference between men is not so much dependant on their different mental capacities, as in the amount of general knowledge. He then adverted to the specialist; and he did not apply the term merely to the minute divisions of medicine, but to the greater division of surgery and medicine, which prevailed, when formerly physicians made a boast of their ignorance of surgery, and surgeons of their ignorance of medicine. All this tended to retard knowledge. Although it was impossible to do without the divisions into which practice has divided, there were in it many disadvantages to the student, who frequently was apt to consider, when the patient was warded, the diagnosis thereby already settled; and if the case proved ultimately to have been placed in the wrong division of the hospital, the interest in it too frequently flagged. He alluded to the great advantages of having all classes of cases in one hospital; and he begged them not to be specialists in their studies. Dr. Hicks warned them against the dangers they would be exposed to in their freedom from control; and then he continued: In the discharge of your duties, you will find many difficulties—and who does not?—and many dangers. The difficulties you will overcome by resolution to follow the right path; the dangers by that spirit of devotedness and Christian feeling which has always distinguished our profession; which has urged its followers to succour the dying amid pestilence, amid showers of bullets, or on the sinking ship. Need I fear that you, devoted to so glorious a profession, will, with all these noble examples before you, shrink from its dangers or quail beneath its difficulties.

In commending to them the value of a kind manner, he said: To those of you who have been laid on a bed of sickness, I need not speak; you have experienced the effect of kind words and gentle actions. To you who, in the full enjoyment of health, know not the weakness of body nor depression of mind produced by sickness, I would say, be very careful lest, in haste or from thoughtlessness, you pain the mind while your skill is endeavouring to alleviate the sufferings of the body. Remember, in addition to this, there may be a mind ground down by care and want; or a heart pierced through by sorrow; add not another shaft, but speak gently and in kindness.

The students about to leave, he cautioned that their position depended mostly upon themselves; that, although the profession gave them a station amongst the best in the land, should their actions fall beneath the proper standard, the professional garb would not cover them; if it were to do so, it could only be by the lowering of that standard, which God forbid, and which could never occur while her sons were, in the main, true to her. He also inculcated strict professional behaviour to each other; and concluded by wishing them, not freedom from all cares and troubles, but energy, perseverance, and steady heroism, which would overcome them; self-reliance, which only a good knowledge of their profession could give them; and that good name, which an upright character would surely bring them.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

Mr. Long delivered the Introductory Address. After an allusion to the retirement of Mr. Batty, a veteran practitioner and lecturer, Mr. Long said that it was more than the third of a century since he first entered the profession. During that comparatively short period, he had witnessed many changes. He had seen many epidemic delusions of the mind, as well as epidemic diseases of the body; and had witnessed strange revolutions in medical practice. He had seen the rise and declension of many "pathies", and as many "isms"—heroic treatment and expectant; alcoholismus and nihilismus—all no doubt at times and in certain cases useful, but none of universal application. This *nihilismus* had arisen naturally out of that perversity which made men rush from one extreme to the opposite, or out of that infirmity which rendered them unable to strike the balance between two independent truths. Our forefathers put too much faith in drugs; and we, by way of compensation, get rid of one error by running into another. Though doubtless our ancestors erred by an over-officious and meddlesome line of practice, and acted as if their medicines possessed specific virtues (to which few could lay claim), and as if no natural body could go on without help, giving medicines whether they were wanted or not, still it was true that there were diseases and conditions in which the effect of drugs was active and beneficial; and when the enormous power possessed by medicines on the animal economy, especially on the nervous system, was seen, it would be wise not to sanction opinions which set at nought these instruments, and led the younger members of the profession to despise them, instead of seeking out for themselves a thorough knowledge of their virtues. As the body was afflicted with a vast variety of diseases, many of which at pre-

sent defied the best directed efforts of the medical art, who knew but that among the vast variety of plants existing on the surface of the earth, and by the researches of modern chemistry, some remedies might not be provided for diseases now considered incurable? Many such had been discovered already. Mr. Long would instance two only—Peruvian bark in intermittent diseases; and the remarkable effects produced on the pupil of the eye by the Calabar bean. An objection had been raised to the use of medicines, that they were "unnatural"; and some spoke of nature and art in the treatment of disease as if they were antagonistic. Man did not now live in a state of nature; and diseases, Mr. Long thought, might be considered quite as unnatural as medicines. It must be borne in mind that medical men were rather ministers to and interpreters of nature, than antagonists engaged, as it were, in a constant warfare with her. The prevailing fault, the lecturer thought, at present was, not the trusting overmuch in drugs, but being sceptical of their utility.

Mr. Long observed, that no distinction was recognised at the outset between medicine and surgery; but the practical application of science was made the ground for subdivision. Medicine and surgery might then be regarded in a twofold aspect—as regarded theory and practice, the principles and their application. Science embodied principles; art consisted in the application of those principles. The more perfect the science, the more simple would be the rules by which the artist would work; but, when principles were of high comprehensiveness, the practice of them required more operative skill and sagacious judgment. In medicine, no principles of any high degree of generality could be said to have been established; and no rules of practice, therefore, existed which could be applied without exception or qualification. The complexity of the conditions affecting the phenomena of disease rendered the knowledge to be acquired, before means could be employed in the cure of it, one of the most difficult objects to which the attention of the practitioner could be directed. Much had of late years been accomplished in scientific and practical surgery, especially in that direction termed "conservative". A good summary of this progress had lately been brought before the profession by Professor Fergusson, in his lectures; and Mr. Long also hailed with pleasure a new edition of Paget's *Surgical Pathology*. Great improvement of late years had taken place in medical education. The preliminary examination, before the student could enter the pale of the profession, was most judicious. The division of the examination into stages was advantageous; this new plan, without overtaxing the energies of the student, enabled him to be better prepared upon all subjects than was possible under the former system. It was a question whether the age of 16 might not be too early for a youth to enter into a profession. The choice had to be made before the mental powers had time to develope themselves—when, in fact, they were in a transition state, and before the tastes had been fully displayed. If general education were prolonged until the eighteenth year, the mind and tastes would have a longer time and more opportunities for unfolding themselves. It was more than probable that a young man, previously well prepared in general knowledge, would commence the study of medicine at 18, 19, or even later, with the probability of much greater success, than he who was bound an apprentice at 16, and passed three or four years in the acquirement of desultory knowledge of its least important details. The law did not allow early marriages; and yet a youth of 16 might be compelled, or of his own free will or caprice might tie himself to what is to be his future business, and as much as possible his pleasure. Taste, as well as intellect, should be consulted in the choice of a profession. Men obliged to devote their intellectual powers to occupations laborious and distasteful to themselves did not succeed; and this held good especially in medicine. A comparatively superficial practitioner, who showed that he liked his profession, would secure a large practice; whilst another, possessed of three times the amount of his professional acquirements, and having, perhaps, greater intellectual pleasure in the pursuit of it, yet whose tastes were offended at its details, would remain, so far as the public are concerned, in neglect and obscurity. It had been well observed, "La médecine est la plus noble des professions, et le plus triste des métiers." A systematic curriculum of study should be pursued, its chief advantage being rather to point out the path to the student than to conduct him along it; and attendance upon lectures which were not demonstrative was chiefly valuable to the student as connecting the knowledge he might have acquired from other sources, and indicating to him the points in which he was most deficient. Examinations were most useful as summarising what had been given in the previous lectures, and as a test of the attention and proficiency of the pupil. To expect a perfect knowledge of the profession, medical, surgical, obstetrical, etc., is out of the question. *Non omnia possumus omnes.* Whilst uniformity of medical education was desirable, there could be no objection to a subdivision of medical practice into various departments. It was impossible for any individual to keep pace with the progress of knowledge in all the branches of medical science. It was universally allowed that "division of labour" was favourable to perfection in all art; and there was no reason why it should be otherwise in the practice of the healing art, provided always that a choice of a special department be not made until the principles of the science of medicine had been fully acquired. Mr. Long reminded the students that the qualities to obtain a fair knowledge of their profession, and to ensure success in it, were not at all extraordinary; they were common sense and perseverance. There must also be a spirit of self-reliance and self-help. Help from without was often enfeebling in its effects; help from within invigorated. There was an education not to be learned from books, or acquired by any amount of literary training; and all observation served to illustrate the lesson that man profited himself more by work and observation than by reading. The steam-engine itself was a monument of the power of self-help in man. The idea, promulgated by Hero of Alexandria, was never lost, but, like the grain of wheat entombed with the Egyptian mummy, it sprouted and grew vigorously when brought into the full light of modern science. Grouped around it were Savary, the Cornish miner; Newcomen, the Dartmouth blacksmith; Cawley, the glazier; Potter, the engine-boy; Smeaton, the engineer; and, towering above all, the laborious, patient, untiring James Watt, the mathematical instrument-maker. The greatest results in life were usually attained by simple means, and the exercise of ordinary qualities. Progress of the best kind was comparatively slow; great results could not be achieved at once; and we must be satisfied to advance in life as we learn to walk, step by step. We must sow before we can reap, and often have to wait a long time content; meanwhile to look patiently in hope—the best fruit often ripening the slowest. There is an Eastern proverb worth remembering: "Time and patience change the mulberry-leaf to satin." In conclusion, the speaker gave some excellent practical advice to the students, not only as to their professional course, but also as to their general conduct.

ROYAL FREE HOSPITAL.

Mr. F. J. Gant, F.R.C.S., delivered the introductory lecture, choosing as his subject, the Pathological Practice of Surgery. He said that, if he were asked what is the most professionally important study in which the medical student and practitioner can be engaged, he should not select anatomy; for its guidance is limited, and of far less value than advocated in the schools. Primed with descriptive anatomical knowledge, regional and systemic, the student commences practice; but, year after year, he mistrusts such knowledge, then ignores and necessarily forgets it, until his view of descriptive anatomy subsides into that of the prominent aspects of structure with the more obvious relations of parts, and as presented in the living body. But this restriction does not extend to organic and histological, or textural anatomy, the minute knowledge of both of which is all-important to the earliest and most exact diagnosis in very many cases. Physiology, like anatomy, over-taught in schools of medicine, is also far more an artificial creation, far less itself a reality. Physiology, human, so-called, yet chiefly the results of experiments on the lower animals, and so far inferential only, is proportionately unqualified to illumine the pathway of medicine and surgery. By mature clinical experience, the practitioner's physiology settles down to a clinical view of the functions of the different parts of the body and their mutual relations—a far more sound, and therefore more enduring, knowledge of the laws of human life than the deceptive depths of bygone years. This practical physiology, conjoined with practical anatomy, together represents man in health, structurally and functionally, in relation to the purposes of medicine and surgery; and by constant reference to this, as his standard of comparison, the practitioner habitually detects and estimates the beginnings of disease, or the disorganisation effected by injury.

Pathology is a science of wide extent and significance. It is the knowledge of disease (including injuries); and this represents: firstly, the alterations, structural, physical, and chemical, which, singly or collectively, the different solids and fluids of the body may respectively undergo, with the situation (if localised) and extent of such changes; secondly, the external causes of these alterations, and their own operation as (internal) causes of other alterations, contiguous to or remote from the original disease; thirdly, the course and tendency of the morbid condition, with, possibly, its subsequent complications, to or towards a favourable or an unfavourable issue. All this, observe, not to mention the analogous consideration of mental diseases, with their grand practical distinctions of irresponsible and responsible actions. I here restrict human pathology to its bodily significance. The first and part of the second of these aspects of disease are represented by pathological anatomy; the remainder, and the third aspect, exclusively, by pathology proper. Pathology proper is, therefore, our polar star in the practice of medicine and surgery.

To avail ourselves of the guidance of this knowledge, obviously it must become fore-knowledge—it must become prognostic.

Having argued the impossibility, in any case, of deducing this requisite knowledge from any other knowledge we may possess of anatomy or physiology, or from pathological anatomy, that it can only be gained by independent pathological experience—*i.e.*, by special clinical observation—Mr. Gant proceeded to notice the ground-plan of an entirely new classification of injuries and diseases in accordance therewith. He said that, in his lectures, the various morbid conditions to which the body is subject would be associated and arranged, by virtue of their pathological affinities. This aspect of pathology at once suggests the guiding and regulating principle of all therapeutics, both medical and operative. We thus discover the earliest occasion for interference with the order of Nature, if any be necessary, in some cases; the kind, and the least amount of such assistance, as may be needed from time to time to conduct the case to recovery. Clinical observation, having gone thus far, shows further, that the curative power of Nature is manifested more efficaciously at the commencement of injuries and diseases than at any subsequent period of their career, during which, indeed, complications arise, in most cases denoting its proportionate failure.

Guided, then, by the teaching of the earliest clinical observation as to the career of diseases, it follows that the earliest (and most exact) prognosis, or foreknowledge thereof, is absolutely necessary to secure the most advantageous co-operation with the restorative power—*i.e*, before the supervention of any unfavourable condition, which, announcing that its curative efficacy is failing, would then probably frustrate the aid of remedial measures, whether medical, operative, or both, as the case may be. Should any complication have already arisen, or should any be present at the very commencement of a case, by similar prognosis or foreknowledge thereof we gain the opportunity for having recourse to adequate remedial measures before the supervention of *worse* complications. In the more rare cases, where the restorative power is itself *alone* sufficient from first to last, such foreknowledge of this self-sufficiency is still necessary, in order to *withhold* any interference which would, or might, divert the natural course of the morbid condition to recovery. We have at least an approach to non-interference suggested by the natural or normal course and tendency of certain fevers—*e. g.*, measles, scarlatina, and other eruptive fevers, all of which are apparently so many manifestations of the effort of Nature to eliminate various blood-poisons. In these and similar cases the purpose of rational medicine is fulfilled by interference only when some "complication" arises by which remedial assistance then becomes requisite "to avert the tendency to death."

Mr. Gant, after some further remarks, proceeded to comment on the term "conservative" surgery.

Mr. Fergusson, in his lectures this year before the Royal College of Surgeons, claims to have first introduced the term "conservative" into surgical nomenclature. But, at the same time, he has distinctly disavowed originality in relation to the principle of practice he thus designated. He has defined it as the preservation of the greatest portion of the body at the smallest possible sacrifice. Up to the present year Mr. Fergusson still adheres to this definition. He re-expressed it in his lectures; and it is still the prevalent view of conservative surgery. But such is the purpose and end in view of all *true* surgery, whether designated conservative or simply surgery. Then, again, conservative surgery, as hitherto understood, has reference only to operations. Advancing a step further in this direction, to obviate the necessity for any operative assistance—*e. g.*, the preservation of a joint without excision, is "conservative" surgery equivalent to "the medical treatment of surgical disease?"

This medical aspect of surgery, as a principle, goes no further, in effect, than that advanced on the part of operative surgery. It equally relapses into the obvious purposes of therapeutics—the preservation of the integrity of the body; if possible, by medicinal measures, rather than by any operation, however

little mutilation one may imply as compared with another operation. But while we admit the necessity and admire the wisdom of reforming the body politic to yet higher states of efficiency, the human body endowed with the power of growth, development, and restoration—is self-productive and self-protective; wherefore we need not interfere with its organisation otherwise than so far only as our assistance is solicited by the shortcomings of its own operations and the failure of its own resources. The subjection and adaptation of all therapeutics—in time, kind, and degree—to the operation and requirements of this self-restorative power (of Nature) confer a truly conservative character on the practice alike of medicine and surgery; and, by ever referring us, as medical practitioners of whatever denomination, to clinical observation of the natural courses and tendencies of injuries and diseases, rule our art from the sure and commanding ground of pathology. To this end, diagnosis and etiological knowledge, each of the earliest and most exact character, are obviously subservient.

Reviews and Notices.

CLINICAL OBSERVATIONS ON FUNCTIONAL NERVOUS DISORDERS. By C. HANDFIELD JONES, M.B., F.R.C.P., etc. Pp. 581. London: 1864.

THIS is a work of great value, both to the student of philosophical medicine who wishes to see physiology and pathology in close alliance, and to the practitioner who seeks for illustrative forms of disease, with sound indications for treatment, and a laudable effort at rational therapeutics.

The scope of the work is far more extensive than the title would have implied some years ago; when functional nervous disorders were very much restricted to neuralgia, and when every form of paralysis was ascribed to some organic central lesion. A few years hence, we may expect that a book with this title will comprehend a still more extensive domain of pathology; when other morbid agencies are viewed, as malaria and other miasms are in this work, as operating primarily on the nervous system, through which they affect other parts with Protean diversity of manifestation, functional and organic.

In no department of medicine of late years has light been so largely shed by experimental physiology as in that of the nervous system. Bell and Marshall Hall led the way; but the views of Claude Bernard on the sympathetic seem destined to lay the foundation of a new pathology. It is now some years since he showed that it was in the power of the physiologist to produce at will symptoms of disease and lesions of organs through their nerves—cough, dyspnœa, bronchial flux, pleurisy, and pericarditis, through the irritation of the pneumogastric; diarrhœa and dysentery from irritation of the solar plexus. His experiments have been confirmed and extended by others.

Our author, while admitting the probability that in all morbid action there must be some molecular change of cells and fibres, holds that, in the diseases of which he treats, the absence of organic lesion is proved, by the failure of careful scrutiny to detect any change, by the possibility of perfect recovery, and by the *juvantia* being such as modify the form rather than the texture of organs.

The points which, in his preface, he indicates as most worthy of attention, are—

"The recognition of primary paresis of the nervous centres, and its distinction from reflex paralysis; the numerous illustration of vaso-motor disorder; the theory of inhibitory action; the remarkable affinity between paralysis, spasm, anæsthesia, and neuralgia; the different quality of nervous disorder, apparently of the same kind, in different instances; the intimate relation of neuralgia in most instances to debility; and the importance of an accurate adjustment of remedies to each individual case."

The work represents a mine of reading, as well as of original observations and reflections. The quality of the latter may be estimated by the following extracts.

"We ought not to think of diseases as uniform entities; but as very varying and inconstant pathological conditions." (Pref., p. viii.)

"We are more and more convinced of the utter diversity and radical dissimilarity of many pathological states and symptoms, called by the same name, and always seeming much alike." (P. 54.)

"The gross outward resemblance leads us to overlook and neglect the concealed, but more important differences. This is the more to be regretted, as the latter rule the treatment." (P. 386.)

"The conception of a diathesis is a most important one, and must replace, to some extent, that of a poison, or *materies morbi*, which has been carried much too far." (P. 525.)

"It is probable that, the more we come to know of disease, the more we shall find that there exist a few great distinct morbific causes, which, by acting on different parts, in varying combinations and degrees, give rise to ever varying modes of morbid action." (P. 122.)

"The more our pathological knowledge increases, the more do we find that many different causes are capable of producing the same effects." (P. 400.)

The chapter on General Pathology is well worthy of attentive study. It brings together the points of neuro-physiology and pathology which throw light on the subsequent special subjects. It will be found a most instructive compendium of our present state of knowledge.

Dr. JONES attributes the pathological phenomena of *Inhibition*, not to special fibres, as Pflüger, nor to energetic action of an afferent nerve, as Lister; but to an injurious impression on it, enfeebling it or the nervous centres to which it proceeds. As illustrations, he cites squint from whitlow, disappearing after the necrosed portion of the phalanx came away; amaurosis lasting thirteen months, with sight restored on extraction of a carious tooth, which had a splinter of wood projecting from one of its fangs; secretion of nasal mucus from plucking the vibrissæ at the orifice of the nostrils; amaurosis and ptosis from decayed or over-crowded teeth; facial paralysis from sudden cold; paralysis from cold and wet; pyrexiæ; etc. As a rule, the removal of the cause restores the function; while remedies directed to the paralysis are powerless.

He thinks it certain that malaria or influenzal miasm may paralyse a nervous centre more or less completely, without producing any organic change in it. Such paralysis he terms simple or neurolytic; it affects motion much more frequently than sensation.

The influence of the *Vaso-motor Nerves* on the cir-

culation and heat is fully discussed, and admitted as an adequate explanation of numerous phenomena. Though the author admits, that other nerves have an influence in increasing the blood-flow through the tissues, he doubts the existence of special trophic nerves, apart from the ordinary motor and sensory nerves. In all his explanations, he employs action or paresis of the sympathetic to account for all vascular changes, to the total exclusion of any active nervous energy in determining heat and increased blood-flow; though he admits, in his general pathology,

"That we cannot doubt that certain nerves, when stimulated, do exert a very considerable influence in the districts to which they are distributed, in the way of increasing the blood circulating through the tissues. Herein they exactly antagonise the ordinary vaso-motor nerves accompanying the arteries, whose activity induces the opposite condition." (P. 23.)

This is the first and the last we hear of these active nerve-influences; and this omission strikes us as the weak point of the explanatory part of the work.

The *Febrile States* are mainly explained by paresis of the vaso-motor nerves. In the asthenic forms, Dr. Jones

"*Assumes* that the poisonous miasma has weakened the vaso-motor system and all the others. The increased temperature, the quick, soft, weak pulse, the hyperæmias of the viscera, are natural results (of the vaso-motor paresis). The increased secretion of urea from the augmented chemical changes in the blood, and from increased renal action, depends on the same cause; so, also, the hypertrophy of the solitary and agminated glands in typhoid are due to the same nervous paresis, and may be regarded as analogous to the enlarged spleen of ague, or the goître of Swiss malaria. Then follow the cerebro-spinal symptoms."

In *Sthenic Fever*, he assumes that the poison acts primarily on the sympathetic system only, while the heart remains vigorous and the pulse hard; the arterial coats, like the heart, retaining for a time excitability, while the increased temperature of the blood acts as a stimulus to both.

It seems to us that, when the miasm is confined to the sympathetic, the arteries should be influenced by it as early as any parts.

Pyrexia, or the Fever of Inflammation, is probably excited by a morbid impression conveyed from the part to the sympathetic centres, in consequence of which the vaso-motor nerves generally are enfeebled through reflex inhibitory action.

Rigors generally have three factors: 1. A morbid stimulus; 2. A hyperæsthetic sensory surface; 3. An excited or mobile condition of one or more nervous centres. In malarious and other fevers, pyæmia and suppurating foci may depend on the action of the poison on the spinal cord, throwing it into a state of undue excitability, whereby the muscles are kept in a state of clonic contraction, while the vaso-motor nerves maintain the organic muscles in a state of tonic (at the onset, we presume). Those of hectic, the author attributes to nervous exhaustion, with the centres in a state analogous to that in chorea; but manifesting itself in disordered actions of the vaso-motor, more than of the musculo-motor.

These views are suggestive and ingenious, though hardly adequate or conclusive.

Neuralgia contrasts strongly with Fever, and rarely exists with it. Malarial neuralgia often alternates with fever; the sensory nerves being affected in the one case, the vaso-motor in the other, by the same cause.

Debility and prostration form the appropriate soil on which neuralgia grows. It is sometimes associated with numbness, especially in very sensitive parts, as in the fingers and hands; slight degrees of muscular paralysis are also occasionally associated with it, as an analogous affection of the motor nerves. The analogy is heightened by the fact, that the pain of a sensory and the paralysis of a motor nerve may both be removed by the interrupted current.

Besides debility or malaria, neuralgia may depend on remote irritation, or on the poisons of gout and syphilis.

Under the various important heads of *Cerebral Anæmia*, *Excitement*, and *Paresis*, will be found many valuable views on various diseases into which these conditions enter.

Unconsciousness and convulsion belong to anæmia, of which venous hyperæmia may be considered the equivalent in its influence on nutrition. Epilepsy, in both its forms, depends on anæmia. A cold state of forehead, with overpowering drowsiness, indicates cerebral anæmia; though the converse has many exceptions. The state of the eye and the urine will aid in the diagnosis; the latter being pale and copious in anæmia—scanty, dense, and lateritious, in hyperæmia. The pupil does not give reliable indications: as an excited brain or depressed cord will produce a contracted pupil, and *vice versâ*.

Malaria, burns, and, in children, dental irritation, are great causes of cerebral hyperæmia. Dr. Jones confesses that in many cases we have no trustworthy guide in distinguishing sthenic from asthenic delirium, beyond that tact which is beyond the reach of rule. In the delirium of acute rheumatism, we must treat it as a substantive disorder by opium and stimulants; though theory might incline us to try to quell the irritation by thorough alkalisation of the system. In all cases, in fact, the quality, not the cause of the delirium, must guide the treatment.

Delirium Tremens. In this disease, the author strongly objects to the expectant treatment. He distinguishes three forms: 1, inflammatory excitement; 2, nervous erethism; 3, asthenia. These require respectively: 1, tartar emetic, with or without opium; 2, sedatives; 3, stimulants.

Chorea is a paretic affection of the brain and cord, giving rise to undue mobility or convulsion, rather than to paralysis. Dr. Jones regards it as one of the most complete examples of the law, that irritability and mobility rise as power fails.

When the disease is simply paretic, tonics suffice for the cure. When the paresis is inhibitory from peripheral irritation, sulphuret of potassium baths cure by stimulating the cutaneous nerves, rousing the nervous centres to more healthy action.

Spasmodic Affections "seem rarer than hyperæsthesiæ. The same may be said of the kindred paralyses, as compared with anæsthesiæ and neuralgiæ. In organic disease, the case is reversed, and motor power suffers more frequently than sensory."

Facial Neuralgia may be of four kinds: Reflex; Cerebral; associated with tenderness; or Malarial.

Under the head of *Brachial Neuralgia*, the author says:

"The nocturnal aggravation of pain; its remission

or absence by day; the intimate relation between it and numbness, so that the latter seems to be a less degree of the same condition; the co-existence in some instances of motor-disorder; the prevalence of general debility; the absence of self-limitation; are family features of neuralgia."

Angina Pectoris he regards as essentially a neuralgia of the heart combined with spasm. He inclines to agree with Laennec that, in a slight degree, it is a very common affection. Cardiac neuroses, he divides into rheumatic, malarious, saturnine, and those connected with exophthalmic goître. The present writer can fully endorse his views as to the dependence of cardiac neurosis on malaria, having for some years seen much of it, and pointed out its dependence on antecedent ague. Much of the invaliding for heart-affections in India is of this nature; though the functional nature of the symptoms is generally overlooked, and organic symptoms are freely ascribed.

Many slight neuroses of the heart, Dr. Jones thinks due to tea, acting on nervous centres or cardiac sensory nerves hyperæsthetic from debility.

"Many Alpine tourists find cold tea an excellent refresher in their mountain clamberings. It is plain enough that, to a tolerably firm nervous system, tea is a grateful and useful stimulant. Its poisonous and depressing action on the weak and shaky system may be explained on the production of hyperæsthesia by debility. When the nervous system has become enfeebled, the plexuses of the coronary arteries partake of the morbid sensibility, and are excited by tea to produce contraction of the vessels. The heart is thus imperfectly supplied with blood; and its action is consequently feeble and flagging. In other instances, where palpitation is produced, it is probable that the stimulus tells more upon the muscular tissue of the heart than on the coats of the vessels."

Under *Respiratory Neurosis*, *Pertussis* is the capital example of a specific bronchial hyperæsthesia.

Under *Laryngismus Stridulus*, the author remarks:

"The sudden death, which is by no means uncommon in this disease, depends, I conceive, on the transmission of irritation along the cardiac fibres of the vagi to the heart, which is thus arrested in its action."

Asthma is considered as a neurosis, attended with more or less of bronchitis, and causing spasm of the bronchial muscles, obstructing the access of air to the cells of the lungs, and thus diminishing the size of the chest, which is indicated by sinking of the epigastrium and elevation of the diaphragm.

As to *Cutaneous Neuroses*, Dr. Jones accepts Romberg's view, that in lichen, prurigo, urticaria, etc., the hyperæsthesia or dysæsthesia is the cause, not the effect, of the eruption. We had recently under our care a case of urticaria, coming on with each accession of tertian ague for three paroxysms. It is possible that the prurigo, which in scabies forms the major element of the eruption, may be the eccentric and reflex result of the original peripheral irritation. Herpes labialis is a frequent concomitant of ague. All these bear out this view.

Malarioid Disease. This is a very interesting chapter, which contains, in a very condensed form, the pith of malarial pathology, followed by illustrations of malarioid disease as occurring in or near London, in children and adults. It is unquestionable that, in many parts of the United Kingdom, malarioid affections are sufficiently prevalent to deserve careful study and attention. As Dr. Jones truly remarks, they are not like our ordinary fevers, self-limiting, but tend to constant recurrences, unless arrested by suitable remedies. Those who are familiar with malarial affections in tropical countries are best qualified to appreciate their existence at home, and to distinguish them from other febrile states. With competent observers, the researches for forms of malarial disorder over the United Kingdom would be a most interesting medico-topographical investigation.

We have thus hurriedly glanced over the more salient subjects of special pathology treated of, but have omitted many more.

The indications for treatment and the adjustment of remedies form a conspicuous part of the work, under the several heads of disease, and are of great practical value. Dr. Jones has added a concluding chapter on Remedies, which merits high praise as an effort in the direction of "rational therapeutics".

Throughout his work, exposure to *fresh bracing air* is once and again recommended as a sovereign remedy in those neuroses which are attended with hyperæsthesia and excitability.

Quinine checks and arrests malarious fever by virtue of its toning influence on the cerebro-spinal and sympathetic system. It does not act by neutralising the malarious poison, as it may be given to any amount in visceral disease from this cause, without the least curative effect. The buzzing in the ears, deafness, blindness, weakness of the pulse, after full doses, are due to contraction of the vessels and anæmia of the ears, eyes and heart. Its prophylactic power against malaria is sufficiently demonstrated. Like all remedies of its class, it is liable to act as an irritant to the tissues; so that, in inflammatory disorders, it is often matter of doubt whether it can be employed without risk of doing harm. It is desirable—often essential—that there should be no visceral congestion when it is administered.

In like manner, the author discusses the actions of arsenic, which are very important and interesting; of iron, strychnia, digitalis, which, in suitable cases and doses, he holds to be a powerful toner of the heart's action; of tannin, sulphuric and nitric acids, opium, belladonna, aconite, cannabis Indica, hydrocyanic acid, oxygen, cold, and warmth. The vaso-motor theory is very fully used, in explanation of therapeutic actions, as of pathological states. The elements of truth in both are no doubt large; but it is improbable that actions in a highly complicated organism are so simple or so uniform, so free from numerous reciprocating influences, as the author's suppositions require. The chapter, as a whole, is full of practical value, and will well repay perusal.

In our study of this work, we have noted a few faults of style, where, like Hudibras's, the English is patched and piebald with Latin, French, and German: "'Il va sans dire' that;" "'ut mos est' of hospital externes;" "'au fond' a neuralgia;" "countenance 'abattu';" "grundleiden" here and there; "therapeutic effects 'rapprochent' them not a little;" These might better be in English than what they are. The press has not been very carefully revised. At page 6, last line, "nerve" should be "muscle"; at p. 65, "exulation" stands for "exudation"; somewhere else, "malaroid" for "malarioid"; at p. 472, fifth line, "spasm of vaso-motor nerves" means, we presume, "spasm of arteries from vaso-motor nerve

influence"; at p. 284, "a non-excited or *active*" clearly should be "non-excited or inactive"; at p. 313, "nyctalopia" is used in an abusive manner for "hemeralopia". There is precedent for this; but it can hardly be justified, as, etymologically, it means just the reverse of what it here stands for.

These are very faint blemishes in a work of very great merit and very modest pretensions. It is a valuable addition to English medical literature.

PRACTICAL AND PATHOLOGICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS. By EDWARD MERYON, M.D., F.R.C.P., etc. Pp. 215. London: 1864.

THIS volume consists of six chapters, with the following titles:—1. The Minute Structure of the Nervous Centres; 2. Paralysis from Affections of the Spinal Cord; 3. Paralysis from Affections of the Brain; 4. Paralysis from Blood-poisoning; 5. Paralysis from Reflex Action; 6. Progressive Forms of Paralysis. The first two of these chapters consist of the series of papers published in the JOURNAL last year by Dr. MERYON; with, however, such additions as a revision has suggested to him, especially the insertion in full of the narratives of cases which were given briefly only in the JOURNAL. It is, therefore, not necessary for us to refer further to these chapters.

In the third chapter, Dr. Meryon speaks of Paralysis from Apoplexy, from Red Softening, from White Softening, from Induration, and from Tumours, etc. He gives, as regards apoplexy, cases illustrating the symptoms observed when the disease affects the cerebral hemispheres, the cerebellum, the crura cerebri, the pons Varolii, and the medulla oblongata; and sums up the data, afforded by paralysis, for diagnosing lesion of each of these parts. In cerebral paralysis, the characteristic lesion is loss of voluntary motion in the extremities, especially the arm, on the side opposite to the side of the brain which is affected; and the same is observed in unilateral atrophy of the cerebrum. In cases of cerebellar extravasation, satyriasis is often a prominent symptom; but here, and also in atrophy of one cerebellar hemisphere, there may be no paralysis. In extravasation into either crus cerebri, hemiplegia of the opposite side with paralysis of the third nerve of the corresponding side, are to be expected. These symptoms were observed in two cases detailed by Dr. H. Weber. In structural lesion of the pons Varolii, there will be hemiplegia, together with more or less implication of the functions of the fifth pair of nerves. "The nerves, also, which regulate the state of the pupils appear to be in close connection with the pons Varolii." When the medulla oblongata is the seat of disease, respiration, sensation, and circulation, are directly affected.

Dr. Meryon also remarks on the diagnostic signs afforded by the character of the pain, the temperature of the surface, and the irritability of paralysed muscles. A lesion seated deeply in the brain does not produce very intense suffering; whereas morbid action in the membranous coverings of the brain or on its surface invariably gives rise to severe pain. Coldness of the extremities, with pale and shrunken face and irregular pulse, point to an interference with the nerves subservient to the action of the heart. Regarding irritability of the muscles in its relation to apoplexy, Dr. Meryon notices the opinions held by Dr. Marshall Hall and Dr. Todd.

Dr. M. Hall,

"In all cases of cerebral paralysis recorded by him, found the irritability of the muscles of paralytic limbs greater than that of the muscles of the healthy limbs; whilst in cases of paralysis of the spinal cord and of disease in the course of nerves, the muscles of the paralytic limb were found to be less irritable than those of the healthy limb." (P. 102.)

Dr. Todd, on the other hand, has brought forward cases to demonstrate that, in some morbid states of the brain, the irritability of muscles of paralysed limbs is not increased. The difference in the results was ascribed by Dr. Hall to a difference in the apparatus used; but Dr. Meryon, often repeating the experiments with a Cruikshank's battery, has obtained such varying results, that he is disposed to think that

"The greater contraction in the unsound than in the sound limb—when it is produced—is due to the restraint exercised by the will of the patient over the healthy limb, when it cannot be ascribed to irritation or inflammation of the brain." (P. 103.)

Further instructive remarks on the rigidity and flaccidity of muscles, Duchenne's experiments, on the difficulties of diagnosis, and on prognosis and treatment, will be found in the book. For restoring the paralysed muscles after cerebral excitement has passed away, Dr. Meryon says that galvanism and strychnia are useful: "but the best of all tonics is a perfect holiday"—and for this an Alpine country is to be preferred, for it is there "that every moral and physical influence is combined to promote the absorption of a blood-clot, and restore vigour and motion to the enervated muscles."

In the fifth chapter—that on Paralysis from Reflex Action—Dr. Meryon gives what he believes to be the most rational explanation of the cases termed by Dr. Handfield Jones "neurolytic paralysis" (BRITISH MEDICAL JOURNAL, Sept. 7th, 1861). In these cases, without apparent adequate cause, a connecting link between the organs of volition and of motion is for a time destroyed, but is generally regained by the action of nervine tonics. Dr. Meryon thinks there must be some structural as well as merely functional lesion.

"There are, in all these cases, certain antecedent circumstances which lead to the inference that a morbid influence has been conveyed to and concentrated upon some portion of the cerebro-spinal system, whereby the functional working of the ganglionic cells of the motor nerves is temporarily suspended." (P. 176.)

"Although we may think and speak of reflex paralysis as a purely sympathetic operation, it is, I think, not too bold an assumption to attribute the paralysing influence to a change of nutrition in the sensory or motor centres. Nor can the absence of apparent change be accepted as positive evidence that none existed in fatal cases of reflex paralysis; for it is possible to conceive of the delicate nerve-tissue as subject to injurious pressure in consequence of vascular turgescence during life, of which no trace may be left after death. Hence much caution is necessary in the establishment of a pathological principle, seeing that we may regard as purely functional that which is dependent on some physical change." (P. 175.)

On the other hand, Dr. Meryon refers to cases of the type represented by evanescent amaurosis attending the presence of intestinal worms, and removed with the removal of this cause of irritation. On a case of this kind, where the patient, a young lady aged 14, recovered from partial paralysis of the arm, on several occasions, after passing an ascaris lumbricoides, Dr. Meryon remarks:

"In this case, the morbid impression upon spinal nerves through the intervention of the spinal cord was conclusively manifest; and, if the cord could have been examined, it is probable that no change from the healthy condition could have been observed." (P. 176.)

Dr. Meryon points out the fact that paralysis in children, while it is often clearly reflex, is sometimes undoubtedly centric in its origin.

"Although irritation from teething, worms, and other intestinal disturbances, is so common as to suggest and appear to justify the idea that all cases of infantile paralysis are due to such causes; yet, in point of fact, how many instances do we see in which no such antecedent irritation has been observed, and which are referable only to structural lesions depending upon inflammation or other nutritive changes in the nervous centres." (P. 177.)

"On the other hand, we meet with many instances in which the excitability of the nervous system is so great, that what begins as sympathetic functional disturbance ends in structural lesion; and such is the natural course of disease..... A due regard to this *natural history of disease* will, I think, elucidate the nature of many cases of genito-urinary paralysis, on which much diversity of opinion has been expressed within the last few years." (P. 178.)

After some remarks on the genito-urinary organs and the uterus as sources of reflex paralysis, Dr. Meryon gives the following characteristics as distinguishing reflex paralysis. His observations, he says, have corresponded with those of Dr. Brown-Séquard, in regard to the distinctions between reflex and centric paralysis.

"1. It is preceded by symptoms indicative of an affection of some other part of the body. 2. It generally varies in degree, according to the variations in the exciting cause. 3. It is usually incomplete, some muscles being more paralysed than others. 4. It is seldom accompanied with spasms in the paralysed muscles. 5. The pains in the course of the spine, the formication, flying pain, and pricking sensation, described in cases of myelitis, do not appear in reflex paralysis. 6. There is seldom anæsthesia. 7. The excito-motory power of the paralysed muscles is generally retained. 8. Convulsive movements are not so apt to be excited by defecation and micturition as they are in myelitis. 9. The restoration to healthy power is often rapid after removal of the exciting cause." (P. 184.)

In the sixth chapter, Dr. Meryon speaks of the Progressive Paralysis of the Insane (following Calmeil's description); Progressive Ataxia (regarding which, Duchenne and Trousseau are his principal authorities); and Paralysis from Granular Degeneration of the Voluntary Muscles (*atrophie musculaire progressive* of the French)—a disease to which Dr. Meryon was among the first to call attention in this country.

Dr. Meryon regards this disease as one essentially and exclusively of the muscular system; and as consisting in a "breaking up of the sarcolemma of the elementary primitive fibres, and a segregation of the granules of which the sarcous matter is composed." It is not primarily a fatty degeneration; fat-globules, Dr. Meryon says, are not found in abundance, "except where every vestige of striated muscular fibre has disappeared; and there the vital power which belongs to the higher products of animal organisation is so far weakened, as to allow those tissues to yield to the physical and chemical influences which surround them, and to degenerate into fat."

Dr. Meryon restricts the term "granular degeneration of muscles" to a limited number of the cases described as wasting palsy, or Cruveilhier's atrophy. Referring to M. Cruveilhier's opinion "that, in the disease in question, the atrophy of the anterior roots of the spinal nerves is the primitive lesion, and the muscular atrophy is the consecutive lesion," he says:

"I can well appreciate the difficulty of weaning the mind from the belief that, as all other forms of paralysis are dependent on affections of the nervous system, this must be so too..... I admit that disturbance of the nervous centres may favour the development of granular degeneration in individuals predisposed to it; but my observations have led me to the belief that this same degeneration may and does exist independent of nervous lesion." (P. 210.)

He remarks on a table of 105 cases of wasting palsy, given in Dr. W. Roberts's work on the subject, that of these he can recognise only 28 as examples of the disease which he is describing; in all the others, where details are given, there is evidence of lesion in the nerve-centres or in the peripheral nerves, or of blood-poisoning. He repeats his belief as to the pathology of the disease:

"Notwithstanding an earnest desire to find a central nervous cause, I am induced to believe in an idiopathic disease of the muscles, dependent, perhaps, on defective nutrition, just as there is an idiopathic disease of the bones dependent on the same cause. And I consider that the consequent degeneration of the muscles is characterised by a breaking up of the amorphous membrane which envelopes the primitive fibres, and a dispersion of the contained granular matter;* that the muscles affected lose their power, in direct proportion to the amount and progress of the degeneration; and that the disease is not apt to be accompanied with symptoms of nervous disturbance." (P. 211.)

The disease has a tendency to be hereditary, and to affect males more than females. The two brothers of a patient whose case was communicated by Dr. Meryon to the Royal Medical and Chirurgical Society in 1851, have also died of granular degeneration of muscle; a fourth is the subject of the disease; while the seven daughters of the same parents are alive and perfectly healthy. In the case of another boy affected with the same disorder, the hereditary transmission is very distinctly marked.

"His mother has three married sisters; one, who very early became a widow, has one daughter, now grown up and quite healthy. Another had two sons and one daughter. Both of the sons at a very early age became affected..... The loss of power gradually extended to the upper extremities till they became quite helpless, requiring to be lifted from one chair

* "The breaking up of the sarcolemma is a different form of degeneration from the atrophy of muscles which supervenes on lesions of the nervous centres or on simple disuse. In these latter cases, fat-globules abound between the primitive fibres, and the investing membrane does not break up."

another, and wheeled about from place to place. ıe progress of the disease in both cases was centrigal, the hands being the last affected. Their arms quired to be lifted upon a table before they could ause themselves, which they did in various ways, writing, drawing, etc. Their intellectual powers ere perfect, and they were cheerful and happy. The dest, about 15, was dark, and very heavy for his ars; the youngest, about 14, was quite the oppote, fair, red-haired, and much wasted from an affecon of the chest, of which he died in 1846. His other died a few days after..... The third sister id a family of two daughters and one son, a very ıe boy. He also began, very early, to show some eculiarity in his gait, which gradually increased; id when he was 10 years of age, there was no appaent prospect of improvement. The two daughters ere perfectly healthy." (P. 206.)

Little or no success has as yet attended attempts cure this disease. Dr. Meryon, however, suggests ıat, if it be dependent on an alteration in the musılar tissue, some remedy should be sought for which ay modify the morbid process of assimilation.

"With this feeling, it occurred to me that, as rsenic has a peculiar preservative action on dead nimal tissues, it might also be the means of preerving living fibres from a disorganisation which ppears to result from malnutrition; and I think it ill be found that it has such power. My experience f its effects has not yet been sufficient to justify a ore decided opinion, for in one case only have I iven small doses of Fowler's solution, and in that he progress of the granular degeneration appears to e arrested." (P. 214.)

Dr. Meryon has studied with much care the subect on which he has written, and has collated an nstructive series of facts relating thereto, furnished rom his own experience and from medical literature. Ie has thus produced a book, in which practitioners ıay with advantage seek for instruction.

Manual of Instructions for the Guidance of Army-Surgeons in Testing the Range and Quality of Vision of Recruits, and in Distinguishing the Causes of Defective Vision in Soldiers. By Deputy Inspector-General T. Longmore, Professor of Military Surgery in the Army Medical School. Pp. 74. London: 1864.

The general introduction into the army of the rifle n place of the musket has rendered necessary an ineased attention to the vision of the soldier; and it ortunately happens that, concurrently with this, the onditions of perfect vision, and the various forms of defective sight, have undergone an amount of investigation and have been determined with a degree of accuracy far beyond what formerly existed. Professor Longmore has, in this treatise, very judiciously, and very ably, endeavoured to make a practical application of modern ophthalmological science to the requirements of the army surgeon.

The book is divided into two parts; the first being on the Optical Examination, and the second on the Ophthalmoscopic Examination, of the Eye.

In the first part, the first chapter treats concisely of normal vision, and on lenses and prisms.

In the second chapter, Mr. Longmore describes various defective states of vision; viz., Emmetropia, Myopia, Hypermetropia, Astigmatism, Presbyopia, Amblyopia, Hemeralopia, Nyctalopia, Hemiopia, Asthenopia, Strabismus, Diplopia, and Achromatopsia.

In the third chapter, he gives instructions as to the mode of determining the quality of vision of recruits, and of diagnosis of various defects.

In the second part, Mr. Longmore describes in the first chapter the Ophthalmoscope (Liebreich's) which is supplied to the army surgeons, and the method of using it.

In the second chapter, the normal ophthalmoscopic appearances of the eye are described.

In the third chapter, the ophthalmoscopic appearances and diagnostic signs of morbid conditions of the intraocular structures are described; and the importance of the study of ophthalmoscopic diagnosis is insisted on.

The composition of this *Manual* was suggested to Mr. Longmore by the Director-General; and we are sure that army medical officers will find that the task has been performed in a most efficient and instructive manner. The author has apparently given in clear and concise language just what is necessary—it being, of course, understood that, as Mr. Longmore recommends, the surgeon who desires fuller and more scientific information will consult more elaborate treatises, such as those of Von Graefe, Donders, Liebreich, Hulke, Rainy, Soelberg Wells, Hogg, and Bowman.

A Practical Enumeration of Various Diseases of the Human Body in both Sexes, and in every Period of Life, which may be cured or successfully treated by the Remedies of Legitimate Medicine. By W. S. Oke, M.D., Consulting Physician to the Royal South Hants Infirmary. Pp. 100. London: 1864.

One of our oldest members, Dr. Oke of Southampton, who has been for many years a frequent contributor to this Journal, has here described, in a short compass, the symptoms of the most common diseases to which the human body is subject, and the remedies which, during a long life of active practice, he has found successful. It is a pleasant and satisfactory manner of spending some hours of the day, after the active life of a hard worked physician is passed, to bring to remembrance the whole range of disease, and to make the shortest statement of that treatment which he knows to have been useful, merely relating those plans which were of benefit. We have often wished that a few of the leisure hours of retirement, after a busy life, were more often spent in reducing to writing that really valuable matter which the experienced practititioner possesses, so that the truths of a long life might be preserved for the use of the younger ones. As a rule, now, the valuable part of the medical experience of our best practitioners dies with them. Much, of course, cannot be transmitted in words. The application of any rules depends on the observation, the judgment, the practical skill, of the individual, and perishes with him. But, if much also of valuable matter could not be reduced to writing, where would be our scientific knowledge of practical medicine?

In this little book, the treatment of one hundred diseases is shortly given; and there are very few practitioners engaged in active practice who would not find the benefit of having it on their table as a "handy book" to refer to occasionally when in doubt

or in want of a remedy. It is like asking a senior what he has found useful; and all know that the advantage of consultations is, that another's practice is seen, and routine often very usefully disturbed. We have faith, too, in a book where there can be no other motive in its publication than the wish to be useful as long as life is given, when that life has been one of unusual success in the practice of medicine.

British Medical Journal.

SATURDAY, OCTOBER 15TH, 1864.

FREE TRADE IN PHYSIC.

A CORONER'S jury at Brighton have brought in a verdict of *felo-de-se* against a woman for having poisoned herself, for fatally taking ergot of rye for the purpose of procuring abortion. Dr. Stephens was called in shortly before she died, and, finding her suffering from violent vomiting and anomalous symptoms, very properly refused to give a certificate that death resulted from natural causes. This led to an inquiry; and it then turned out that the poor women had, for eleven weeks at all events, been taking ergot of rye, for the purpose of procuring abortion. Several questions of interest turned up during the inquiry. Who supplied the medicine? Who prescribed it? What are the symptoms of a poisonous dose of ergot? The physic, it appeared, was prescribed by a gentleman who was *non est inventus*, one Dr. Rymer, as he called himself, who appeared to be of ubiquitous movements, and who was, it was said, wanted by the police, as well as by the coroner's jury. His address was, "Dr. Rym—, P. O., St. Martin's-le-Grand." A servant, who had seen him, "thought from his dress that he was a country minister"; but she was informed by her mistress that he was, in truth, the "family physician". The quantity of ergot taken by the woman is not mentioned in the report of the inquest; but we believe the following is a copy of the prescription of the medicine ordered by the clerical-looking man, and which was taken continuously for eleven weeks.

℞ Tinct. secal. cornut. ʒij; ol. menthæ pulegii ʒij. Misce. Take one teaspoonful in water three times a day.

Naturally, the jury inquired whether the druggist did right in making up this prescription week after week for the woman; and they very properly, in our opinion, by their verdict, inferred that the druggist had not shown due precaution in dealing out such a deleterious prescription week after week to the same person. The prescription was signed "J. D. R.", and was regarded as the prescription of an authorised medical man. Now, so far the matter seemed clear enough; viz., that the woman had taken the ergot for the purpose of procuring abortion, and died from the effects thereof. But *ubi tres medici duo athei* is a very old adage, and here it met with its example again, or something like it; for now appeared a volunteer on the coroner's stage, Dr. Edward Roberts, who came, he said, "out of friendship to Mr. Garrett", the druggist, and who, we must add, certainly allowed his feelings in that way to get the better of his judgment.

"Dr. Edward Roberts deposed: I reside at Burgess Hill. I have had great practice. Mr. Garrett was an assistant with me about two years about fourteen years ago. He was in the habit of largely dispensing the medicine ergot of rye in its different forms, and he was fully aware of its effects. He has known it to be given for three weeks together in as large or larger doses than have been mentioned; always in womb affections. He was then a most competent dispenser, and I had the most unlimited confidence in him. I disagree largely with Mr. Kemp with regard to secale producing death."

"Coroner: Do I understand you to say that ergot of rye, taken week after week for nine weeks, would not produce death?—No, undoubtedly not. I should not look for death from it. Death would be from indirect causes."

Dr. Roberts then went on to say that he entirely differed from Professor Taylor, and, we suppose we may add, from every one else who knows anything about the matter, as to the effects of ergot. For the sake of the profession, it was, of course, a pity to see such difference of opinion on such a point publicly stated; but, happily, the jury were not led away by the doctor's evidence, as he himself appears to have been by his feelings towards his late assistant.

Another point worthy of consideration here is this—Would it not be well if medical men, instead of appending their initials, were invariably to write their names in full after their prescriptions? In such case, the druggist (if he have any doubt as to the writer of it) can at once turn to the *Medical Register*, and learn if he be or be not a qualified medical man. Had this course been followed in the present instance, the druggist would have found whether the writer of the prescription was or was not on the list of registered practitioners, and might then have had his suspicions excited.

Another point touches the amount of knowledge of the effects of drugs which should be required of those who compound them. The profession will conclude, doubtless, that no druggist should make up a prescription consisting mainly of ergot of rye in large doses, week after week, for the same female, without having his suspicions gravely excited as to the propriety of the medicine. Every druggist should know enough of the action of the drugs he makes up to teach him the lesson of prudence in such a case. Altogether, the affair is just another of the daily occurring proofs of the unsatisfactory condition of the healing art in relation to the public. Science comes forward in the person of Dr. Stephens, and informs Justice that a great wrong has been done; that a

dly medicine has been prescribed by a *soi-disant* octor", of "clerical appearance", "the family ysician", who is not to be found; and it is also wn, that the woman—the victim—took the medie to procure abortion; that a druggist made up a tainly very unusual prescription, containing an nt which is notorious for its action on the womb, tle after bottle, without suspicion of the purpose which it was employed; and then, to cap it all, a dical man comes forward to declare that, in his nion, Dr. Stephens's evidence was wrong, and the ole theory as to the cause of death a mistake—nes forward, in fact, to bewilder coroner and jury, l, we fear, to give an opening to those who are d of turning our profession into ridicule.

'The Coroner said, he should have thought, when came into that room to-day, that there would ve been no difference of opinion as to the cause of woman's death; but Dr. Roberts had told them t, in his opinion, death could never be primarily used by ergot of rye. Dr. Stephens's experience of case, and the description he had given them of appearance of the body, both before and after ath, were very important; and they must consider w far the opinion of Dr. Roberts was to be taken opposition, not only to his opinion, but also to Dr. ylor. Difference of opinion would exist between dical men, as with all other classes of the comnity; but, for his own part, he had no hesitan in saying, with the opinion of Dr. Stephens, cked as it was by that of Professor Taylor, that ath was caused by injury to the organs of digesn, and other organs, by the use of ergot of rye."

Common-sense and science, as we have seen, how-er, so far happily prevailed; and the jury returned proper verdict. But, alas! when we come to ask public "satisfaction" in the case, where is it to be nd? As, in the great Crimean shortcomings, we ve to ask in vain, "Whom shall we hang?"

VAIN PROSECUTIONS.

R. TALLEY has been distinguishing himself in the ily papers, by appearing in the police offices as proutor of real offenders and of supposed offenders ainst the Medical Act. It does not appear that r. Talley is the legal agent of any one in particular. e certainly is not the agent of the Medical Council. om his mode of conducting his cause, we conclude at he is acting *suâ sponte*, enthusiastically it may , out of sheer disgust at the villainies which are ily practised by so-called members of the medical ofession. Mr. Talley, in thus conducting these prouutions, has done both harm and good. He has done rm to the cause he would advocate, by his manifest discretion in the manner of conducting it. He has, fact, given magistrates, and the public too, we ar, a distaste to the same. But he has, also, done od, in showing how utterly unable the present edical Act is to compete with the evils which it s the pretension of abating. In a country like is, where free trade is the breath of its nostrils, it seems to us almost hopeless to expect that any good can be done by the prosecution of quacks and quackeries and irregularities of practice. So long as the fact remains, that any man or woman in the country may practise medicine or surgery, it seems reasonable to conclude that it is vain to hope to arrest the evil by attacking the unlawful assumption of the titles which indicate the practice of medicine and surgery. This much, at all events, is certain, and we would call especial attention to it; viz., that if ever such prosecutions are to have a chance of success, they must be undertaken by the Medical Council itself. Assuredly, if it be the duty of any one, it is the duty of the Medical Council to see that the powers of the Medical Act are clearly defined and fully carried out. Most of us will agree that the Council might much better expend some of its large income in trying conclusions as to the real value and meaning and powers of the Act, than in using up all its means in interminable and purposeless disputations on Medical Education. The Medical Council should, at all events, sets its house in order. It either has, or it has not, the power which it is supposed to possess. If it have the power, it is bound in honour to exercise it. If it have not the power, then let it go to Parliament and get its powers better defined, more extended, or more curtailed. Let it know, and let the profession know, what its real functions and capacity are.

A FEW weeks since, there was reported in the French medical journals a very remarkable case of attempted deception on the part of a young female. She asserted that her person had been grossly violated, and that her violators had attempted to strangle her. Two men, on the strength of her assertions, were arrested and kept for some time in prison. Unfortunately, the girl's tale had imposed on one medical man, who gave evidence which in some degree corroborated her falsehoods. On the investigation of an expert, however, the truth came out; and it was shown that the girl was a shameful impostor, and that the men were perfectly innocent. We are reminded of this case while reading the cruel injury—the ruin—which a girl a few days ago attempted to bring upon a member of our profession—accusing him, in fact, of having accomplished her ruin whilst professionally engaged with her. Happily, the case was disposed of at once before the magistrate, and the whole tale proved to demonstration to be a base calumny. Such facts, however, are warnings to the medical witness, and of much interest to the psychological physician. They show the extreme caution with which such accusations, made by young females, should be received; and present examples of that strange and perverted, we might say demoniacal, condition of the moral sentiments, which is occasion-

ally met with in females at a certain period of life. The magistrate took a merciful view of the girl's conduct, and trusted that it might in some way be ascribed to aberration of intellect incidental to her age and condition.

The profession will do itself great injustice, if it do not seize upon the present occasion of doing justice to Mr. Griffin. Mr. Griffin has shown disinterestedness, devotion, energy, and the highest philanthropy, in his attempts to better the condition of our Poor-law medical brethren. No gentleman could have a better claim to the thanks of our profession; and we feel very strongly that it is not alone from those of our profession who are engaged in the service of the Poor-law administration, that Mr. Griffin should receive thanks. Any one who devotes himself to the good of his medical brethren, as Mr. Griffin has done, well merits a public acknowledgment. The qualities which he has shown in the cause to which he has devoted so much time and so much pains, are not of so common a sort as to be passed by without recognition. In honouring men of the stamp of Mr. Griffin, the profession shows that it knows how to honour itself.

Dr. Craig Maclagan, in a paper lately read before the Edinburgh Medico-Chirurgical Society, shows that the "arsenic-eating" of Styria is no fable. On a late visit to Styria, he took occasion to investigate the matter himself; and, with his own eyes, saw one man swallow over four grains of arsenious acid at a dose, without suffering any poisonous symptoms. He afterwards found arsenic in the man's urine. Another man swallowed in the doctor's presence, six grains of arsenious acid, eating it on bread and butter.

"The man stated that he generally takes about the quantity we saw him swallow once a week, but with variations in the intervals, there being sometimes four days only, sometimes eight days, between the doses; that when he has a distance to walk to his work, he takes a larger dose, and is then in good spirits for about eight days; that if he, however, intermit it for fourteen days, he feels stiff in the feet, with general lassitude, and a craving for another dose. If his victuals are hard of digestion, he takes a dose to assist the stomach; and if he take a rather full dose, he brings a good deal of wind off his stomach, but never vomits. He stated that his father had taken arsenic before him, and in considerable quantity; and that, in the immediate neighbourhood of Liegist, numbers use it, several taking it daily, and many in larger doses than he. He said that all who take it are healthy; that he never knew of any one vomiting from its use; and he believed that, like the use of tobacco, if the dose is very gradually diminished, an arsenic-eater can break himself of the habit."

Dr. Polli, as our readers may remember, some years ago appeared to have made a great therapeutical discovery touching the cure of fevers and certain diseases of a septic kind by the aid of sulphites. Dr. Mariano Semmola gives, we are sorry to say, a modified view of the case. The sulphites, he says, are certainly capable of arresting fermentation in a chemical sense; but they have no sensible physiological action. The physiological phenomena of oxidation continue unaltered under the action of the sulphites; the quantity of urea, carbonic acid, and water, excreted during the twenty-four hours, remaining unchanged. The diseases which are supposed to be the products of some morbid fermentation—typhus, scarlatina, marsh-fevers, measles, etc.—are not influenced by the sulphites; neither are syphilis, purulent infection, etc. The fermentation theory of the origin of these diseases is hypothetical, and opposed to clinical facts. The diseases in which the action of the sulphites is incontestable, and indeed remarkable, are putrid infections not resulting from any specific disease. The sulphites destroy the action of the putrid substances which have been absorbed, and completely remove putrid emanations when locally applied. Sulphite of lime, considered as a remedy capable of favouring the cretaceous formation of tubercle, is just one more of the thousand therapeutical illusions recommended in phthisis.

The question of the transmissibility of syphilis to animals has lately undergone discussion in the Academy of Medicine—*à propos* of a cat which was said to have been infected by eating charpie, etc., saturated with the virus, in the Hôpital du Midi. The fact was regarded as apocryphal; and the general opinion was, that the disease was purely a human disease; and that no observer had ever yet succeeded in artificially producing it in animals, or had ever seen it existing in animals.

M. Kœnig has announced a new stethoscope, which possesses marvellous sound-conducting powers. He owes, he says, to M. Hiffelsheim the first idea of the instrument. It is formed of a very thin bladder of caoutchouc, into which air is forcibly blown. It is placed in a wooden case; and the sounds are passed through the condensed air to the ear of the observer.

What we should here regard as almost impossible appears to be of not unfrequent occurrence in France; viz., the communication of syphilis through catheterism of the Eustachian canal. Several cases of the kind have already been related; one or two of them authenticated by M. Ricord. M. Lailler now records another carefully observed case, and gives full details of it; from which it would seem certain that the patient was affected with syphilis; that the disease arose subsequent to the frequent catheterism of the Eustachian tube for deafness; and that the catheterism was the cause of the infection. It really, as we have said, seems incomprehensible, that any aurist could be guilty of such a filthy and shameful act as using dirty instruments in cases of this kind; but we must record what seem thoroughly well authenticated facts.

Association Intelligence.

MEDICAL PROVIDENT FUND.

THE Chairman of the Directorate has received information of the following appointments of Directors by the Branches.

East Anglian Branch. B. Chevallier, M.D. (Ipswich).

Yorkshire Branch. William Hey, Esq. (Leeds); William D. Husband, Esq. (York).

Metropolitan Counties Branch. Charles F. J. Lord, Esq. (Hampstead); Edward H. Sieveking, M.D. (London); A. P. Stewart, M.D. (London).

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

	£.	s.	d.
Amount already contributed.....	312	13	0
Dr. Ormerod (Brighton)	10	10	0
Dr. Radclyffe Hall (Torquay)	10	10	0

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

BATH AND BRISTOL BRANCH.

THE first Ordinary Meeting of the session will be held in the Victoria Rooms, Clifton, on Monday evening, October 17th, at 7 o'clock; R. W. FALCONER, M.D., President, in the Chair.

The first business of the meeting will be to elect two members of the Branch as Directors of the Provident Relief Fund of the Association.

H. MARSHALL, M.D.
R. S. FOWLER. } *Hon. Secs.*

Clifton, October 1st, 1864.

SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

SHROPSHIRE SCIENTIFIC BRANCH.

THE Annual Meeting of this Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 19th, at 2.30 P.M.

Dinner at 4.30 P.M. T. B. BARRETT, Esq., President; J. W. MOORHOUSE, Esq., Vice-President.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the West Kent General Hospital, at Maidstone, on Friday, October 28th, at 2.15 P.M.

Dinner will be ordered at the Mitre Hotel at 5 P.M. Tickets, 5*s.*, exclusive of wine.

Dr. MONCKTON has consented to occupy the Chair; and papers are promised by Fred. Fry, Esq., F.R.C.S. (Severe Injury to Brain: patient surviving thirteen months); and by G. H. Furber, Esq. (Spontaneous Evolution of the Full-grown Fœtus).

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, October 12th, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BATH AND BRISTOL. [Ordinary.]	Victoria Rooms, Clifton.	Monday, Oct. 17, 7 P.M.
SOUTH MIDLAND. [Autumnal.]	Buckingham.	Tuesday, Oct. 18, 1 P.M.
SHROPSHIRE SCIENTIFIC. [Annual.]	Lion Hotel, Shrewsbury.	Wed., Oct. 19, 2.30 P.M.
SOUTH-EASTERN. [General.]	West Kent General Hospital, Maidstone.	Friday, October 28, 2.15 P.M.

SOUTH-WESTERN BRANCH: MEETING.

A MEETING of this Branch was held at the Devon and Exeter Hospital on October 4th, for the purpose of electing three Directors to the Provident Relief Fund. There were present: Dr. RADCLYFFE HALL (Torquay) in the chair; Dr. Ackland (Bideford); Dr. Bennie (Lympstone); Dr. Potter (Cullompton); C. H. Roper, Esq. (Exeter); and Dr. Thomas (Hartland).

Resolutions. The following resolutions were passed.

Proposed by Dr. POTTER, and seconded by Dr. BENNIE—

"That P. C. De la Garde, Esq., of Exeter; T. L. Pridham, Esq., of Bideford; and Dr. Cookworthy, of Plymouth; be appointed three of the Directors of the Provident Relief Fund, subject to their acceptance of the office."

Proposed by Dr. THOMAS, and seconded by Dr. ACKLAND—

"That it be recommended to the Committee of Council, that the Relief Fund should be confined to sickness arising from disease, and not from accidents; as the latter could be provided for by insurance in the Accidental Insurance offices."

"That, as regards limiting the Relief Fund solely to the members of the Association, a request should be inserted in the JOURNAL that each member should communicate to the Chairman of the Directorate his feelings on the matter; and that the wishes of the majority should be carried out."

NORTH WALES BRANCH: GENERAL MEETING.

A SPECIAL General Meeting of the members of this Branch was held on Tuesday, October 4th, at 3 P.M., at the Bull Hotel, Denbigh, under the presidency of W. WILLIAMS, M.D., of Mold.

Medical Provident Fund. Upon the proposition of Mr. TURNER JONES (Denbigh), seconded by Mr. LL. LODGE (St. Asaph), Thomas Taylor Griffith, Esq., of Wrexham, was unanimously elected to represent this Branch in the Board of Directors of the Medical Provident Fund of the British Medical Association.

Dinner. After the business, for which the members had assembled, had concluded, they dined together at the hotel.

HEALTH OF THE FRENCH ARMY. A report by Marshal Randon contains some interesting information with respect to the sanitary condition of the French army. The mortality in the army has for some time, it appears, been on the decrease. "In 1846, the annual mortality was, among the troops in France, 19 deaths per 1000 men, and in Algeria 64. In 1862 and 1863, there were only 10 deaths per 1000 in France, and about 12 in Algeria." Judging from the context, the decrease in French garrisons is very important. A corresponding diminution is observed in the men in hospital; in 1842, one twenty-third of the army; in 1852, one-thirtieth; in 1862, one thirty-ninth part of the army.

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Bath, September* 1864.]

The Relation and Special Application of Fat and Sugar as Respiratory Food. By THOMAS HAYDEN, M.D. The author believed that fat and sugar possess different values as food; that they undergo different transformations, and, during these transformations, subserve distinct purposes of economy; that the period of their retention in the body is the same; that they are not mutually convertible; but that ultimately they pass out of the body under the common form of carbonic acid and water, and are jointly concerned in the production of animal heat. After noting the mechanical purposes of adipose tissue, he alluded to the provision made in the fat deposited in the body, for the maintenance of animal heat during a certain period, under circumstances of total deprivation of heat-producing food. But, before deposited fat can become available for this purpose, it must undergo disintegration, or disassimilation, and be reabsorbed into the blood. Dr. Hayden did not deny that the adipose, like other tissues of the body, is constantly undergoing gradual molecular destruction; but what he desired to convey was that fat must be always in the first instance assimilated, and can, under no circumstances, be applied to the maintenance of animal heat before undergoing the twofold process of constructive and destructive assimilation. Amylo-saccharine substances, on the other hand, are immediately and directly passed off from the blood, and are never assimilated in the proper acceptation of the term. Of the starch taken in as food, however, a certain proportion escapes the action of the saliva, and is deposited in the liver, probably in the hepatic cells, whence it is drawn to supply heat when the amount of sugar in the food recently taken happens to be insufficient, or when the body is exposed to highly refrigerating influences. Having referred to the experiments of Pavy, Bernard, Sanson, Poggiale, and Roguet, Dr. Hayden said that he was engaged in a series of experiments, and, from the observations he had so far made, had arrived at the following conclusions. The amount of fat deposited in the body is regulated by the absolute and relative quantity of oleaginous and saccharine matter in the food taken; both substances, taken in a large quantity, cause excessive deposits of fat. If the fat taken be in defect, even though the sugar be in excess, no increase in the deposit of fat takes place, but rather a decrease; obviously in consequence of ordinary molecular absorption, to which the adipose, in common with other tissues, is subject, not being counterbalanced by assimilation. If the fat taken be in excess, whilst the sugar is insufficient to meet the immediate wants of the respiratory function, still the deposit of fat may not undergo increase, but the contrary; apparently because a portion of that already deposited must undergo reabsorption into the blood for the purpose of supplying heat. Fat is, therefore, as a heat-producing substance, only supplemental of sugar, which is the ordinary *pabulum* of respiration. Saliva, like gastric juice, is secreted in quantity strictly proportioned to the immediate wants of the system, and quite irrespectively of the absolute quantity of food taken; a certain proportion of the starch of the food, varying according to the quantity taken, and the necessity of respiration, escapes the converting action of the saliva, and is stored up in the liver. This liver-starch is being taken constantly back into the blood to supplement the respiratory elements of the food, and in the blood is converted into sugar, probably next into lactic acid, and finally into carbonic acid. Hence the presence of sugar, normally, in small proportion in the blood of the right side of the heart; hence, likewise, its presence in the right heart of animals fed exclusively upon meat, in whose portal blood not a trace of sugar is discoverable.

Meat as a Source of Entozoa. By T. S. COBBOLD, M.D., F.R.S. Referring first to beef and veal, he described the various species of tapeworm to be found in cattle. He also referred to the difficulty of detecting these parasites, even by a skilled veterinary surgeon; but added that all danger of injury to mankind, from their presence, was avoided by cooking the meat at a high temperature—say 212 Fahrenheit. Most of the tapeworms inhabiting sheep did not appear capable of living in the human body; still it was a wise precaution never to take meat underdone. Pork was the most injurious; and there was now no question that the measle inhabiting the pig was communicated in the pork eaten. If the poor would only abandon their semi-civilised habits of eating raw or half-cooked meat, the evil would soon cease altogether. A great variety of entozoa was to be found in game, but they were, for the most part, of innocuous classes. In fish they were more abundant than in either birds or mammals; but there was reason to believe that fish might be eaten either cooked or raw without danger to the consumer.

Vegetables, Fruits, and Water, as a Source of Entozoa. By T. S. COBBOLD, M.D., F.R.S. There was no doubt that entozoa were introduced with vegetable food. Small moluscs harboured parasites in prodigious quantities, and they were the source of one or more of the parasites that occasionally invaded the human form. These entozoa might be taken in water drinking, but they were much more likely to be taken from water-cress, or other vegetables of the kind. It was necessary with all vegetables that the greatest cleanliness should be observed in preparing them for the table, and care should be taken to avoid swallowing these small molluscs, which were very likely to escape observation. A large species of the tapeworm, discovered in Egypt, would, he was afraid, be brought to this countiy at some time from our colonies; and if ever it got place amongst us, it would be difficult of extermination. Eggs and living specimens had been found in this country, both in men and monkeys, but only to a very small extent. He was the first to discover it in the monkey. There was no evidence to show that any species of entozoa was derivable from fruit. A great many evils in children were charged to eating unripe food, but, as far as entozoa were concerned, that fear was entirely groundless; and if they should be so introduced, the chances were that the larvæ would be taken from the surface of the fruit. With regard to celery, cabbages, and all the ordinary market-garden vegetables, he might say that all decomposing animal and vegetable matter sustained entozoa, and the more filthy the water or liquid manure employed to secure the fertility of the garden, the more likely was a supply of entozoa to be taken with the vegetables grown upon the land. The most careful washing was, therefore, required. Parasitic larvæ might be found in water that was to all appearance perfectly pure; but speaking generally, it might be inferred that fresh spring water was perfectly innocuous. The same thing could not be said of water stored in large tanks in hot climates. The presence or absence of the larvæ of human entozoa in water

s dependent upon the place whence the supply ne, and upon the condition of the water. The pork asle might be readily communicated to human ings in this way; and there was another species cen from water, the habit of which was to esconce elf in the brain, causing death. There was one id inhabiting dogs which was often communicated the human being. One-sixth of all persons who d in Iceland perished from a little creature so small at in its larval state it could scarcely be seen. No e need drink water impregnated with these entozoa. ne danger would be got rid of if the water was vays carefully boiled, filtered, or distilled; but a ter to be effectual ought not to pass anything ger than one one-thousanth of an inch. Sand and arcoal filters were of very little use. Paper filters ould be employed. All entozoa not preserved for ientific experiments should be destroyed by fire. eer, porter, etc., he believed perfectly harmless. ven though impure waters should have been emoyed, the boiling of the wort would be alone sufficit to destroy any number of parasites. As to unfernented drinks, such as ginger beer, cyder, and the e, there could not be perfect certainty. All must pend upon the source and the supply of water. In gard to wines, the same remarks were applicable. lcohol added to water was sufficient to destroy the rasitical eggs; but he questioned whether the nount of spirit in our home-made wines was sufficit for the purpose.

Report on the Physiological Action of Nitrite of Amyl. y B. W. Richardson, M.D. The author described itrite of amyl as an amber-coloured fluid, smelling id tasting like essence of pears; and gave a classiication of numerous experiments which he had perrmed with it. It arrested oxidation, and prevented ne process of decomposition in animal and vegetable ibstances. The following was Dr. Richardson's ummary of the effects of nitrite of amyl. 1. It is bsorbed by the body, however introduced, whether y the skin, the stomach, the lungs, or by inoculation. . After its absorption, its effects are immediately een on the heart and circulation. There is, in the rst place, violent action of the heart, with dilatation f the capillaries, followed by diminished, but not exinguished, power of the heart and contraction of the xtreme vessels. As an excitant of vascular action, he nitrite of amyl may be considered the most powerul agent yet discovered by the physiologist. 3. In nimals whose bodies admit of its removal spontaneusly, and whose circulatory and respiratory systems re simple, such as frogs, the nitrite suspends animaion; and when the animals are placed under favourble circumstances for the process of recovery, they nay recover. There is no other known substance hat suspends animation in frogs for so long a period f time. In warm blooded animals, which are clothed n a skin less permeable, and in whose bodies the cirulatory and respiratory systems are more complicated, the nitrite cannot actually stop the movements f respiration and circulation without destroying life. But even in these animals it can reduce respiration nd circulation so extremely, that a condition preisely analogous to what is known as trance or cataepsy in the human subject, can be induced by it, and e sustained for many hours. 4. The nitrite of amyl s not an anæsthetic; by it consciousness is never destroyed, unless death is produced. 5. The effect of he nitrite on the organism is directed to the motive force, which it first wildly excites and then subdues. 6. The *modus operandi* of the nitrite appears to be by arresting the process of oxidation in the tissues. 7. Physically, the nitrite holds a place between the volatile bodies, such as chloroform or ether, and the solid bodies, such as opium and woorali; hence its effects are less evanescent than those arising from the volatile substances, and less destructive than those produced by the solid substances. In this lies the secret of the peculiar action of the nitrite. He described the pathological or diseased conditions produced by it; its effects as compared with other compounds of amyl, and numerous other substances; and the reason why it should so powerfully influence the circulation. He then put the question, whether with the facts now known we ought to deny the possibility of placing the body in such a condition that it may for some hours, or even days, assume the appearance of death? In catalepsy, or trance, we see such an appearance of death in a disease; and we have heard of the famous experiment of the Fakirs of India, in which they seem to hold life for a time in abeyance. Dr. Richardson thought that in catalepsy there was found in the body a substance which acted like the nitrite of amyl. He thought, also, it was possible that the Fakirs possessed a substance derived from the vegetable world that had the property of producing the same effects in a marked degree. In conclusion, the author discussed the question of the value of the nitrite of amyl as a remedy in the treatment of disease. He had not had time, practically, to try this point; but he suggested that the substance would probably be found of service in cases of sudden failure of the heart. He also believed it would prove serviceable in the treatment of tetanus; that it would, by its paralysing action on the voluntary muscles, check the tetanic spasms, and, by enabling the patient to live through the acute attack, would give time for the system to become relieved of the primary malady. As there was no known remedy for tetanus, Dr. Richardson urged the trial of the nitrite of amyl strongly. The whole of the amyl series required to be investigated physiologically; the inquiry promised to be attended with the most important results.

Preparations of Bromine. By G. D. Gibb, M.D. Bromide of lithium was prepared with the view of treating gout and rheumatism of the throat and neck. In small doses, it acted as a tonic gentle stimulant, and sometimes as a diuretic, and might be combined with other agents with advantage. The bromide of zinc he had found to relieve impaired nervous power; and he proposed bromide of lead as a soothing and cool local agent in certain inflamed states of the mucous membrane.

The Hour of Death in Acute and Chronic Disease. By Alfred Haviland, Esq. The author had collected over 5000 cases of death, with the hour of death, and other circumstances recorded, which he had tabulated and exhibited on a large chart. By this chart, he showed that, in 1000 cases of death in children under five years of age, the periods of the greatest mortality took place during the hours between 1 and 8 A.M.; and that, in the succeeding hours between 9 and 12 P.M., the rate of mortality was at its minimum. He then compared these statistics with 2891 deaths from all causes; and the chart showed how remarkably the wave lines of death compared with those above. Deaths from consumption, although they showed a general resemblance in the wave line, yet between the hours of 4 to 8 A.M., showed a depression, when compared with the first four hours period. He contended that the tables on the chart proved the extraordinary mortality in the early hours of the morning when the powers of life were at their lowest ebb. He urged the necessity of feeding and stimulating the patient at their weakest hour, so as to tide them over a critical period, and, even if death be inevitable, to so support the patient that he might at least have a few hours more of life snatched from eternity to admit of his being able to carry out some neglected duty, pardon some enemy,

and see some beloved friend. He finally urged upon his professional brethren the high importance of teaching friends and nurses how to attend to those under their charge.

Correspondence.

PUNCTURE OF THE BLADDER *v.* PERINEAL SECTION.

LETTER FROM THOMAS PAGET, ESQ.

SIR,—I have delayed noticing the letter of Dr. Morris, published in your number of August 27th, until others who might wish to make observations on the subject had had time to do so.

I assure Dr. Morris that I receive his remarks in the spirit of indulgence which should ever attend the movements of science. I can also allow him to think "his patients in a better state than mine"; that is, if he can so think when he has read again, and with more attention, my cases and remarks published in the JOURNAL, of July 2nd, 1859.

He will then find that no "great annoyance and inconvenience was experienced by a person having an elastic gum catheter constantly protruding through the walls of the abdomen", simply because no catheter is used; there is only a tube and shield, the whole length of which is named as "about three inches."

In fact, the only projection from the body in my cases is that of the ordinary silver shield of a common bladder-cannula, which does not exceed half an inch, and is situated in the receding portion of the hypogastrium, where the clothing cannot roughly touch it. I am told by my patients that no inconvenience is felt from it. It is, then, Dr. Morris's *own cases* that must have suggested to him the protruding catheters; and their annoyance and inconvenience must have suggested them, too, as being felt by *my patients*. One of his "has worn the catheter ever since the operation, changing it every fourth or fifth day"; for the other, he says, "I replace the catheter every fourth day with a new one, as they become furred up and useless."

I submit, then, that his time for preferring the state of his patient to that of mine, though it may come, is not yet. Our respective patients will be upon an equality only, when he shall be able to report them, as I have mine, freshened in condition, erect, and free in gait; one of them "rejoicing in the opportunities business allows him of walking four or five miles, which he does perfectly free from pain." At present, he can only congratulate them upon—1, the blessing of relief from pain, not a small one to those who have suffered from retention of urine; 2, the advantage of being able to wear a catheter, protruding from the body, with "the great annoyance and inconvenience" of such protrusions; 3, the opportunity of cherishing the pleasing fiction that they are not micturating by the tube, but "at their pleasure, passing their urine through the penis" all the while.

But the two operations themselves have to be compared. The section, always viewed as severe, attended with after-peril, and uncertain in practicability and degree of success. The puncture now described, simple, certain, devoid of peril, and free from objection, for persons above 60. I must own that no sneer upon it, as "an easy and ready way of getting out a difficulty", will drive me from preferring the latter, and considering my patient as cured of the stricture he no longer feels or fears. The results of perineal section must be shewn far to outweigh in benefit those of puncture, and must very much exceed those of Dr. Morris's present description, to change my feeling. Perhaps, I ought to blush at a want of heroism, when candour draws from me the avowal, that though an "aspiring operator", I have never entertained any feeling short of the highest possible respect for that which I now find sneered at; viz., "an easy and ready way of getting out of a difficulty."

I am, etc.,
THOMAS PAGET.

Leicester, Sept. 25th, 1864.

THE DIET OF CHILD-BED.

LETTER FROM GRAILY HEWITT, M.D.

SIR,—Permit me to make a few remarks in reply to Mr. Pope's letter (*vide* BRITISH MEDICAL JOURNAL, September 24), criticising a paper recently published by me in the *Lancet*, on the Diet of Child-Bed.

I am sorry that the views I have advocated, as regards the dietary of women during child-bed, do not meet the approval of a gentleman who is pleased to speak of me so eulogistically; but I can do no less than defend my opinions, arrived at, as they have been, after mature deliberation, and supported by what I conceive to be sound argument.

I shall content myself with replying to the arguments adduced by Mr. Pope; and I hope yet to win him to my side of the question.

Mr. Pope, in his letter, appears to consider that the digestive organs of a woman recently delivered are in a state "more or less deranged"; and he states that the gravid uterus has, during the latter half of pregnancy, "so compressed the whole of the abdominal viscera, and more so those immediately connected with the digestive function, as to leave them in a state unfit for such diet" (the generous diet recommended by myself). May I ask Mr. Pope for the proof of this? Is it, or is it not, the fact, that women are, as a rule, capable of eating a good dinner, and digesting it easily and comfortably, up to the very hour when labour begins? If Mr. Pope's assertion were correct, the only logical conclusion would be that, during the latter half of pregnancy, the ordinary quantity of food could not be taken—a conclusion which I should imagine Mr. Pope is hardly prepared to adopt. I can assure him that, if he will make the experiment, he will find that the digestive powers are as good on the day following a natural labour as on the day before it, and that his patients will be thankful to be allowed, without delay, to recruit their exhausted forces, by taking the food to which they are accustomed. When the exhaustion is great, the digestive powers may be, as I have already remarked, weakened; and, in such cases, prompt administration of stimulants is necessary, for these supply the place of ordinary food.

"Generally" (says Mr. Pope), "before the secretion of the milk, fever must supervene"; and this fever is, Mr. Pope adds, "mainly regulated by the diet." I repeat, that "milk-fever" is, on the contrary, so far as my experience teaches me, very rare; while its importance is, I believe, altogether over-estimated. I agree with Mr. Pope, in considering that it is to be regulated by the diet; but I have no faith in a low diet for the purpose of preventing it. The fact that I have witnessed it so very rarely—and it is a fact—while I have been for some time in the habit of administering a liberal diet from the first, is, at all events, worth something as an argument; weakness and feverishness, I have generally seen, go together.

In conclusion, I would say, with Mr. Pope, *Magna est veritas, et prevalebit.*

I am, etc.,
GRAILY HEWITT.

Berkeley Square, Sept. 27th, 1864.

SCARLATINOID DISEASE AFTER OPERATIONS.

LETTER FROM JAMES EDMUNDS, M.D.

SIR,—The following case bears upon an interesting uestion now under discussion in your columns.

Some years ago, I was consulted by a young gen-eman in respect to several enlarged glands beneath ıe jaw, which, being very unsightly, he was anxious get rid of. I told him that the only cure of which knew was extirpation with the knife, and that this as so hazardous an operation, that he had better ıt up with the inconvenience. After, however, ıving undergone various treatment by other practi-oners, he returned to me, and requested that I ould remove them, and I did so.

In performing the operation, an angular flap of the ıteguments was raised, and the glands, having been agged forward with a vulsellin, were completely tirpated, and the integuments then brought accu-ıtely together.

A day or two afterwards, the patient had bad sore-ıroat, and a rash so indistinguishable from that of arlet-fever, that I ascribed his alarming condition the fact of his having had scarlet-fever about him the time when the operation was performed; and ought to say that the sore-throat was no mere local ympathy with the part operated upon, but such as ould not be distinguished from that of scarlet-fever f a severe but not malignant type.

Fortunately, the case did well, and the deformity as perfectly cured; no trace thereof remaining, ex-ept a linear scar beneath the jaw, which could only e seen on careful inspection.

On thinking over this case in connection with the etter from Dr. Wilks, I am now disposed to think hat the scarlatinoid disease which followed the oper-tion was the result of the absorption of septic matter y the open mouths of those lymphatic vessels which ad been divided; and this explanation will also ac-ount for the other cases, although in them the scar-ıtinoid disease was less profound, because the mount of injury to the lymphatics was less extensive.

If the explanation which I have suggested should e accepted by the profession as the true cause of ymptoms which, in some cases, are dangerous to life, nd which, in all cases, must, more or less, conta-ıinate the blood, and jeopardise the healing powers; must take rank as a specific reason for carefully voiding the lymphatic vessels in all operative pro-eedings; although, as far as I know, this point has not itherto been specifically insisted upon, and it is cer-ainly the usual practice almost to ignore the course f the lymphatics in determining the course of many ırgical incisions.

Mr. Henry Lee, in his papers in the JOURNAL upon yphilis, has very clearly pointed out the difference etween absorptions of noxious matters by the veins nd absorption of the same matters by the lympha-ics. In the one case, we get complete systemic in-ection; but, in the other, the noxious matters are, s it were, digested; or, at any rate, are modified by ıe vital powers of the lymphatic system; so that we o not get the same results as when these matters ave gained direct access to the blood by mere smosis into the veins. So it may be in surgical perations; septic matters may enter directly into he blood through the open mouths of veins, and roduce that train of results which we call pyæmia; r septic matters may enter the open mouths of the ivided lymphatics, and may be more or less modified ı the lymphatic system, so as to produce: 1, mere ocal irritation or abscess in the course of the vessels nd glands; 2, rheumatoid disease; 3, more serious results, in the shape of eruptive fever, or of vital prostration and malignant poisoning.

A report by myself of a remarkable case, called, for want of a better name, "Malignant Pustule", which bears upon this question, will be found in the *Medical Times and Gazette* of last year.

I am, etc., JAMES EDMUNDS.

Oct. 10, 1864.

IS SIMPLE ACUTE ERYSIPELAS A LOCAL OR A CONSTITUTIONAL DISEASE?

LETTER FROM JOHN HIGGINBOTTOM, ESQ., F.R.S.

SIR,—The following queries I proposed to the profession in March 1853, at a meeting of the Provincial Medical Association; to which I have had no response. As it is still a question in which I have much interest, I should be grateful to any of my professional brethren who would favour me with an opinion.

1. Is simple acute erysipelas a purely local, or a constitutional disease?

2. Is it sometimes a local, and sometimes a constitutional disease?

3. Is it simultaneously both a local and constitutional disease?

In addition to the above queries, I should like to ask, Why erysipelas is classed among the exanthemata? I am, etc.,

JOHN HIGGINBOTTOM.

Nottingham, Oct. 10th, 1864.

Medical News.

APOTHECARIES' HALL. On October 7th, the following Licentiates were admitted:—

Bell, Cyril William Bowdler, Valetta, Malta
Davies, Herbert, University College Hospital
Dodd, Edward, North Stoke, Oxfordshire
Fairbank, Thomas, Islington
Powell, John, Chichester, Sussex
Power, William Henry, St. Bartholomew's Hospital
Smallman, Joseph Clement Bruce, Willingham, Gainsborough

At the same Court, the following passed the first examination:—

Cass, William Cunningham, University College
Gill, George, Liverpool Royal Infirmary
Hoffmeister, William, University College
Tindall, Alexander M'Ivor, St. Bartholomew's Hospital

APPOINTMENTS.

ARMY.

GROGAN, Surgeon J., M.B., 4th Dragoon Guards, to be Surgeon-Major, having completed twenty years' full-pay service.
STOCK, Staff-Assistant-Surgeon J. N., to be Assistant-Surgeon 9th Foot.
WRIGHT, T. W., Esq., to be Staff-Assistant-Surgeon.

ROYAL NAVY.

BAYNES, Wm. W., Esq., to be Staff-Surgeon of Woolwich Dockyard.
IRELAND, Arthur F., Esq., Assistant-Surgeon, to the *Duke of Wellington*.
JAMESON, Hugh, Esq., to be Retired Deputy-Inspector-General of Hospitals and Fleets.
MACDONALD, John D., Esq., Surgeon (additional), to the *Victory*, for service at Haslar Hospital.
MULVANY, Charles P., Esq., Assistant-Surgeon, to the *Nimble*.
PIERCY, Frederick, Esq., Assistant-Surgeon, to the Portsmouth Division of Royal Marines.
REID, John W., M.D., Surgeon, to the *Victory*.
TORRANCE, John B., Esq., Assistant-Surgeon, to the *Victory*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

COLEMAN, W., Esq., to be Surgeon 26th Kent R.V.
GILL, H. K., Esq., to be Assistant-Surgeon 3rd Administrative Brigade Lancashire A.V.
GRIFFITH, A. L., M.D., to be Assistant-Surgeon 16th Wiltshire R.V.
LANSDOWNE, F. P., Esq., to be Surgeon 1st Administrative Brigade Gloucestershire A.V.

Rigby, J. M., M.D., to be Assistant-Surgeon 3rd Administrative Brigade Lancashire A.V.
Williams, E., M.D., to be Surgeon 1st Gloucestershire A.V.

MARRIAGE.

Warwick, the Rev. J. C. B. W., late Curate of St. Peter's, Northampton, to Marian, second daughter of John M. Bryan, M.D., Northampton, on October 6th.

DEATHS.

Bannister. On October 2nd, at 433, Oxford Street, Elizabeth M. A. L., wife of J. Henry Bannister, Esq., Surgeon.
Bowling. On September 27th, aged 8, Henry Fraser, youngest son of the late J. Pierce Bowling, Esq., Assistant-Surgeon Bengal Army.
Brown. On October 13th, at Belitha Villas, Islington, the wife of Augustus Brown, M.D.
Cass, William Leonard, Esq., Surgeon, at Goole, Yorkshire, aged 24, on September 23.
Gallagher, John, M.D., Deputy Inspector of Fleets and Hospitals, at Bermuda, on September 20.
Hodges, Edward, M.D., late of Bath, at Bayswater, aged 54, on October 2.
Jeffery, Joseph, Esq., Surgeon, at 14, Trinity Terrace, on Sept. 27.
Lovell, C. H., M.D., at Tottenham, aged 74, on October 5.
*Reece, George, Esq., of 45, Sussex Gardens, Hyde Park, at Malvern, aged 52, on October 1.
Roscoe, Richard, M.D., at Humberstone, Leicestershire, aged 71, on October 3.
Rose. On October 1st, at Hampstead, aged 1 month, the infant son of *H. Cooper Rose, M.D.
Salter, Richard F., Esq., Surgeon, at Bayswater, aged 52, on October 2.
Waterworth, Charles A., M.D., at Newport, Isle of Wight, aged 24, on October 3.
Wright, Alexander, Esq., Surgeon, late of Norton, near Sheffield, at Boerne, Texas, on June 28.

Death of Heurteloup. The journals announce the death of Baron Heurteloup, of lithontriptic fame.

Dr. Sieveking, we understand, returns from Denmark to Balmoral in charge of the young Prince, and has probably already arrived in Scotland.

Association of Medical Officers of Health. Dr. Druitt has been elected President of the Metropolitan Association of Medical Officers of Health for the ensuing year.

A Rare Bird. A splendid specimen of the goshawk, strong and robust in frame, and of exceedingly fine plumage, was lately shot on Filey Brigg. The Rev. F. O. Morris, B.A., in his *History of British Birds*, says: "In Yorkshire, the only occurrence of this bird on record was at Cusworth, near Doncaster, where one was killed in the year 1825."

Beneficence. On the recent opening, at University College Hospital, of the contribution-boxes at the doors of the hospital, there was found a sum of £78 odd, in bank notes and all the various coins of the realm from pounds to farthings; among them were four distinct gifts, one of £25, two of £5 each, and one of £2 : 10.

American Army Medical Service. Never was the medical student stimulated by so many incitements to perfect himself in his profession. Our navy, rapidly expanding, is in such need of educated surgeons, that promotion to the highest rank occurs in the second year. The army has absorbed thousands, and still calls for more. But the army and navy will have only the best. (*American Medical Times.*)

Science for the People. The Minister of Public Instruction has addressed a circular to the rectors of provincial academies of the French University, suggesting the propriety of establishing, in the large towns of their respective circumscriptions, popular lectures, like those given last winter with so much success at the Sorbonne in Paris. The experiment has already been tried at Lisle by the professors of Douai, and at Marseilles by those of Aix, in both cases with most beneficial results.

Alcoholic Drinking. Dr. Decaisne sums up the evils proceeding from the abuse of spirits as follows: Increase of crime and suicide, hereditary transmission of the passion for drink, and of other deplorable tendencies, hereditary origin of epilepsy, idiocy, scrofula, and many other maladies, although the parents may have been free from them, weakening of the reproductive powers, the depopulation of certain countries, and, as a consequence, their misery. Dr. Rufz, who has practised medicine in the Antilles, attributes three-fourths of the premature deaths among the negroes to the abuse of tafia.

Chloroformisation. An United States army-surgeon speaks as follows of the use of chloroform: "I may allude to the lavish use of chloroform in army practice. It is almost invariably given in every operation, and oftentimes by hospital attendants or other non-professional persons, and with scarcely ever a bad effect. Until the recent battle of Cold Harbour, I do not remember to have seen a death in which there was a suspicion that the anæsthetic had hastened the fatal issue, or produced it; and in the case alluded to it was more than doubtful whether the chloroform had any agency in producing the patient's death. This immunity from bad effects in the administration of chloroform in field service, is due, probably, more than anything else, to the fact that, given, as it most generally is, in the open air, there is an ample supply of atmospheric air mixed with the lethean vapour.

Dr. Charles Maclean, late Inspector-General of Military Hospitals, died on the 4th inst., at Rathmines, at the advanced age of 74 years, after a painful and protracted illness. This excellent surgeon entered the service in 1809, as hospital mate, in which rank he served at Walcheren. In the following year, he landed in the Peninsula, and was promoted to the assistant-surgeoncy of the 2nd Battalion 53 Regiment. He was present at the battle of Busaco; served at Torres Vedras, Salamanca, Vittoria, and the Pyrenees (July 30th, 1813); also at the crossing of the Bidassoa, Nivelle, and Toulouse. For these eminent services he he was awarded the War Medal, with seven clasps. In July 1814, he embarked with his battalion for St. Helena. Dr. Maclean officiated as physician to the first Napoleon during his exile at St. Helena. When quartered at Jamaica (1849-52), the special thanks of His Grace the Duke of Wellington were conveyed to him for his sanitary measures during an outbreak of cholera in that island. (*Irish Times* and *Dublin Medical Press.*)

Deaths in London During the Quarter. 18,008 persons died in London during the quarter which ended on Saturday, October 1st. Diarrhœa caused the greatest mortality in the zymotic class, 2,080 persons dying from this disease. Cholera was fatal to 130 persons, the majority being children. Small-pox caused 140 deaths—a number which, although large, contrasts favourably with that in the corresponding quarter of 1863, when 512 lives were lost by this scourge of the human race. Measles, on the contrary, exhibits a large increase, causing 855 deaths. Typhus carried off 980 persons, and visited with much severity the East and South districts of the metropolis. Phthisis destroyed 1,933 lives. Other diseases of the respiratory organs proved fatal in 1,699 cases. From diseases of the brain and nervous system 1,734 persons died; diseases of this character show a gradual and steady increase. Five hundred and twenty-seven persons lost their lives during the quarter from accidents of various kinds; 264 of these were killed by fractures and contusions, 49 by burns or scalds, 13 died from the effects of poisons, 84 were drowned, and 66 were suffocated. Sixty-three persons committed suicide.

Medical Officers of Health. The Annual Reports of our Officers of Health bear ample proof of the great benefits to society which have accrued from the appointment of these gentlemen. Dr. Lankester, in his Eighth Annual Report to the vestry of St. James's, quotes the words of the Registrar-General on this head. "In the census of 1861" (says Dr. Lankester), "I am returned as one of forty-seven Health-officers who exist in the United Kingdom. The Registrar observes: 'This is a new medical office. Hitherto the medical skill of the country has been chiefly employed in the treatment of the rich; but the means of life-preservation was neglected, and was scarcely applied practically, because it formed no part of the business of the medical profession. The Health-officers, few in number, have already done incalculable good, and the local government of no community is complete without them. The conditions on which health depends are so various as to require for their regulation the highest order of medical education and talent.'" We find, from Dr. Lankester's Report, that, under his vigorous inspectorship, all the cow-houses of the parish have been closed, in consequence of their owners having broken the laws laid down for their guidance.

Royal College of Surgeons. The annual report of the receipts and expenditure of the College has just been published, from which it appears that the former amounted to £13,806 : 14 : 8, being an increase of £1396 : 13 : 8 over the preceding year. The principal source of revenue is derived from the preliminary, primary, and pass examinations for the diploma of membership, which collectively produced £10,331 : 5. The certificates of qualification in dental surgery raised £924; the fees derived from the fellowship amounted to £377 : 10; rent, £702 : 15 : 6. The disbursements amounted to £12,844 : 13 : 3, or only £25 : 16 : 2 more than last year. The College department is put down as absorbing the largest amount, viz., £7998 : 17 : 1, including fees to Council Courts of Examiners, diploma stamps (£1 each), list of members, coal, salaries, wages, and law expenses. The Museum department costs £2264 : 13 : 8, for catalogues, specimens, spirit, bottles, salaries, and wages; and the Library department, for the purchase and binding of books, salaries, etc., is put down at the moderate sum of £601 : 18. The annual list of Fellows, Members, etc., has just appeared, from which it seems that the total number of Fellows, in whose hands the elections into the Council are vested, amount to 1296, of which number 300 write "*exam.*" after their names. The Licentiates in Midwifery number 926. There appears a great increase over last year in the number of dentists, who are now 280 strong. The gentlemen who obtained the diploma of membership are on the increase, as evidenced in the receipts above mentioned.

Military Prisons. The annual report on the military prisons in the United Kingdom, by Lieut.-Colonel Henderson, the successor of Sir J. Jebb as Inspector-General, has just been issued. The new scale of dietary is described as proving sufficient to maintain the men in good health, capable of performing the labour required of them, and of rejoining their regiments in a condition at once to undertake their ordinary duties. The improved scale has considerably diminished the average loss of weight, and the number of prisoners treated for sickness in the last year has been proportionately less than in any year since 1851. The fact that the prisoners confined in the military prisons are far more healthy than their comrades in garrison furnishes an additional proof, if one were necessary, of the loss of health, besides other evils attendant on the irregularities of a soldier's life, most of which have their origin in facilities afforded them for obtaining intoxicating liquors, and point to subjects in which improvement is much needed.

The Late Dr. Dundas Thomson. At a late meeting of the Metropolitan Association of Medical Officers of Health, the following resolution was passed: "That the members of this Association deeply lament the loss they have sustained by the decease of its late President, Dr. Dundas Thomson, F.R.S. To the late Dr. Dundas Thomson, the medical officers are not only greatly indebted for the zeal and energy he constantly manifested in the promotion of the interests of the Association; but especially so for the kind services he liberally afforded them by throwing open to their use at all times his valuable chemical laboratory, and for his personal assistance so freely given to them in their investigations. The Association are desirous of recording an expression of the esteem and respect they felt towards him, and also the opinion they entertained of the very able, efficient, and courteous manner in which he discharged the duties of President during the whole time he held that office. That a copy of this resolution be forwarded to Mrs. Thomson, signed by the chairman. Resolved, also, that the meeting do convey to Mrs. Thomson an expression of its heartfelt sympathy with her, in this hour of her affliction, in the irreparable loss she has sustained in the premature death of her late husband."

Ozone-Registration. Dr. Kemp says: "Considering ozone as oxygen in a dynamical condition, and knowing that it is capable of converting sulphuretted hydrogen and other deleterious gases into innocuous compounds, the principal object of registration is to ascertain under what circumstances it is redundant, how far in peculiar localities it is utilised, and to what extent, when totally absent, the public health suffers from the deficiency. Daily observations are now making in at least three stations in the neighbourhood of Hereford; and, although only about half a mile asunder, the difference in the amount of ozone is most remarkable. In a paper on this subject, read before the British Association at its recent meeting, I have, for reasons therein stated, proposed to substitute dextrine for starch in the test-papers, the advantage of which has since been fully confirmed."

Anatomy in the East. In the last general report on public instruction in the Lower Provinces of the Bengal Presidency, which has just reached England, Dr. Norman Chevers, the Principal of the Medical College, states that the number of bodies dissected during the year amounted to 1,112—an extraordinary fact, when it is considered that, only a few years ago, a native gentleman lost caste by touching a dead body. The total number of in- and out-door patients who received relief at the hospital and in its dispensaries during the year amounted to 30,700, exclusive of the very large number treated in the Eye Infirmary. In the European general wards, there occurred 184 deaths, or 9.69 to the treated; in the native wards, there were 684 deaths, being 28.33 per cent. to the treated. Dr. Chevers concludes his interesting report by stating that in March last his Highness the Maharajah of Jyepore, a native prince of great enlightenment, who is very earnest in advancing medical education in his own State, after having visited the College, was so pleased with it, that he munificently presented the sum of 1,000 rupees, "to be devoted to any purpose the managers of the institution may determine."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. General Introductory Address, by the President.

TUESDAY. Pathological Society of London.

WEDNESDAY. Junior Medical Society of London, 8 P.M. (University College.) Mr. Ch. E. Orme, "On the History and Nature of Wasting Palsy."

THURSDAY. Harveian Society of London, 8 P.M. Mr. W. Adams, "On Forcible Extension in Cases of Partial Anchylosis or Stiff Joint."

FRIDAY. Western Medical and Surgical Society, 8 P.M. Mr. G. Pollock (President), "On the Relative Advantages of Puncturing the Bladder by the Rectum and Perinæal Section, for the Treatment of Impervious Stricture."

TO CORRESPONDENTS

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A CORRESPONDENT says:—"I have been amused at the growlings of the *Lancet*. I fear, from the clumsy and ill-disguised writing, the instrument has got rusty, and won't cut."

DOSE OF OIL OF MALE-FERN.—SIR: Will you kindly let me know the dose for an adult of the oil of male-fern, as there is a great discrepancy in the doses ordered by some of your correspondents; one of whom recommends heroically two drachms; whilst Neligan, in his work on Materia Medica, gives but twenty drops.

I am, etc., H. ALCOCK,
Medical Officer, Kilnaleck Dispensary, Cavan Union.

Kilnaleck, co. Cavan, Ireland, October 5th, 1864.

[The dose of oil of male-fern is from twenty minims to a fluid-drachm for an adult. The great point in the administration of the remedy is to give it on an empty stomach. EDITOR.]

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—J. T. Savory, Esq. (Wendover), 5s.; W. E. Porter, Esq. (Lindfield), 5s.; J. F. Martin, Esq. (Abingdon), £1:1; P. La Fargue, Esq. (Meriden), £1; J. J. Clapcott, Esq. (Beaminster), £1:1; Dr. W. H. Colborne (Chippenham), £1:1; H. B. Smith, Esq. (Battle), 5s.; J. Prankerd, Esq. (Langport), 10s.; Messrs. Firth and Fernie (Macclesfield), 10s. 6d.; Dr. W. Ogle (Derby), 10s. 6d.; Dr. Hulme (Wigston Magna, near Leicester), 10s.; Dr. Barnes (Finsbury Square), £1:1; D. Dorning, Esq. (Barton-on-Irwell), £1; R. Roe, Esq. (Barton-on-Irwell), £1; J. L. Fletcher, Esq. (Eccles), 10s.; G. Calder, Esq. (Hailsham), 5s.; J. E. Clouting, Esq. (Shipdham), 10s.; A. C. Shout, Esq. (Petworth), 10s.; J. Wills, Esq. (Sturminster), 10s.; Medical Officers of Leek Union, 10s. 6d.

Amount previously announced, £67:13:6. Received at the *Lancet* office, £4:12.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, October 12th, 1864.

THE SOCIAL SCIENCE REVIEW of the present month is mainly occupied with a good summary of the chief proceedings of what the *Review* calls "the British Parliament of Science", which last month assembled at Bath.

THE JOURNAL OF MENTAL SCIENCE for October contains an article on the Moral Treatment of the Insane, by Mr. Commissioner Browne; the address of Dr. Morel, read at the annual meeting of the Association of Medical Officers, etc.; Suggestions for a Cottage Asylum, by Mr. Toller; a Lecture by Professor Laycock, on the Legal Doctrine of the Responsibility of the Insane, and its Consequences; Remarks on the Refusal of Food in the Insane, by Dr. S. W. D. Williams; and Clinical Notes on the Atrophy of the Brain, by Dr. Wilks. An interesting Report on Foreign Psychological Literature is given by Dr. Arlidge.

THE OPHTHALMIC REVIEW (No. III) is still mainly the Expositor of Foreign Ophthalmological Proceedings. The chief papers in it are Translations from the German School. In this way are given a Clinical Lecture by Von Gräfe, on Cases of Paralysis of the Oculo-motorius; and a Clinical Lecture by the same celebrated man, on Cataract. Dr. Magawly of St. Petersburg gives in translation a Contribution to the Clinical History of Glaucoma. These papers, with a good retrospect by Mr. Windsor, form the prominent features of the journal.

CHLOROFORM.—SIR: An absurd romance on chloroform is now going the round of Europe, copied out of one of our leading magazines. A most excellent lady—a Lady Bountiful, rich and religious, with enormous property—falls sick, and has a tumour to be removed. A "spiritualist", some such as those dreary people now in vogue in London, advises, from some suspicion of the "faculty" and *clairvoyance*, that chloroform be on no account used, as it is tempting Providence to abolish a natural agent, "pain". Two surgeons come to do the operation: one is in favour of chloroform (let us call him Mr. X. Y. Z.), the other is careless about it; but, during the operation, the Lady Bountiful dies of the chloroform. Standard medical weeklies are quoted to condemn chloroform; but these weeklies are so dishonest, and given up to trade themselves, that even now the story is encouraged, and not one word in favour of chloroform permitted to appear in their columns. It is against medical etiquette! Professor Simpson and all the best men of Guy's agree with me, that this story is a foul libel on the profession and on chloroformists. But this poor titled lady has an inquest; and that is supposed to cover a multitude of sins. The doctors are dreadfully blamed in the verdict. The climax of the tale is reached; when churches are to be built, parsonages endowed, ragged schools got up with the expected money in the "will" of the lady; but the spiritualist knows something more; and when the will is opened, the enormous fortune goes to Mr. X. Y. Z., who, of course, knows what he was doing in giving the chloroform! The story is in a wretched thing called *Good Words*. Every one should denounce it. I am, etc.,

Sackville Street, October 3rd, 1864. C. K.

COMMUNICATIONS have been received from:—Mr. RICHARD GRIFFIN; Dr. ROUTH; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Mr. H. ALCOCK; Mr. HIGGINBOTTOM; Dr. E. CRISP; Dr. EDMUNDS; Mr. D. KENT JONES; Mr. C. H. ROPER; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; Mr. T. M. EVANS; Mr. F. J. GANT; Dr. GRAILY HEWITT; Dr. C. HARRISON; Dr. R. FOWLER; THE HONORARY SECRETARY OF THE JUNIOR MEDICAL SOCIETY; Dr. FREDERICK J. BROWN; Dr. JAMES PATERSON; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. J. VOSE SOLOMON; and Mr. T. SPENCER WELLS.

BOOKS RECEIVED.

1. A Manual of Diet and Regimen. By H. Dobell, M.D. Second Edition. London: 1864.
2. Amputation at the Hip-Joint. By J. Fayrer, M.D. Calcutta: 1864.
3. Eighth Annual Report made to the Vestry of St. James's, Westminster, for the year 1863. By E. Lankester, M.D., F.R.S. London: 1864.
4. Essays and Reviews on Affections of the Nervous System. By W. Camps, M.D. London: 1864.
5. Archives of Dentistry. No. II. London: 1864.
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8. A Manual of Practical Hygiene. By E. A. Parkes, M.D., F.R.S. London: 1864.
9. Hints on the Philosophy of Education. By H. Sandwith, M.D. London and Hull: 1864.
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11. Lectures on Public Health. By E. D. Mapother, M.D. Dublin and London: 1864.

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

DIPHTHERIA: WITH NOTES OF THE POST MORTEM APPEARANCES IN TWENTY-FOUR CASES.

By JOHN BRIDGER, Esq., Cottenham, Cambridgeshire.

IT is with feelings of great diffidence that I rise before such an assembly, to make a statement of some few facts which have occurred in an epidemic of the disease called diphtheria, as presented to my notice within the past three years. Our worthy President, Dr. Paget, having seen several of the cases, requested me to take notes, and bring the results before the members of this Association. It is, therefore, on these grounds that I take the liberty of trespassing on your valuable time.

Since April 1862, upwards of 3,000 cases have fallen under my care. At the onset of the epidemic, the disease was of a more acute character than at the present time; cases then presenting the characteristic appearances so well known to the profession, and so ably described by Dr. W. H. Ranking in a lecture at the Norwich Hospital (*Lancet*, January 8th, 1859.) Latterly, most of the cases have been of a milder character; very many of them relapses. The sequelæ are often very serious; such as pleurisy, pleuropneumonia, endocarditis, peritonitis, croup, paralysis; in one case, abscesses of the liver; in one, gangrene of the lung; some have passed membrane from the bowel; in one case from the bladder. Erysipelas has very frequently followed; sometimes commencing at the nostrils and spreading over the face and head; sometimes from one or both ears, and spreading over the head and face; in a few cases from the anus, umbilicus, penis, or vagina, and extending slowly over the whole body and lower extremities. In the three last mentioned points of commencement, it has occurred in infants, who took the disease from their mothers, and shewed signs of it, either at birth, or within a few days.

Women who have the disease previously to or during pregnancy, have their condition modified by it. In some it produces abortion; in some, premature confinement; and in others, hæmorrhage or lingering labour; whilst in all puerperal women, for a period of from three to six weeks after delivery, and occurring every few days, there is a discharge of shreddy membranous or glairy matter like uncoagulated white of egg. This has taken place in fifty-two cases; my attention being generally called to it by the patient or nurse as something unusual. The children born of parents affected with diphtheria, invariably shew signs of it soon after birth. If you look into their throats you see the tonsils, uvula, and soft palate swollen and red, perhaps slightly œdematous, producing slight hoarseness and cough. This may go on for some days, or even weeks, the child seeming neither well nor ill; when all at once it is taken worse, screams out with pain, and dies in a few minutes. Whenever I have been able to examine the body, I have found that death has been caused by effusion into the pericardium. Altogether, out of this number of cases where diphtheria has been the primary cause, there have been seventy-five deaths; twelve were complicated with scarlet-fever; nine with measles; one with confinement and scarlet fever together; one with confinement alone (primipara.)

A young woman, aged 21, gave birth to an acephalous child. She was doing well up to the twelfth day, when she complained of her throat. The tonsils, soft palate, and uvula looked red only. In about twenty-four hours she complained of a kicking sensation in the throat, screamed out, and died. No *post mortem* examination was allowed.

I have made twenty-four *post mortem* examinations, the notes of which are appended to this paper.

I wish particularly to bring before the notice of the members of this Association a certain condition of the auriculo-ventricular valves of the heart, seen in every case where an examination was allowed, whether complicated with any other disease or not, and to the best of my belief, not previously made known to the profession.

It is a roughened, reddened, thickened appearance of the valve; as if by interstitial deposit, situated midway between the insertion around the ventricular opening and its attachment to the chordæ tendineæ; one or both valves being affected, more or less, according to the severity of the case, and the time elapsing between the symptoms of heart-affection and death.

The symptoms denoting this affection of the heart may come on early or late; generally late, several cases having occurred where, to all appearances, the patient has been well. It is ushered in and may be diagnosed by the following symptoms: an anxious countenance; hurried respiration; a rapid pulse, from 120 to 170; tenderness over the præcordial region; scarcely any pain, excepting on pressure. In four cases, there was a slight murmur at the apex of the heart; in two of these it subsided in a week; in one, remained permanent for some months; and one case is now under treatment. The duration of the urgent symptoms varies from three to seven days.

I have not noted the exact number of cases in which the heart has been so affected, but can say in at least a hundred; and in some the affection came on so severely, that the symptoms were more like collapse with cold clammy perspirations, and requiring the immediate administration of diffusible stimulants, very frequently repeated, every ten, fifteen, or twenty minutes. I also apply flying sinapisms more or less frequently, as required; repeating them at least twice daily, until the pulse subsides, and the tenderness on pressure has gone off. I also give internally, the steel mixture with nitrate of potass every one, two, or three hours; a small dose of grey powder and compound ipecacuanha powder at bedtime every night. I also give in addition, to those cases with a *bruit* and accompanied by pain, three grains of the extract of conium every four or six hours in a pill, until the pain subsides.

In respect to the treatment generally pursued, I rely principally on the tincture of sesquichloride of iron, but combine with it the acetate of ammonia and spirits of nitrous æther, in order to keep the skin and kidneys active. When there are glandular enlargements, I add to these the iodide of potassium; and should there be also an œdematous condition, together with glandular enlargements, both the iodide of potassium and the chlorate of potass. If the tongue be much loaded, and the patient feel at all sick, I generally give a stimulating emetic of equal parts of sulphate of zinc and ipecacuan; and throughout the active stage of the disease, an alterative dose of calomel or grey powder combined with the compound

ipecacuan every night at bedtime. I apply emollients or stimulating fomentations to the throat externally, directing the patient to gargle with warm water or weak vinegar and water frequently; unless there be very much fœtor, then I substitute a weak solution of chlorinated soda. The forcible removal of membrane and the application of acids or caustic are, I think, quite useless; in fact, I believe they are injurious, producing shock, and afterwards greater depression. Perfect rest and quiet are necessary. Beef-tea and stimulants (either brandy or wine, as best suited to the case) are given; and when indications of approaching paralysis shew themselves, I add to the steel mixture small doses of the solution of strychnine; thus, I believe, in very many cases obtaining a more rapid convalescence than can be obtained by any other tonic, such as quinine, bark, and the mineral acids, all of which I have tried. Acids, I find, are not generally tolerated.

In some special cases, where there is a large amount of semi-fluid fœtid discharge from the mouth and nostrils, the solution of chlorine (made by adding dilute hydrochloric acid to the chlorate of potass) in combination with steel, and given every two or three hours, I have found to act almost magically in checking this discharge, and producing a rapid convalescence.

I find generally, that for young children, the chlorate of potass with steel is not only the most pleasant, but the best remedy; bringing back the colour to the lips and cheeks sooner than anything else.

In cases of croup, I give a grain of calomel and two grains of ipecacuan as a mild emetic every two, three, or four hours; and during the intervals, the steel mixture with nitrate of potass, and small doses of chloroform; applying externally to the throat and chest, fomentations of hot mustard and water. The calomel and ipecacuan are discontinued as soon as the urgent symptoms pass off; but the steel is continued, with chlorate instead of nitrate of potass.

Dr. Paget saw one of these croupal cases; the child died; and after death, I sent the larynx and heart for his inspection. Of eight similar cases, five died and three recovered. They all similated spasmodic croup with patches of membrane on the tonsils only, and yellow pultaceous looking matter lining the top of the trachea for about an inch.

In all cases where membrane extended down the trachea into the lesser bronchi, death followed rapidly. One patient, a lad aged 14, died suddenly in going from the bed to the night stool, apparently from paralysis of the heart. He was previously doing well, and going about the house, until his mother gave him a dose of castor-oil contrary to my wishes. I have found change of air to be absolutely necessary in some cases—beneficial to all. Cottenham being situated on the border of the Fens, our atmosphere is of a depressing character, consequently those persons who come from a higher elevation and a more bracing atmosphere to reside in this neighbourhood generally take the disease. On several occasions, when there has been a batch of fresh cases, those already ill have been taken worse, on a particular day and hour, and in a particular direction, as if caused by a wave passing over in this direction from village to village.

I do not pretend to know or assign the causes of origin of this disease; but I believe, with many others, that it is a disease affecting the whole body through the medium of the circulation, and always producing affections of an asthenic character. Where it attacks persons of a tubercular diathesis, if not immediately fatal, it lights up the tubercular disease, and hurries them rapidly on to a fatal termination, where probably they might otherwise have lived for years.

Notes of Post Mortem Examination in Twenty-four Cases of Diphtheria.

Case I. *Diphtheria, Fourteen Days: Exhaustion.* I was sent for to see L. C., aged 11, female, of Histon, on April 6th, 1862. On arrival at 8 P.M., I found she had been dead half an hour. Her mother stated she had been ill with a bad throat a fortnight. A *post mortem* examination was made by the coroner's order, thirty-six hours after death.

The *body* was very pale, but well nourished. The head was not opened. *Throat.* The mucous membrane of the mouth, tongue, soft palate, uvula, and pharynx, were very pale. The tonsils were enlarged; no abrasion or ulceration. On opening the larynx, I found a small piece of diphtheritic membrane lying loose between the chordæ vocales. The mucous membrane lining the trachea and bronchi was very pale. The lower lobes of both *lungs* were congested; otherwise healthy. In the *heart*, the muscular fibres were pale; the right auricle and ventricle were half full of uncoagulated blood; the left auricle and ventricle empty. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened by interstitial deposit. The other organs were normal. Three other children afterwards died in this same family.

Case II. *Diphtheria, Ten Days: Croup Four Days.* R. N., aged 7 months, male, had been ill ten days. The disease commenced like a cold with hoarseness. The tonsils, soft palate, and uvula, looked red only. In the last four days he had symptoms very like laryngismus stridulus, with numerous fits of dyspnœa, in one of which he died, on April 12th, 1862. He was also teething at the same time. No membrane was seen throughout the progress of the case.

Post Mortem Examination, twelve hours after death. I was not allowed to open head. The body was well nourished. The mucous membrane of the throat and larynx was pale and soft, for about an inch beneath the vocal cords; a little creamy looking matter lined the larynx and trachea. The *lungs* were congested, especialiy the lower lobes; otherwise healthy. The auriculo-ventricular valves of the heart on both sides were roughened, reddened, and thickened; mostly on the right. The right auricle was nearly filled with a fibrinous clot, extending into the ventricle. Semi-coagulated blood was found in the left ventricle. The *kidneys* were congested.

Case III. *Diphtheria, Four Days.* H. T., aged 6, female. Her illness commenced with the formation of a membrane on the tonsils, spreading over the fauces and pharynx. The second day it extended down into the larynx, trachea, and bronchi. She died on the fourth day, April 28th, 1862.

Post Mortem Examination, twenty-four hours after death. The *head* was not opened. The *body* was well nourished. *Throat.* There was no membrane above the larynx. The *tonsils* were enlarged and hardened. On opening the larynx and trachea, I found a membrane lying loose, and extending from just beneath the vocal cords down the trachea into the bronchi. A semi-purulent opaque matter filled up the lesser tubes entirely. The *lungs* were congested; otherwise healthy. *Heart.* The right auricle and ventricle contained a mass of fibrine continuous from one to the other. There was uncoagulated blood in both auricles and ventricles. The auriculo-ventricular valves were roughened, reddened, and thickened on both sides. The *kidneys* were congested.

Case IV. *Diphtheria, Twelve Days: Paralysis of the Heart.* T. P., aged 14, male; was taken ill on June 13th, 1863. There was a membrane on the tonsils, soft palate, uvula, and pharynx; it extended up the back of the soft palate, blocking up the posterior

nares. This patient was going on well towards recovery up to June 25th, when his mother gave him a table-spoonful of castor oil (contrary to my wishes.) He died on going from the bed to the night-stool in a fainting fit, the oil having acted three times.

Post Mortem Examination, thirty-six hours after death. The *tonsils* were enlarged; there was no membrane. The *lungs* were slightly congested. *Heart.* The right auricle and ventricle were partially filled with uncoagulated blood. Both auriculo-ventricular valves were roughened and thickened; the redness had gone off. The *kidneys* were congested; the left was large and granular, and contained muco-purulent matter in its pelvis.

Case v. *Diphtheria, Three Days: Effusion into Pericardium.* C. H., aged 4 months, male; had been poorly for three days previously, apparently with a cold and slight hoarseness. He was suddenly taken worse on November 19th, 1862. At 7 a.m., he screamed out with pain, and died in five minutes.

Post Mortem Examination, made by the coroner's order, twenty-six hours after death. The *body* was well nourished. A few bloody points were observed on slicing the brain, and there was general venous congestion. *Lungs.* From sixteen to twenty apoplectic clots were scattered over the anterior and posterior surfaces of both lobes of the left lung, situated between the serous covering and parenchyma of the lung. When cut into, they were found to consist of partially coagulated dark blood, and were of about the size of mustard seeds. Both lungs were congested. *Heart.* The pericardium was distended with fluid slightly tinged with blood. The serous covering of the aorta within the pericardium was roughened and thickend, looking opaque. A vein between the serous covering and artery was plugged by dark clots of about the same size, and similar to those scattered over the surfaces of the left lung. Both auriculo-ventricular valves were slightly roughened, reddened, and thickened. The kidneys were congested.

Another infant of the same parents died the following year in a similar manner, but had membrane on the tonsils three days previously to death.

Case vi. *Diphtheria, One Month: Peritonitis, etc.* W. M., aged 5 years, male; a delicate thin boy, had been ill a month, and was progressing favourably up to December 7th, 1862, when he complained of pain in the epigastrium. There was slight tenderness on pressure; respiration quick; he had slight cough; pulse 160, weak and fluttering; his countenance was pale and anxious. There was membrane on both tonsils. The tongue was clean; bowels open; urine free, pale, and acid. He had no heat of skin; there was considerable aphonia; no abnormal sounds of heart or lungs could be detected on percussion or auscultation. He continued much the same up to the 14th, when sickness supervened, which cleared the tonsils of membrane. He gradually got worse, effusion taking place into the abdomen and chest, and the urine becoming albuminous. He sank very quietly on the 16th at 10 a.m.

Post Mortem Examination, seventy-four hours after death. The *body* was emaciated. Rigidity had gone off. The *head* was not opened. The *tonsils* were enlarged. The *chest* contained about four ounces of dark coloured serum on each side. There were slight agglutinations between the upper and lower lobes of both lungs, of recent lymph. The whole of the left lung was much congested. The *heart* was large and flabby. The right auricle and ventricle were gorged with semi-fluid and slightly coagulated fibrine. The left auricle and ventricle were partially filled also. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened. The aortic valves were slightly thickened and rough, and their edges looked red. The *abdomen* contained two pints of serous fluid in the cavity. The mesenteric glands were large and injected. The *kidneys* were congested; there was muco-pus in the pelvis of right kidney.

Case vii. *Diphtheria, Seven Days: Effusion into Pericardium.* A. W. P., aged 1 year, male; always a delicate sickly child; had about a week ago a cold, hoarseness, and short hacking cough, of which he seemed to get the better of until the day he died, January 6th, 1863, when he cried out in his mother's arms, turned dark in the face, and died in half an hour. Two hours previously he took food well, and cut a tooth three days prior to death.

Post Mortem Examination, made by the coroner's order, twenty-four hours after death. *Head.* Numerous bloody points were observed on slicing the brain; and there was general venous congestion. About a drachm of clear fluid was found in each lateral ventricle. The *tonsils* were large; the mucous membrane pale. The *lungs* were slightly congested. *Heart.* The right auricle and ventricle were nearly empty; and there was very little blood in the left ventricle. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; the left much more so than the right. The pericardium contained about six drachms of fluid. The *kidneys* were congested; the right contained a small phosphatic calculus. (This was hereditary; the father and grandfather suffered from stone).

Case viii. *Diphtheria, Twenty-two Days: Carcinoma of Liver, Two Years.* S. M., aged 67, male; had been ailing for about two years with pain in the body, sometimes accompanied by diarrhœa and vomiting. He had been unable to work during the last eight months. There was no particular swelling; but he had a very cachectic appearance. He complained on January 1st, 1863, of sore-throat, and great depression. The tonsils, uvula, and soft palate, were red only; there was no membrane. On January 20th, heart-symptoms came on; fluttering rapid pulse, 160; with extreme depression. He died on the 22nd.

Post Mortem Examination, forty-eight hours after death. The *head* was not opened. The *body* was emaciated. The *lungs* were congested; there were old pleuritic adhesions. The heart contained clots of fibrine in both auricles, more especially in the right. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. The *liver* weighed about seven pounds, and scattered throughout its substance were masses of soft medullary cancer, varying in size from a pea to a walnut. The *omentum* was a mass of hard cancer. The *kidneys* were congested; the right contained four small hard dark calculi in the pelvis.

Case ix. *Diphtheria, Six Days.* S. U., aged 3 years, female; always a delicate child; complained of sore-throat, and had barking cough, on March 5th, 1863. I was sent for on the 8th. The uvula and soft palate presented the characteristic redness. The tonsils were enlarged; and there was a small patch of membrane on each. Great difficulty of breathing came on, on the 19th, at 6 p.m., with rapid fluttering pulse—scarcely countable—about 180; heat of skin and thirst; craving for cold water. Suspecting membrane in the trachea, I gave an emetic, but it had no effect; and she died on the 11th, at 6 a.m.

Post Mortem Examination, twenty-four hours after death. The *head* was not opened. Both *lungs* were much congested. A membrane lined the trachea and great and small bronchial tubes. Below these, semi-purulent opaque matter filled up the lesser bronchi. The *heart* contained clots of fibrine on both sides. The auriculo-ventricular valves on both sides

were roughened, reddened, and thickened; the left most. The *kidneys* were congested.

Case x. *Diphtheria, Seven Weeks: Pneumonia.* E. M., aged 64, female. She had considered herself an ailing woman for twenty years; had duodenitis twenty years since, and was in the habit of taking a small quantity of opium daily. She had sore-throat and cough six weeks before. She was seen on March 21st, 1863. The throat presented the characteristic redness, with frothy mucus about the pharynx. There was some heat of skin; rapid weak pulse, 100. There were pneumonic crepitation in the right lung, and large moist rales in the left. She died on the 26th.

Post Mortem Examination, twenty-four hours after death. The *head* was not opened. *Chest.* The upper lobe of the right lung was in the third stage of pneumonia; it was easily broken up with the finger. The lower lobe was in the first stage. There were patches of recent lymph on the pleural surfaces. The left lung was congested. Old pleuritic adhesions existed on both sides of the chest. *Heart.* The right side was gorged with semi-fluid blood and fibrine; the fibrine was very firm in the auricle. There were clots of fibrine in the left auricle, extending into the pulmonary veins. The auriculo-ventricular valves were roughened, reddened, and thickened on both sides; the left most. The *spleen* was congested and softened; the kidneys congested.

Case xi. *Diphtheria: Second Attack: Neuralgia: Exhaustion.* Mrs. R. P., aged 62, had sore-throat and hoarseness in December 1862. She sent for me January 20th, 1863. She then had the characteristic redness of the soft palate, uvula, and pharynx, and enlarged tonsils, with a peculiar raised cup-shaped appearance of the papillæ circumvalatæ at the base of the tongue, which is always the case when the disease has existed some time. There were also congestion of both lungs; irregular quick pulse; with slight pain and tenderness in the precordial region. These symptoms were relieved by treatment; and I discontinued my attendance on February 6th, although she was not well. On June 22nd, 1863, I was again called in. There were no chest symptoms. The tongue and throat were much the same. She had great pain and some tenderness over the lower lumbar and sacral vertebræ; the pain extended down the sciatic nerves. On July 15th, I met Dr. Bond in consultation, who, from her cachectic appearance, considered that she had a carcinomatous affection of uterus or appendages. About thirty years ago she had an illness, and had never been thoroughly well since. She gradually got worse, and died July 19th, 1863.

Post Mortem Examination, twenty hours after death. The *head* and *chest* were not allowed to be opened. In the *abdomen*, the parietes were loaded with yellow fat an inch and a half thick. The stomach, small and large intestines, bladder, uterus and appendages, were all normal. The *spleen* was large and very soft. The *liver* was of ordinary size, harder and paler than usual, sprinkled throughout with spots of degenerated tubercle of about the size of peas. The *left kidney* was of nearly double the ordinary size, congested, surrounded by fat, and contained fat in the pelvis. The *right kidney* was atrophied, enclosed in fat. The upper end contained a cyst filled with sero-sanguineous fluid; the walls were hard and chalky, almost like bone. The lower end contained a cyst of chalky granular matter within membranous walls. There was no proper kidney structure; the middle was filled with yellow fat and oily fluid.

Case xii. *Diphtheria: Second Attack: Gangrene of Lung.* J. W., aged 11, had diphtheritic sore-throat in January 1863; but soon got well. On August 20, 1863, he presented the characteristic redness of throat, with pain on swallowing. No membrane was visible. Pulse 100. On August 23rd, pain in the right side came on, with difficulty of breathing, and heat of skin; pulse 120; breath very fœtid; no expectoration. There were dulness on percussion and sibilant breathing. He lay on the diseased side. The dulness increased up to the 25th, with more restlessness than pain, when he began to spit up greenish muco-purulent stinking matter in small quantity; and continued about the same up to the 30th, when he raised a table-spoonful of dark, bloody, stinking matter, and again, on September 1st, double the quantity. He became very restless, complained of difficulty of breathing, and died at 10 A.M. the following morning.

Post Mortem Examination, twenty-six hours after death. The *body* was emaciated. Decomposition began in a few hours. The *head* was not opened. *Lungs.* The *right* lung was surrounded by about a pint of dark sero-purulent fluid; the lobes were agglutinated by recent lymph, attached to the pleura costalis posteriorly, and internally to mediastinum. The whole lung was in a softened, pulpy, dark, stinking condition, more especially the lower lobe; and on breaking it up and placing in water, small pieces of chalky looking matter, of about the size of mustard-seeds, settled down to the bottom. The *left* lung was healthy, but congested. *Heart.* The pericardium contained an ounce of dark serous fluid. The left auriculo-ventricular valve was red, roughened, and slightly thickened. The *liver* was larger, harder, and paler, than it usually is. The *spleen* was healthy. *Kidneys.* The right kidney was pale and granular; the left congested. There was pus in the pelves of both.

Case xiii. *Measles, Twenty-one Days: Pneumonia, Eleven Days: Diphtheria, Five Days: Purpura, Two Days.* J. W. M., aged 1½ year, the son of phthisical parents, had measles, which came out well, but convalesced slowly. Pneumonia came on at the end of the third week. He was going on favourably until the thirty-second day, when a membrane appeared on the tonsils, soft palate, uvula, and pharynx. The child gradually sank. Two days prior to death, purpuric spots were thickly scattered over the upper and lower extremities.

Post Mortem Examination, thirty hours after death. The *head* was not opened. *Throat.* There were small patches of membrane on the hard and soft palate, back of fauces, and pharynx. *Chest.* The upper lobes of right lung (which was divided into three lobes) were in the third stage of pneumonia; the lower lobe in the second stage. The whole of the left lung was in the second stage of pneumonia. There were patches of recent lymph between the pleural surfaces on both sides. *Heart.* The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; mostly on left. The *kidneys* were congested.

Case xiv. *Diphtheria, Three Days: Second Attack: Scarlet Fever, Four Days.* S. M., aged 5, female, had typhoid fever in February 1863; of which one sister died, and one recovered who imported it from London. She also had diphtheritic sore-throat in May 1863, and recovered. She complained of sore-throat, and looked very red on September 28th, 1863. I was sent for on the 30th, at 7 P.M. I found her in a very bad condition; the head was hot; the body and extremities covered with cold clammy perspiration; she had sordes on the teeth; the tonsils were enlarged, and there was a membrane on them. She had a weak fluttering pulse, about 170; muttering delirium, and picked the bed-clothes. She died the next day.

Post Mortem Examination, forty-two hours after death. The *head* was not opened. The *lungs* were congested; the bronchi filled with muco-pus. *Heart.*

he auriculo-ventricular valves on both sides were oughened, reddened, and thickened. The *liver* was ongested. The gall-bladder was distended with lear serous fluid. The *kidneys* were congested. The *kin* of the body and extremities was of a dark crimon colour.

Case xv. *Diphtheria: Death by Choking.* F.B., aged 9 days, female, was born a fine child with cleft palate. he mother and other children had diphtheritic sore-hroats previously to this child being ill. The nother stated that the child had been ailing from bout a fortnight old, with apparently a cold, hoarseess, cough, and wasting, which she attributed to he cleft palate, and so had no medical attendant. he died suddenly on Oct. 14th, at 7 A.M.

Post Mortem Examination, by coroner's order, fty hours after death. *Head.* There was venous ongestion generally. The brain was softened from ecomposition. *Throat.* The tonsils were enlarged. piece of rag, lying from the middle of the tongue, nd extended backwards into the top of the larynx; t was about two inches and a half long, and had een given to the child with sugar to suck. *Chest.* he lungs were congested. There was an ounce of erous fluid in each pleural cavity. *Heart.* There ere about six drachms of clear serous fluid in the ericardium. Both auriculo-ventricular valves were oughened, reddened, and thickened; the left most. he *abdomen* contained two ounces of clear fluid in he cavity. The *kidneys* were congested.

Case xvi. *Gastric Fever: Diphtheria: Pleuritis: Hepatitis: Abscesses, etc.* J. C., aged 46, male, on August 13th, 1863, had symptoms of gastric fever, vith pain in the hepatic region and lower lobe of the ight lung. On the 20th, a membrane covered the onsils, soft palate, uvula, and pharynx. On the 29th, e had endocarditis, with quick pulse (160); and light pain and tenderness on pressure; this was reieved in three days. He seemed to progress favourbly for about a week, and began to get out up to the Sept. 13th, when pleurisy of the right side set in, exending to the peritoneal coverings of the diaphragm nd liver. Effusion took place on the 16th into the leural sac. On the 23rd, he had rigors, followed by lushing heats daily, indicating abscess. On October 2th, five nodular swellings appeared just beneath he ensiform cartilage, accompanied by dull heavy ain. On Oct. 14th, vomiting and difficulty of swalowing set in; and he died on the 19th, at 10 P.M.

Post Mortem Examination, twenty hours after leath. The *body* was much emaciated. The *head* vas not opened. *Throat.* There was a membrane on he tonsils, soft palate, uvula, and pharynx; also, on he hard palate and gums. *Chest.* The right lung vas collapsed, pressed close up to the spine, and lmost solid. The pleural cavity was filled with hree quarts of semipurulent matter and flaky lymph. here were two openings through the diaphragm from he right lobe of the liver. The left lung was slightly mphysematous; otherwise normal. The *heart* was ale, flabby, and soft. Both auriculo-ventricular alves were roughened, reddened, and thickened. here was an ounce and a half of clear serous fluid n the pericardium; and the heart was pushed over o the left side. The *liver* was of nearly double its usual ize, especially the left lobe. It was full of abscesses; here were five smaller ones pointing just beneath the nsiform cartilage, and two opening into the pleural avity through the diaphragm. The *spleen* was enarged and congested. The *kidneys* were congested.

Case xvii. *Diphtheria: Third Attack in Eighteen Months.* L. L., aged 6, female, had been ill a month vith the usual throat appearances of membrane, etc. he had ascites thirteen days, general anasarca three ays, followed by pneumonia three days. The urine, which had been previously highly albuminous and scanty, became totally suppressed; and she died comatose on Oct. 3rd, 1863.

Post Mortem Examination, forty hours after death. The *body* was emaciated. The *head* was not opened. There was general dropsy in the cellular tissues. *Throat.* There was a membrane on both tonsils, soft palate, and pharynx. *Chest.* The pleural cavities were full of clear serous fluid. Both lungs were in the second stage of pneumonia. *Heart.* The pericardium was distended with fluid. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. There were clots of fibrine in both auricles and ventricles, mostly on the right side. The *abdomen* contained a pint and a half of serous fluid. The *kidneys* were pale and granular, and contained pus in their pelves.

Case xviii. *Diphtheritic Croup: Second Attack, Twelve Days.* E. T., aged 3 years, female, a well nourished child, had diphtheria a year ago, and got well in ten days. She was taken ill this time with catarrhal symptoms, redness of throat, and croupy cough. A patch of membrane appeared on each tonsil three days prior to death.

Post Mortem Examination, nine hours after death. The *body* was warm. The *head* was not opened. *Throat.* The mucous membrane of the larynx was covered with yellowish looking mucopurulent matter, which extended down into and lined the trachea and bronchi for some distance below the bifurcation. On scraping off this matter, the mucous membrane looked dark and congested. Both *lungs* were congested, especially the lower lobes. The *heart* contained clots of fibrine in both ventricles and auricles, most on right side. Both auriculo-ventricular valves were roughened, reddened, and thickened. The *kidneys* were congested.

Case xix. *Diphtheritic Croup, Five Days.* S. H., aged 4½ years, female, complained of cold and sore-throat on February 13th, 1864. I was sent for on the 16th. Her tonsils were enlarged; there was membrane on both; tongue clean; pulse 140; respiration hurried; slight hoarseness. The membrane all cleared off on the 16th. Croupal symptoms increased up to the 18th, when she died at 6 A.M. Dr. Paget saw her on the 17th, at 4 P.M.

Post Mortem Examination, thirty hours after death. The *head* was not opened. *Throat.* The tonsils were large, roughened, and granular looking. The ventricles of the larynx, also epiglottis at the back, were roughened and granular. The mucous membrane above the chordæ vocales was congested and looked granular, and below the cords, for about three-fourths of an inch, yellowish pultaceous matter lined the larynx. There was no true lymph. There was a little frothy mucus in the smaller bronchi. The lower lobes of both *lungs* were congested. *Heart.* The left auriculo-ventricular valve was roughened, reddened, and thickened. There was a clot of fibrine in the right ventricle. The *kidneys* were congested; and contained half a teaspoonful of semipurulent urine in each pelvis.

Case xx. *Diphtheria, Three Days: Pneumonia.* M. A. R., aged 10 months, female, always a sickly child, had been ill for three days with cold and cough; then got hot and feverish, with white stuff in the throat. She was not seen by me previously to death.

Post Mortem Examination, by coroner's order, sixty hours after death. There were no marks of violence externally. The *body* was somewhat emaciated. In the *head*, there was venous congestion generally. No tubercular deposits were found. The *tonsils* were large and roughened. The lower lobes of both *lungs* were in the first stage of pneumonia; the left most. The upper lobes were congested.

Heart. The right auricle was very much distended with blood and clot of fibrine. Both auriculo-ventricular valves were roughened, reddened, and thickened; the right most. The *kidneys* were congested.

[An elder child died on the day of the inquest of diphtheria; and all the family, nine in number, subsequently had it severely.]

Case xxi. *Diphtheria, Forty-one Days: Impaction of Bowel, etc.* S. P., aged 15, female, came home ill on February 1st, 1864, with diphtheritic sore-throat, erythema nodosum of both legs, and some phlebitis, first of the veins of the right and then of the left foot. She had never menstruated. She improved under treatment, and went out for two days. Then dysenteric symptoms came on, with twisting pain in the region of the ileo-cæcal valve. She went to bed, and gradually got worse; the pain increasing and bowels becoming constipated. In five days, a lump of the size of a small orange, globular and hard, appeared in the right iliac region, which was very tender and painful; there was slight redness and heat. Pulse weak, 130. On the seventh day, stercoraceous vomiting set in, and continued until she died, March 15, 1864. She had complained of a twisting pain and costiveness occasionally ever since August 1863.

Post Mortem Examination, sixteen hours after death. The *body* was well nourished. The *head* was not opened. The *tonsils* were enlarged, rough, and hard. The lower lobes of both *lungs* were congested. *Heart.* Both auriculo-ventricular valves were slightly roughened, reddened, and thickened. There was a large clot of very firm fibrine in the right auricle and ventricle. *Abdomen.* The omentum was very dark red, and tied down to the bowels and parietes of the abdomen by recent adhesions. The bowels were glued together by semipurulent lymph, and there was a pint of seropurulent fluid in the cavity of the peritoneum. Surrounding the ileo-cæcal valve and appendix vermiformis, between the layers of omentum, and very firmly attached to the bowel, was a sac containing about four ounces of dark pus. The ileo-cæcal valve was almost obliterated; the bowel above was distended, and nearly empty; below it was shrunken, and the mucous membrane was very dark red and softened. Within the appendix was a small stone, very like a gall-stone. The appendix was short—one inch. The mucous lining was softened; and the external coats were red and thickened in connection with the abscess. There was soft lymph over the *spleen* and *liver*. There were no gall-stones in the gall-bladder. The *ovaries* and *uterus* were congested; there had been a slight sanious discharge *per vaginam* five days before death. The *kidneys* were congested.

Case xxii. *Diphtheria: Scarlet Fever, etc.* B. H., aged 14½, male, of small stature and strumous constitution, had been ill a week with a second attack of diphtheria, but was getting better and going out, when scarlet fever came on, February 7th. More membrane appeared on the tonsils and throat. He was very ill for five days, but rallied, and was convalescing satisfactorily up to the 21st, when the urine became scanty, smoky, and highly albuminous, of specific gravity 1.020, and acid. He had great tenderness over both kidneys. Anasarca supervened. He was relieved by treatment up to March 6th, when he had a series of convulsive fits, and symptoms of effusion into the right side of the head; this passed off. On March 9th, pleurisy in the right side appeared, followed by endocarditis and peritonitis on the next day. On the 15th, pneumonia of the left lung commenced; and he died on the 17th.

Post Mortem Examination, sixteen hours after death. The *head* was not opened, The *tonsils* were of the size of walnuts; their surfaces were roughened. The cellular tissue was generally infiltrated with serum. There was very little fat on the body. The *chest* contained a pint and a half of clear serous fluid in the right pleural cavity. There was soft lymph between the lobes of the right lung, also in patches on the anterior and posterior surfaces. The lung was congested. Both lobes of the left lung were in the second stage of pneumonia. There were three ounces of bloody serum in the left pleural sac. *Heart.* The right auricle and ventricle were filled with a large clot of tough fibrine. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. *Abdomen.* The serous covering of the coat of the bowels was very vascular, and covered with patches of soft lymph. There was a pint and a half of serous fluid in the cavity of the abdomen. The *liver* was congested; the *spleen* was large, and covered with soft lymph. The *kidneys* were very large, mottled; their tissues were softened, and very much congested. The *mesenteric glands* were large and congested; some of them contained degenerated tubercle.

Case xxiii. *Diphtheria: Phthisis Laryngea, Two Years.* W. R., aged 44, male, had been ill for two years with hoarseness, ulceration of pharynx and larynx. He had been under various medical men. Eleven weeks prior to death, whilst out walking, he was taken suddenly with a pricking sensation in the throat, difficulty of swallowing his saliva, and palpitation of the heart. When sent for, I found the throat with characteristic crescent-shaped redness, etc. He had a fluttering rapid pulse, about 170; anxious countenance; slight pain and tenderness on pressure over the heart; tongue clean; bowels regular; urine natural. He was relieved of these symptoms in seven days, the pulse going down to 90, about his usual standard; but he gradually succumbed to the laryngeal affection, and died from exhaustion on April 14th, 1864, having been unable to swallow anything but liquids for some time.

Post Mortem Examination, fifty-three hours after death. The *body* was much emaciated. The *head* was not opened. *Throat.* The mucous membrane of the larynx and epiglottis was ulcerated and covered with pus. The rima was permanent. The thyroid and arytenoid cartilages were almost bare of mucous membrane; they were thickened and hardened, almost like bone, and ulcerated in places. The vocal cords were almost obliterated; in fact, the larynx was one mass of disease, which extended down to the second ring of the trachea. In the *chest*, there was old tubercular disease of the upper lobe of right lung, where there was a small cavity of the size of a walnut, with very thick walls, half filled with pus. Some old pleuritic adhesions existed on both sides. The bronchial glands were enlarged, and infiltrated with tubercular matter. *Heart.* The muscular fibres were pale and attenuated. The auriculo-ventricular valves were rough and thickened by interstitial deposit; redness had gone off, mostly in the left ventricle. The *kidneys* were pale and granular.

Case xxiv. *Diphtheria: Second Attack: Pneumonia.* C. W., aged 9 months, male, born a fine child, had diphtheria when a fortnight old, but was relieved in ten days. The second attack came on at seven months, like catarrhal fever, with redness of throat only. In two or three days, a membrane appeared on the tonsils. There was great elongation and œdema of the uvula, producing cough and noisy respiration. Symptoms of pneumonia set in seventeen days, of endocarditis five days, before death. He died on May 6th, 1864.

Post Mortem Examination, seventy-two hours after death. The *body* was emaciated. The *head*

was not opened. The *tonsils* were large, roughened. *Chest.* On exposing the ribs to open the chest on the right side, I found an abscess at the junction of the second costal cartilage with the rib. The bone was separated from the cartilage, and felt rough. The abscess was of about the size of a walnut. The pleura covering the lung was adherent just at this spot to the pleura costalis; but there was no opening. The thymus gland was adherent to the tissues around. *Lungs.* The whole of the left lung was adherent to the walls of the chest by pleural surfaces and carnified, sinking in water when placed in whole or in pieces. The right lung was congested. The *heart* contained clots of fibrine in both ventricles and auricles. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; the left most. The *kidneys* were congested.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

LINCOLN COUNTY HOSPITAL.

LACERATION OF FOOT; TETANUS; RECOVERY AFTER THE REMOVAL OF A SPLINTER OF BONE.

Under the care of E. F. BROADBENT, Esq.

[*Reported by* C. HARRISON, M.D., *House-Surgeon.*]

W. C., aged 32, was admitted at midnight, on June 13th, 1863, under the care of Mr. Broadbent. About an hour previously to his admission, his right foot was injured, being run over by the wheel of a traction-engine. The foot was severely crushed; a large flap of integument on the dorsum of the foot was torn up, exposing the metatarsal bone of the great toe, which was fractured. The other metatarsal bones were not fractured. The sole of the foot was also severely lacerated, and felt pulpy and disorganised. A moderate amount of blood had been lost; and there was still some hæmorrhage, which appeared to come mostly from the sole of the foot. The heel and ankle-joint were not injured. The limb was dressed with wet lint; and a sedative draught was given.

June 16th. On removing the dressings this morning, the foot presented a sloughy appearance; the great toe was gangrenous. A consultation was called; and it was not thought advisable to interfere, as the vitality of the posterior part of the foot was good, and the man of strong constitution. The sloughy and disorganised portions were slit up with a bistoury, and a charcoal poultice was applied.

June 17th. The gangrene was not extending. A line of demarcation was apparently forming round the sole and dorsum of the foot.

June 29th. Since the last report, the gangrenous toe had separated; the fractured portion of metatarsal bone had been removed; the sloughs had all separated; and now the foot presented a healthy granulating surface; but on the previous night he complained of sore-throat, and this morning he could open his mouth only sufficiently wide to admit one finger. The muscles of the neck were very hard. He was ordered to have extract of cannabis Indica, beef-tea, and brandy. At 6 P.M., he was suddenly seized with great dyspnœa and sense of suffocation; he could only breathe in the upright position, and was not altogether conscious.

July 2nd. He had continued much in the same state; but the jaw was becoming faster every day, and now it was with much difficulty that any beef-tea or brandy could be administered. The wound looked healthy; and a small splinter of bone was projecting through the granulations. A few incisions were made, and the piece of bone (a portion of the metatarsal bone of the great toe (was removed).

July 5th. Since the removal of the bone, the jaw had been gradually loosening; and he could now open his mouth, and eat and drink well.

From this date, he gradually improved; the wound, under stimulating applications, gradually healed; and on October 10th, he was discharged.

INJURY OF THE RECTUS ABDOMINIS MUSCLE.

Under the care of T. SYMPSON, Esq.

[*Reported by* C. HARRISON, M.D., *House-Surgeon.*]

JOHN H., aged 20, a farm servant, was admitted on April 1st, 1863, under the care of Mr. Sympson. In the evening, he was amusing himself by jumping over a cat-gallows, when he caught his toe against the cross-piece (a thatch-peg), kicked it off before him, and fell on the sharp end. When brought to the hospital, he walked into the surgery; and, on examination, a small wound on the left side and lower part of the scrotum was found. He complained of severe pain on the right side of the abdomen. He walked up to a ward at the top of the house, and was put to bed. The edges of the wound on the scrotum were brought together by a suture. He passed some perfectly clear urine soon after admission. On examination of the abdomen, a rupture of the right rectus muscle was found; the rupture was oblique, and about three inches in extent, commencing about two inches above the pubes, and about a quarter of an inch from the mesial line, and passing obliquely upwards to the outer margin of the muscle. One finger could be placed between the divided parts of the muscle. There was no mark of any injury externally, not even an abrasion of the skin. He could not say how far the stick had entered the scrotum. He was placed in bed, with his back elevated and thighs flexed, so as to relax the abdominal muscles; and a fomentation was applied.

April 4th. His bowels had been relieved; he had no pain.

April 9th. There was considerable redness of the integument, with tension and throbbing pain. A poultice was applied. In the evening, a quantity of very offensive matter escaped through a small ulcerated opening in the abdominal wall.

April 10th. Another opening, two inches to the right and lower down, discharged a quantity of fœtid matter. His bowels were relieved this morning. Gurgling of the intestines was distinctly felt; they seemed close under the integument.

April 11th. Both openings in the abdominal walls were discharging freely. He had no pain. Tongue clean. Pulse 80.

April 12th. A director was introduced; and, being close under the integument, the sinus was laid open. A small incision was also made at right angles with this; and some substances, at first resembling sloughs, were removed. As, however, they did not look like disintegrated tissue, they were more closely examined; and, after washing well and removing the pus and lymph from their surfaces, they were found to be a piece of cloth about an inch square, corresponding to the trousers he wore at the time of the accident, and some portions of bark of stick. After these foreign bodies had been removed, and the wound cleansed, the fascia transversalis, covered with healthy granulations, was visible, and at the upper part of the wound the edge of the divided muscle was seen.

From this date, he progressed favourably, had no

bad symptoms; the wound looked healthy, and healed gradually.

In a few weeks, he was allowed to get up; and on May 18th, was discharged cured. He could walk perfectly well; and there was no tendency to hernial protrusion.

Original Communications.

CASES OF STRANGULATED HERNIA,

TREATED BY INFLATION OF THE BOWELS, AND BY SHAKING THE PATIENT WHILST IN AN INVERTED POSITION.

By Richard Griffin, Esq., Weymouth.

Case I. A short time since, I visited, in consultation, a female, with symptoms of strangulated femoral hernia, which had existed for a couple of days. In consequence of several attempts at reduction, the hernia, about the size of a walnut, had become very painful, and there was some tenderness of the abdomen; vomiting was frequent, and there was no action of the bowels, although several large aperient doses and enemata had been administered. I procured a pair of bellows and passed the nozzle into the anus, an assistant holding the nates well together, so as to prevent, as much as possible, the escape of air from the bowels. The patient complained of the distension giving her pain; but the inflation was continued for about a quarter of an hour, much of the air escaping either through the bellows, or by the side of the nozzle; but it was, apparently, of no benefit.

A fresh consultation was then held; when it was deemed advisable to recommend an operation. This, however, was postponed for a short time, but fortunately was not needed. In about an hour after inflation, the bowels acted freely, and all symptoms of strangulation ceased; the distension having caused the forcible withdrawal of the strangulated knuckle of intestine which had prevented the peristaltic action of the bowels. The patient recovered.

Case II. In another case, to which I was called in consultation, the old woman had stercoraceous vomiting for three or four days, with constipation. The hernia was femoral and irreducible. The bellows were used in this case, as in the last; and, although they appeared at the time to have been of no avail, yet, in about an hour, a free action of the bowels took place. Unfortunately, however, there was no stopping the diarrhœa which ensued, arising from the drastic purgatives which had been administered; and the old lady died in forty-eight hours. The inflation, however, reduced the hernia; and so far was a success.

Case III. I was called in consultation to a man who had a strangulated inguinal hernia, which could not be reduced by the taxis. Purgatives and enemata had been freely administered during the preceding three days. I at once tried the bellows; which had not been used many minutes, before the man called out, "You are blowing up my purse!" Such was, indeed, the fact; the scrotum having become largely distended with air, owing to a laceration in the rectum having been made with the pipe of the enema-syringe, which, I subsequently ascertained, had been so roughly used, that the man called out when the enema was being administered, and blood followed the withdrawal of the pipe. The bellows were removed, and the man immediately went to the night-stool; and a copious evacuation followed. I did not see the patient again; but I subsequently heard that he got well, and the air in the scrotum was soon absorbed.

Case IV. A fourth case has been related in one of my Poor-law pamphlets, in which a strangulated hernia was reduced by the bellows; the taxis, enemas, and purgatives, having previously failed.

These cases prove that, before the operation for strangulated hernia is performed, it would be well to try the effects of inflation; although this, like everything else, is sometimes liable to fail, as the following cases will prove; superadded to which, shaking the patient whilst in the inverted position, also failed.

Case V. A man with scrotal hernia, to whom I was called in consultation, had all the usual remedies tried, including inflation of the bowels, but in vain. He was then hoisted with his knees over my medical friend's shoulders, and lifted in that position until only his head touched the bed, and had a thorough good shaking. The intestine, however, was too tightly held to be dragged from its position by this procedure; he was, therefore, obliged to submit to an operation, by which he was cured.

Case VI. A lady, very stout, about 50 years of age, who had suffered for years with an irreducible umbilical hernia, for which she wore a supporting abdominal-belt, having one day used a little extra exertion, came home fatigued, and complained of pain in the bowels, followed by sickness and constipation. Enemata, salines in a state of effervescence, then opium, and finally purgatives, with inflation of the bowels, were tried, together with the taxis; but the hernia could not be reduced. A former medical attendant of the lady was then summoned from a distance; and, on his arrival, he suggested that shaking in the inverted position should be tried. Accordingly, the patient's knees were placed over his shoulders, with her legs hanging down his back, and, with the assistance of several persons present, he gradually raised himself into an upright position, the patient's head only touching the bed. He then gave her two or three good shakings, which did not occupy more than a minute or two; but, on looking at the patient's face, I discovered that breathing had ceased, and she was pulseless. We instantly placed her in the recumbent position; the window was thrown open; and a napkin, with the end dipped in water, was very freely applied to the face and chest, the slaps from it being anything but gentle. In a few minutes, there was a slight sigh; and, after a short time, we had the pleasure of having our patient in no worse a state than before the attempt at reduction by shaking; but it was felt to be a painfully narrow escape by all present, and may serve as a warning, not to be disregarded by medical men, that they ought to be careful how they turn stout people topsy-turvy. A medical gentleman from Bath was telegraphed for; but, in spite of the efforts of four surgeons, our patient gradually became worse, and died. As we were not permitted to have a *post mortem* examination, the precise cause of death was not ascertained.

HYDROCELE.

By John Thompson, M.D., F.R.C.S., Bideford.

Hydrocele is of such common occurrence, that it must be a subject of interest to every practitioner. It affects persons of all ages, but is most frequent in the later periods of life. I know that this will be disputed; but I am nevertheless persuaded that, if it be taken into consideration how small is the number of persons living between the ages of fifty and seventy, compared with those between the ages of thirty and fifty, experience will justify my opinion.

Little need be said of the symptoms which almost invariably distinguish the disease. The pyriform shape, semi-elastic fluctuating feel, translucency, and increase of the tumour from the bottom upwards, are familiar indications. Other attendant marks, such as a feeling of weight in the scrotum, with dragging pains along the loins, are commonly present. It is curious to notice how every symptom may vary—the shape may be round, ovoid, or very much like the outline of the ram's testicle; the tumour may be almost as hard as a cricket-ball, and pain in the back be also present, equal to that felt where organic disease of the testicle exists. I mention the two last points in connexion, because one might hastily infer from them, that diseased testicle and not hydrocele was present, an error which I have known to occur. The degree of the translucency is said to vary much; but perhaps this assertion may rest somewhat on the care or otherwise with which the examination is made. Very little practical direction is usually given in books on this point; but Mr. Erichsen very properly recommends the surgeon to grasp the back of the tumour, so as to tighten the integuments, before passing the light through them.

I am satisfied that, if this plan be constantly adopted, but little difficulty will be experienced in applying this most diagnostic test, and obtaining a satisfactory result. The rays of light from a window or candle should pass laterally through the swelling, the latter being held off so as to insure this; thus the testicle and appendages which lie behind may be avoided.

Where the patient consents, which he generally will, and nothing forbids the operation for the radical cure, I presume all are agreed that this should be effected; but in a great number of persons afflicted, age, or the existence of organic disease, render it inapplicable. Under these circumstances, it is usual to adopt what is termed the palliative treatment, and to tap the swelling three or four times a year with a trocar and cannula, on which I wish to offer some comment.

It is admitted that this treatment offers but little hope of cure, the instances where it has occurred being very rare; but there is another method of dissipating the tumour that is not unfrequently attended with a radical cure of the disease; I mean the method by acupuncture.

In the congenital hydrocele of children, it will very generally succeed, and not unfrequently in that of adults. I admit its great inferiority to the practice by injection; but where this cannot be adopted, as in children and old persons, it seems to me but a common-sense thing to use the method next in order of efficacy.

For many years, I have not tapped a hydrocele with a trocar, unless as a prelude to injection; but have, in all cases, used acupuncture, and, to my great gratification, every now and then a cure is effected, with less inconvenience to the patient than had he been tapped as many times in the ordinary way.

It is no new suggestion to treat hydrocele thus, as it was long ago tried in Germany, and since in this country by Mr. R. Keates and Mr. Travers, who reported that "it acted favourably in a number of cases, but was not generally to be relied on."

I believe this is quite as much as can be said for it. My position is simply, that, as acupuncture properly performed gives the patient even less inconvenience than tapping with the trocar, and is frequently followed by a radical cure, which the operation by tapping is not, therefore it is advisable to use acupuncture in all those cases that are unsuitable for the treatment by injection, seton, etc.

There is something to be said about the manner in which acupuncture is to be performed. It is advised by a recent writer to use a grooved needle, but for what reason, I cannot understand. If the needle is cylindrical in the shaft, with a conical point, as is usually the case, it is a very unscientific shape for puncturing tight structures like the skin and sac. All needles intended to penetrate the human structures readily, should be either triangular or spear-shaped at the puncturing extremity; and the shaft should not be large. I always use a needle that Mr. Liston employed in the operation for hare-lip; it has an expanded spear-shaped extremity for piercing, and a small cylindrical shaft. From three to six punctures may be made with this, well through the skin and sac, the scrotum being grasped firmly on its hinder part in the left hand at the same time, so as to tighten the integuments. No marked pain is felt; a little fluid oozes from the punctures while the hand is applied, but ceases on its removal; in a day or two the tumour is gone.

The needle used by the sewers of kid gloves will answer equally well with that I have described, it has a sharp triangular extremity for piercing; our needle-makers knowing that this is the form necessary for entering tough animal structures, the round conically pointed needle is only applicable for loose textures.

Reviews and Notices.

LECTURES ON THE DISEASES OF WOMEN. By CHARLES WEST, M.D., Fellow of the Royal College of Physicians; Examiner in Midwifery at the University of London, etc. Third edition. Pp. 687. London: 1864.

A PORTION of the first edition of this work was issued by Dr. WEST more than eight years ago; and it was then described by him as "embodying the results of ten years of observation in the wards of a hospital." Since that time, two editions have appeared; one in 1858, and the other in the present year—being the work now before us. The author has, he says, "carefully revised the whole work, and added to it whatever larger experience has increased his knowledge."

The thirty-three lectures of which the book consists are distributed as follows. Lectures 1 and 2 are on the Symptoms of Diseases of Women; 3, 4, and 5, on Menstruation and its Disorders; 6, 7, and 8, on Inflammations of the Uterus; 9—13, on Misplacements of the Uterus; 14—18, on Uterine Tumours and Outgrowths; 19, 20, and 21, on Malignant or Cancerous Diseases of the Uterus; 22 and 23, on Inflammation of the Uterine Appendages, and Uterine Hæmatocele; 24, on Inflammation of the Ovaries; 25—30, on Ovarian Dropsy; 31, on Diseases of the Female Bladder; 32, on Diseases of the Urethra and Vagina; and 33, on Diseases of the External Organs of Generation.

This book has been so long before the profession, and must be so well known, that to subject it to the ordinary process of reviewing seems almost unnecessary. Yet, believing that there are some among our readers who would desire to know the opinions of so eminent an authority as Dr. West, we will endeavour to gratify them by giving an outline of his doctrines on various more or less important topics.

The Speculum. Dr. West describes, in the second chapter, the uterine speculum, and gives rules for its

employment; and thus he confesses himself an advocate for its use. But he uses it with restriction; and acknowledges that, if he were asked the broad question, "What is your opinion of the speculum?" he would find the answer a difficult matter. He endeavours, however, to reply in this way.

"Those who first introduced the speculum into practice employed it for two purposes; partly as furnishing a new means of diagnosis, partly as enabling them to adopt various modes of local treatment, which without it were impracticable. Now, I believe that the advantages of these topical medications for which the speculum is used have been greatly overrated; though there are some cases, and those such as have proved most rebellious under other plans of treatment, in which these local measures may be resorted to with the most signal advantage. In estimating the value of the speculum as a means of diagnosis, I think that the advances in knowledge of uterine disease, of which it was the indirect occasion by the impulse which it gave to their study, are sometimes confounded with those positive additions to our information which we owe exclusively to the use of that instrument. The former have been very great, indeed; and I think candour compels us to acknowledge that they have been due almost exclusively to persons who, not content with our present means of investigating uterine disease, have laboured to increase them by the means of instruments. The latter have certainly been less considerable; but, nevertheless, the speculum enables us in many instances to decide at once, and with certainty, upon the nature of a case, which otherwise we should have understood only after long and careful watching..... At the same time, however, that I hold the speculum to be in many cases of most essential service, I think that the endeavour of all of us should be to ascertain the minimum of frequency with which its employment is necessary. This is to be done, not by decrying the instrument; still less by attributing dishonest motives to those who use it; but by soberly and honestly trying to test the value of the information which we derive from it, and learning to discriminate between those appearances which the speculum discloses that are of moment, and such as are of no importance." (Pp. 21-22.)

Chronic Inflammation of the Uterus. This subject is very fully discussed by Dr. West; who gives his reasons for dissenting from the doctrines enunciated by some eminent uterine pathologists, that inflammation and ulceration of the neck of the womb is the immediate cause of uterine ailments, and that the right understanding of the pathology and treatment of these turns on the appreciation of the importance of this condition of the cervix. The reasons which Dr. West gives for dissenting from this opinion are, in brief, the following. The argument derived from the supposed greater vascularity and higher vitality of the cervix, as to its greater liability to become the seat of inflammatory mischief, is negatived by the more abundant supply of blood to the body than to the neck of the organ; by the relative share taken by the body and neck of the womb in menstruation and in pregnancy; by the fact that cancerous disease of the neck may reach an advanced stage without producing general illness or local suffering; by the impunity with which the cervix uteri may be forcibly dilated, incised, burnt, or excised; by the evident unimportance, notwithstanding the relative frequency, of abrasion or ulceration of the os uteri; by the general absence of uterine inflammation, or abundant discharge in cases of prolapsus, notwithstanding that the neighbourhood of the os uteri is almost invariably the seat of extensive and obstinate ulceration; and by the comparative absence of local injury of the cervix uteri in prostitutes, whose course of life might *a priori* be supposed to render them specially liable to such affection. At this stage of the inquiry, Dr. West concludes,

"That the condition of so-called ulceration or abrasion of the os uteri is far from infrequent, even in cases where no uterine symptoms were complained of during life; but that it is usually unassociated with other important affections of the uterus such as may be supposed to be the effect of inflammatory action; and further, that such affections do not seem to be readily excited by causes acting on the neck of the womb, either when displaced or when the organ is in its natural position." (P. 116.)

Proceeding a step further, Dr. West inquires whether

"In the case of persons suffering from uterine ailments, there are such differences either in the kind, degree, or duration of the symptoms, according as ulceration of the os uteri is either present or absent, as would enable us to connect with it certain definite consequences, or to say that it tends to certain definite results such as do not otherwise occur." (P. 116.)

His reply to this question, founded on a careful examination of cases, is in the negative. He finds that uterine pain, menstrual disorder, and leucorrhœal discharges, are as often independent of ulceration of the os uteri as connected with it, but that in the latter case they are apparently slightly more intense; that ulceration of the os does not appear to have any special causal relation to sterility or abortion; and that, while induration and hypertrophy of the cervix uteri has been found more frequently connected with ulceration than independent of it, the idea of a relation of cause and effect is opposed by the coexistence in numerous instances of an indurated cervix with a healthy os uteri, and by the absence in other cases of induration where ulceration has been very extensive.

But what of the argument, "that recovery from various uterine ailments is daily seen to follow the employment of caustic and the application of various local remedies directed exclusively against ulceration of the os uteri"? Dr. West admits the fact; but finds for it a solution involving a principle, not special to female diseases alone. He holds that, in many of the slighter forms, the simple hygienic and medicinal treatment to which the patient is subjected, at the same time that caustic is applied, are in reality the means best fitted to relieve most of the disorders to which woman is peculiarly subject. The very simplicity of these measures, however, and the fact that they seem to demand nothing but common sense to recommend them, diminish their value in the eyes of the patient; unless they are laid down as conditions indispensable to the success of the local treatment which is applied—with perfect good faith on the part of the practitioner—to the ulceration which he regards as the cause of the symptoms of which his patient complains. As to the real action of the caustic used in these milder cases—nitrate of silver—Dr. West attributes to it merely a slightly stimulating action which "seldom does harm—sometimes, I believe, does real good, though no more than might

have been equally attained by vaginal injections or by any other similar remedies."

But, Dr. West points out, the evil in these cases does not rest merely with the formation of an overestimate of certain therapeutical proceedings. The peculiar influence of the sexual system on the diseases of females plays an important part. When the patient recovers, she of course attributes her recovery to the cure of the local disease; and, on any return of any symptoms resembling those from which she has suffered, her mind reverts to the local disease, and "all her apprehensions are revived lest the same painful investigation, the same distressing manipulations as before, should be again required." As is the result of morbid attention to other functions of the body, so it is with regard to the uterine function; the ordinary pains and discomfort of menstruation assume undue importance, and are noted with increased vigilance; and hence the patient imagines her uterine disease, for which she has already been treated, to be again on the increase.

"Such persons among the poor come to our hospitals; and, on questioning them as to their ailments, they at once, and without waiting to describe their symptoms, say that they are suffering from ulceration of the womb; though, on examination, one finds no traces of it, or at most a little redness of the edges of the os uteri; or it may be even that slight abrasion which I trust that I have shewn to be as trivial in importance as it is frequent in occurrence. But though they have no serious disease, they are not the less, or perhaps one might say all the more, real sufferers, and sufferers most difficult to cure. The treatment they perhaps are once more subjected to serves but to confirm the morbid habit of mind which has been gradually increasing upon them, and destroying both their present happiness and their capacity for it in future years." (P. 122.)

As to the use of stronger applications such as caustic potash, Dr. West observes that they cannot be described as acting *cito*, *tuto*, or *jucundè*. They produce intense pain, nausea, or sickness, intense depression, and sometimes syncope; the duration of the treatment is tedious, confines the patient, and necessitates frequent specular examinations; and, what is of most importance, the application of caustic potash is liable to be followed by contraction or obliteration of the cervical canal, and not unfrequently by inflammation of the uterus and its appendages.

Having thus declared his opinion that menstrual irregularities, uterine pain, and leucorrhœa, are by no means necessarily connected with ulceration of the cervix, Dr. West argues that, while these morbid conditions are sometimes traceable to hepatic, gouty, or rheumatic disorder, there are many cases "in which the symptoms date back to pregnancy, delivery, or miscarriage, and in which the enlargement of the uterus, as well as the history of the patient, point to a purely local cause of the ailment." He attributes the symptoms in such cases to inflammation of the body of the uterus; and quotes, as supporting this view, put forth by him more than ten years since, the German Professor Scanzoni; who, in his work on Chronic Metritis, published last year in Vienna, says:

"We, for our part, are firmly convinced that the pathological changes of the upper portion of the uterus are of much greater moment, both locally as well as with reference to the disorder which they produce in distant organs, than the recently so highly estimated swellings, hypertrophies, granulations, and ulcerations of the cervix."

It must be understood, that Dr. West does not neglect or underrate the local treatment of uterine disease. His chief dependence, in ordinary cases, according to the special indications, on constitutional treatment, aided by leeches to the uterus, counter-irritation and vaginal injections—which, he recommends, should be inexpensive and readily prepared by the patient herself. These means generally suffice; but, in exceptional instances, "local applications are necessary to bring about the healing of an ulcerated or abraded condition of the os uteri, which may have persisted, unaffected, or but little modified, by the general treatment."

Source of Leucorrhœal Discharge. Dr. West expresses his dissent from the opinion advanced some years ago by M. Huguier and Dr. Tyler Smith, that the source of discharge in leucorrhœa is the glandular structure of the cervix uteri. He maintains that the discharge ordinarily comes from the internal surface of the uterus; but at the same time admits that "a very copious secretion may be poured out from the follicular structure of the cervix uteri, and that, in some instances, as, for instance, in pregnancy, the discharge may be almost exclusively derived from it." Here there is a remarkable development of the glandular apparatus of the cervix; and the same condition, dependent, in Dr. West's opinion, on some previous irritation of the uterus, follows abortion or habitual sexual excess. The ailment is, according to Dr. West, of rare occurrence; and is essentially chronic. It is, when severe, very difficult of cure; but is generally "rather an annoying infirmity than a serious disease." The treatment which the author recommends is almost entirely local.

"I have found benefit in some cases from the introduction of dossils of cotton-wool, steeped in solution of tannin or covered with powdered alum, and applied by means of the speculum to the os uteri; but I have made less use than perhaps I ought to have done of the injection of astringent fluids into the cervical canal itself. . . . . In some obstinate cases I have cauterised the whole of the interior of the cervix with nitrate of silver, by means of Lallemand's *porte caustique*, but without advantage. It seems as if in these cases the action of the nitrate of silver was expended on the copious secretion, and scarcely reached the cervical follicles themselves. Something may probably be done to remedy this evil by the employment of the douche, or of very abundant vaginal injections to clear the canal of the cervix to some extent just before the caustic is applied. I am disposed to think, however, that in the most obstinate cases it may be expedient to adopt a suggestion of M. Huguier, of which I have but small experience, though I have followed it with benefit on two or three occasions. He is accustomed to scarify the interior of the cervical canal with a small, curved, narrow-bladed, blunt-pointed bistoury, before introducing the caustic." (Pp. 141-2.)

Treatment of Prolapsus Uteri. In speaking of this subject, Dr. West disapproves of the procedures recommended by Mende, Fricke, Mr. Baker Brown, and others; which consist in narrowing the vaginal orifice by producing adhesion between its two sides. He adduces cases in which the operation has failed; and observes that the published records of alleged successful cases do not give proof of the permanence of the cure.

"The objection, and to my mind, the fatal objection, to these surgical proceedings for the cure of prolapsus uteri, is furnished not merely by the imperfect nature of the cure which they accomplish, and the new discomforts and inconveniences which they substitute for those before experienced, but still more by the want of permanence in their result, even when their issue is most fortunate; and this objection seems to me all the more serious, since failure in this respect appears to be the rule, success the rare exception." (P. 181.)

Still more strongly does he condemn an operation recommended by M. Huguier—that of excising a portion of the neck of the womb. It is dangerous and formidable; and, according to M. Huguier himself, is inapplicable in the very condition in which it would appear to be most needed—"a capacious pelvis and a large opening of the vulva, more or less laceration of the perinæum, and considerable relaxation of the soft parts at the pelvic floor."

Carbonic Acid Gas as a Local Anæsthetic. Since Professor Simpson called the attention of the profession to the use of carbonic acid gas as a local anæsthetic in painful uterine affections, various experiments with this agent have been made, and high opinions have sometimes been expressed as to its efficacy. Dr. West, however, says that it has disappointed him as well as others. The results of trials in Paris have been, that it is uncertain; that it sometimes aggravates instead of relieving sufferings; and occasionally gives rise to temporary headache, drowsiness, and depression; the symptoms being, according to M. Bernard, less frequent and slighter in cases of uterine carcinoma than of congestion or inflammation. Sometimes the employment of the gas was followed by great relief of pain and by improvement in the local disease; while in other cases, though the pain was lessened and the general health improved, the local condition remained unaltered. Dr. West's experience of this remedy is thus given by him, in one of the chapters on Uterine Cancer.

"My own experience of the use of the carbonic acid gas in cases of cancer is confined to ten cases, in three of which temporary relief followed its employment, while in two the patient's sufferings seemed rather increased by it, and it was discontinued. In the other five instances the relief was not striking—certainly was not greater than a comparatively small dose of an anodyne would procure; nor was the condition of the patient otherwise more improved than might be expected from the quiet and the comfort of an hospital, though, on the other hand, no inconveniences due to the poisonous influence of the gas were produced by its employment." (P. 396.)

Uterine Hæmatocele. Dr. West has had eight cases of this affection under his care. He gives outlines of the histories of five; and relates three more elaborately. Including these, he has collected 103 instances; of which twenty proved fatal. He believes, however, that the usual fatality of the disease is even less.

"For, on the one hand, some of the cases have been reported as pathological curiosities; and, on the other, many which have had a favourable issue have been unrecorded. Many, too, have certainly passed unrecognised; for the disposition to the spontaneous absorption of the effused blood, unless the quantity poured out has been enormous, seems to be very great." (P. 462.)

With regard to operation, Dr. West is of opinion that the cyst should not be punctured under the following circumstances: when the effusion is recent, and may possibly become absorbed; when the effusion, though of long standing, is gradually, even though slowly, diminishing; and when the amount of effusion increases periodically at each menstrual epoch. But he would perform puncture when a long standing effusion shews little or no disposition to become absorbed; and when rigors and hectic symptoms denote the occurrence of suppuration. In such case, he says, he would puncture through the abdominal walls, if the swelling could not be readily reached through the vagina.

Ovariotomy. This important topic is carefully examined by Dr. West; who has candidly reconsidered, and in great measure recanted, the opinions which he held regarding the operation when the earlier editions of his work appeared. At that time, he wrote as follows:

"These three reasons: the high mortality which experience and dexterity have failed to lessen; the special hazard attendant on those cases where yet the operation is specially indicated; and the utter uncertainty in which we find ourselves, even in the most favourable cases, as to its probable result; have chiefly influenced me in the formation of any opinion as to the general inexpediency of performing ovariotomy." (P. 597.)

Such was Dr. West's opinion six or seven years ago. Now, however, he admits that, while ovarian disease remains just where it was, so far as curative measures—iodine injections, etc.—are concerned, the reply as to the safety of the operation of ovariotomy must be much more favourable than heretofore. This improvement he attributes to the labours of surgeons in this country and in America. His approbation of the operation, however, appears from some expressions to be still qualified.

"It seems that completed ovariotomy is nearly as fatal as before; that life is prolonged but little longer than it was formerly in fatal cases; and the causes of death are much the same as they were, although I have no doubt that, owing to improvement in the details of the operations, there has been a reduction in the risk of mere hæmorrhage.

"The great advance which has been made, however, appears in the certainty of diagnosis that has now been attained, as seen by the far fewer instances where the operation has been commenced, and abandoned either from adhesions, or from some other cause interfering with its completion." (P. 601.)

Yet, at page 603, we find the author speaking as positively in favour of ovariotomy as any rational advocate of the operation can desire.

"I think that we are now bound to admit ovariotomy as one of the legitimate operations of surgery; as holding out a prospect, and a daily brightening prospect, of escape from a painful and inevitable death, which at last indeed becomes welcome, only because the road that leads to it conducts the patient through such utter misery."

After pointing out what he considers to be the contraindications and the indications for the performance of the operation, Dr. West, in his concluding remarks on the subject, strongly condemns

"The practice of testing some of these questions as though they were questions of moral right or wrong; as if ovariotomy could not be defended save for some sinister end, nor its expediency be doubted except from a moral obliquity rendered excusable only by

hopeless dulness. Belief in each other's integrity of purpose seems to me essential to our eliciting truth by discussion; and I see no reason why I am to suspect another of being less mindful of our common duty to humanity, because he tries to relieve suffering or to prolong life by some means in which I have not the same confidence." (P. 605.)

This quotation proves that, while Dr. West never hesitates to differ from his fellow-labourers in the same field wherever he believes difference to be necessary, he does so in a liberal spirit, and in full recognition of the honesty of purpose of those from whose opinions he dissents. We must now conclude our notice of this book; in which, indeed, we have been obliged to leave unnoticed much that it would probably have been interesting to place before our readers. That we have so far departed from our rule of but briefly noticing works which have passed through several editions, is due to the fact that, through some accident, Dr. West's work has not hitherto received in this JOURNAL that attention which was due to it. Perhaps, however, this previous omission is scarcely to be regretted, inasmuch as it has given us the opportunity of noticing the latest—and sometimes the changed—opinions of so eminent an authority. Dr. West deserves well of the profession, and especially of those interested in the subject of which he treats, for having so ably laid before them the results of his own large experience. The book is one which gives its author a place in the highest rank of those who have in recent years laboured to increase our knowledge of the diseases of women.

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THE INTRODUCTORY LECTURES.

THE Introductory Lectures given at the different Medical Schools, abstracts of most of which will be found in our columns, present an interesting subject for a passing study. Looking beyond the immediate occasion, they give us an opportunity, not afforded in any other way, of obtaining a glimpse of the minds engaged in the important work of medical teaching; of seeing, also, what subjects, occupying the attention of the profession, bear especially on the interests and prospects of those just entering it. We may derive from them also indications of educational changes needed, or of the working of those recently made.

Keeping in view the men to whom these lectures are more particularly addressed, we feel almost intuitively that the duties and responsibilities of the profession, its labours and rewards, the bearing and importance of the various studies, the necessity for regular and persevering work, and the best methods of pursuing this work, with exhortations to honest purpose and an upright life, should form the staple topics. Whatever these subjects may be to others, they are to the numbers of new students each year brought up to London to a certain extent new. They may, at least, impress upon them new force through the individuality of the lecturer; and there can be no question that, in many instances, good and permanent impressions are so produced. We think it, therefore, an excellent sign that so many of the orators have disregarded the almost inevitable risk of finding many of their good things already said; and that, remembering the time when they, too, were entering upon a new career, they have dwelt much upon the points mentioned. The tone of these discourses is thoroughly earnest; they could come only from men who feel the responsibility of their position, who love their profession, and who have given much deep thought to their work. We need not characterise the different styles, which present considerable variations; some aspiring to eloquence (those of Dr. Braxton Hicks and Dr. Down, for instance), others inclining to the philosophical (as that of Mr. Callender); the older hospitals giving an opportunity for an appeal to history, and to great names associated with them, which was effectively used.

As was to be expected, the Army Medical Service was a prominent topic. The unanimity of the profession on this subject cannot fail to catch the attention of our legislators; and we venture to predict that, in the absence of any general cause of excitement, the next session of Parliament will not be very old, before the authorities at the War-office are called to a reckoning, unless, indeed, they are wise in time, and grant the concessions demanded.

With regard to professional education, the teachers seem disposed to halt for a time and test the recent changes. With one exception, all seem to regard them as in the right direction, and complain only of the imperfect application of them by some of the corporations. There is one decided want, however, which we should fail in our duty to omit to mention, that is of some more general efficient system of clinical instruction; this cannot be too fully and openly recognised, in order that a remedy may be found without delay.

BANTINGISM.

MR. BANTING may, we think, be considered a fortunate individual. He has given a name to a system; he has occupied the public attention to a degree which, we imagine, has given him surprise and satisfaction. He no doubt enjoys the consciousness of being a public benefactor; and he has even had the gratification, at a very cheap rate, of appearing before the world more or less in the character of a martyr. He has, in reality, been the means of doing good, though in a way not exactly such as he imagined. He has obtained for the profession a hearing on the subject of dietetics; and, not to mention the

numbers of medical men who have spread their sheets to the favouring gale, has given to scientific experimentalists the opportunity of turning to more immediate account the results of their valuable labours.

Our readers are familiar with the points of Mr. Banting's system. He has recently supplemented his original statements by the information that a given quantity of loaf-sugar per week will add nearly double the amount to his weight. In this he is supported by the of course not very philosophical testitimony of Mr. Mechi, who, on the strength of his experience, recommends sugar for the fattening of cattle. Mr. Banting further states as a fact, to him inexplicable, that, on commencing his system, the most remarkable loss of weight occurs within the first four and twenty hours, amounting to two, three, or more pounds; and he concludes that, as a matter of course, this loss and the gain from taking sugar represent so much fat, leaving out of account altogether the varying amount of fluid in the tissues of the body.

The truth is, that considerable variations in the weight of an adult are the rule, and not the exception; and the conditions influencing these have been so ably stated from careful experiment by a Fellow of the Royal Society, in a letter to the *Times*, that we are tempted briefly to reproduce his statements. Before and after a meal, before and after voiding the excretions, there is, of coure, a marked difference—not improbably overlooked by some of these amateur experimentalists. Again, a man is always one or two pounds lighter in the morning than over-night, from loss of carbonic acid and water from the lungs and skin during the night. The Sunday's repose and the Sunday dinner make a difference of three or four pounds in the weight of a man of active habits, the food not being worked off by exertion. A sudden frost, by constringing the cutaneous capillaries, by rendering combustion more active, and by increasing the flow of urine, brings down the weight. A thaw, on the other hand, causes the skin to fill with blood, the extremities to swell, and, especially when evaporation is hindered by a saturated condition of the atmosphere, increases the weight. Hard work on a hot day will reduce it. In nearly all these cases, the difference in weight is due to the greater or less quantity of fluid retained in the body. The accumulation or removal of fat is a much slower process. It will gradually disappear under the influence of a diet from which fat, sugar, and starch are excluded, and especially when exercise is combined; but, for its formation to any considerable amount, a constitutional predisposition must exist. Some persons would make fat under no circumstances short of the Dahomian system of enforced inaction and cramming with oleaginous food, or would die rather than fatten under this. When the disposition is present, it will be encouraged by all the fatty constituents of food, animal or vegetable, and, to a less extent in proportion to the amount taken, by starch or the sugars; these substances either undergoing a change of deoxidising character which converts them into fat, or supplying readily combustible material, and allowing all the fat eaten to be stored up. As we can take larger quantities of starchy and saccharine than of fatty matters, they may actually supply more of the material from which adipose tissue is formed; though, weight for weight, they would yield less than fat. Experience teaches us, however, that fats nearly identical in chemical composition give very different results when taken as food; and starch and sugar have not necessarily the same value as foods because they are both hydrates of carbon. To take the number of grains of nitrogen and carbon as the sole point of comparison between different diets leads to the most fallacious conclusions. By remembering that differences in weight may be due to fluid, as well as to fat, we may estimate the value of the facts with which Mr. Banting and others are kind enough to furnish us.

The *Times* has on several occasions roundly accused the medical profession of complete ignorance of the subject of dietetics, and concludes that the experiences of Mr. Banting are as new to it as to general society. We could refer to numerous authors to show that the principles of this branch of science have been accurately laid down, and all Mr. Banting's facts anticipated before he came into the world; and recent observers (we would here name especially Dr. Edward Smith), by a course of experiments carried out with scientific rigour and untiring perseverance, have ascertained the exact nutritive value of almost every article of diet. The profession has nothing to learn from Mr. Banting except the good results of applying practically the vast stores of information at their command.

On the evening of the 13th instant, a new Special Hospital, or rather a Course of Clinical Lectures at a new Hospital, St. John's Hospital for Diseases of the Skin, was inaugurated with considerable *éclat*. The medical staff and their supporters, properly wise in their generation, show a knowledge of the means by which success is to be sought in the present day. A saint lends his name. A large room at the Westminster Palace Hotel is engaged for the opening lecture; the attractions of a *conversazione* are added; and a numerous company invited. They may be congratulated on the result so far as it is indicated by the numbers who attended. The address, delivered by Mr. Erasmus Wilson, F.R.S., consisted mainly of an account of the origin of the hospital, and the want it was intended to supply. Of course, much liberty of speech is allowable on an occasion like this; but we can scarcely agree

with all that was said. Cutaneous medicine has not been so utterly neglected in London as seemed to be implied. Witness the advertisements in the *Times* from day to day. Moreover, completely to ignore the long established and well known Hospital for Skin Diseases at Blackfriars, was neither judicious nor fair. Special hospitals are the order of the day; and, without conceding to this all that was claimed for it, or to the colleague of Mr. Wilson the transcendent virtues he attributed to them, we may acknowledge that they are ambitious and energetic, and wish the new institution a good position among the Special Hospitals of London.

Our readers will have already seen with sorrow, in the daily papers, accounts of the fearful plague of fever which has, at Bermuda, so rapidly carried off many of our army medical officers. These gentlemen—non-combatant officers, forsooth!—were sent from Canada to combat as deadly an enemy as soldier could encounter in fiercest war, and have fallen in the work, doing their duty as nobly as the man who mounts, in a forlorn hope, the deadly breach! Facts like these would, one might think, make even the cheek of double-dyed red-tapism blush, and its ears tingle, when it reflects upon the injustice and the indignity which it still attempts to impress upon the branch of the service to which these noble fellows belong. We record with pleasure what the world says of these men and their work. Will Parliament longer permit the Horse Guards to deal unrighteously with a service that produces such heroes?

The *Montreal Herald* of September 24th says: "Not many days ago, it was our duty to mention the departure from this country of a number of military surgeons ordered to Bermuda, to render such poor aid as medical skill can afford to the many sufferers in that island attacked by yellow fever. On Saturday, official information was received that Dr. Clarke and Dr. Milroy have succumbed before the fatal epidemic. Surgeon-Major Barrow has also been taken down by disease; but we believe that in his case the attack was complicated by dysentery, and at last accounts he was reported to be recovering. Dr. Fergusson, also of the 30th, has been attacked, and was not out of danger when the last advices came away. Out of eleven surgeons who left this city on the 17th ult., we have had within thirty days the intelligence that five have been assailed by the fever; and that two, if not three, have died."

"The late Dr. Clarke, 15th Foot. This young officer, who has perished among the seven military surgeons in the epidemic at Bermuda, is the second of one family in the Army Medical Department who has lost his life in the service. His brother, Assistant-Surgeon William Clarke, of the 35th Regiment, when the other two officers were killed in the affair at Arrah, in India, and the men were retreating, drew his sword and rallied them until shot down himself mortally wounded. John Clarke served throughout the war in the Crimea, including the Alma and Inkerman, through the whole of the Indian campaign under Sir Hugh Rose. His services in the Crimea were considered great, and he was brought to notice in dispatches in the Indian mutiny. He was generally beloved and respected by both officers and men, and had made many real friends among officers of very high rank. He died September 4th, 1864."

"The late Dr. Milroy. The name of this excellent young officer is now added to the melancholy list of those brave men who have fallen at Bermuda in the discharge of their humane but extremely perilous efforts to stay the progress of a terrible visitation. His career has been comparatively brief, but marked by devotedness to his country's service, and distinguished eminence in the studies belonging to his profession. He entered the army at the outbreak of the war with Russia, and continued throughout all that memorable campaign. Bravely did he fulfil his duties in the battles of Alma and Inkerman, under the fire of the enemy, and in the trenches before Sebastopol; for which services, in addition to the Crimean and Turkish medals, he was decorated with the Order of the Medjidie. On the termination of the war, he continued with his regiment in Ireland, the Mediterranean, and for the last three years in Canada, where he is well known, and has left many devoted friends. To his fellow-officers he was greatly endeared by his gentleness of manner, fine cultivated taste, high honour, and genial disposition; while the private soldiers of the 30th held him in affectionate veneration for his unwearied efforts to advance their comfort and intellectual and moral improvement."

Mr. Syme, speaking of clinical teaching, makes the following remarks respecting the proper remuneration of medical instructors. It is gratifying to us to see that so great a surgical authority and so well known a teacher is not above taking a sensible view of medical education, and viewing it from its material aspect.

"So long as both the instruction and attendance are regarded as matters of course, and certified by the surgeons collectively in favour of every student who pays his fee for admission to the hospital, it would be vain to expect anything better than the present system of sham. In Edinburgh, clinical instruction is more highly remunerated than any other department of medical tuition; since, the fees being the same for all, while the clinical lectures are delivered only twice instead of five times a week, a student pays two shillings for each of them, and not more than tenpence for any one of the others. If reform is really desired, it should be founded on the concentration of responsibility and the adequate remuneration of service rendered."

The following suggestions for the custody and sale of poisons have been made in a report of the medical officer of the Privy Council.

"1. That none but qualified persons, educated to the trade of druggists, should be allowed to vend by retail drugs or medicines capable of acting as poisons. 2. That the sale of poisonous drugs by chandlers, grocers, oilmen, drapers, or small shopkeepers, should be strictly prohibited. [A licence might, if necessary, be granted, enabling these persons to sell certain specified medicines used by the poorer classes.] 3. That the sale of arsenic, strychnia, and other specified poisons should, after a certain date, be restricted to pharmaceutical chemists and licentiates of the Apothecaries' Society. Any other persons acting as druggists not to be permitted to sell them, until they have proved their knowledge of poisonous drugs

by undergoing a proper examination. 4. Under no circumstances should boys or girls, or persons who cannot read or write, be permitted to sell poisonous drugs. 5. Some rules are required for the management of a licensed retail trade in poisonous drugs. No youth should be allowed to dispense or sell them who is not above the age of eighteen years, and who has not been for at least one year engaged in the practice of pharmacy, under a pharmaceutical chemist or licentiate of the Apothecaries' Society. This restriction not to be applied to one who has passed an examination either at the Pharmaceutical Society or at Apothecaries' Hall, as to his knowledge of poisonous drugs. 6. That poisonous drugs and medicines having a similar colour and appearance should not be kept near to each other in similar bottles, drawers, or boxes, with similar labels. 7. That less facility should be given for the purchase of arsenic, strychnia, and other deadly poisons, which can be used for the purpose of suicide or murder. 8. That no poisonous drugs should be sold to girls or boys under the age of twenty years, on any pretence whatever; and that, in all cases of purchase, there should be a witness of adult age. 9. All poisonous drugs sold should be distinctly labelled with the name of the drug, the address of the vendor, and the date of sale. 10. That noxious substances, such as arsenic, corrosive sublimate, sugar of lead, and tartar emetic, and others of the like nature, when stored in large quantities in casks or packages, should be distinctly labelled, and kept apart from other substances of an innocent kind which they resemble."

The Directors of the British Medical Provident Fund held their first meeting at the Freemasons' Tavern on the 20th instant. There were present: The President (Dr. Richardson) in the chair; T. H. Smith, Esq.; R. B. Carter, Esq.; E. Daniell, Esq.; H. Veasey, Esq.; Dr. Bryan; Dr. Chevallier; Dr. Armstrong; Dr. Collet; T. T. Griffith, Esq.; Dr. P. W. Latham; T. Paget, Esq. (Leicester); John Clay, Esq.; Dr. Fayrer; C. F. J. Lord, Esq.; Dr. E. Waters (Chester); Dr. A. P. Stewart; Dr. Desmond; and Dr. Falconer (Bath). It was decided that the Fund should be thrown open to the whole profession; and that the question as to the limitation of age to 60 should be referred for consideration to the Executive Committee. It was also decided that the benefits of the Fund should extend to disability from accident, but not to partial disability; and that, for the first two years of the existence of the Fund, no member should insure for more than £100 *per annum*. There are still six Directorships to be filled up. Mr. Westall was appointed Treasurer, and Dr. Henry Secretary, of the Fund. The Guarantee Fund already amounts to about £350.

M. Briquet, in the name of himself and of MM. Louis and Barth, read to the Academy of Medicine a report on a paper of Dr. Gintrac of Bourdeux, "On the Contagiousness of Typhoid Fever".

"There is," says the report, "in typhoid fever, as in all other communicable diseases, a question of theory and a question of fact. Let us first note the chief circumstances attending contagious diseases. 1. Typhoid fever arises primitively under the influence of divers conditions. It becomes afterward communicable. Thus, of the twenty-eight general diseases which are contagious, twenty-one arise in similar manner, and afterwards become contagious. 2. All contagious diseases are transmitted by the agency of a visible or invisible germ. The germ of typhoid fever is invisible, as are the germs of seventeen of the contagious diseases. 3. All contagious diseases have a period of incubation, as has typhoid fever. 4. Contagious diseases, at some period or other of their progress, show signs of their presence in the skin or mucous membranes. Typhoid fever shows such signs. 5. Most of the contagious diseases rarely occur a second time in the same person. The question of fact may also be disposed of in a similarly definite way. In the hospitals of large towns, facts of communication of the disease are rare, but they are not so rare in private practice. Yet they are only observed in a limited way in isolated cases, and in small localities. And, under this head, communicable diseases may be arranged in two classes. Some of them are readily communicable, such as small-pox and measles; whilst others, as dysentery, hooping-cough, erysipelas, and amongst these typhoid fever, are only communicated under certain conditions of the atmosphere, intensity of the disease, or defect of aeration."

The reporter, after making some remarks on the typhus of the bovine species of animals, gives an account of the facts detailed in Dr. Gintrac's paper.

"The first—a female—patient arrived in ill health from a district and from a house where typhoid fever existed. She had returned to her family, and into a district where there were no patients; and immediately afterwards the fever breaks out in the house, and attacks several persons. Besides this, several of the relatives, or those who had acted as nurses, and were previously in good health, were successively seized with the fever. And, lastly, three persons, who had contracted the disease by communication, dispersed into different localities, where no fevers existed; and there, after their arrival, typhoid fever declared itself in each of the families into which these three persons had entered. It may be added, that the villages indicated were the only ones in which the fever had shown itself."

M. Gréant asserts, that the results concerning the capacity of the lungs, obtained through experiments on the dead body, are never correct. The pulmonary capacity depends upon the elasticity of the diaphragm and of the walls of the thorax; and this elasticity does not exist after death. He, therefore, determines the pulmonary capacity by the inhalation of hydrogen. Hydrogen, on the least inspiratory effort, penetrates into the smallest bronchia. By analysis of the expired gases, he obtains the capacity of the lungs.

In a late discussion on fever, M. Bouley, the veterinary surgeon, remarked, that it was a complete mistake to suppose that the typhus fever of cattle resulted from faulty hygienic conditions or from crowding of the animals. This typhus arose in the steppes of Eastern Europe, and there only. The disease is unknown in France, in Austria, and in Prussia, thanks to a strictly guarded sanitary frontier.

Thirty-ninth Annual Meeting

OF THE

SSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

HE Thirty-ninth Meeting of this the parent of all andering Associations was held at Giessen during ie days from the 17th to the 23rd of September. As was begun under the happiest auspices, so it was rried to a dignified and happy end. Already, a eek before the time appointed for the beginning, iere were five hundred visitors from all parts of the atherland announced; and amongst them the *coryhées* of all branches of science. It was, therefore, ot astonishing that at high tide the numbers of the rticipators should have risen to fifteen hundred, and iat, after every student's cabin and every hospitable tizen's spare room were occupied, the remaining sitors should have had to be quartered upon the eighbouring towns of Wetzlar and Marburg, being ken to and fro by express trains on the railways. iessen is but a small town of 10,000 inhabitants, but provincial capital, and, above all, an ancient and lebrated university. As a university, particularly, is well liked throughout Germany; and it was this eling which brought many men of importance there, id caused them to add their dignity to that of the ssembly. Was it not the cradle in which all the ounger chemists on the globe had, at one time or her, been rocked? Were not associations of the ost solemn kind connected with that peristyle on ie Seltersberg, where the master-mind thought, orked, and taught? Had not all the mineralogists velled in the oryctognostic treasures of the neighourhood of this town, where plutonic, neptunic, deonic, and basaltic formations, meet to produce a kind f agreeable chaos—a large stone pit for the geologist hammer his samples? Here Dieffenbach had died, fter having travelled round and all over the earth. here was the Anatomical Institute, which, to the iedical mind, recalled the association of Bischoff, his master in demonstration. In short, every faculty, om the theological to the agricultural (for there is ow a Faculty for National Economy), had its hisorical attractions; and thus the feast became, not nly one of naturalists and doctors, but even the wyers participated in good style; the theologians ropped Adam, and listened to the tale about the ssil-man from the Neander-thal; and there was an mount of science absorbed by the fair sex, which, ith the young, will pass as a recommending accomlishment—with the elder sisters, as the result of a fe-long application.

We arrived at Giessen on the morning of September 9th. I must here explain that the "we" which I ave just used is not the *pluralis majestatis*. For as did not sink my individuality at that meeting, I do ot intend to do so now, when I am writing. "We" ere eight comrades, from as many points of the comass, who met at Frankfort in a railway-carriage. Well, then, we arrived, were received, entered our names, got our cards, lodgings, programmes, and, greatest treat of all, our luggage was taken care of by one set of friendly townsmen, the "Dienstmänner", while some intelligent young boys of the gymnastic society, "Turner", acted as our guides. They looked so agile, that my friend from Mexico, who has some inclination to exaggerated dimensions, was nearly prevailed upon by me to try a little "Dauerlauf" down the hill, to see whether the constitutional would not be a good preparation for the great dinner in the afternoon. My Turner led me correctly to my lodging, as I can vouch; for, years ago, I had known the way myself. However, it was very good that I had this young guide, to tell me who lived in the new houses that had been built, and what had become of the occupants of old ones. I had entered that town often, without a guide, on foot or in a post-chaise; but never in such state as on the present occasion. I came in the throng, with music at the head of a procession, colours flying, guns saluting, and everybody turning out on the balcony or at the window to welcome; the hosts at the doors to receive their guests. I, too, was received by a friendly host and his daughters two. I pressed the hands of old friends; and then subsided into what Giessen children know as "the Corner".*

At a quarter to eleven, the large hall of the Town Club was thronged with a brilliant assembly. The President, or, as he is termed by the statutes, "first business leader", Dr. Wernher, Professor of Surgery, delivered the opening address. As a greeting to the assembly, it was most cordial; as an introduction to strangers to the town and university, it was most happy; as a history of the rise of the institutes connected with science in that little place, it was admirable. Of the twelve special institutes for the teaching and advancement of science, which a state of not one million inhabitants maintains in this university, besides the theological, juridicial, and philosophical faculties, he gave the history of those which, as being the first, had the greatest difficulties to overcome, the University Hospital and the Cliniques. Of the founders, he named Balser, Wilbrand, and others; but modestly omitted to mention himself, as the founder of the Museum for Morbid Anatomy, an institution which began with the purchase by the Government of the collection of Soemmering, the German John Hunter. Loud applause followed this interesting, and withal short, address. The assembly was then greeted by the Government of Hesse-Darmstadt, through its deputy Councillor Küchler. Next came the Burgomaster, the friend of students, known as "Black Vogt", whom years may make more portly, but they have certainly not made him less black or less liked. In a short speech, he welcomed the assembly on the part of the citizens of his town, and gained such thunders of applause for his manly representation of citizenship, that all other oratorical successes paled into insignificance. Then came the "Rector Magnificus", who, as an anecdote has it, is this year the first man of Giessen, but next year relapses into his former nothingness, and with becoming dignity and that versatility of style mastered alone by professors of history, proffered to the assembly the welcome of the University. The Vice-President (*Germanice*, "second leader of business"), Professor Leuckart, now read the statutes of the Association, and in doing so requested the assembly to correct a ludicrous mistake in the wording of Article 17, which, amongst more cheering and laughter, he showed had been misprinted for the first time at Bonn years ago, and since re-misprinted by various generations of

* The house of the Protestant Bishop, Rev. Mr. Simon.

"leaders of business." He communicated that the Grand Duke of Hesse, and his nephew Prince Louis of Hesse, would be unable to attend the meeting; but that the Archduke Stephan of Austria was present upon their invitation, and, in return, requested the assembly to pay him a visit at his Castle of Schaumburg. The Town Councils of Ems, Nauheim, and Marburg, had sent invitations to the assembly, which, like that of the Archduke, were duly honoured. Next came a piece of indiscretion on the part of the old Leopoldine-Caroline Academy. This tottering institution demanded to become the guardians of the documents of the wandering assembly. Then, the new democratic Academy at Frankfort, the "Freies Deutsches Hochstift", made a counter-proposition to the same effect in its own favour. Thereupon, much talking "about the Emperor's beard"; until at last a frivolous member asked, whether there were any documents at all in existence? Thereupon, the "leaders of business" declared they had not received any. Whereupon, great was the laughter! Then, a rambling discussion; until Vogt of Geneva moved to leave things as they had been. Great cheering, and motion accepted by applause. "Es bleibt alles beim Alten."

The meeting then settled down into a more serious condition of mind, and listened to a lecture by a Dr. Jessen of Eldena, On German Inquiries into Natural Things. He insisted that Bacon of Verulam had not invented the inductive method; but that, if the Germans of the sixteenth century were not entitled to the honour, Roger Bacon certainly was. What he said about James's Chancellor was a faint echo of Liebig's well known researches on this important subject of history. Next day, while walking up the hill of Schaumburg Castle, I had some conversation with this orator, and found, to my surprise, that he had not even read Bacon of Verulam's works. I told him that he might have made his case ten times stronger, and proved more than Liebig himself, if he had attacked Bacon's astronomy, and the manner in which he endeavoured to make Copernicus ridiculous. As for the rules of induction, those (I said) had been fully stated by Aristotle; and it was exactly for this reason that (as is reported in *Bacon's Life*, in the splendid edition in the Royal College of Physicians, London), from his sixteenth year to the end of his life, he had hated Aristotle. A thinker must needs be hateful to a dreamer. This proposition and its truth was again illustrated by the speech of Dr. Volger of Frankfort, on the Darwinian Hypothesis of the Origin of Species, which followed upon the lecture of Dr. Jessen. In a kind of *feuilleton* article, this versatile and dialectically accomplished gentleman demolished, to his own satisfaction, a theory which Darwin himself had never enunciated. He maintained that Eve's forehead had not been flattened backwards like that of the Neanderthal skull, but had been as straight and high as that of any of her daughters which crowned the galleries. He thought knowledge was useless if it led to such conclusions as Darwin's, and ended by the paradox, Long live no knowledge. Alas! it already lives long enough, and will yet live long enough, without Dr. Volger's help or good wishes.

But the meeting resolved to have some knowledge; and the "first business leader" closed the meeting, to admit of the constituting of the sections for the several branches of science. Ten sections were consequently formed, and marshalled to their respective meeting-rooms. There they all appointed presidents, secretaries, made rules, lists of announced contributions; and, before two o'clock was well round, everybody was again somewhere else, on the alert, to look out for good places at the dinner.

About half-past two, Zinsser's (formerly Busch') Gardens presented an animated appearance. It w here that new arrivals met groups already made; was in the open air under trees and amongst shrul and flowers, that "combinations" were made. A last, the hall was entered, and seats eagerly soug by their owners. The hall had been built from th foundations expressly for the celebration. It wa constructed similar to the picture-gallery in the la Exhibition Building at London, with light fro above, gauze instead of glass to promote ventilatio and covered all over with fir-twigs, garlands, an flowers. The walls were ornamented with the arm of the towns where the thirty-eight former meeting had taken place. At the great southern wall, abov the orchestra, was the gigantic figure of Germania with the necessary amount of black, red, and golde banners around. At the eastern wall, was a nice pi ture of Galileo in the conclave, at the moment whe he bursts out, "It moves nevertheless."

Of the next hour or so, I can report nothing; for did not then take in impressions, but dinner. I wa only now and then roused by the toasts, which, i that anomalous country of the Germans, are curiousl interspersed with the services of the dinner. Soup— no toast. Fish, etc.—first official toast—of course *Pater Patriæ*—great enthusiasm—music, "God sav the Queen." Happily, they did not attend tha standing; but while the music continued, the dinne also did. Roast beef, etc.—second official toast, Th German Association of Naturalists and Physicians Well, that was hearty! Be embraced, ye millions This kiss to the whole world! Venison and othe game—third official toast, The University of Giesser Up to that moment I had drank out of small glasses But then I remembered my Hippocratic oath, an that I had vowed not to be modest, and went an fetched one of the large golden tankards of the Uni versity, which had been given to it by Landgra Philip the Magnanimous. I made it brimful o ancient Niersteiner, and let the loving cup go round Then I remember sweet dishes, dessert, interspersed with many toasts of non-official character. I also re member having to answer many invitations to join in a glass to our mutual health. At last, I planted the big tankard before me, emptied it in memory o Old England and the British Medical Association, re turned it, as in duty bound, to the magnificent beadl of the University, and was much the better for having had my dinner.

The afternoon and evening were spent in strict ac cordance with paragraph 2 of the Statutes: "The principal object of the Association is to afford to the naturalists and physicians of Germany opportunities for making the personal acquaintance of each other.' Amongst the naturalists, the chemists were certainly foremost that evening in making acquaintances which is not surprising, seeing that affinities are their constant study. Some ceased to be mathemati cal, and forgot all about equivalent; *vulgo*, what a man can stand. Some celebrated physicists were heard late in the evening having a discussion on equilibrium. All medical conversation was, of course banished from the mixed assembly of the evening but, nevertheless, the physicians shone splendidly They were sad and serious; and none more so than your humble servant, Mr. Reader. For, to keep himself *au fait*, he was executing in his mind the integration of Euler's Integral (formula considerately omitted) by means of Cauchy's method of Integration by the Imaginary. This is a much better test than the vulgar one of walking on a straight line After the unusual excitement of this 17th, it composed me like a dose of Dover's, and brought me happily late into the 18th. Recipe—After Integration

y the Real, and Disintegration of the Real, try In-gration by the Imaginary. *Probatum est!* Who ants more information is requested to enclose a fee.

On September 18th, the Mineralogical Section mus-red at six o'clock in the morning at the railway-ation, and started for Schloss Schaumburg, where ey arrived at nine. They were received at the castle y his Imperial Highness the Archduke Stephan of ustria, and by him introduced to his splendid col-ction of minerals deposited in a handsome room in ne of the towers of the castle. The illustrious host xplained the arrangement and the principal speci-ens of his splendid collection himself; and aston-hed all professional teachers both by the substance nd the manner of his delivery.

The Archduke Stephan, as Palatine of Hungary, ith Kossuth for his minister, had, in the year 1848, ood up for the rights of Hungary. For this he was ccused of treasonable designs upon the crown of that ingdom by the Vienna Camarilla; but having, in ality, no such designs, he was deserted by Kossuth nd his crew, and being the only man in this great ruggle who had an honest purpose, he fell to the round. As a clever and accomplished man, he was, f course, declared dangerous by the Hapsburg aenad, the Archduchess Sophia, his beloved aunt, nd banished in disgrace to Schaumburg, in the ahn valley in Nassau, an inheritance of his from his other's side. The thirteen years of leisure he there evoted to the embellishment of his fine estate, the ebuilding of the castle, and, above all, to the cultiva-ion of natural science. In this manner, it was pos-ible that he could invite the German men of science s one of themselves, attend their meetings, and, by is learning and hospitality, gain universal favour.

The great throng of the Association arrived at chaumburg about eleven o'clock. After visiting the owers, and enjoying a magnificent view from the asket on the masthead, from which floated the Im-erial standard some two thousand feet above the evel of the river below, I joined the breakfast on the awn, and, abstaining from the Markobrunner, uenched my early thirst in coffee. That and many "hochs" over, the Archduke headed the retreat to-vards the railway-station, being anxious that his isitors should not be too late for their visit to Ems, vhich was to take place in the afternoon. At the ailway-station, he was addressed by the "leaders of usiness", and greatly cheered. He replied in a fine peech, delivered with clearness and emphasis. As he train filed past the station, I saw his wiry, tall igure, and dark, thin, eagle-like countenance, bow nd smile the parting acknowledgments to the enthu-iastic naturalists and physicians.

Ems, beautiful Ems! Hygieia of youth and beauty, earning for offspring! Really, to live here for a nonth or two might ensure success to a figure of narble. And what is it that works these miracles? "Kesselbrunnen" and "Kränchen"! Magical springs! And what protoplasma do they contain? Bicarbonate of soda, twelve grains to the pint; and chloride of odium, six grains to the pint! Now, *is* life a che-nical process, which can reproduce itself out of such are as this? Has it not a mineral basis, like agri-ulture? And which is the easiest: to suckle a babe pon water, or to beget a babe upon such minerals? This is no frolic, but a serious medical question: What is the *rationale* of the effect of the waters of Ems in increasing population? "Perhaps Professor Schaaffhausen of Bonn will answer the question in a future physiological section meeting," quoth I to my inquisitive friend. As he believes in spontaneous ge-neration, he will have less difficulty in explaining the effect of the waters of Ems, containing minerals, than in explaining his observations of the spontaneous growth of protococcus cells in distilled water, inside hermetically sealed glass tubes.

It being time for dinner, we completely disap-peared for a time within the Hotel d'Angleterre, and there we dined splendidly for an hour and a half; drank fine wines at fine prices; heard music of the best; then saw and met fine company in the Kurgar-ten. "So you see they do not live on watery minerals alone," said my friend of the inquisitive turn, know-ingly punching my obdurate sides. I had had a me-dical lesson upon the restorative powers of Ems. Anybody with a long purse may be sent there. If he is not exactly cured, he is sure to come back pleased; and that is worth a great deal in these dreadful times of nihilism.

How matters grew on the morning of the 19th of September will reflect itself immediately in my style; and I will, therefore, rely upon this faithful mirror, rather than upon a special attempt at description. The Sections met in earnest. The mineralogists and geologists had a fine meeting. After Ludwig had described the formations of the Rhenish basin, G. Rose gave a splendid lecture on the Description and Classification of Meteorites. The meteorites are of two kinds—iron and stone meteorites. The iron me-teorites show again three varieties, and the stone meteorites seven. Thus there are ten varieties of these aërial messengers to our earth; and in one of them Rose discovered a new crystallised mineral, the rhabdite. The Sections for Psychiatrics and State Medicine discussed the arrangements of a new agri-cultural colony for lunatics at Hildesheim. State medicine proper was quite neglected.

The Section for Mathematics and Astronomy con-fined itself entirely to the former branch, and did not discuss any celestial objects. The Section for Physics discussed W. Thomson's Bottle-Electrometer, and listened to an interesting demonstration and lecture by Professor Reusch of Tübingen on Singing Flames. Then the Section adjourned to the Chemical Section, where curious things had passed. Heraeus had in ten minutes, with the aid of a little gas-flame and some oxygen, melted a pound and a half of platinum, and cast a form with it. This had been attained simply by using a crucible of burned lime, the worst conductor of heat known. The chemists now vacated the seats to the Physical Section, to enable them to see the remarkable experiment repeated. When the Chemical Section was reorganised, after several in-teresting theoretical papers, Liebreich gave a *resumé* of his researches on the Composition of the Brain of Man and Animals. He said that the brain consisted almost entirely of one single chemical substance, which, by washing with ice-cold water, could be freed from adhering impurities, and afterwards dissolved in ether. The ether contained also cholesterine. The new substance the author termed "protagon"; it contains carbon, hydrogen, nitrogen, and phosphorus. The substances commonly enumerated as immediate principles of the brain are products of decomposition of this protagon. The archencephalists were much disquieted by the news that the chemical composi-tion of the brain of animals was the same as that of man. The Botanical Section divided the species Sempervivum in two; listened to a description of the Garden for forestic experiments near Brunswick (Professors Jessen and Forstrath Hartig); appreci-ated Professor Sachs's experiments on the effects of variously coloured light upon certain phenomena of vegetation; and admired the acute observatiohs of Hofmeister on the mechanism of the movements of the protoplasma. This movement was warmly dis-puted in the discussion, after which the meeting closed.

In the Zoological Section, many short communica-

tions of special interest were made. The acclimatisers and marine animal breeders will be glad to hear that the sponge, so essential for the comfort of our faces and bodies, has been reared successfully on the coast of Dalmatia; and that the experiment, as Dr. O. Schmidt communicated, is to be further extended. But the most grotesque animal was exhibited by Professor Leuckart it was a fish with say one thousand eyes distributed over the whole of its body. This great robber bears the name of Chauliodus Sloani. It has teeth like a viper, lining its voracious mouth like a railing. In the ordinary place on the head, it bears two principal eyes; and on the lingual bone, between the gills, round the covers of the gills, on all prominences of bones, along both sides of the abdominal surface to the end of the tail, it bears magnificent black subsidiary eyes. I have examined some of these eyes microscopically; they are composed of a large transparent lens, a vitreous, a choroid with a magnificent black layer of pigment-cells; and in the fundus of each eye a special optic nerve enters. Professor Claus drew attention to a similar occurrence and position of subsidiary eyes in a kind of crayfish, Euphausia.

In the Section for Midwifery and Diseases of Women, Professor Dohrn made a communication on the Shape of the Basis of the Thorax in Pregnant Women and New-born Children. He confirmed the observation of Küchenmeister, found by spirometry, and further supported by Fabius and Wintrich, that the capacity of the lungs is not diminished during pregnancy, but that the basis of the thorax becomes much wider, thus indemnifying the lungs for the loss in height. Then there ensued discussions and communications of no interest to any one, until Professor Winckel recommended that, if women had to be confined with the aid of the forceps, they should lie on their side. This proposition contains no novelty to my readers, as this position on the side is habitual in England, where also most deliveries take place while the parturient woman is lying on her (left) side. I can say from experience, that in sundry light cases the use of the short (Smellie's) forceps may be quite easy while the parturient person is on her side; but it is not so when the long forceps has to be used. For that the dorsal position is far preferable. I am also quite certain that, in the lateral position, both natural labours and forceps deliveries lead much more frequently to ruptured perinæum than in the dorsal posture; and that no labour should be allowed to be completed without the parturient woman is either on her back with her legs apart, or on her side with a pillow or bolster between her knees, to keep her thighs sufficiently apart, should she not restrain herself sufficiently to keep them flexed towards her abdomen. I believe, therefore, that the accoucheurs of both nations may, in this respect, learn something from each other.

The communications in the Section for Medicine began with a short lecture by Professor Barthels of Kiel, on the Excretion of Carbonic Acid in Diabetes Mellitus. He said that, in this disease, the temperature of the body was always below the normal standard. To find an explanation of this, he examined the air expired by diabetic patients, and discovered that it constantly contained about half a per cent. less of carbonic acid than the expired air of healthy persons. The discussion then made vagaries upon the large topic of the treatment of diabetes. Beneke of Marburg desired to know the effect of sulphate of soda or Karlsbad water. Pfeuffer of Munich said that the physicians at Karlsbad were not sanguine as to the curative power of their water over diabetes, as he had heard when lately there. But the water diminished the sugar, and made them feel generally better. The rest of the discussion, in which D Weber, Rosenstein, Remak, Barthels, Ludwig Au bach, Heldman, Pfeuffer, and Stiebel participat was desultory and somewhat of a disgrace, o speaker deriving diabetes from disease or wounds the *fifth* ventricle of the brain. The meeting th adjourned to the clinical theatre of Professor Sei to see the application by Professor Remak of t constant electrical current to cases of neuroparalys Professor Remak's apparatus is a great battery, co taining some fifty elements of his own, an improv ment of Daniell's elements. It runs on wheels, a can be drawn by one person; but to bring it into house or up a staircase requires two. Its weight between three and four cwt. He applied a consta current to a woman of thirty-eight years of age, wl suffered from paralysis of the ilio-psoæ and orbicular oculorum; the paralysis being probably a so-calle hysterical one—that is, caused by chronic ascendir sympathetic neuritis. A current of twenty-five el ments, conducted through the ilio-psoæ for fifte minutes, caused a little return of power in the rigl leg, which she could raise for some inches from tl bed; no improvement in the left. A similar applic tion to the eyes enabled her to close the lids once twice. A second case of paralysis from meningit was rejected as unsuited to the treatment. A thir case, diagnosed as tabes dorsalis superior, seat the lesion on the left side of the spinal marrow, b tween the third and fourth vertebræ, was treate for five minutes with a constant current from thirty eight elements. While the patient had before bee unable to mount a chair with the left foot, and o closing his eyes had shaken strongly, so as to be i danger of falling, after the application he coul mount a chair with the left leg repeatedly and with out effort, and stand firmly with his eyes closed.

The Section for Anatomy and Physiology was th most successful of all, and remained so up to the las day. It sat daily for four or five hours, and wa always well attended to the last moment. Its busi ness began with a communication by Dr. Stein o Frankfort, on the Circulation in the Kidneys; th point of which was, that the capillaries which accom pany the tortuous tubules arise from further splitting up of arteries which have left the glomeruli. Pro fessor Gerlach of Erlangen spoke on the photograph ing of microscopic preparations. He discussed th several methods of Swan, and then showed a new method which employed carminate of ammonia, thus enabling the histologist to give to injected prepara tions at once the colour which they bear. The blue aniline colour can be similarly used for blue prepara tions. This method is, indeed, to be called "photo-chromographing". Dr. Kehrer of Giessen next showed that the corpora lutea from the ovaries of various mammals are identical in weight and size in the same class of animals, whether they are gravididatis or menstruationis. During pregnancy, the last corpus luteum is not changed, but only during the puerperal state. The ovaries mostly alternate in furnishing the egg. In multiparous animals, one ovary furnishes a larger, the other a smaller, number of eggs. Thus the observation of the corpora lutea leads to the knowledge of the laws of ovulation. Professor Dursy of Heidelberg spoke of the embryonal formation of kidneys and sexual organs, known as Wolff's body. He distinguished two kinds of canals—those which opened into the great duct, and those which did not. These latter, he said, confirmed the discovery of Henle of the loop-shaped or recurrent uriniferous tubules in the kidneys. Dr. Thudichum of London made a communication on the Colouring Matter of Bile. The red modification—cholerythrine—which, combined with alkali, was yellow, and then consti-

ited the bilifulvin of Berzelius, he had analysed, ad found to have the formula $C^{18}H^{9}NO^{4}$. This assed into the green modification, or cholochloine, y doubling its equivalent, and taking up two equi-alents of oxygen—2 ($C^{18}H^{9}NO^{4}$) + 2 O = $C^{36}H^{18}N^{2}O^{10}$. He explained the nature of the test for biliary olouring matter with red nitric acid; and showed nat, as the cholerythrine and its derivates contained o iron, the assumed derivation from the colouring natter of the blood was not substantiated.

The Section for Surgery was opened with a lecture y Professor Roser of Marburg on the Operation for mpyema. He said that hitherto three objections had een made to this operation: 1. That air might enter he thorax; 2. That the exudation might re-form; . That the lungs re-expanded but little, or not at all. Ie showed, on the contrary, that air had to be in-ected into the cavity of the thorax, in order to get he pus completely expelled; the purulent cavity hen became quickly smaller, and the lung expanded urprisingly. As the natural opening of empyema ostly takes place near the sternum, Roser proposed o open anterior encapsuled empyemas in front, near he region of the heart. He related two successful ases. An empyematic fistula, of eight years' stand-ng, he cured by making resection of a piece of the ypertrophied rib, which prevented the efflux of the us. A hepatic abscess, which had burst into the leura, he emptied by cutting through the latissimus orsi. He recommended, when necessary, to excise a iece of rib. All empyemata require the constant se of the catheter, and the free admission of air, to ssist in the expulsion of the pus. Already, Dieffen-ach had insisted on a simple spacibus incision for he cure of empyema. Dr. J. Glück of Kashau re-ated a case of excision of two hypertrophied breasts rom a Hungarian girl aged 16. The tumours weighed 21¾ pounds. After Drs. Königsfeld and Adelmann ad shown and explained the use of two apparatuses or fractures of the neck of the thigh and of the leg, he Section broke up. At one o'clock, the scientific abours of all the Sections announced for the 19th of September terminated.

[*To be continued.*]

Virchow's Counterblast. After a lecture recently given to the Operatives Society at Berlin, by Profes-sor Virchow, on the danger attending the use of to-bacco, twelve young men stepped forward and declared hat they would thenceforth smoke no more, and would devote the money thus saved to effecting an nsurance on their lives. (*Daily Paper.*)

Lunatics in England and Wales. The number of insane patients confined in county asylums, work-houses, and licensed houses, in England and Wales, on January 1st, 1863, was as follows:—Private pa-tients, maintained at their own or their friends' ex-pense, 5,341, of whom 3,042 were males and 2,299 females; paupers, maintained at the expense of counties, unions, etc., 36,638. In some of the returns of pauper insane the distinction of sex is not set forth, but in such of them as give it, the proportion appears to differ considerably from that of private patients. With the private cases (those maintaining themselves, or who are maintained by friends), as will be seen above, there are more men than women insane; with the pauper class the order is reversed, and lunacy is more frequent amongst women. There was a total number of private and pauper insane of 41,979; to which, however, may be added 877 criminal lunatics confined in asylums, hospitals, etc.—viz., 677 men and 200 women—showing another variety of propor-tion as regards the sexes.

Association Intelligence.

MEDICAL PROVIDENT FUND.

The following is the list of Directors of the Medical Provident Fund, elected up to the present time. The first meeting was held at the Freemasons' Tavern, in London, on Thursday last.

Chairman of the Board, elected by the Association:
Benjamin W. Richardson, M.D., London

Elected by the Committee of Council:
George Burrows, M.D., F.R.S., London
H. D. Carden, Esq., Worcester
R. B. Carter, Esq., Stroud
T. Heckstall Smith, Esq., St. Mary Cray
(One Vacancy.)

Elected by Branches:

Bath and Bristol Branch:
William Budd, M.D., Clifton
R. W. Falconer, M.D., Bath

Birmingham and Midland Counties Branch:
Edwin Bartleet, Esq., Campden
John Clay, Esq., Birmingham
G. Fayrer, M.D., Henley-in-Arden

Cambridge and Huntingdon Branch:
Peter W. Latham, M.D., Cambridge

East Anglian Branch:
B. Chevallier, M.D., Ipswich
Edward Copeman, M.D., Norwich

East York and North Lincoln Branch:
Sir Henry Cooper, M.D., Hull

Lancashire and Cheshire Branch:
L. E. Desmond, M.D., Liverpool
George Southam, Esq., Manchester
Edward Waters, M.D., Chester

Metropolitan Counties Branch:
Charles F. J. Lord, Esq., Hampstead
Edward H. Sieveking, M.D., London
A. P. Stewart, M.D., London

Midland Branch:
Edwin Morris, M.D., Spalding
William Ogle, M.D., Derby
Thomas Paget, Esq., Leicester

North Wales Branch:
T. Taylor Griffith, Esq., Wrexham

Reading Branch:
George Pound, Esq., Odiham

Shropshire Ethical Branch:
(No return.)

Shropshire Scientific Branch:
Samuel Wood, Esq., Shrewsbury

South-Eastern Branch:
John Armstrong, M.D., Gravesend
Henry Collet, M.D., Worthing
Edward Westall, M.D., Caterham

South Midland Branch:
John M. Bryan, M.D., Northampton
Edward Daniell, Esq., Newport Pagnell
Henry Veasey, Esq., Woburn

South-Western Branch:
Thomas L. Pridham, Esq., Bideford
(Two vacancies.)

West Somerset Branch:
(Election not yet made.)

Yorkshire Branch:
W. D. Husband, Esq., York
(One vacancy.)

Dr. Richardson begs to announce the following contribution to the Guarantee Fund—

	£.	s.	d.
Amount already contributed	333	13	0
Dr. Fayrer (Henley-in-Arden)	10	10	0

Further contributions will be announced.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the West Kent General Hospital, at Maidstone, on Friday, October 28th, at 2.15 P.M.

Dinner will be ordered at the Mitre Hotel at 5 P.M. Tickets, 5s., exclusive of wine.

Dr. Monckton has consented to occupy the Chair; and papers are promised by Fred. Fry, Esq., F.R.C.S. (Severe Injury to Brain: patient surviving thirteen months); and by G. H. Furber, Esq. (Spontaneous Evolution of the Full-grown Fœtus).

Frederick J. Brown, M.D., *Hon. Sec.*

Rochester, October 12th, 1864.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A meeting of the above Branch was held in the Medical Department of the Birmingham Library, on Thursday, October 13th; James Russell, M.D., President-elect, in the Chair. There were also twenty-one members present.

New Members. The following gentlemen, having been previously elected members of the Association, were elected members of the Branch:—T. J. Aubin, Esq., Kingswinford; J. H. T. Bailey, Esq., Coleshill; Chas. S. Boswell, Esq., Redditch; G. H. Fosbroke, Esq., Bidford; George E. Horton, Esq., Dudley; John Manley, Esq., West Bromwich.

Medical Provident Fund. After a very lengthened discussion, the following gentlemen were elected Directors of the Provident Relief Fund:—Edwin Bartleet, Esq., Campden; John Clay, Esq., Birmingham; and George Fayrer, M.D., Henley-in-Arden.

Paper. Dr. Wade read a very able paper on the Production of Heart Diseases by Violence, with Cases illustrative of the different Varieties of Disease determined by Sudden Over-exertion and Accidents.

WEST SOMERSET BRANCH: QUARTERLY MEETING.

A quarterly meeting was held at Clarke's Castle Hotel, Taunton, on Thursday, October 13th, 1864, at 7 P.M. Present: J. H. Kinglake, M.D., in the Chair; Messrs. Randolph, Legge, Alford, H. J. Alford, W. Liddon, and Dr. Kelly.

Next Annual Meeting. It was resolved: "That the next annual meeting be held at Clarke's Castle Hotel, Taunton; and that Hugh Morris, Esq., of South Petherton, be President-elect."

Medical Provident Fund. It was resolved: "That the Branch is not at present prepared to nominate a Director to the Provident Relief Fund."

Papers. 1. Mr. Legge read a paper on Scarlatina, as it had fallen under his observation in the neighbourhood of Wiviliscombe during a recent epidemic. This interesting paper was accompanied by an elaborate table containing details of ninety cases. A long discussion followed, and Mr. Legge was thanked for his communication.

2. Mr. W. Liddon exhibited Preparations of two Eyes which he had lately removed, one on account of Malignant Disease, and the other of Extensive Injury from an accident. The cases and operation were shortly described.

3. Dr. Kelly described a Remarkable Birth, where the fœtus presented the appearance of, and was mistaken for, a monstrosity without face or limbs; it having been born so closely enveloped in transparent membranes, from which the liquor amnii had escap that the placenta covered the face and anterior s face of the child, hiding its features and limbs, a seeming to have grown to it. It was only on minu inspection that the discovery of the real state things was made out, and, unfortunately, after t death of the imprisoned fœtus had taken place.

4. Dr. Kelly gave the history of a case in whi Barnes' Dilators were successfully used for induci Premature Labour. The apparatus was shown a explained.

CAMBRIDGE AND HUNTINGDON BRANCH MEETING.

A meeting of this Branch was held at Cambridge October 13th; G. E. Paget, M.D., in the cha There were also present: J. Carter, Esq. (Cambridg C. P. Daniell, Esq. (Swavesey); M. Foster, Es (Huntingdon); G. L. Girling, Esq. (St. Ives); I Green (Cambridge); Dr. Latham (Cambridge); a Dr. Pinchard (Cottenham).

The following resolutions were passed.

"That P. W. Latham, M.D., be appointed the r presentative of the Branch on the Directorate of t Medical Provident Fund."

"That it is not desirable that the age of contrib tors to the Provident Fund be limited to 60 yea That the representative of the Branch be request to communicate this resolution to the Board of D rectors."

"That the next annual meeting be held at Ely."

"That John Muriel, Esq., be President-Elect."

Correspondence.

TREATMENT OF PATURIENT WOMEN.

Letter from Thomas Pope, Esq.

Sir,—I should not have noticed Dr. Hewitt's repl to my letter, if etiquette were out of the questior but as he has asked me a question, it necessitates a answer.

In that part of my letter where I speak of the d ranged state of the digestive organs at and before th time of labour, he says, "May I ask Mr. Pope for th proof of this?" and then goes on to say, "Women ar as a rule, capable of eating a good dinner, and digest ing it easily and comfortably, up to the very tim when labour begins." My answer to this is, "Ex ceptio probat regulam"; for the general rule is, tha all parturient women have anorexia, flatulence, an all the other symptoms, more or less, of derangemen of the digestive function; and the assertion to th contrary, may be characterised as "Rara avis in terri nigroque simillima cygno."

And now, I would advise Dr. Hewitt to ponder wel my letter; and, unless he can say something mor to the purpose, to come over to my way of thinkin in this matter; for, assuredly, as regards the state o the stomach, etc., and milk-fever, he will prove him self thereby a better friend to the parturient daugh ters of Eve. *O magna vis veritatis.*

I am, etc.,

Thomas Pope.

Cleobury Mortimer, Shropshire, Oct. 16th, 1864.

Letter from William Legge, Esq.

Sir,—I am glad to see the attention of our asso- ciates drawn to so important a subject as the diet of child-bed, on which, unfortunately, so great a differ- ence of opinion exists; for my own part, a rather ex-

sive midwifery experience induces me, unhesitatgly, to declare my adhesion to the views of Dr. aily Hewitt. We cannot wonder that, a rigorously v diet being considered indispensable to the treatnt of severe disease by the past generation of pracioners, should by them be enforced in the manageent of the puerperal state; parturition they reded, not as a natural physiological process, but as abnormal occurrence requiring active interference. the present day, we recognise the fact that the st step towards the rational treatment of natural bour, is at once to dismiss the idea that we are aling with disease; we shall then see the necessity aiding the system to rally from the exhaustion nsequent upon the severity of the parturient pross, and proportioned to the amount of hæmorrhage which it is succeeded; and, here bearing in mind e great physical exertion undergone, and the drain on the system yet to ensue when the mammary cretion is established, common sense suggests that e diet should be suited to the patient's requirents, sufficiently substantial without being stimuting. The pints of gruel, alternating with pints of a, to which, in former days, lying-in women were r weeks restricted, were the fruitful source of flatunce, tiresome perspirations, and irritation of the in.

With a liberal diet, there is little fear of our enountering milk-fever or abscess of the breast; when e milk is in process of secretion, so far from finding necessary to keep the patient low, I believe the ndency to milk-fever will be in the inverse ratio to he nourishment administered; and that nothing is productive of what, in our west country, is known s "breast-ill", as defective nutrition. A proof of his is afforded by the much greater frequency with hich the poor, who are compelled to depend upon ea and gruel, suffer from inflammation of the breast.

So strongly do I feel the importance of this subject hat, some time since, I prepared a paper relating to , to read at a Branch meeting. Being then prented attending, I only refrained from producing it ubsequently, as meanwhile all I had to say was said o much better by Dr. G. Hewitt, and backed by his wn high authority, could not fail, I thought, to proluce an impression on our brethren; and I trust that he present discussion may deepen that effect, and ive evidence thereof in the conversion of Mr. Pope nd many others.

I am, etc.,

WILLIAM LEGGE.

Wiveliscombe, Oct. 17th, 1864.

[Mr. Legge would, in our opinion, confer a benefit n the Association by publishing the paper referred o by him. The question is a purely practical one, he calm discussion of which, in the manner so well xemplified in this letter, may usefully engage the atention of the profession. [EDITOR.]

INTRAOCULAR MYOTOMY.

LETTER FROM J. VOSE SOLOMON, ESQ.

SIR,—The letter, signed "Jabez Hogg", in the JOURNAL of Oct. 8th, raises the following questions, to which I will give categorical answers, leaving, without further comment, the ethical part of the controversy to the decision of the profession upon the facts which have been laid before them.

1. With whom originated division of the ciliary muscle as a remedy for eye-tension?

Answer. Myotomy of the ciliary (the term myotomy being restricted to the sense in which it was understood prior to the introduction of subcutaneous section of muscle) originated, without question, with Dr. Whyte, in the year 1801 (BRITISH MEDICAL JOURNAL, vol. I, p. 450, 1863). Whyte cut the muscle transversely *behind* the iris.

2. Has myotomy of the ciliary, confining the term to the preceding sense, been practised by any other?

Answer. Yes; by Dr. von Gräfe, in the performance of iridectomy for glaucoma, 1856-57. In this operation, the muscle is cut *transversely*, and in *front* of the iris.

3. Who first methodised and practised division of the ciliary muscle for the relief of glaucoma, in the sense in which the terms "division, etc." are employed by Mr. Hancock, but rejected by all writers on orthopædic surgery, and by Bowman, Nunneley, and Follin, who have dissected the ciliary muscle; viz., a puncture or "incision" of muscle made *parallel*, instead of at a right angle, with the course of the principal fibres?

Answer. Without question, Dr. Desmarres, who, in 1847, illustrated the subject clinically, under the title of Paracentesis of the Sclerotic, in his *Traité des Maladies des Yeux* (BRITISH MEDICAL JOURNAL, vol. I, 1863, p. 451.)

4. By whom was Desmarres' practice introduced into London?

Answer. By Mr. Hancock, who commences his incision or puncture rather nearer to the margin of the cornea; but, in all other particulars, carries out to the letter the directions given by the Parisian oculist. (JOURNAL, 1863, vol. II, p. 579.)

5. Who first devised myotomy of the ciliary for the relief of myopia and eye-tension, in the sense in which the term division of muscle or tendon was employed by Stromeyer and Little, and is now universally accepted by the profession; viz., the subcutaneous division of muscle or tendon in a direction contrary to the course of the principal fibres?

Answer. The humble individual whose signature appears to this note.

In this operation (*Intraocular Myotomy*), the division of the muscle is not nominal but surgical. To use Dr. Follin's term, there is no "illusion." The muscle is enfeebled; an important neurotomy is effected. *The incision does not radiate from the margin of the cornea; but is parallel with one of the equators of that membrane. Hence, the diameter of the eyeball is not enlarged; and vitreous humour is seldom lost, unless it be diffluent. The base of the iris, the ciliary nerves, and perhaps filaments of the fifth pair, are divided in the same situation, direction, and to a similar extent, as in iridectomy.* (See, for diagrams exhibiting the direction of the incision in Whyte's, Desmarres', and my own operation, my papers published in the JOURNAL in 1863 and 1864.)

I must decline further correspondence upon this subject.

I am, etc.,

J. VOSE SOLOMON.

96, Newhall Street, Birmingham, Oct. 10th, 1864.

SPONTANEOUS EVOLUTION.

LETTER FROM WILLIAM SOPER, ESQ.

SIR,—Thinking a well marked case of the above occurrence might be interesting to some of your readers, I have ventured to trouble you with a short account of one which occurred to myself.

On Sunday, October 9th, 1864, I was sent for to attend Mrs. H. in her sixth pregnancy. She is a tall and powerfully built woman, and has always had good and quick previous labours. I arrived at 7 P.M.; found the membranes ruptured, and vertex presenting. At 7.30, the first child (female) was delivered; and its placenta quickly followed. On passing my hand over the abdomen, I found the uterus still distended; and, on examining, found the second

bag of membranes protruding, but flaccid, and with it the hand of the child. I endeavoured to return it; but, the pains being violent and with hardly any intermission, was unable to do so. The arm and shoulder quickly followed. I introduced my hand into the uterus, hoping to seize a foot; but the violence and frequency of the pains compelled me to desist. I waited some time, hoping they would moderate; but, the action continuing, the breech became jammed into the brim. The hand and arm still protruded. In about five minutes, the breech and right arm were completely expelled from the pelvis, the rest following immediately. A dead male child was the result.

I think this case fully accords with the views entertained by many members of the profession—that where we have a large and capacious pelvis, with the parts thoroughly relaxed, we are justified in letting Nature supersede us, and avoid in many cases an unjustifiable and dangerous amount of force.

I am, etc., WILLIAM SOPER.

1, St. George's Villas, Stockwell Road, October 1864.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Wednesday, October 19th, 1864, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Barker, William Lewington, Hungerford
Barrington, Nicholas William, Peninsular and Oriental Company's Service
Belcher, Joseph Silverthorne, M.D.St. Andrews, 3, New Road, Wellclose Square
Burman, William Maxwell, Wath-upon-Dearne
Chippendale, Walter, M.D.St. Andrews, Palermo, Sicily
Colborne, Anthony Charles, 53, Tachbrook Street, Pimlico
Eames, John Davey, Bourton-on-the-Water
Ferguson, Frederick Stuart, M.D.Edin., Bolton
Gray, John Temperley, 1, Portland Terrace, Daiston Lane
Hodge, Benjamin Terry, Sidmouth
Lattey, James, St. George's Hospital
Leigh, Thomas, St. George's Hospital
Merry, Robert Rosier, Chelmsford
Oliphant, John, M.D.Edin., 24, Alfred Street, Bedford Square
Phillips, John Jones, Guy's Hospital
Puzey, Chauncy, Guy's Hospital
Schmid, Carl Theodor, M.D.Tubingen, 33, Edwards Square, Kensington
Williams, John David, Bala, North Wales

The following gentlemen were reported by the examiners to have passed the Primary Professional Examination:—

Bradshawe, Paris, King's College
Hoffmeister, William, University College
Nowell, Richard Bottomley, Guy's Hospital
Renshaw, William Alfred, Manchester
Rogers, Charles Edward Heron, Middlesex Hospital
Swindale, John, Middlesex Hospital
Tindall, Alexander McIvor, St. Bartholomew's Hospital
Webb, John Holden, St. Mary's Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board, on the 19th instant.

Bailey, William, Tipton, Staffordshire; diploma of membership dated July 27, 1864
Browne, Edgar Athelstane, Notting Hill; April 26, 1864
Fairbank, Thomas, Thiberton Street, Islington; July 27, 1864
Jones, Alfred Orlando, Milner Square; May 13, 1864
Langworthy, George Vincent, Modbury, Devon; April 27, 1864
Lawrence, Henry Cripps, Kingston-on-Thames; July 27, 1864
Owen, Robert Edward, Beaumaris; May 12, 1864
Pearless, Charles Durrant, East Grinstead; January 26, 1864
Powdrell, John, Farndon, near Chester; April 27, 1864
Thompson, William Allin, Oxford; May 2, 1861
Ward, Martindale Cowslade, Markham Square; May 10, 1864
Wills, Charles James, Stockwell; May 24, 1864
Yates, William, Richmond; April 27, 1864

UNIVERSITY OF CAMBRIDGE. Degree of M.D.

Liveing, Robert

APOTHECARIES' HALL. On October 13th, the following Licentiates were admitted:—

Carreg, Griffith Llewelyn, Birmingham
Herbert, Henry Carden, Castle Island, co. Kerry
Pyle, Charles John, Amesbury, Wilts
Smith, John Ablewhite, Louth, Lincolnshire
Worger, Thomas Hewlett, Kent and Canterbury Hospital

At the same Court, the following passed the first examination:—

Leigh, Thomas Drake, Royal Infirmary, Liverpool

APPOINTMENTS.

ARMY.

ALDER, Assistant-Surgeon S., 62nd Foot, to be Staff-Assistant-Surgeon, *vice* J. Mackenzie, M.D.
ARMSTRONG, Assistant-Surgeon L., M.D., 13th Hussars, to be Staff-Surgeon, *vice* H. Franklin.
EKIN, Assistant-Surgeon J., M.B., 4th Foot, to be Staff-Surgeon *vice* G. Saunders.
ELLIOTT, Staff-Surgeon-Major R. C., C.B., to be Deputy Inspector General of Hospitals.
FERRIS, Surgeon-Major G. T., Royal Artillery, to be Staff-Surgeon Major, *vice* H. B. Franklyn.
FRANKLYN, Staff-Surgeon H. B., to be Surgeon Royal Artillery, *vice* G. T. Ferris.
GIBB, Staff-Surgeon-Major A., M.D., to be Deputy Inspector-General of Hospitals, *vice* J. Mouat, C.B.
JOHNSON, Staff-Assistant-Surgeon F., M.B., to be Assistant-Surgeon 13th Hussars, *vice* L. Armstrong, M.D.
MACKENZIE, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon 62nd Foot, *vice* S. Alder.
MOUAT, Deputy Inspector-General J., C.B., to be Inspector-General of Hospitals.
SHAW, Staff-Assistant-Surgeon J. A., M.D., to be Assistant-Surgeon 4th Foot, *vice* J. Ekin, M.B.
TIPPETTS, Staff-Assistant-Surgeon A. M., to be Staff-Surgeon, *vice* R. C. Elliot, C.B.

ROYAL NAVY.

COOKE, George P., M.D., Surgeon (additional), to the *Duncan*.
EDMUNDS, Henry, Esq., Surgeon (additional), to the *Fisgard*.
ELLIOT, John, Esq., Surgeon, to the *Excellent*, for the *Royal Sovereign*.
KIPLING, Thomas, Esq., Assistant-Surgeon, to the *Duncan*.
M'CLEMENT, Richard C., Esq., Assistant-Surgeon (additional), to the *Duncan*.
MANGLE, Robert, Esq., Surgeon (additional), to the *Duncan*.
NIHILL, John, M.D., Surgeon, to the *Duncan*.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BURTON, R. G., M.D., to be Surgeon 21st Kent R.V.
DOLMAN, A. H., Esq., to be Assistant-Surgeon 6th Derbyshire R.V.
FROST, T., Esq., to be Assistant-Surgeon 4th Yorkshire A.V.
MATHER, G. R., M.D., to be Assist.-Surgeon 1st Lanarkshire A.V.
MEADE, H., M.D., to be Assistant-Surgeon 5th Yorkshire A.V.
MITCHELL, E., Esq., to be Assistant-Surgeon 1st Administrative Brigade Caithness-shire A.V.
JOHNSTON, T., Esq., to be Assistant-Surgeon 19th Lanarkshire R.V.
SMITH, A. W., M.D., to be Honorary Assistant-Surgeon 1st Lanarkshire A.V.
STEPHEN, W., Esq., to be Honorary Assistant-Surgeon 1st Aberdeenshire A.V.
WATSON, J., Esq., to be Surgeon 1st Newcastle-upon-Tyne R.V.

DEATHS.

DIAMOND. On October 11th, at Thurlby Hall, Lincolnshire, aged 2 months, Rosa Jane, daughter of Warren H. Diamond, M.D.
HALFORD, Edward, Esq., Surgeon, at 1, City Road, aged 45, on October 12.
LODGE, Henry S., M.B., 2nd Regiment, at Bermuda, on August 31.
LOVER, William, M.D., in Dublin, aged 57, on August 23.
MACLEAN, Charles, M.D., late Inspector-General of Hospitals, at Rathmines, Dublin, aged 74, on October 4.
MILROY, David, M.D., 80th Regiment, at Bermuda, on Sept. 3.
RUSSELL, Wm., M.D., at Lausanne, aged 23, on October 2.
SKEGG, Robert, Esq., Surgeon, at St. Martin's Place, aged 60, on October 17.

BEQUEST. A Miss Clements has left £30,000 to be divided amongst the charities of Liverpool.

EW GERMAN HOSPITAL. On Saturday last the German Hospital at Dalston was opened by his al Highness the Duke of Cambridge.

INNER TO DR. EWART. A public dinner was lately en to Dr. Ewart on the occasion of his leaving dleton in Teasdale, and a gold watch presented to

HE OLD SAD TALE. We regret to learn that lera is very bad among the men of the 20th Regit, although there is no disease anywhere else. ir huts are said to be too crowded, and badly tilated.

IRMINGHAM GENERAL HOSPITAL AND THE MUSI- FESTIVAL. At the weekly board, held on Friday k, the further munificent sum of £2000 was re- ed from Colonel Mason, the chairman of the Mu- l Festival Committee, on account of the proceeds he late festival, making altogether £5000 which e been paid to the funds. *(Birmingham Gazette.)*

EGISTRATION OF STUDENTS. The annual registra- of students pursuing their studies at the eleven ropolitan Schools, has just been concluded at the al Colleges of Physicians and Surgeons, and at thecaries' Hall, and it is stated that, there is some ng off in the gross number, and that at only three ols is there a slight increase over last year.

NIVERSITY OF CAMBRIDGE. Dr. Paget (Caius), Dickenson (Caius), Mr. Lestourgeon (Trinity), Dr. Latham (Downing), have been appointed ex- iners in medicine; Dr. Humphry (Downing), and Lestourgeon (Trinity), examiners in surgery. Dr. sier (Caius), has been appointed deputy-professor natomy, on the nomination of Professor Clark.

ANTINGISM. Mr. Banting is in great force—the ession of Alderman Mechi to his ranks having had ood effect on the recruiting. A gentleman recently te to him announcing that he had successfully re- ed himself by eighty pounds, the largest amount known. The Emperor of the French is trying the nting system, and is said to have already profited atly thereby.

EALTH OF SCOTLAND. The Registrar-General's nthly return for the eight principal towns of Scot- d shows that in September the births, deaths, and rriages were all considerably above the average. e zymotic class of diseases caused about one-third the deaths (32 per cent.), in Perth, 42; in Green- , 43; and in Paisley, 47 per cent. The deaths m scarlatina rose in September to 125; but typhus er was the most fatal of the zymotic diseases; it s most prevalent in Greenock, Aberdeen, Leith, l Glasgow, and caused 155 deaths in the eight ns, among a population not a third of that of the tropolis. The weather was nearly normal during month.

EFUSAL OF CERTIFICATE OF DEATH. A poor wo- n of Shadwell, made application to Mr. Partridge redress. Her husband died last Monday, and was ended by Mr. Hawkins, of Colet Place, to whom e applied for a certificate of the cause of death. Mr. wkins refused to give her a certificate unless she id him 6*s*. She was unable to raise the money, and e undertaker dared not remove the body from the use without a medical certificate. Mr. Partridge ected 412 K, to wait upon Mr. Hawkins, and upon return, was told that Mr. Hawkins peremptorily clined granting any certificate until he was paid 6*s*. the woman were anxious to bury the body of her sband, she had better apply to the parish. The gistrate observed that he could not compel the sur- on to give a certificate. He was very sorry for the or widow, but he could not help her.

PUBLIC GENERAL HOSPITAL AT DONCASTER. A movement to establish a public general infirmary at Doncaster, is received with great favour at Doncaster and the neighbourhood, and at a meeting held on Monday, under the presidency of Mr. Moore, the Mayor, it was announced by Alderman Shirley that upwards of £3,400 had been promised towards the required amount of £5,000 including £500 from the Corporation at Doncaster. Such an institution is greatly needed, inasmuch as from the introduction of machinery in the agricultural districts accidents are of more frequent occurrence. A report, which showed that the governors of the dispensary had agreed to amalgamate with the proposed infirmary, and that a site embracing 2,440 square yards had been selected, was unanimously agreed to.

POISONING BY YEW-TREE BERRIES. It appeared that a girl 3 years old, daughter of the gardener to the Finchley Cemetery, was observed by the father to eat one or two of the berries from an Irish yew-tree, but he then thought nothing of the circumstance. Shortly afterwards the child was taken with a kind of faintness. The mother gave her a small quantity of brandy and other restoratives, which seemed to recover her, and she was then put to bed, a dose of castor oil being administered. The deceased, however, relapsed into her former alarming state, and death ensued. Mr. J. White, surgeon, found her dead. On *post mortem* examination, he found in the stomach some partly digested yew-tree berries—from twenty to fifty. He produced some of the seeds, but many of them had passed into the intestines. The husks and seeds were poisonous, but not the fleshy part of the berry. The stomach and intestines were patched and inflamed, showing the irritative action of poison, which was caused by the berries. The coroner remarked that this was a very important case, for yew-trees were thickly planted in all the cemeteries, and by the fact becoming known that the berries were poisonous, greater watch would be kept upon children by those who had them under their care while visiting such gardens.

OZONE TESTS AND READINGS. Dr. Allnatt says: "I conclude that bibulous paper, saturated with a solution of iodide of potassium and starch or thin arrow-root, affords the most effective tests we possess. The formula of its preparation is as follows. Take of pure white starch, 1 ounce; iodide of potassium, 3 drachms; mix in a marble mortar, and add gradually 6 ounces of boiling water. The papers to be saturated with the mixture while hot, carefully dried out of contact with the external air, and preserved in close tin boxes." Mr. Lowe remarks: "Assuming that we have adopted the best tests and the most approved method of using those tests, it will be requisite to correct the readings for the velocity of air at the time, for the height of the barometer, for temperature, and for the hygrometrical condition of the atmosphere. It must be borne in mind that if in a given time 1,000 cubic feet of air passing through the ozone-box gives a register of 4, 2,000 feet passing through in the same time will give one of double that amount. Moisture can also increase or diminish the action, a very dry air, or a perfectly saturated atmosphere showing a *minimum*. The lower the barometer descends the more ozone is shown upon the tests. In very hot or very cold weather ozone is also at a *minimum*. With a west there is much more ozone than with an east wind. The *maximum* amount of ozone will occur with a moderately moist atmosphere, a temperature between 50° and 60°, a barometrical pressure under 29 inches, and a gale occurring at the same time. Before the actual amount of ozone can be ascertained, certain corrections must be applied, and until uniformity is

adopted the observations cannot be made comparable. Under these circumstances we can do little more than record much or little ozone.

The Grievances of Druggists. The following is a portion of the address of the president of the British Pharmaceutical Conference held at Bath:—"All the responsibilities of professional men are laid upon chemists without either the dignity or emolument. We are treated as shopkeepers, with profits less than those of an ironmonger. Rich and poor of all grades do not hesitate to consult them in all sorts of difficulties, and obtain freely and gratuitously that for which a physician or consulting chemist would charge a handsome fee. That the information thus freely accorded to all is truly valuable, is proved by the fact of the constancy of the practice, and the needless jealousy of many professional men. To obtain this amount of public confidence, a large expenditure of means, careful observation, energy, study, and integrity of purpose, are required. When the public confidence is secured, it is the interest of the chemist to maintain it by all and every means in his power. Foremost amongst the means are the obtaining good assistants, and making such arrangements in the establishment as shall, as far as practicable, obviate all chances of accident. Having done this, and exercising constant watchfulness, all that a man can do has been done. No regulations could be devised nor Act of Parliament enforced to prevent a physician from making a wrong mark, which might lead to fatal results. The case at Liverpool brings all these considerations before us in the most vivid manner..... Is a man to suffer destructive and ruinous spoliation because his assistant is not more than human? It is monstrous injustice. A general practitioner may, and does make numberless mistakes with impunity, because the facts are confined to himself and his own surgery. The eyes of the physician and the public are not on him or his dispenser, to stimulate to vigilance and care; thus few accidents under such circumstances ever see the light, and perhaps it is well it should be so. Without some change in the law, the profession will be abandoned by educated and high-minded men, and their places taken by others, ignorant and reckless, and thus public safety will be jeopardised. The twelve pence now demanded for as many doses of pills, can only be adequately replaced by a sum equal to the fee of the prescriber; for it is clear we have the responsibility of two professions on our shoulders, which ought in common justice to be paid for."

Leprosy in India. With the appearance of the disorder, all our readers must be more or less familiar. Our streets and bazaars furnish us with terrible illustrations of the ravages which this disease makes on the human face and figure. The disease generally manifests itself at from 20 to 30 years of age, and proves fatal in from twelve to thirty. It is, however, very seldom in itself attended by such results; but it commonly induces a predisposition to other diseases, such as dysentery, low fever, etc., from which the patient generally dies. It is allowed that it more commonly attacks the male sex; but as females can and do conceal the disease, this assertion must be accepted with an allowance. Opinions would appear to be divided, as to whether it attacks Europeans in this country or not. It affects Hindoos and Mahomedans almost equally, and occurs both among high-caste men who eat only vegetables, and low-caste men who eat everything. The disorder is by some attributed to the miserable way in which natives live, in foul unventilated houses, alongside of miasmatic marshes and heaps of all kinds of filth, wearing clothes which they never put off except for a few minutes, when they dip them in some pond, and their generally unclean habits. But in this some of the writers cannot ag The disease is considered hereditary. Dr. Pask Saharunpore, states that the belief in the heredit transmission of this disease was so deeply groun in the minds of the Rajabeer generally, that t were in the habit of burying alive, not only the l himself, but all his relatives and friends, lest, in n tiplying their kind, the disease should be commu cated to distant generations. In Shreenuggur similar custom prevailed. Every person affected w leprosy was buried alive, a father burying his s and a son his father. Although the natives beli that leprosy is contagious, the authors of the repo before us are decidedly of a different opinion. Le retain their wives, who are never affected; hosp servants who wash the ulcers of these unhappy s ferers remain free; wealthy lepers entertain men the same purpose, who wash and dress their so once or twice a day, and are in constant attenda on them, and are yet untouched by the disorder. Corbyn, of Bareilly, mentions an instance of a wom who is a leper, being employed as a cook in a pul serai; and she assured him that no objection h ever been made by travellers to food prepared by h Dr. Paske believes that the discharge from the ulc ative stage, if applied to an abraded surface, wo inoculate the individual with whom it came in c tact. Dr. Loch, of Mirzapore, and Dr. Annesley, Jhansie, report two cases of spontaneous cure, t former of father and son, the latter of two wom In the former case, the boy was wholly cured, t father partially. But, generally speaking, medic can only check progress, not restore the patient perfect health. (*Bengal Hurkaru.*)

The Indian Medical Service Dispatch. W can only point to three concessions which Sir Wood has chosen to make; viz., the promotion of number of senior assistant-surgeons; the privilege counting service qualifying for the rank of surgeo major from date of first commission; and the n furlough pay-table. All the other grievances, which the medical service has so long and so loud complained, remain unredressed. The invidious di tinctions between the two services still remain assigning commissions to the deputy inspector general and inspectors-general of the British servic while these grades in the Indian service are declar by the Royal Warrant to be only staff-appointment of assigning a superior rate of pay to the deput inspectors of the British service in India, who a also entitled to retiring pensions and half-pay pe sions according to rank, while in the Indian servi pensions are still regulated by length of service onl The new pay-table is a delusion; as, with the exce tion of the surgeon-majors attached to native reg ments, the new scale of pay is actually less than th old scale. The half-pay pension of a surgeon-maj in the Indian service, after twenty years, is £200, exactly the same as is given to a surgeon of th British service after ten years! In the grades inspector and deputy inspector general, the pensio in the British service are regulated by rank, while i the Indian service they are given by length of servi only. It can be stated in a very few words what th medical service did look forward to, and what the would have been satisfied with. They expected t receive the effective pay of their relative ranks, wit a graduated scale of staff salary similar to tha granted to military officers in the new organisatio of the army; they also expected to be put on a foo ing of equality with medical officers of the Britis service in regard to the commissions and pay of the deputy inspectors-general, as well as to have the pensions regulated by rank, as in the British servic (*Bombay Gazette.*)

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON THE USE OF THE HYSTEROTOME IN CERTAIN FORMS OF UTERINE DISEASE.

By C. H. F. Routh, M.D., M.R.C.P., F.A.C.L., Physician to the Samaritan Hospital for Women and Children.

The use of the hysterotome was first recommended, as far as I know, in 1847, by Dr. Simpson of Edinburgh. That distinguished obstetrician, however, limited its application to cases of stricture or narrowing of the uterine canal—in those cases, in fact, where the dysmenorrhœa present was mechanical. The existence of this cause few, who have much to do with diseases of women, can for a moment deny; yet even here it is remarkable how authors vary. Mackintosh believed them to be of frequent occurrence; his test being the difficulty with which the uterine sound was admitted. Yet we find that Dr. West—an eminent authority, and the latest writer on diseases of women—when speaking of the hysterotome, says: "I am utterly at a loss as to the principle upon which these instruments are recommended. If the cervix uteri be wide enough to admit them, I do not see how its narrowness can offer a mechanical impediment to the escape of the menses. I can, however, readily understand that the uterus may suffer severely from the violence offered to it; and, indeed, have known pelvic abscesses succeed to these manipulations." (P. 84, last edition.) But, on the other hand, so far as I read him, he does not appear to have himself used the instrument many times. He speaks only of one example in which he employed it; and then it was Stafford's instrument for dividing impermeable urethral stricture, where the internal os had contracted after a severe confinement, and would only admit a small catgut. Years ago, Dr. Oldham, in a paper in *Guy's Hospital Transactions*, on the Mechanical Treatment of Dysmenorrhœa, gave a case where death resulted from peritonitis. In reply to the former, it may be well to state that it is scarcely philosophical to argue from the mistakes of others, when, probably, we have not all the facts, precisely as they occurred, to judge by; and, in regard to the latter, it is notorious that, in some states of the system, very little examination of the uterine organ, even by the sound itself, will produce cellular abscess. In others, again, the mere pulling down the uterus will produce the same result. That cellular abscess may follow the use of the hysterotome, I am free to admit. I have seen two fatal cases of it: one which occurred in a young woman under the care of a colleague; and one which occurred in a patient of my own, a case of fibroid of the uterus, a week or ten days after she left the hospital apparently well, and to which I have already referred in my Lettsomian Lectures. In the first case, the dysmenorrhœa present was very severe. We could not get the smallest catgut bougie in; and we had to wait for a menstrual period, when we succeeded in making this penetrate. The canal was kept open for a time; and, the period once over, the os was incised, but, unfortunately, with a fatal result; peritonitis and abscess supervening.

I have records of at least twenty-five cases in which I have used the hysterotome, in all of which more or less benefit was derived. In several, a complete cure was effected. But I have used it in several other cases, notes of which I have not kept. Dr. Greenhalgh assures me he has used it in some seventy cases—in only one with much hæmorrhage; but the woman was very plethoric, and it greatly relieved her.

The cases in which I have used it are cases of mechanical dysmenorrhœa, which, notwithstanding the statements of authors, judging from my own experience, I should say, are not so rare as some believe. More frequently they seem to follow long continued cases of endometritis. In many of these cases, sterility has previously existed. In some, pregnancy has very soon followed the use of the hysterotome. I have used it also in cases of retroversion and anteversion; in cases of occlusion of the os, internal or external; in cases of fibrous tumour of the uterus; but most commonly in cases of congestion or very large cervix, as a means of bleeding the uterus, which it does in many cases more effectively than leeches.

I shall add a few words on the *modus operandi* in these several examples.

1. *Cases of stricture of external os and part of cervical canal.* These cases are very simple. The external opening is so small that an ordinary uterine sound cannot be passed. When this is enlarged by a bistoury, and then the os and cervix laterally incised by the metrotome, the disease scarcely ever recurs. This is not usually the case, if the practitioner is satisfied to use the bistoury alone. The relief is marked at first, but does not last.

Where the external os is the locality of constriction, and even occlusion, the treatment is more difficult. Here I have been quite unable to pass the sound or hysterotome farther than into the cervical canal. And some care is requisite; for it is manifest that it is often difficult to know *à priori* whether, after all, we have not to do with an undeveloped uterus; and whether really what we call only cervical canal is in fact not the entire uterine cavity of a uterus which has not enlarged from childhood *pari passu* with the other organs. I have seen this condition several times; and this in women with large breasts, well developed external parts, and strong sexual desires, thereby evincing the complete maturation of the ovaries. The feel of the uterus, if the woman be not over-fat, its lightness and small size, may help the diagnosis, particularly if there have been absence of all appearance of menstruation in previous years. But in others, where, although insufficient in quantity, a sanguineous discharge has been occasionally observed, and especially if there be much *embonpoint*, the diagnosis is oftentimes very difficult. In the first variety, if the catamenia appear regularly, I have found the best plan is to wait for the catamenial period; and on the second or third day, when this has been firmly established, the catgut bougie has been easily introduced, and gradual dilatation rendered possible, until at length the hysterotome could be passed in, and the incision to enlarge the passage made. But in the second variety, where the catamenia have been very irregular or absent, I have adopted a different plan. Formerly, I used to employ a piece of pointed deal, surrounded by cotton wool, which was pushed in as far as it could go, and kept *in situ* by a plug of cotton from behind. In this way, I have been gratified to find that it seemed to penetrate further every day, till, in about four or five

days, I could get a small bougie into the uterine cavity. The treatment thenceforward was very simple, and exactly resembled that in the case last mentioned. In one case, where the uterus was large, and in which menstruation had formerly existed, and a child had been born, this secretion was suspended, and I could not get the smallest bougie to penetrate further than up to where the internal os should be. Here I daily introduced the wooden plug; but, after its removal each day, I made, by a small bistoury, a puncture about a line in length, in the direction of the uterine cavity. In the course of about a week, the uterine cavity was entered; and, by the subsequent dilatation and the use of the metrotome, my patient made a good recovery. I pursue the same plan now, only I use dried sea-weed as my plug, in lieu of the piece of deal. This acts also as a spongetent.

Short, however, of actual stricture, or even much narrowing of the canal, there are conditions of the passage which, whether due to tumefaction of the lining membrane, to the presence of many rugæ, or to an irritable condition of the membrane not very different from that of irritable stricture of the urethra, often induce dysmenorrhœa, and seem to keep up uterine congestion and sterility. In many of these cases, the hysterotome, carefully employed, brings about a radical cure. I do not deny that some of these might get well by local depletion, such as leeches and purgatives, etc.; but a relapse in cases so treated is more common. The use of the hysterotome is preferable in these examples, especially as the cut made may be much more limited, amounting to little more than internal scarification.

2. It is, however, in *chronic endometritis*, which persists for years, and which torments not only the patient, but proves by its constant recurrence very disheartening to the accoucheur, that the hysterotome may often be very advantageously employed. In my lectures delivered at the Samaritan Free Hospital, on Endometritis (p. 47), I spoke of two varieties of endometritis, which I ventured to designate as the *senile* form and the *intermittent*. In the first, called *senile* because commonly found among old women, the obstruction is found chiefly at the *lower* part of the cervical canal; and the accumulation of leucorrhœal discharges occurs above, giving rise to much uneasiness, pain, bearing-down, backache, etc., until the accumulation forces open the os, and the contained matters are expelled, with full relief to all the symptoms. The *intermittent*, where the obstruction is chiefly due to stricture or occlusion of the internal os, and where, in addition to the previous symptoms, those of *pseudo-pregnancy* are also developed. I do not stop here to dwell upon these forms of disease. Suffice it to say, however, that in these cure can only result by laying the passage freely open, which is most effectually done by the instrument in question. Supposing, however, that the quantity of fluid retained *in utero* is large, as, for instance, in cases of retained menses from stricture of either os, must the treatment pursued be identical? My reply is, certainly not. We must bear in mind that the uterus moves up and down with the movements of respiration. If the speculum be introduced, this may be seen. If the patient take a deep inspiration, the uterus is pushed downwards; it, on the contrary, rises with expiration. I have measured the extent of this movement, which is considerable, by the *kinometer*, over and over again; and the fact is well known to most accoucheurs. If we have now a large uterine cavity, containing an amount of fluid, and lay open the external os, air will rush into the cavity with force during expiration. We may thus induce the formation of putrid contents in the uterus—a condition with which I have met. It is for precisely the same reason that we should not open an *ovarian* cyst *per vaginam*: air will penetrate; the contents become purulent and fetid; and death very often, almost invariably, will result. It is for this same reason that, in cases of retained menses which are allowed to come away *per vaginam*, death is not unusual. An opening *per rectum* has not the same disadvantage. The sphincter here prevents this suction of air upwards during expiration. In cases of cellular abscess which open or are opened *per vaginam*, the same objection does not apply. Here, as you may convince yourselves by the kinometer, and as the uterus is fixed, the movements of respiration have no effect, and hence the danger is less. If, therefore, the opening be made by the hysterotome, it should be free; and it is a *sine quâ non* to wash out the uterine cavity, and frequently so, with warm water, to prevent fœtid accumulations. Even then much trouble is entailed. It appears to me, therefore, that if the quantity of fluid contained be great, it is wiser to remove it first *per rectum*, before we lay open the uterine os. The neglect of this simple precaution may prove the cause of a patient's death, as its observance may ensure the patient's safety.

3. There are two diseases, *retroversion* and *anteversion*, to which women are very liable, and which not unfrequently give rise to much inconvenience. Occasionally, indeed, the woman becomes a complete invalid. In the former especially, I have found the hysterotome in many cases curative, not only in removing the retroversion, but the sterility which is not unusually present in this affection also. I have elsewhere explained (*Lectures on Endometritis*) what I believe to be the etiology of this affection; namely, congestion of the body of the uterus, superadded to an effort to lift up a weight, or a sudden fall. The cure in these affections is through the *loss of blood*, which relieves the congestion, and enables the previously top-heavy organ to recover itself. What I have here said will explain the advantage to be derived by its employment in cases of simple uterine congestion with prolonged cervix or ulceration—conditions usually relieved by leeches, but which can be far more readily and quickly cured by the hysterotome. The blood lost is in these cases more *rapidly* lost, and flows more *copiously*. The effect produced is more permanent therefore; and, if followed by those remedies which, like secale, strychnine, and a few others, have the effect of *contracting* the uterus and its muscular parietes, the blood does not again accumulate in the vessels, which recover their full elasticity and tone where they were before passive, and a cure follows.

4. There is only one other affection to which I must incidentally refer. In most if not in all cases of *hæmorrhage due to the presence of fibrous tumours*, it has been shown that opening the os freely nearly always diminishes, mostly arrests, all hæmorrhage. I have so lately and so fully discussed this subject in my Lettsomian Lectures, which have been published in your JOURNAL, that I need say no more on the subject here.

It will thus be seen that I am an advocate for the free use of the hysterotome, and that I do not apprehend any danger from its use in experienced hands and with a proper instrument. It only remains for me to explain the *modus operandi*, and the several instruments which I would recommend.

The hysterotome first employed by Dr. Simpson is a well known instrument. It cuts only on one side, and requires to be applied twice, on the opposed uterine surfaces. In or about 1849, I brought out the instrument I now show you, manufactured by Mr. Maddox—a double instrument, which has done

ood service. It is also upon the bend: so far an advantage. Its defect is, that it wants power; and, ke Dr. Simpson's, it makes the cut in the neighourhood of the internal os as broad as that at the xternal os. This is a mistake, and is one cause of he fatal hæmorrhage which has sometimes, it is said, ccurred. This hæmorrhage proceeds from the cirular arteries which are placed in the neighbourhood f the internal os, so well depicted in Dr. Savage's eautiful plates, and which must necessarily be ounded if the incision at this spot be here too exensive. However, as at this point it often happens hat the uterus is constricted, the whole thickness of he organ may be cut through, or nearly so, and may e the cause of not only hæmorrhage, but also periconitis. It is here that my friend and late colleague Dr. Greenhalgh has made a signal improvement in the instrument, which has been still more simplified by my colleague Dr. Savage, and modified again by myself.

Look now at this instrument of Dr. Greenhalgh. You introduce it as an ordinary straight sound. As you press your index finger against this stop, and pull down at the same time the instrument, the knives start out, one on each side. However, they start out but little at first; but, as they descend, they start out more. The cut thus made is triangular. Note now in this plate the position of the circular arteries. They are entirely avoided. Here, then, lies the improvement. It is difficult by Dr. Simpson's instrument, or mine of 1849, to avoid cutting too deeply above; but by this instrument you cannot, if you would, do so. I do not say that, in the hands of a skilful practitioner like Dr. Simpson, he might not with his instrument cut triangularly, as you must with this; but, with my hands, I should be more confident to use Dr. Greenhalgh's.

One great advantage of Dr. Greenhalgh's instrument is, that it is narrow, and can be used without a speculum, there being on each side a *guard* to prevent the vagina being wounded. Its narrowness also admits of its employment in a virgin. There is no doubt that this instrument, made by Mr. Weiss, is a perfectly straight hysterotome. The objections are, its *price*; its occasional difficulty of application—at least to me, for Dr. Greenhalgh does not admit this; and its not being on a curve.*

Let us now look at Dr. Savage's hysterotomes. I give you his own description, with which he has favoured me.

"No. 1. A straight double action hysterotome, something like Smellie's scissors. The blades, when closed, slightly pass each other, so that each cutting edge is sheltered by the back of the opposite blade. The handles are strongly bowed, to suit the hand. A spring within the bows closes the blades the moment the pressure of the hand is relaxed.

"The cutting action is regulated by a screw and moveable button at the end of the bows.

"The blades, when closed, form a stem not larger than an ordinary uterine sound.

"Dr. Savage uses it with or without the speculum. In a practised hand, a regularly conical incision is readily made, by graduated compression of the bows, as the instrument is being withdrawn. The blades fall back the moment the compression at the bows is relaxed. This also is manufactured by Mr. Weiss.

"No. 2. *Straight Hysterotome.* Two long plates of metal, prolonged into a stylet, about the size of a uterine sound. Two thin cutting blades, one behind the other, within, and, when closed, entirely protected by the hollow stylet. Each blade is prolonged into a shaft, curved in a direction contrary to the cutting edge. The shafts, like the blades, are entirely covered by the metal plates, and are attached below to a single handle by a moveable joint. A pin on each side, passing through both the metal plates opposite the commencement of each curve in the shafts, force each blade to project more and more, as the shafts are drawn down by the stylet-handle between the metal plates. The latter terminate in a shield. By placing the thumb against the shield, so as to retain the instrument in the uterus, the handle is easily drawn down by the remaining fingers of the same hand. The organ is thus held *in situ* by the stylet all the while, the blades, gradually divaricating, cut their way out as they descend, making a conical incision, the shape and extent of which obviously depend on the figure of the curve and proximity to each other of the pins.

"The instrument is regulated by a forked spring, moving the pins. After the curve has passed the pins, the blades fall together between the metal plates, and can be easily withdrawn without danger to the vagina. This was manufactured by Matthieu of Paris.

"No. 3 *Straight Hysterotome,* with action the same as the last; but it was found that the length of the incision in the former varied with the position of the pins. In this, there is substituted for the pins, a plate of metal, which turns on a centre; so that the width of the incision can be varied without variation as to its length. This arrangement is the invention of Mr. Foveaux, of the firm of Weiss in the Strand.

"In both the latter instruments, the blades fall back the moment the incision is completed. The metal plates are apparently scarcely wide enough to protect the vagina. Of course, this objection is at once removed by making them wider; Dr. Savage, however, says he prefers the plates as they are.

"Cases of failure after the use of hysterotomes are often effectually treated by a more deliberate operation after Sims's method. The position of the patient is on the side. A Sims's speculum, held by an attendant, draws back the perinæum and back part of the vagina. The uterus is drawn forwards by a fine hook attached to the posterior lip, and a knife with a long handle and a moveable blade, which acts laterally—that is, on the flat—previously fixed at an angle suitable to the case, makes an incision, first on one side and then on the other at discretion. This instrument, No. 4, is Dr. Savage's modification of Sims's knife. It is double-edged, and, for the sake of portability, is divided into three parts. Any number of small blades, having these trunnion knobs, can be firmly fixed on the holder, which is an ordinary bivalve holder, with holes for the reception of the trunnions."

I pass on now to speak of my own. This was manufactured by Mr. Coxeter, and, as you may suppose, it is the one I prefer.

The internal mechanism is similar to that made by Matthieu for Dr. Savage, with one or two little improvements. The groove in which the pins play being not straight, but inclined outwards, so that they do not fall inwards when they have reached a certain point. The parts come off at once, without unscrewing the pins. But the principal merit, I think, is the curve. The distal end of the instrument is straight. The part which penetrates the uterus, and two-thirds of its length beyond this, consists of a semicircle. The blades, as they open and are pulled down, thus descend in the same plane, and the cut surface is, therefore, uniform. In all the curved instruments I have seen, the uterine portion may be curved, but the other portions are straight. Hence, the blades are forced out of position, and

* Dr. Greenhalgh's first instrument was on a curve, but only in its extreme end.

make an irregular cut. The objection is the breadth of the shoulder, and the difficulty of its application in a virgin. My reply is that, in such cases, hysterotomes, if used, and if the hymen be an obstruction, should be preceded by a sponge-tent to dilate it. But besides, though the shoulder be wide, yet the finger is round, and the aperture required to admit the latter will, after all, admit the former. Again, it is more readily applied in cases of ante- or retro-version. And its cost is very much lower; at least one-third that of Dr. Greenhalgh.

But all the hysterotomes in the world will not answer, in many cases, unless measures be taken to keep the incision open. It may be laid down as a rule that once we have a canal lined by mucous membrane which has contracted, although it may be safely dilated, it will, as a rule, have a tendency to contract again. As, moreover, it was usual, occasionally, that these cases bled a good deal after the use of the hysterotome, the custom has been to plug with oiled lint the cut uterine cavity, both to restrain the hæmorrhage and keep it open. I have, as others, usually kept this plug in forty-eight hours before removal, and then substituted a metal pessary; occasionally, a sea-tangle-tent. The former are less irritating; but often fall out.

Now here it is that my friend, Dr. Greenhalgh, has invented a metal uterine pessary, to which I must give the palm. I now show this intrument, manufactured by Weiss. It is made of silver, and looks like an ordinary hollow, slightly curved, metal tube, rounded at the distal end with a shoulder at the other. In reality, it is made of two lateral halves, which separate by a spring; and it, also, has one large aperture at each side. By means of a central wire, which fits through projecting rings inside the tube, it is admitted closed. When the wire is withdrawn, it opens; thus keeping the dilated organ patent; and, as not only is the pessary open, and thereby prevented from falling out, but as the sides of it have also lateral apertures in them, the catamenial flow is not prevented, and it may be worn, and is worn, safely, by patients who are menstruating. One other advantage is this. Owing to the spring before referred to, were the circular uterine arteries cut, the apposition of the sides of this stem pessary against them would, by pressure, check all hæmorrhage. With these instruments, it must be a bad case, indeed, which will not be kept open. I may say, these silver uterine pessaries, after cutting by the hysterotome, if not too long, so as to press against the fundus, give rise to very little if any inconvenience, though kept in for months.

Testimonial to Mr James. Mr. James, on his retirement from the Melbourne Hospital, has been presented by the committee with an address, elegantly engrossed and illuminated on vellum, expressive of the high satisfaction with which they very properly regarded his conduct, during the long period he was connected with the hospital.

An Artful Suicide. That druggists are not always to blame for deaths which had been ascribed to their carelessness, is well shown by a case referred to in Dr. Taylor's report. It is that of a man who bought four ounces of Epsom salts of one druggist, and half a pound of oxalic acid of another. He then emptied the Epsom salts from the papers, replaced them with oxalic acid, and then poisoned himself. The substitution was afterwards proved by the circumstance that some crystals of Epsom salts were found remaining in the folds of the paper, and thus the druggist was acquitted of blame, and the fact of suicide established. (*Chemical News.*)

Illustrations
OF
HOSPITAL PRACTICE
METROPOLITAN AND PROVINCIAL.

LINCOLN COUNTY HOSPITAL.

DISLOCATION OF FEMUR OF FIVE WEEKS' DURATION REDUCTION.

Under the care of T. Sympson, Esq.

[*Reported by* C. Harrison, M.D., *House-Surgeon.*]

H. C., aged 11, was admitted November 2nd, 1863. He stated that, five weeks previously, he was riding a horse, which galloped off and threw him; he fell on his right hip, and could not raise himself. He was afterwards seen by two surgeons, who tried to reduce the dislocation with pulleys; but, not succeeding, left him to be a cripple for life. His friends were, however, advised to send him to the hospital. On admission, the head of the femur could be distinctly felt on the dorsum ilii; and when he was in the upright position, the foot of the affected side, rested on the dorsum of the opposite foot. In the measurement, from the anterior superior spine of the ilium to the outer malleolus, the limb was two inches shorter than on the opposite side.

November 3rd. He was placed under the influence of chloroform; and the pulleys were applied in the usual manner, but unsuccessfully.

November 4th. Chloroform was again administered; the pulleys were applied; and suddenly, the extension being removed, the head of the bone slipped into its proper place.

November 11th. He was allowed to get up; and was discharged cured on the 23rd.

EMPYEMA; PARACENTESIS THORACIS; RECOVERY.

Under the care of S. Lowe, Esq.

[*Reported by* C. Harrison, M.D., *House-Surgeon.*]

John S., aged 18, farm-labourer, was admitted October 14th, 1863. He stated he had always enjoyed good health until last May, when he took cold, and was suddenly attacked with giddiness and rigors, followed by pain in his chest, cough, and slightly bloody expectoration, with great dyspnœa. This state continued about three weeks; and then his chest began to swell on the left side. He had been under treatment at the Dispensary as an out-patient; but, the swelling on the left side of his chest having gradually increased, he was advised to apply at the hospital. On admission, the left side of the chest was much larger than the right, and altered in shape; the intercostal spaces bulged; there was dulness all over the left side, and the vesicular murmur was inaudible; there was no vocal fremitus. Respiration was puerile on the right side. The heart was displaced, and beating on the right side of the chest. He could only breathe in the upright position. He expectorated a great quantity of muco-purulent matter; had diarrhœa, loss of appetite, night sweats, and hectic.

December 19th. At 10.30 A.M., the dyspnœa having become more urgent, paracentesis thoracis was performed in the usual manner, and two pints of sero-purulent fluid were evacuated. The tube was fastened in, to remain. At noon, he had slept about an hour, and breathed better; and the cough was much easier. At 7 P.M., as the breathing was rather more

mbarrassed, three-fourths of a pint of pus was evaluated; after which he breathed easier.

December 20th. He had slept during the night for several hours. Ten ounces of pus were evacuated. He was ordered a mixture of ammonia and cinchona, with beef-tea, wine, and egg-flip. Pus was evacuated on the 21st, 22nd, 23rd, 24th, 28th, and 30th.

Jan. 1st, 1864. He was greatly improved. His appetite was much better; the cough and breathing were greatly relieved; the expectoration diminished. He slept well. Air could be heard to enter the lung.

Jan. 6th. The tube was removed, as no pus flowed through it.

Jan. 13th. There having been considerable discharge from the wound, the tube was reintroduced, and about twelve ounces of pus were discharged.

On several other occasions, pus was evacuated through the tubes; a quantity also escaped by the side of the tube. He gradually improved; the discharge ceased; the wound made for the tube healed; the heart returned to its normal position; air freely entered the lung; the left side of the chest became resonant on percussion; the cough and expectoration gradually ceased; and he expressed himself as well as ever he was in his life, and was discharged cured April 4th, 1864.

In this case, fluid was evacuated through the tube on fifteen separate occasions, to the amount of 230 ounces in all.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. Vose Solomon, F.R.C.S.

[*Continued from page* 328.]

Case vi. *Traumatic Cataract; Choroiditis and Great Tension Unrelieved by the Extraction of the Cataract; Intraocular Myotomy, followed by Cure.* Edward A., aged 40, was admitted an out-patient in June 1861, with traumatic cataract of the left eye, from a blow received four weeks before. The soft lens matter was removed by Gibson's operation (the linear extraction of Von Gräfe), and the pupil maintained well dilated by atropine. Nevertheless, the choroiditis and great tension which existed on his admission continued. On June 11th, the tension was very great, and the vitreous humour was turbid. A convex glass rendered the vision worse. Intraocular myotomy was performed to-day, and fluid discharged from the eye. In ten days (June 21st), the tension was normal. With a two-and-a-half-inch glass, the patient reads a few words of great primer (Jäger's 12). On August 2nd, three weeks after operation, the eye was normal as respects tension and choroiditis. Minion type (Jäger's No. 4) could be read with ease. No relapse occurred.

Case vii. *Subacute Glaucoma Supervening on the Depression of the Nucleus of a Cataractous Lens; Intraocular Myotomy, followed by Relief to Pain and Tension; Cure.* Mrs. T. was operated upon by solution for cataract in the left eye, and the small hard nucleus was depressed, in August 1859. Her health was, and had been, very feeble.

On May 4th, 1860, the globe was hard; the choroid veins were enlarged; and vessels extended over the margin of the cornea, which membrane presented scattered opacities. The vitreous humour was turbid; yet, in the absence of the neuralgic pains, from which she suffered severely, the vision was reported to be good. Intraocular myotomy was performed to-day. The muscle, or a false membrane, behind the iris, cut like ligament. A full discharge of straw-coloured fluid followed the incision. In four days (May 8th), the eye was easier than it had been for the last six weeks. In consequence of the illness of her husband, the patient failed to attend again till August 28th, 1860. On that day, the enlargement of the ciliary vessels was nearly gone; in place of a ring of broad dilated vessels, a few of small calibre only remained. The tension had given place to elasticity. With a two-and-a-half-inch double convex lens, she read pica type. The neuralgic pains have been less severe and frequent ever since the operation; they were relieved by the use of atropine drops. On November 7th, the eye was normal, and possessed clear vision for small type, when aided by a cataract-glass.

This case is not altogether conclusive, as very severe irritation, occurring after depression, sometimes completely subsides on the absorption of the lens, and excellent vision is obtained. But I have never seen such a result where the cornea had become opaque and vascular, as in this patient.

In two years afterwards, I extracted, through a full section of the cornea, the lens of the right eye. She left the hospital in a fortnight, with an eye as perfect as is possible after such a surgical operation.

Case viii. *Myopia; Subacute Glaucoma; Intraocular Myotomy, followed by Improvement; Relapse at the end of two years.* A cane-splitter, aged 38, who had been near-sighted all his life, was admitted June 1862. The right eye had always been very imperfect; and since an accident which occurred to it about eighteen months before, the vision had been gradually lost. The left, which had been growing more near-sighted, was rendered dim and still more myopic by the accident. When he moved his eyes quickly, flashes were seen. In about six months from the occurrence of the injury, he ceased to be able to read; and experienced so great difficulty in getting about in the dusk of evening, that sometimes he inadvertently ran up against persons in the street.

On his admission, a thin, diffused opacity occupied the middle third or fourth of the cornea. It appeared to be of old date. The eyeballs were of stony hardness; the pupils were dilated; intercurrent obscurations and iridisation were experienced. The field of vision was much contracted. He suffered from constant frontal headache, and saw objects like stars during the day. He could see to cut his nails at about five inches; but not his dinner. Roman type (Jäger's No. 20) could not be read. Most of these symptoms were observed by the patient to occur about six weeks after the injury to the right eye.

On June 7th, 1862, intraocular myotomy was performed on both eyes.

June 21st. For several days he had been able to read No. 20 at sixteen inches with clearness, and could cut his finger-nails at seventeen inches.

July 1st. The optic discs were gray and slightly cupped. The vessels on the right were much curved, on the left very attenuated. A narrow staphyloma posticum surmounted the upper circle of each disc. The tension of the left globe was much diminished. He could now see finger-nails at twenty-four inches, instead of five only. The frontal headache, flashes, etc., subsided immediately after the operation.

July 29th. Features were distinct at two yards. With a concave eighteen-inch lens, vision was much improved.

The necessities of the poor man's family obliged his return to work almost immediately after these notes were taken. At the end of two years (I had occasionally seen him in the intervals, and found the reduced tension maintained), he returned to me with hardness of the eyeball and impaired vision.

Remarks. The supervention of glaucoma, or even exalted eye-tension, upon the myopic condition, is a

most serious complication, and should be at once met by a surgical operation that is competent to remove the intraocular pressure. For the relief of this state in some, I have performed iridectomy; in others, "division of the ciliary muscle", as it has been called. The results have not been very satisfactory, although no accident marred the operations. With one exception, the disease was far advanced. Among the illustrations of the treatment of glaucoma by iridectomy, instances will be related in which the relief following the operation was not maintained. Indeed, it seems unreasonable for surgeons to have anticipated that it should be otherwise, when we consider the great tendency to atrophy of the tissues which marks the progress of the disease under consideration, and, moreover, that atrophy of the optic nerve-fibres will occasionally precede the occurrence of eye-tension. If my theory be correct, that the operation beneficially affects the nutrition of the eye through the ciliary ganglion, the early application of intraocular myotomy or iridectomy in certain carefully selected cases of atrophy of the optic nerve, would be sound practice.

Case ix. *Chronic Glaucoma; Intraocular Myotomy; Cure.* Mrs. B., aged 40, was admitted March 31st, 1860, has had symptoms of glaucoma in the right eye for nearly four years, and in the left for fifteen months. The right eye presented chronic glaucoma, opacity of the lens, and stony hardness of the globe. There was complete amaurosis. The left eye was of stony hardness; tension, T 3; the cornea was of normal curvature; its sensibility below par; the sclerotic was white, like porcelain; the ciliary vessels were enlarged, tortuous, and pink; the pupil was dilated and motionless; the iris was bright and convexed, so that the anterior chamber was shallow. The humours were pellucid. She read, with convex glasses, small-pica (No. 8 Jäger); but it was not clear at any time.

Intraocular myotomy was performed, April 10th, on the right eye; on April 14th, on the left. Both eyes lost their hardness, and the vision of the left became clear and steady. She wrote on June 17th, "the mist through which I used to see objects has vanished away." When last heard of (Nov. 29th, 1860), the improvement was retained.

Case x. *Amaurosis (T 3); Excavation of the Optic Disc; Intraocular Myotomy; Temporary Restoration of Vision.* J. O., aged 70, was admitted July 23rd, 1861. He was exceedingly deaf, and was sent to me by my friend Dr. Walker. Both eyes were of stony hardness. The left had been blind two years; the right about six months. His face was livid, and the integuments of the nose were highly hypertrophied. He denied having been other than a sober man. In the right eye, there was atrophy of the optic nerve. The retinal arteries were very minute; the veins, which were very irregular, indicated cupping by being interrupted at the lower rim of the disc. Intraocular myotomy was performed as a *dernier ressort*. He was ordered to have a blister behind the ear. In seven days (July 30th) tension was diminished; the patient recognised shadows of fingers and the window-frame. In fourteen days after the operation, he counted fingers, and made out a word of No. 18 (Jäger's). The tension was too great, but not excessive.

September 9th. He read Roman type (Jäger's 20). Features were clear to him at two feet distance.

October 14th. There was a relapse. He could not read No. 20, although the tension was normal. The optic nerve exhibited advanced atrophy; the vitreous humour was more clear than heretofore. Spectacles did not relieve him.

Case xi. *Chronic Glaucoma; Objective Symptoms and Pain removed by Intraocular Myotomy.* L. H., aged 65, admitted May 15th, 1860. She had been stone-blind and suffering great pain for eight months. The eyes were hard as stones; the corneæ rough and vascular; the conjunctivæ injected; the pupils widely dilated; the lenses opaque and green; the irides were of a dull lead hue.

On May 15th, intraocular myotomy was performed on both eyes, for the relief of pain. On the 25th, it was repeated on the right eye.

July 30th. Tension was moderate; there was no pain; the corneæ were clear. The patient's vision was as on her admission.

[To be continued.]

Transactions of Branches.

MIDLAND BRANCH.

CASE OF ABSCESS FORMING A FISTULOUS OPENING BETWEEN THE BOWEL AND THE BLADDER.

By Henry Goode, M.B., etc., formerly Physician to the General Infirmary, Derby.

[Read October 15th, 1863.]

The injury I am about to detail occurred to a man aged 43 years, robust and muscular, of active bodily habits, sound and healthy in all his organs, well able to undergo all the fatigue incidental to the amusements of a keen sportsman. At the beginning of September 1862, he was in robust health; but began, shortly after this, to experience a pain and weight in the front part of the abdomen, about halfway between the umbilicus and the pubes, on the left side of the linea alba, with slight tenderness on pressure; and he complained of a difficulty in doing acts such as the clambering over a stile, and in drawing himself erect again. Then came a slight lassitude and failure of appetite. But still, though he felt unequal to continue his sporting expeditions, the symptoms were so far from being urgent, that he did not for a time think it necessary to apply for medical assistance.

I saw him accidentally, for the first time, on October 26th; at which period he complained of pain in the small intestines, flatulence, and nausea, and distress at the neck of the bladder in passing water, the urine being high coloured and scanty. An examination of the urine showed nothing unnatural in this secretion, except that boiling threw down a deposit of phosphates, soluble in dilute nitric acid—a very usual symptom in irritation of the intestines. On November 7th, the urine was first observed to contain a little mucus; and a few white flakes floated in it, resembling minute portions of paper: these, on being viewed through the microscope, proved to consist of granular corpuscles, and, as events subsequently showed, were the first indication of inflammation in a part of the mucous membrane. About the middle of this month, he began to find tenderness in the region of the cæcum, with occasional attacks of spasm; and the dull pain on the left of the linea alba continued unabated. For the next month there was little change, except a gradual increase in the mucus and white flakes of the urine. Blisters and other remedies were resorted to, but all seemed of no avail; and, becoming impatient, the advice of my friend Mr. Fearn was sought by the man's friends, who agreed with me in considering that there was evidence of some obscure inflammatory action of the peritoneum covering the small intestines, if, indeed, there were not an abscess situated among them. On passing the hand down the left flank, a rough sensation was perceived, as if the

bdominal wall were studded with minute tubercles; nd this effect we supposed to be caused by lymph ffused on the peritoneal surface. At the time, hese symptoms were attributed to undue exposure o wet.

On December 23rd, the urine was still free from lbumen, but loaded with mucus and the floating white flakes. There was also tenderness and swelling of the right cord and testicle. Shortly after this, here began to be a passage of wind by the urethra, succeeded in a few days by a quantity of dark matter with small lumps, which was described as having exactly resembled the loose fæces passed about that time from the bowel; and, on December 30th, the urine was found to have become strongly albuminous, and to contain much pus. It became evident that a communication had taken place between the bowel and the bladder, apparently by the bursting into the bladder of an abscess communicating also with the bowel. Still there was no evidence of disturbance in the rectum or large bowel, and no urine has subsequently been detected passing by the anus; on the contrary, the fæces were usually of a solid consistence, such as belong to a state of health. The patient found that, when lying on the left side, this posture most promoted the passage of flatus and little particles from the bowel into the channel leading to the urethra.

The treatment adopted at this time was to administer sedatives to lull the irritation; and to prevent motion as much as possible, that adhesions might form, if they would, to close the opening. The flow of the pus into the bladder irritated the mucous lining of that organ and the urethra, and wore down the patient to a state of great emaciation; but the urine by degrees became more free from pus; and on Jan. 13th he felt so well, that he got up from bed, and walked down stairs several times. This movement caused an increase of the pus, and renewed the irritation of the bowel and bladder; and it was noted especially on one occasion, that he lay on his left side during the night, and the next morning passed in his urine a considerable quantity of orange-coloured pulpy matter, which proved, on examination, to be the pulp of oranges eaten during the night.

On the 20th, he experienced much pain in the neck of the bladder, and much increase of irritation in passing his water; this lasted for two days, until, on one occasion of passing his water, he discovered in the chamber-vessel a small triangular fragment of a plum-stone, with the three angles exceedingly sharp. After this, the irritation subsided to the same condition as before; and, though this continued to wear him down, his tongue and stomach, on the whole, continued good, with the exception of occasional slight bilious attacks of one or two days' duration. He noticed, about February, a singular symptom, which continued always afterwards: that whenever he drank any alcoholic liquid, of the nature of wine or brandy, he immediately felt a sharp pain shoot down to his bladder and urethra.

Towards the end of February, he was again so much better, though much emaciated, that he took a drive in a carriage; but the result of the shaking during his ride brought again an increase of the pain and disturbance, and more flatus passed by the urethra. After this, he kept himself still at home; and through March he gradually improved, insomuch that, at the end of that month, no wind had passed by the urethra for a period of six weeks; the urine became more clear; and he began to walk gently about. At this time he was rapidly regaining flesh, even as much as five pounds weight in a single week. It was evident that at this time the fistulous opening was closed, and with the cessation of the consequent irritation came renewed strength; but, about the middle of April, it again became open, and he again rapidly lost the ground he had recovered. The pus in the water was not constant, but seemed to accumulate in the abscess, and be discharged every few days; and his emaciation became extreme. He was sounded for stone, but none was detected.

He noticed, at various times, the passage by the urethra of articles of food from the bowel. Thus, on one occasion he perceived some chopped mint, from mint-sauce he had eaten; on another, a fragment of strawberry with the seeds, and a fragment of a rook's bone. These fragments had a fæcal odour; but there was never observed any of the excretion formed peculiarly in the large intestines.

Towards September, he became well enough to go into the country; and, in the course of a month or two, recovered so much of his appetite and strength as to be able to walk with vigour, and his weight reached twelve stone; but the fistulous opening was never closed long at a time. He gradually, however, fell back again, and for the last twelve months has gone on without much variation, being not capable of much exertion. He informs me that lately, after taking some unwonted exertions, which strained him, for two or three days loose fæcal matter passed by the urethra, causing much irritation in the bladder, and consequent loss of strength and appetite; and during that time nothing whatever passed by the bowel, but since then the excretions have passed by the ordinary channels. He has not, however, recovered from the effects of this last strain, suffering from pains in the region of the left kidney, and swelling of the left testicle; but no tumour can be detected, and the granular condition perceived formerly in the abdominal walls has long since disappeared.

Such is the history of this almost unique case, which seems beyond the reach of art. As to the probable cause of the fistula, it seems not unreasonable to attribute its origin to the little fragment of plum-stone passed in the early stage of it. To this cause it was always attributed by the patient, who averred he had never eaten any stone-fruit since the beginning of September, when he partook of a plum-tart, before his illness began. If this were in truth the cause, the fragment must have become fixed by one of its sharp points in a fold of the mucous lining of the intestines, and there produced a perforation, with sufficient peritoneal inflammation to effect a union between parts of the bowel and the bladder; and, finally, it must have passed into this viscus. The general freedom of the colon from disturbance, with the nature of the little particles of fæcal matters detected in the urine, and the other symptoms, render it likely that the aperture in the bowel is placed in some part of the small intestines; and this supposition is further corroborated by the fact that injections by the rectum have never passed into the urethra.

An account of a case somewhat similar is recorded in the tenth volume of the *Transactions* of the Association. It is there stated that a little boy swallowed a pin, which ultimately reached the appendix vermiformis; and, causing this to become adherent to the posterior part of the bladder, passed through and lay in this organ, leading to the formation of a stone, which seems to have been the principal source of distress. But, for further particulars of that case, reference must be made to the paper itself.

In the present case, it appears that any means of closing the fistulous opening would effect a cure; but this we have no means of attaining.

Shortly after the above paper was read, the man alluded to sank under his disease. He was seized with a rigor, followed by persistent hiccup and vomiting, which yielded to no remedies, and, after continuing for several days, ultimately proved fatal, after two years of disease.

Sectio Cadaveris. On opening the abdominal cavity, the omentum appeared healthy. When this was raised, the coils of the intestines, in several parts below the level of the umbilicus, were observed to be firmly agglutinated by adhesions of old standing; but there were on the surface no traces of recent lymph. The stomach and the upper parts of the viscera appeared to be perfectly healthy; but the lower were green and discoloured, as was also the peritoneal surface of the bladder, to which the cæcum and adjacent portion of ileum adhered. The extremity of the appendix vermiformis made a nipple-like process in front. Behind the bladder, in the pelvic space, was a firm mass, about six or seven inches in diameter, which, on removal, was found to be a large abscess, with indurated walls of about an inch in thickness. This abscess was united to the bladder on its front, and above to the lower surface of the cæcum and adjacent portion of ileum; and it communicated freely with both the cæcum and ileum by several apertures in each, of sufficient size to admit the finger. At the lower part, the sac of the abscess opened into the bladder by one small aperture sufficiently large to admit the free passage of a probe, and situated between the orifices of the ureters; and thus the abscess formed a canal of communication between the bowel and the bladder. The mucous lining of the bladder was healthy. The wall of the abscess was firmly united to the rectum where it lay against it, but did not communicate with it. It appeared somewhat singular that, notwithstanding the free communications from the bowel, the sac of the abscess was empty and free from fæcal matters, which can only be accounted for by supposing that the pressure of the viscera maintained the two walls of the abscess in close apposition during life. In removing the diseased mass, a small collection of recent pus at one side disclosed the existence of a small recent abscess; and this was probably connected with the rigor and the gangrenous condition and the vomiting which ultimately destroyed the patient.

ON THE ADVANTAGES OF RETAINING THE STAFF IN THE BLADDER UNTIL AFTER THE EXTRACTION OF THE STONE IN LITHOTOMY.

By Edwin Morris, M.D., F.R.C.S., Surgeon to the Spalding Union Infirmary, etc.

[*Read at Lincoln, Dec.* 12, 1862.]

Unforeseen difficulties frequently arise during the operation of lithotomy, which considerably embarrass even the most experienced surgeon. Any suggestions, therefore, that may be thrown out with a view of lessening them, cannot be otherwise than welcome to the practical surgeon.

During my first operation for stone, I did not, as is usual, remove the staff until after I had extracted it. I was so struck with the simplicity of this proceeding, and the facility with which it enabled me, when I required, to pass my finger or forceps into the cavity of the bladder, that I have ever since adopted it when operating for stone. I witnessed an operation for stone on the opening day of St. Thomas's Hospital, at the Surrey Gardens, by Mr. Clark, when I noticed that he also retained the staff; and on that occasion it certainly did him good service. The operation was well and quickly done; but, from some cause or other which I did not hear explained, the extraction of the stone (which was by no means large) was a difficult and most tedious affair.

When we reflect for a moment upon the structure and position of the parts involved in this operation, and the various abnormal conditions in which they are frequently found, we shall no longer be surprised at the complications and difficulties which often occur to baffle the efforts of the operator, and to shake the confidence of the young surgeon. To be "forewarned is to be forearmed". A knowledge of this fact, together with a practical proof of the utility of the retention of the staff during the operation of lithotomy, is the only excuse I shall offer for having brought this subject before the notice of the members of this Association; and, had this plan invariably been adopted, we should not have been pained with reading accounts of trials in a court of justice relative to lithotomy, or with the details of a prolonged and cruel operation.

We will suppose, if you please, that the operation has been so far conducted that the knife of the operator has entered the bladder; urine flows copiously. "The staff is now to be removed; and a pair of forceps, adapted to the age and size of the patient, are then to be introduced." These are the written directions of one of our leading surgeons of the present day, attached to one of the largest hospitals in London. To this proceeding (with the greatest deference towards that gentleman) I am diametrically opposed. To withdraw the staff at this part of the operation is, in my humble opinion, to lose the key which would enable us to overcome nearly all the difficulties which may arise during the future proceedings of the operation. To enable us to judge of the utility of this proceeding, I must describe a few imaginary cases, where certain difficulties have arisen (and which have, in fact, frequently, too frequently, occurred), wherein the retention of the staff would have been of the greatest service.

The first case we will suppose is that of a child under eight years of age, where the operation has been so far conducted, and, in accordance with the usual custom, the staff has been withdrawn. It is found, however, that the opening into the bladder is too small, owing, probably to timidity on the part of the operator in using the knife at this particular spot. It is all very well to say, "Enlarge the opening by forcibly passing the finger through it," or rather through a mere puncture that has been made. All practical surgeons will tell you that this is not so easily done. The tissues are remarkably resisting, and not so readily torn—if they be, assuredly the force used to effect this will be productive of much mischief afterwards, which the surgeon will sincerely regret. The fact remains: the opening is too small, and must be enlarged. For this purpose, the operator passes his finger within the wound; and, after some exploring, he may or may not find the small opening. How useful he would find the staff at the moment; and if, by any chance, it had been retained, how thankful he would be! If he now attempt to reintroduce the staff, in all probability he will be foiled; the end of the instrument will not enter the bladder so easily, but become entangled at the small aperture already made; and it is just as likely that he would be guided in any direction than into the bladder. If he fail in reintroducing the staff, and depend upon his forefinger as a guide to the bladder, he is in great danger of forcing his way between the bladder and rectum, or of seriously wounding the latter. The above is not a fancy-drawn picture, but has actually occurred—to experienced surgeons too.

Another difficulty may also arise from the fact that the opening all the way has been made so small that in passing the finger, so as to admit of enlarging it,

you plough before your finger the surrounding tissues, which completely baffle you in your attempt to find the opening into the bladder. You then pass your knife along the finger, in the hope of reaching the bladder again; but, alas! the risk you run of inflicting irreparable if not fatal injury upon your patient is enormous. Now, in all these cases, had the staff been retained, the advantages gained by the operator would have been incalculable. And why not? It is not in the way, and does not interfere with the future movements of the operator.

What I recommend is simply this. After the bladder is opened, instead, as is customary, of removing the staff before the extraction of the stone, let it remain in the hands of an assistant, who hooks it up firmly underneath the symphysis pubis, and holds it there, out of the way of the surgeon. Should it be again required, it is ready at a moment's notice. If the assistant merely depress the staff, and bring its convex portion down on the perinæum, the operator with his finger readily finds it. He has thus at command an iron road into the bladder. If it be necessary, he can now with safety enlarge the opening with great facility. I have long since seen the necessity of such a proceeding, and have really wondered that it has not before been insisted upon by surgical writers and teachers. I have not, however, hitherto seen it alluded to, or noticed in any way, with the exception of the instance at St. Thomas's Hospital which I have before mentioned. I feel strongly upon the subject, and hope to hear of its universal adoption; and trust that those whom now I have the honour of addressing will on the first opportunity test the practicability as well as the utility of the proceeding. I could advance many reasons why it should be adopted; but I am at a loss to advance one single argument against, or objection to, the practice. Any observations I may have to make relative to the practice of retaining the staff until after the completion of the operation for stone must necessarily be brief; there is so little actually involved in it that requires explanation, further than that the staff should be retained. The more simple the way, therefore, in which the subject is introduced to your notice, the better. Had I, on the other hand, proposed a new mode of operating, it would have been necessary to have written an elaborate treatise about it, with a full detailed description of the structures involved in the operation, together with proof of the reasons why a new method should be adopted in preference to one which had been universally practised for so many years. The error which I wish to see corrected is one of *omission*, not *commission*, and does not involve the operative procedure usually followed. I make this apology for the shortness of the paper, and trust that you will not think the subject less worthy of your notice on that account. As far as I am concerned, my object is attained—the opportunity of bringing before you this really important matter; and I hope that it will elicit from some practical surgeon present his views relative to the practice, and at the same time draw the attention of the surgical profession to a subject well worthy their serious and attentive consideration.

Cultivation of the Cinchona in Australia. At the last monthly conversazione of the Victorian Acclimatisation Society, Dr. Mueller, in the course of a discussion upon Mr. Duffield's paper entitled "Some account of the quinine yielding Cinchonæ," thought it probable that the cinchona might be naturalised in the eastern parts of Gipps Land, in some portions of New South Wales, in Queensland, and in the northern part of New Zealand. (*Australian Med. Journal.*)

British Medical Journal.

SATURDAY, OCTOBER 29th, 1864.

DEATH OF ARCHIBALD ROBERTSON, M.D., F.R.S.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

One of the oldest of our Vice-Presidents has lately been removed by death. Dr. Archibald Robertson, a man known as a learned and accomplished physician, and at the same time a most genial and kind-hearted gentleman, died at his residence in Clifton on the 19th instant, at the age of 74. In early life, Dr. Robertson served for a short period in the Royal Navy; but afterwards settled in Northampton, where for many years he had a large and successful practice. He was highly respected by all; and his widely extending reputation rendered his practice very laborious in the later years of his active life. He retired from practice about ten years ago; since which time he has resided at Clifton. Notwithstanding his retirement, he maintained his feeling of interest in his profession, and was a warm friend and firm supporter of the British Medical Association, of which he was President at the meeting in Northampton about twenty years ago. He leaves one son—a clergyman of the Church of England.

THE MEDICAL PROVIDENT FUND.

The first meeting of the Directors of the Medical Provident Fund, to which we briefly alluded last week, and of which we give a detailed report in the present number, must, we feel, prove most satisfactory not only to the members of the Association, but to the profession at large. The number of Directors present, many of them coming a day's journey, and all coming from the duties of active practice, indicates how earnestly the cause of the Medical Provident Fund is espoused, and how complete is the machinery of the Association, when it is once put in motion, for carrying out this or any other useful work. The meeting shows, in truth, that as yet we know little or nothing of the real strength of our body. Its energies have been, as it were, laid aside, only to prove themselves the more powerful when exercised.

The character of the Directorate deserves special attention. As the Chairman remarked at the meeting, the Branches of the Association, from their local knowledge, have facilities for selecting the most likely men for fulfilling the duties pertaining to the office of Director; and we must state what we think few will deny, that on this occasion the Committee

of Council and the Branches have exercised a judgment which is most satisfactory. Without dwelling further on the qualifications of the members of the new Board, we prefer to turn to their work as the test of their capacity for the task they have undertaken. We think we may safely congratulate the Association on the first specimen of work done; while we may remove, by referring to it, all the scruples and objections which have been so enviously made in reference to the spirit in which the Fund was originated, and by which, it was presumed, it would be carried on.

On the question of the limitation of age, which was brought forward, as promised at the Cambridge meeting, the Directors did all that they could, under such limitation should not be enforced. At the same the circumstances, to meet the general wish that time, they could not shut their eyes to the fact that, on the present system of calculation, the extension beyond the age of sixty is, in an actuarial sense, unsafe. They therefore, allowing their judgments to balance their sympathies, have stated that it is their wish to put no obstacles in the way of any one who may desire to take advantage of the Fund; but that, as they have to deal with facts, they must meet them as they are presented. They therefore have referred the subject to their Executive Committee, commissioning that body to inquire whether, on some new basis of calculation and arrangement, the object asked for may be obtained. Those who know best the difficulties of dealing with the refined points of calculation on the value of health and life, will appreciate most readily the prudence of the course that has been pursued.

By an unanimous vote, the Board of Directors have determined to throw open the benefits of the Provident Fund to the whole profession. We expected from the first that they would do so. The act is but the echo of the prevailing tone of the meeting at Cambridge; nay, we believe, it is but the echo of a meeting held so long ago, that there are probably not twenty members who remember it. It was an act, for which there was no necessity for any one individual to assume that pressure was needed. It comes spontaneously from the heart of the Association. It carries with it useful administrative work, which the Association can do, and will do. It is not to be supposed that those who saw difficulties in the way were either insensible to the wants of the profession, or misguided in their judgments. In a strict and business point of view, these gentlemen, in matters of law and of honour, were sound—some thought too sound—in their views. They saw that the Association could carry out for its own members a safe and sure policy on the broadest principles, not only of mutual support, but of representation in its fullest sense. The Association will do this in a way that would admit of no misunderstanding—in such a way, that no man could say to another, "You aim to act for me without consulting me, and to usurp rights which I cannot yield." This was a strong argument; its bases being unity of purpose and of action—bases which constitute the essentials of mutual support and aid. There also was the legal argument, equally strong and definable; but there was still another—namely, that it was not just to ask men to enter as units of a general scheme, even for their own benefit, and not at the same time allow them to take part in the management of that scheme. Yet, on the assumption that the Association must take the initiative and be the organising body, there remained no other course than that which was adopted, in which it could proceed. The difficulties, always reasonably put forth, have been removed by the experiment of cutting the Gordian knot, and trusting to time and circumstance for the removal of any dangers that may arise. We have said that this was the only course that could have been pursued; and we accept it the more readily, because we know that it will be carried out by men who will not lose sight of its dangers, and are ready and liberal enough to meet every emergency. So far as the mere welfare of the Association is concerned, nothing but good can, we think, follow the measure that has been taken. It cannot be expected that any member will leave the Association because it seeks to do good beyond its own limits; and it may be expected that many subscribers to the Fund, by being brought into contact with the Association, and seeing the advantages of belonging to it, will join it also. We rather hope, in truth, that the addition of members to the Association through the Fund will be so in accord with the progress of the provident scheme, that no special legislation will be necessary for subscribers outside our body.

The Provident Fund now fairly afloat, its rules in course of formation, and its officers fully appointed, nothing more is required than the individual support of our members to render it one of the most substantial and extended institutions of the day. There need now be no medical man who, in sickness, may not claim as a right, when ill, a sum at the rate of £100 a year—a sum on which many a country curate has to pass for rich during health—a sum which, if not great, is adequate to meet pressing anxieties, and which, in course of time, it may be found possible to increase largely on payment of an increased premium.

One word more, in relation to the Guarantee Fund. This Fund, raised up to the present time by the sole exertions of one of our members, amounts to nearly £400. Why, by a moderate effort on the part of several individuals, should not these hundreds be turned into thousands, and the provident design rest on a monetary basis that shall place it at once beyond all danger? This question is now no longer associational, but in its widest sense professional; and

amongst the wealthy and moderately wealthy we cannot but believe that there are some hundreds who, if appealed to, would lend their willing aid to promote the great object to which we have directed attention. We would urge the Directors to make this effort a part of the business of their office. We would urge the Secretaries of Branches to take up the same action. And to every associate, even though he should be an intending benefited subscriber, we would suggest that a contribution from himself and friends to the Guarantee Fund will be the readiest means of ensuring the success of an institution of which the Association will always have occasion to be proud, and the profession to be thankful.

A PUZZLING CASE.

A RATHER remarkable case is now undergoing investigation before a coroner's jury. A gas-inspector was picked up in the Green Park, on Friday, the 30th ultimo, in a state of insensibility, taken to St. George's Hospital, and pronounced by Mr. Jones and Mr. Freeman, resident medical officer and house-surgeon, to be drunk. After lying there for a couple of hours, he recovered somewhat, and was delivered over to the police, who, not knowing his address, locked him up for the night. Next day, his wife and a friend bailed him out of custody; but finding him very ill, took him to the Westminster Hospital, where he died on Wednesday, the 3rd instant. He was covered with bruises on admission; and a *post mortem* examination revealed, as the cause of death, a fracture of the skull, with laceration of the transverse sinus and consequent hæmorrhage into the cranial cavity.

Here follows a brief summary of the evidence given before the jury on two occasions. Anything more contradictory could not well be imagined. The deceased was habitually a temperate man, and, according to one witness who saw him shortly before he was found in the park, sober on that afternoon, but suffering from the effects of inhalation of gas. A police-inspector, however, states that this witness had previously said he was drunk. Another witness saw him fall heavily twice—first forwards, then backward; after which he lay in an insensible condition. He further noticed an extensive bruise on his forehead. Taken straight to the hospital, his breath is said to smell of spirit. The case is pronounced to be one of simple drunkenness. No bruises are observed by the resident medical officer and house-surgeon, or by the policemen who removed him, either at that time or when they restored him to his friends the next morning. The police admit that when liberated he did not speak; but say that, in other respects, he appeared well enough. The wife and a friend who accompanied her, on the contrary, state that their attention was at once attracted by the bruises; that he was not only speechless, but unable to walk without support. He was taken to Westminster Hospital, where numerous bruises were observed, and he became comatose and died.

The medical officers of St. George's and Westminster Hospitals agree in the conclusion that the fracture of the skull which caused death must have taken place shortly before his admission into the Westminster Hospital; we think, on insufficient grounds. Hæmorrhage from a torn lateral sinus is not necessarily forcible and profuse, as from a ruptured artery; and the blood being on the surface, and not in the substance of the nervous centres, tearing the structures will not produce local paralysis. The symptoms are not absolutely inconsistent with the fact of the injury having been inflicted in the park; and this is important. It could only have been done in the park, in the police-cell, or in the interval between the removal of the patient from this and his admission into Westminster Hospital. In the first case, there may have been a brutal outrage, or it may have been simple accident; in the second case, the worst supposition is culpable carelessness; in the last, to which the medical evidence given at the inquest would shut us up, there must have been foul murder.

Positive evidence carries more weight than negative; and it is not unnatural to suppose that a man who had seen the fall would notice a bruise, which the medical officers and the police, under the idea of drunkenness (in which they were probably right), might overlook.

A "SECRET FRIEND" VICTIM.

A CASE of great interest to the public at large is at present under the consideration of the magistrates. The history, to the profession, is very old and well known. The charge, as it stands, is as follows.

"A man known as 'Wray', or as 'Doctor Henery', was charged with conspiring with one 'Anderson', *alias* 'Wilson,' to extort money from a Capt. Clarke, by publishing the nature of an illness of which the 'Doctor' had professed to cure him. The silly captain tells his own tale. I am about 28; and in August 1863, a book by Dr. Henery was sent to me, and I came to town on the 17th. I went to 52, Dorset Street, and was introduced into a small, dark sort of room. I asked the man who came in if he was Dr. Henery, and he said he was. He obliged me to give my name and address. I asked him how much I was indebted to him; and he said, 'Eleven guineas; ten guineas for the medicine, and one guinea for the fee.' After getting through that, I sent for more. I think I sent seven times. I paid him £85 : 11. I heard nothing more till June or July, when I received the following letter.

"'Medical Institution, 52, Dorset Street,
Portman Square, London, July 1864.

"'No. 3 Private-room, Bugle Hotel, Newport.

"'Dear Sir,—Experience has proved that in cases similar to what you are suffering from a personal interview invariably leads to the advantage of a patient, and therefore have requested the bearer, a gentleman of great experience and skill, to see you, as

he happens to be in your neighbourhood on a professional visit.

"'Yours truly,

"'A. F. HENERY, M.D.

"'W. ANDERSON.

"'Captain Clarke, Parkhurst.'

"It was put into my hands by the ostler from the Bugle Hotel. The prisoner who now stands here called upon me at my barracks on behalf of Mr. Henery. He then said that I had better draw a check for £150 to settle Dr. Henery's claim. He afterwards said he would take £100. He asked me for a sovereign for his expenses, and I ultimately gave him one. I wrote to Dr. Henery, and received this:

"'Medical Institution, 52, Dorset Street, Portman Square.

"'Sir,—I regret..... I do not understand your giving so much trouble in the matter. I have to inform you that my claim for £150 is for medical advice and medicine. If you will satisfy my claim without further trouble, I will give a receipt in full of all demands, or sign any paper that you may choose to draw up, so that you shall not be troubled again by your obedient servant,

"'A. F. HENERY.

"'September 26.'

Shortly after this, the captain receives another threatening note. The doctor says that he had called at Cox's. The writer says: 'Now, supposing I were to inform you application will be made at the War-office, with explanation of case, and if we were to do so you know what the consequences would be; or supposing I were to inform you that I expect to be in your neighbourhood in Scotland next week. I am in no hurry, and will allow you time to reflect'; etc."

At this period of the investigation, the magistrate was informed that Dr. Henery, whom he had sent for, was ill in bed. "Go and fetch him," said Mr. Yardley; and fetched he eventually was. Before the justice, his name was found to be Wray. "We will call him Wray," said his solicitor; and Wray was at once identified by the captain as his "Dr. Henery."

Sergeant White then gave an amusing account of the "sick" Dr. "Henery" or "Wray".

"I found Dr. Henery in bed, and I knew him as the person trading under the name of Dr. Henery. I said, 'You must attend the court; there is a warrant for your apprehension.' He said, 'I can't; I am too ill.' I said, 'That is nonsense; I saw you out yesterday.' I pulled down the bedclothes, and found he had his drawers on. He then got out of bed.

"The case was eventually adjourned; and both defendants were required to find the same bail—that is, £500, and two responsible sureties in £250 each."

Every member of the profession will warmly re-echo the following words of comment on the case.

"Let the accused have the benefit of any uncertainty that may exist. If they be innocent, they are exceedingly unfortunate men, against whom appearances are very strong; if they be guilty, they are amongst the most pestilent knaves and the most dangerous scoundrels that ever merited a halter. Traders upon the weaknesses and infirmities of humanity, they are infinitely worse than any ordinary robbers; they are the highwaymen of social life—the Thugs who strangle honour."

On the second appearance of the defendants before the magistrates, the case was adjourned on account of one of them, Anderson, being reported in a state of delirium tremens. A later account reported him dead.

IN a report addressed to the Board of Governors of St. Mary's Hospital, by the Medical Committee of the Hospital, on the subject of the administration of chloroform, the Committee have recommended that, for the future, the method of administration proposed by Mr. Clover be adopted in the hospital.

THE registration of medical students in London during the current session shows a diminution on former years. Men entering the profession possess, we gladly note, far higher qualifications than they did formerly. This year several of the new students are graduates of Oxford, Cambridge, and Dublin. The Church, the Bar, the Army, and even the Navy, also have their representatives in the list of students.

WE are glad to hear that the entry of students at the Royal Manchester School of Medicine for the session 1864-65 is unusually large. The average age of the students is 21 years; showing the influence of the late regulations of the Medical Council as to preliminary studies and examinations.

THE instruction of the deaf and dumb in Paris appears to have made great progress.

"In 1853," says M. Bouvier, "the Academy of Medicine, consulted as to the mode of instruction which should be employed for the deaf and dumb, replied, 'that experience had not decided whether education by mimicry or by speech was the best.' During the last eleven years, however, much light has been thrown on the question. Dr. Blanchet, during eighteen or twenty years, has followed a system which was the dream of Itard, and which tends, in the future, to transform the deaf and dumb into deaf only, removing the mutism which accompanies the deafness. For this purpose, all that is necessary is to bring up and educate the deaf and dumb in constant intercourse with persons who speak. This plan is now actually in practice in the Department of the Seine. There is not at the present time a single deaf and dumb child of poor parents who cannot receive in the communal schools of Paris the primary instruction which other children receive, and acquire at the same time a certain degree of the faculty of articulate speech. At Montpellier, Lyons, and Strasbourg, similar attempts have also been successfully made. As a guide to teachers, the works of MM. Blanchet and Valade-Gabel have received the sanction of a ministerial commission."

M. Bouvier asked of the Academy a Commission to examine the above facts. The deaf and dumb children, it appears, thus educated, speak, but remain deaf. They gather the words of the person with whom they converse from the movements of his lips, and thus, in truth, hear with their eyes.

Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[*Continued from page* 477.]

On the evening of Monday, the 19th of September, there was a grand ball in the Hall of Zinsser's Garden. The old or permanent hall alone was used for the Terpsichorean exercises; the new building was devoted to the purposes of cooling and refreshing, and the conversations of the older and less excitable participators. The assembly was brilliant, but a little too much crowded; so that, towards ten o'clock, an exodus of redundant old gentlemen, amongst them myself, took place, and a rush was made for the long tables in the Unicorn. There the scientific discussions of the morning were continued, with the assistance of a congenial cigar, until, about an hour after midnight, they reached their legitimate end.

On Tuesday, the 20th, at eight o'clock, the meetings of the several Sections were continued. In Anatomy and Physiology, Professor Schaaffhausen of Bonn gave a lecture on Spontaneous Generation. He is a staunch adherent of Darwin, and generalises from this point of standing regardless of the consequences. To him, spontaneous generation is the only wanting link in the chain of facts which prove the unity and unchangeability of Nature. He has watched organic decomposing substances, and found that they give rise to the lowest imaginable and the smallest visible germs. These germs transform into fungi on the one, and monads on the other hand. All larger infusoria, he maintains, are only further stages of development of these monads. Indeed, all observations of the earliest stages of organic life argue, according to the speaker, in favour of the existence of spontaneous generation, and not against it. The panspermic theory of Pasteur is to him an unproven hypothesis. He next discusses the beginning of life on the globe, and says that the first formation must have been a being capable of living on water and minerals. And such a being is to the present day still formed spontaneously—the protococcus.

This provoked a remarkable discussion, which was opened by Vogt of Geneva, with the inquiry after the circumstances under which protococci originated. Having been informed that pure water in a hermetically sealed tube would, on standing, deposit these beings, he gained an easy victory, by remarking that they must be a reign of organic beings for themselves, as capable of living on pure water, which neither plants nor animals could. Remak of Berlin then said, in a somewhat depreciating style, that it was only necessary to mention the names of Ehrenberg, Schwann, and Helmholtz, in order to show that spontaneous generation was an untenable hypothesis. The speaker, being evidently somewhat excited, was cooled down by the laughter of the assembly. He was, moreover, replied to by Vogt, who spoke in favour of further inquiry, and against the burking of inquiry by the quotation of authorities. The panspermy he denied as a fallacy. The experiments of Ehrenberg he showed to be not conclusive, as late discoveries regarding the propagation of infusoria had much amended the teaching of that inquirer. Here, in England, Schaaffhausen will find much sympathy in his endeavour to unravel the mystery of protogenesis. Have not Bristowe and Rainey shown, step by step, the spontaneous generation of the Trichina? And has not Professor Hughes Bennett of Edinburgh seen the fine particles fly together, "fall in" in generation order, and turn out a perfect living vibrio? Further on we shall see to what magnificent results these inquiries are gradually leading. The great sea-serpent is declared to be a product of spontaneous generation, upon the pattern of Dr. Bennett's vibrio, and to be composed of closely packed atoms of the size and shape of herrings.

The Section next had the pleasure of listening to a demonstration by the well known neurologist, Dr. Stilling of Cassel, of a "small brain", as the Germans term the cerebellum, which showed a part not hitherto known in anatomical science. Dr. Stilling also exhibited some magnificent folio plates, which are part of the illustrations for his great work on the *Nervous System*, now in course of preparation for publication. He was succeeded by Professor Henke, who gave a morphological contemplation of the knee-joint, explaining the apparent anomalies of the condyles of the femur, and likening them to the special features of the condyles of other long bones. Professor Fick of Zürich explained a new kymographion, or instrument for drawing, on paper, lines representing the waves of the pulse of arteries. He has substituted a series of levers and springs for the mercurial manometer in Ludwig's kymographion, and now obtains results which are in accordance with the mathematical theory. Dr. Nasse then gave some results of his chemical inquiries into the nature of tyrosine. He believed it to contain salicylic acid. This was doubted by Dr. Thudichum, who had never been able to produce trichloranile from tyrosine.

Physics began at nine o'clock, with a communication by Dr. Prestel of Emden, on the Periodic Fluctuations of Ozone in the Air at Emden. He subsequently also showed how the amount of water contained in any territory at any time might be estimated; and he proved, from the measurements of the height of three rivers, the correctness of his method. Professor Melde showed an apparatus for letting gas-bubbles of any size mount up in fluid columns; and several other remarkable illustrations of phenomena arising from the mixture of fluids and solids, or fluids and gases. Dr. Quincke had discovered three new lines, obtained in the spectra of higher order, by the employment of a micrometer cut on glass by means of a diamond. Professor Reusch then drew attention to hydrophan as a new medium for the diffusion of gases. It allows hydrogen to pass easily. It was not shown what comparison it bears to the artificial graphite employed by Graham. But when three such minds as those of Bunsen, Reusch, and Graham become concentrated upon diffusion, we may take the material of each as having its own merit, though the one be hydrophan, the other black lead, and the third gypsum.

In the Botanical Section, they began with inspecting mosses from Porto Rico, and rare plants from Baden. Professors Schimper and Sachs then related observations proving that the roots of plants secrete an acid, by means of which they produce corrosions on carbonates, such as marble, magnesite, and dolomite, and in a less degree on phosphatic minerals, imitating the course and size of the roots. Several other warmly combated communications of most special interest concluded the sitting.

The Section for Medicine began its second meeting with a communication by Dr. Thudichum of London, on the Migration of the Trichinæ. He communicated observations and experiments upon pigs and other animals, from which he concluded that the young tri-

chinæ do not, as had hitherto been assumed after Leuckart, migrate through the peritoneal cavity and cellular tissue, but penetrate into the lymph and blood-vessels, and are distributed over the whole body with the blood. The symptoms of trichinosis, which had hitherto been surrounded with mystery, such as the œdema, the irritation of the skin, lymphatic abscesses, pneumonic and pleuritic conditions, he explained as caused by the direct irritation of the trichinæ. He supported these views by observations which he had made upon a great number of patients during the epidemics at Stassfurt in Prussia and Dessau in Anhalt. Dr. Weber next demonstrated a new method for the topical treatment of the nose. He showed a syphon-apparatus, by means of which fluid could be made to enter one side of the nose and come out at the other. Water alone, he said, was irritating; and milk, or fluids containing salt of the specific gravity of serum, were preferable. Professor Remak spoke on neuroses of the base of the brain, which begin with partial paralysis of the muscles of the eye and face, and are combined with psychical derangement. In such a case, of which photographs were exhibited, he had applied the constant electric current; and not only had the paralysis and spasm of the face been improved, but the psyche also had been ameliorated.

In the Chemical Section, Professor Böttger of Frankfort exhibited a process for encrusting glass with crystals; and another for zincographing by means of chloride of platinum. Dr. Scheibler gave the results of his researches into the oxidation products of naphthaline. Professor Fritzsche demonstrated the formation of Gay-Lussit, by mixing a solution of chloride of calcium with an excess of carbonate of soda. Dr. Schmitt gave the results of some researches on tyrosine. He failed to produce it artificially; but found that, by dry distillation, it yielded ethyl-oxyphenylamide and carbonic acid. Dr. Werner spoke on the spectrum analysis of coloured solutions; showed that, for the production of good absorption spectra, dilute solutions and a strong white light were best; and proved every proposition by experiments upon an excellent spectroscope.

The Sections for Mathematics and Astronomy, Psychiatrics, and State Medicine, also met, and discussed matters of special interest to the participators.

In the Section for Gynækology and Midwifery, Dr. Birnbaum of Cologne described a case of labour which had been complicated by the presence in the pelvic cavity of a multilocular echinococcous tumour. It was necessary to puncture the tumour during labour, whereupon the head entered the pelvis, and was extracted by the forceps. On the fifth day, shivering fits and pain in the tumour appeared; but a great amount of decomposed pus, mixed with membranous rags and a large number of echinococcus cysts of various sizes, having been discharged through the vagina and urethra, the patient recovered. Dr. Gusserow exhibited the new metrotome by Dr. Greenhalgh of London, and showed its advantage for quickly dilating the os uteri. There was a great debate on the instrument, and the various questions connected with its use. Professor Spiegelberg then spoke on the length of the cervix uteri in various stages of pregnancy; and concluded that these stages were not in any way characterised by special lengths of the cervix, and could, therefore, not be diagnosed thereby.

In the Section for Zoology was illustrated the great advance of natural science by means of the microscope. Almost every animal is now examined with the same exactness as the human frame. No wonder, then, that the retina of the cephalopodes should come in for its share of examination and description. It was given by Professor Hensen. Pecten was shown to have two optic-nerves to its eye, each of which goes to a separate layer. Dr. Weissmann spoke on the development of the Tipulidæ and Mussidæ; Professor Troschel on the tongue of a kind of snail, Conus; Dr. Mzcenikow on the organs of sense of the Annelides; Upper-Forester Müller on the nidification of birds.

The Section for Surgery had a lively discussion on the merits of a new mode for amputating the thigh at the knee, excogitated by Gritti; in it the thigh-bone is sawn off through the condyles, or at the epiphysal line, and the anterior flap is allowed to retain the patella, which it is intended to heal upon the sawn surface of the femur. Dr. Lücke had done this operation in four cases. The first was that of a soldier, who had received a shot into the knee at Missunde; he died in the second week of purulent discharges; the patella was not united to the femur. The second case dated from the storming of Düppel. Here the patella became firmly united with the saw-cut on the femur, and the patient had an excellent stump; the cicatrix was behind, and had not to sustain any pressure during walking on the stilt-foot. The third and fourth cases both ended fatally. Dr. Lücke communicated another case from Rotterdam, in which the patella had been perfectly united with the section of the femur. Professor Wagner of Königsberg next detailed the result of the dissection of a case of Gritti's operation, which had recovered, but died subsequently of kidney-disease. The patella was riding upon the anterior edge of the cut surface of the femur, was thickened and bent, and united to the femur by connective tissue only. Professor Bardeleben of Greifswalde preferred amputation in the lower third of the femur to Gritti's operation. Dr. Heine had collated twelve cases of Gritti's operation, made during the last campaign. Two only were successful; one was the case of Lücke already mentioned; the other, a case in the Austrian Hospital at Altona, which had been operated upon immediately after the sea-fight near Heligoland. All the others died of pyæmia. Professor Busch and Dr. Passavant, of Frankfort, described some cases of hypertrophy of the foot which had been treated by amputation.

The Section for Mineralogy discussed eagerly some new proposition as to the origin of the silicates by replacement of previously existing chalk. The argument was sustained principally by Dr. Volger of Frankfort, the anti-Darwinian, and Dr. Tschermak of Vienna. Much other matter of special interest was communicated.

In the afternoon of this day, the Congress adjourned to the neighbouring Spa Nauheim. This place had been well prepared for the reception of the distinguished guests. At the entrance, there was erected a fine triumphal arch, ornamented with the gigantic medallion-heads of Alexander von Humboldt, of Gauss, the great mathematician (whose brain was heavier than any other that was ever weighed, and is now the subject of the study and admiration of anthropologists), and of several other great men of the past, with whose names and memory the Association is intimately connected; amongst them, taking a centre place, Oken, the founder. The arch itself was so arranged, that the multitude, in approaching it, beheld the Geysir, or Sprudel, in the distance, as it were, framed by it. Having passed the arch in the procession, with music ahead, the visitors passed the Sprudel itself, and admired this remarkable phenomenon. It is a hot salt-water spring, carried upwards by violent exhalations of carbonic acid, and looks like a huge fountain, to which the vapour affords a magical lining, or background. It shows periodicity

in its action; and can be seen, at regular intervals, to fall quite low, and then to rise again to a considerable height. Its water is used for bathing, drinking, and making salt; its carbonic acid is also used for gas-baths, which irritate the skin, and make people sitting in closed boxes sweat. Thence the savants and friends dispersed in the fine gardens and grounds; collected again at the Kurhaus for dinner; after dinner, had music and coffee and gossip, which was most agreeably variegated by the presence of a large number of the gentry from the near and distant neighbourhood, and a good sprinkling of the candidates and professors from the clerical and scholastic Protestant seminaries of the neighbouring ancient, formerly Free Imperial town of Friedberg.

As darkness arrived, the grounds of the Kurgarten gradually became a blaze of light; all the walks, buildings, an ornamental temple in the centre, and even the very grass itself being illuminated by thousands of lamps. While this was going on, the town of Nauheim opened the taps of its magnificent great beer-barrels; and had the satisfaction to see full justice done to the quality of their contents and the liberality with which they flowed. Refreshed, we wended our way towards the railway-station; passed the Sprudel, now glowing magically in the red light of a huge pot of strontia-mixture; then the arch, and imagined the faces above smiling at our mirth, yet wishing to come down into the throng, where they had been many a time. Then, amongst firing of guns and cheering of great crowds, the steam-horse carried us back to Giessen.

[*To be continued.*]

Mortality among the Chinese. "With very rare exceptions, says the *Ballarat Star*, "the mortality among the Victorian Chinese is caused by affections of the organs within the chest, and especially of the lungs."

Our Black Troops and Consumption. There are some thousands of black troops in the service of the Crown. In Ceylon the mortality is much lower among the native than among the white troops; but in the West Indies, where also there are both black and white, it is very decidedly otherwise. In Jamaica the mortality among the black troops was 30·25 per 1,000 of mean strength; among the white troops only 12·81. Mr. O'Flaherty, the principal medical officer in that command, remarks that the black soldier to outward view is apparently strong and muscular, but when sick he has comparatively little power of resisting or sustaining disease, and fatal cases of consumption are seldom protracted to the advanced stages commonly observed among European soldiers. It must be borne in mind that the black recruit undergoes a very trying change, on enlisting, from almost complete idleness, and a semi-savage state of existence, to a life of order, regularity, and continued exertion in learning his work during the first two years; the white corps brings no soldiers in the recruit stage. In Jamaica also the black troops have much heavier duty than the white, and have been provided with only two meals a day, at 8 a.m. and at noon, leaving them for nearly twenty hours without any regularly provided sustenance; but the medical officer had recommended the addition of an evening meal. The liability of the black troops to consumption is remarkable also in the returns for West Africa. At the Gambia the deaths from consumption and diseases of the lungs in the four years 1859-62 were as many as 17·64 per 1,000 *per annum*. The mortality from all causes in the year 1862 exceeded 28 per 1,000 at Sierra Leone, the Gold Coast, and Lagos; there are no European troops there to allow of a comparison of mortality.

Association Intelligence.

MEDICAL PROVIDENT FUND.

The first meeting of the Board of Directors of the Medical Provident Fund was held at the Freemasons' Tavern, on Thursday, October 20th. Present: Dr. Richardson, in the chair; Dr. Armstrong (Gravesend); Dr. J. M. Bryan (Northampton); R. B. Carter, Esq. (Stroud); Dr. Chevallier (Ipswich); John Clay, Esq. (Birmingham); Dr. Collet (Worthing); Edward Daniell, Esq. (Newport Pagnell); Dr. L. E. Desmond (Liverpool); Dr. Falconer (Bath); Dr. Fayrer (Henley-in-Arden); T. Taylor Griffith, Esq. (Wrexham; Dr. Latham (Cambridge); Charles F. J. Lord, Esq. (Hampstead); Thomas Paget, Esq. (Leicester); T. Heckstall Smith, Esq. (St. Mary Cray); Dr. A. P. Stewart (London); Henry Veasey, Esq. (Woburn); Dr. E. Waters (Chester).

Letters expressing regret at inability to attend the meeting were read from Dr. Ogle (Derby); W. D. Husband, Esq. (York); Dr. Morris (Spalding); S. Wood, Esq. (Shrewsbury); Dr. Copeman (Norwich); H. D. Carden, Esq. (Worcester); and G. Southam, Esq. (Manchester).

Dr. Falconer acted as Honorary Secretary.

Vacancies. The following vacancies were announced as having occurred in the Board of Directors; one in the members elected by the Committee of Council; one in the Yorkshire Branch; two in the South-Western Branch; one in the West Somerset Branch; and one in the Shropshire Ethical Branch.

Mr. Paget moved, Mr. Heckstall Smith seconded, and it was resolved unanimously—

"That notice of the vacancies be given to the Secretaries of the Branches, with a request from the Board that, at the next meeting of the Branches, these vacancies be filled up, and the returns made to the Chairman."

Guarantee Fund. The Chairman reported that the contributions to the Guarantee Fund amounted to £344 : 13; of which £133 : 18 had been paid. The money had been placed at interest in the Union Bank. (The bank acknowledgments were placed before the meeting.) He wished to take the opinion of the meeting as to the application of the Fund.

A discussion occurred, on the question whether the donors to the Fund intended it to be applied to preliminary expenses, or to be held altogether in reserve. —The Chairman recalled the fact, that the Association had voted £50 towards preliminary expenses; whether this would or would not be enough for the year, would turn on a question yet to be discussed—viz., that of confining the Provident Fund to members of the Association, or opening it to the whole profession. If the fund were to be opened to the whole profession, the expenses would, of course, be increased; and under any circumstances, in fact, he thought that the £50 granted by the Association would not be sufficient. The various donors to the Guarantee Fund had expressed very different desires as to its application; some wished it to be applied to preliminary expenses; others, as a reserve.—Several members of the Board spoke on the question; the prevailing feeling being that, while it would be advisable to apply a certain part of the Guarantee Fund to preliminary expenditure, the principle of forming a reserve should be sustained; and that what was now used should be considered as borrowed, not sunk. In accordance with this opinion, it was moved by Mr. Smith, seconded by Mr. Paget, and carried—

"That the preliminary expenses be at present drawn from the Guarantee Fund, to be replaced from the General Fund as the Board of Directors may hereafter decide."

Treasurer. The CHAIRMAN said he must ask the meeting to appoint a Treasurer. Up to this time, he had undertaken the work; but it was impossible for him to carry it on together with his duties as Chairman.

Mr. LORD proposed, and Dr. COLLET seconded—

"That Dr. Westall be appointed Honorary Treasurer of the Provident Fund, *pro tempore*."

Dr. WATERS thought this would be the most fitting opportunity for bringing forward a question which, in the Branch he represented, and, he believed, in other Branches, was considered of the greatest importance; viz., What was the responsibility of Directors individually, should any liabilities be incurred? and what would be the responsibilities of the Association as a body under the same circumstances? He would ask the Chairman to give his views on that subject.

The CHAIRMAN said that the question had been put by many other members of the Association; and he read a letter from Mr. Southam, in which that gentleman suggested that, if any doubt existed on the point, counsel's opinion should be taken. He (the Chairman) believed that the Association could not possibly incur any responsibility; and that no individual could, as a Director, incur any responsibility except in the case of fraud. In the latter case, he did not know whether the liability would fall solely on the delinquent, or on the directors at large. Even in this extreme case, the responsibility must necessarily be very small, presuming that the Directors did their duty; for, as the meetings would be held at least four times a year, and the accounts balanced on each occasion, the responsibilities could never exceed those of three months' standing. It had been asked, If it were found that the sums paid by subscribing members did not meet the requirements of sick members, what steps would have to be taken? To this he replied that the remedy was obvious. The Directors would have to summon a meeting of the subscribers; and the terms of subscription would have to be raised according to the necessities of the case. At the present moment, however, the Directors could do no more than take the soundest possible actuarial basis for their plan, and put it practically to the test.

Mr. HECKSTALL SMITH said he took, if he might be allowed to say so, a stronger ground than the Chairman. The legal bearings of the case would be identical with those which obtained in benefit clubs enrolled under Act of Parliament. The responsibility would be distributed over the whole of the members who subscribed to the Fund and took advantage of its benefits. It was purely a matter of mutual trust between member and member; the Directors being merely the representatives of the members, and responsible only with the members themselves. Even in case of fraud, the loss sustained would be distributed over the whole of the subscribing members; and no one would be implicated as to the whole sum except the fraudulent person or persons. As regarded the Association, it would be impossible to attach any responsibility to it; the Board of Directors being entirely separate from the Executive of the Association; the funds being entirely different; and the objects of the Provident Fund being clearly defined. For his part, he would not have been a Director for an hour, if he were not legally sure that the responsibilities were divisible among the whole of the subscribing members.

After some further discussion, Dr. WATERS expressed his entire satisfaction with the manner in which his question had been answered. He hoped that the explanations given by the Chairman and Mr. Smith would be fully reported.

The motion, for the appointment of Dr. Westall as Treasurer, was then put to the vote, and carried.

Secretary. Dr. WATERS moved—

"That Dr. Henry be appointed Secretary of the Provident Fund for three months."

The motion was seconded by Mr. CARTER, and carried.

It was then proposed by Mr. DANIELL, seconded by Dr. BRYAN, and carried—

"That the remuneration of the Secretary, for the three months, be £25."

Executive Committee. Mr. PAGET moved, and Dr. STEWART seconded—

"That the following gentlemen constitute an Executive Committee, to draw up rules and regulations for the government of the Provident Fund, and to submit the same for approval and adoption by the Board of Directors: The Chairman; Dr. Westall; T. H. Smith, Esq.; Dr. Armstrong; C. F. J. Lord, Esq.; Dr. Falconer; J. Clay, Esq.; Dr. Fayrer. The Chairman to convene the members of the Committee, and to have a casting vote. Three to be a quorum."

Mr. CLAY wished, before the motion was put, to ask under what constitution the Fund would be placed. In the Report read at Cambridge, three plans were suggested; viz., a Charter of Incorporation for the Association; enrolment under the Friendly Societies' Act; or independent organisation. Before the Executive Committee could draw up any regulations, it must be advised on this point.

The CHAIRMAN said that it had been determined by the Committee of Council of the Association, with whom this particular question rested as much as with the Directors, that an effort should be made to obtain a Charter, and to place the Provident Fund under the bye-laws of that Charter. This failing, the Directors would probably have to cause the Fund to be enrolled. Both plans would give it a legal standing; and there were advantages, and disadvantages, attending both; but, as the Committee of Council had determined on one course, the present Board could not do otherwise than wait. This delay need not interfere with the drawing up of rules, which might be framed on the very safe basis laid down by Mr. Tidd Pratt for friendly societies, and legalised, might be acted on temporarily, and embodied in the bye-laws if a Charter were obtained, or consolidated if the society were enrolled.

Mr. CLAY wished particularly to know whether, in the event of a Charter being obtained, the bye-laws of the Association relating to the Provident Fund would be submitted to the Directors by the Committee of Council previously to being passed.

The CHAIRMAN said there could be no doubt that any bye-laws proposed by the Committee of Council would be laid before the Board.

The resolution was then carried.

It was proposed by Mr. CLAY, seconded by Mr. GRIFFITH, and carried—

"That the Executive Committee be instructed to print the rules and regulations when determined on, and to circulate the same among the Board of Directors a month previously to their next meeting."

Instructions to the Executive Committee. The CHAIRMAN said that, before the Executive Committee commenced their work, there were certain points on which they ought to be instructed by the whole Board now assembled. He would limit such instructions simply to questions that were of the largest professional interest; and respecting which he had received most inquiries. He would first take the opinion of the meeting on the point, *whether the benefits of the Fund should cease at sixty years of age.*

A long discussion followed. Mr. HECKSTALL SMITH was against the limitation of benefits to 60; but felt that there ought to be a limitation to the age of entry. He would limit entry to persons under 45 years of age. If that were not done, then limitation of the benefits to 60 was requisite.—Mr. CLAY thought that it was actuarially sound to enact the limitation; and placed before the Board a very elaborate series of facts shewing the amount of sickness at various ages. —Mr. DANIELL was strongly opposed to any limitation. If members chose to pay an extra subscription *pro ratâ*, he did not see why they should be deterred from doing so.—Dr. BRYAN said that the limitation suggested would prevent very large numbers of the Branch which he represented from taking any interest in the Fund.—Mr. PAGET concurred. He thought it would be a most unwise policy to appear even to exclude any member of the profession on the ground of his age. It was natural that a man at 60 must pay, for the same benefit, a sum much larger than a man at 30 would pay; and in this manner, he believed, any danger that might be feared would rectify itself.—Dr. CHEVALLIER said that, as the periods for which a man would receive relief would necessarily be limited to certain fixed periods, that would act in preventing danger.—Dr. STEWART said that his sympathies were entirely with those who would have no limitation; but, in the interview which he and the Chairman had had with Mr. Tidd Pratt, he (Mr. Pratt) had dwelt so emphatically on the necessity of the limitation, that he (Dr. Stewart) felt sure that the stability of the Fund would be much influenced by the way in which the question was determined.—Mr. CARTER thought that the limitation would be necessary.—The CHAIRMAN, in closing the debate, said he was as anxious as any member present to see that the Fund applied without limitation of age; but his calculations as to days of sickness, made quite independently, so entirely accorded with those of Mr. Clay, that he was afraid to join so warmly as he could wish with many of his friends. He would like to reconsider the question, with the view of determining if some new method could be adopted, on sound calculation, which should remove the limitation. He could wish that the meeting, while expressing its sentiments generally, should not bind the Committee to draw up a rule negativing limitation, but should leave it open for them to consider the matter further.—The following resolution was then proposed by Mr. PAGET, seconded by Dr. FAYRER, and was carried unanimously—

"That the Directors, sharing in the general desire to extend the benefits of the Fund beyond sixty years of age, specially instruct the Executive Committee to examine into this point, with a view to such extension; and to embody their decision in their Report."

The CHAIRMAN then asked for instruction on the point, *whether the Fund should be applied to cases of disability from accident as well as from disease.* He read a letter from Dr. Radclyffe Hall, suggesting that accidents should not be included; and also a resolution passed by the South-Western Branch to the same effect.—Dr. DESMOND, Dr. BRYAN, and Mr. CLAY took part in the discussion. Dr. BRYAN thought it would be almost impossible to define amongst medical men what was and what was not an accident. He asked whether or not a dissection-wound would be considered an accident.—Ultimately, the following resolution, proposed by Mr. DANIELL, and seconded by Dr. CHEVALLIER, was carried unanimously.

"That the Committee be instructed to include accidents in their rules as a part of the benefit scheme."

The next subject discussed was the question, *whether or not the Fund should be confined to members of the British Medical Association, or open to the profession at large.*—Mr. CARTER moved—

"That the Directors instruct the Committee to make rules for the admission of members of the profession generally."

Mr. CARTER, in moving the resolution, urged that it would be a great injustice to the profession generally to limit the benefits of the Fund to members of the Association. There were many professional men of small income, who would be most anxious to join the Fund, but who could not afford to join the Association also; and some might subscribe to both for a time, and afterwards leave the Association. But it would not be just to ask them to forfeit what they had paid to the Fund because they chose no longer to belong to the Association. He further stated that, if the Fund had not been started by the Association, it would have been commenced by himself and several other gentlemen with whom he had been in communication; and that although, finding the Association was about to take up the same question, and seeing that it had special facilities for carrying out the scheme, he had deferred to it, he still considered that the plan should embrace in its organisation the profession at large. Such extension would, he believed, increase the number of subscribers to the Fund, and do good rather than harm to the Association.

Mr. DANIELL seconded the resolution. He said he must claim precedence of Mr. Carter in suggesting a relief fund for the whole of the profession. He had, in fact, originated and for a time carried on a fund of this description, than which nothing could have worked more satisfactorily, had it been possible at the time to manage it better. Indeed, the society ceased with some hundreds of pounds in its hands. His scheme was much wider than that now contemplated; and he hoped that the present plan might ultimately be enlarged, while he fully approved of commencing with the single and simple object of giving relief in sickness. The present undertaking commenced under far better auspices than his own. He had not a penny with which to meet preliminary expenses; and all the expenses (which were very large) were met from the contributions of members. His friend Dr. Richardson, in this movement, had been wiser; for he had raised a fund before there were any expenses; aud the expenses themselves promised to be small. To limit the benefits to members of the Association would be a very narrow policy: to open it to all would necessarily, he believed, add to the ranks of the Association; but, even if it did not, the Association ought to take the higher ground of usefulness, and give to the scheme the widest application.

Mr. PAGET warmly supported the proposal for the extension of the benefits of the Fund to the profession. He did not think the Association could be too liberal.—Mr. VEASEY, as President of the South Midland Branch, wished to express, on the part of the Branch, their almost unanimous desire that the Fund should be extended.

The CHAIRMAN read a resolution from the South-Western Branch, recommending that a request should be inserted in the BRITISH MEDICAL JOURNAL, that each member of the Association should communicate to the Chairman of the Directorate his feelings in the matter, and that the wishes of the majority should be carried out. Speaking on the whole question, he felt now, as he had from the first, that it would be most desirable to extend the Fund to the whole profession, if it could be done safely. It was on this point of safety that he had hesitated. The difficulty was this: that the Directorate, as now constituted, was purely connected with the Association; and he

did not see, therefore, how those gentlemen who joined the Fund, and were not members of the Association or of any of its Branches, could be represented in the management. He felt that the distinction between represented and unrepresented members might lead to difficulties of a very serious nature. He fully agreed with Mr. Carter as to the justice of throwing the Fund open; while he felt that no organisation could be more perfect for the special working of such a Fund than that of the British Medical Association. The Branches of the Association were so many ready-made centres; the members of those Branches knew best who in their respective districts would be most likely to join in the movement, and, above all, who would be most likely, from particular knowledge and earnestness, to serve as competent Directors. So far, the organisation had proved itself well; for he had no hesitation in saying, that no small section of men outside the Association could have brought together from the various parts of England such a Directorate as had been elected; and he believed that the profession at large, when it saw the names of the Directors elected by the Committee of Council and by the Branches, would be of the same opinion. Thus the Association possessed the organisation; while the profession altogether required to take part in the measure, could the two elements be united. On the whole, he thought that the demand to admit the profession altogether overruled, though it did not meet, the difficulties he had suggested; and he should therefore vote for the extension, in the hope that some plan might be suggested by which those difficulties would be removed.

Mr. HECKSTALL SMITH, while admitting the desirability of extending the Fund beyond the Association, saw the greatest difficulties in the way of extension, so long as the Association held the sole management. Within the bounds of the Association, the scheme was in unity with the work of the Association, and was easily managed. There could be no discordance, because every man had a voice in electing representatives to the governing body; and those representatives were responsible to their Branches for the performance of their duties. But if a large number of members came in from without, who would represent them? and would they be content to be unrepresented? He confessed that he was a strong advocate for carrying out the Fund, for a time at least, purely within the Association; and he should only fail to vote for this, because he felt he must bow to the opinion of the Chairman, who had given so much thought to the matter, and had shewn such valid reasons why the Association should be the organising body, and because he hoped, with the Chairman, that, as members came in from without, some plan might be devised by which they could be enabled to have a voice in the management.

Mr. GRIFFITH suggested that the Fund should be confined to the Association for two years.—After some remarks by Dr. FAYRER, Dr. DESMOND, Mr. CLAY, Dr. ARMSTRONG, and other Directors, most of them being in favour of extension, the resolution for extension was put, and carried unanimously.

The next subject discussed had reference to instruction to the Executive Committee in respect to the question whether *relief should be granted to members suffering from partial disability from disease or accident.*—Dr. LATHAM proposed, Mr. CLAY seconded, and it was carried—

"That there be no system of partial relief introduced into the regulations of the Provident Fund."

It was next discussed, whether *by payment of multiple premiums, members should be allowed to insure so as to secure, during sickness, proportionately increased benefits.*—Dr. WATERS proposed, and Dr. FAYRER seconded—

"That, for the first two years from the commencement of the Society, no member be allowed to subscribe more than will entitle him to receive £2 a week when incapacitated by sickness or accident."

Dr. CHEVALLIER, Mr. CARTER, Dr. FALCONER, Mr. CLAY, and the CHAIRMAN, took part in the discussion. The resolution, on being put to the vote, was carried.

Bankers to the Fund. Mr. CLAY proposed, Mr. LORD seconded, and it was resolved—

"That the Guarantee Fund be deposited in the Union Bank of London, in the names of the Chairman and Treasurer, and that all cheques be signed by them conjointly."

Collection of the Guarantee Fund. Dr. LATHAM proposed, Dr. FAYRER seconded, and it was resolved—

"That the Chairman and Secretary be authorised to call in the several sums promised to the Guarantee Fund."

It was agreed that the next meeting of the Directors should be called by the Chairman, on the recommendation of the Executive Committee, after the preparation of their Report.

A vote of thanks to the Chairman, and to Dr. Falconer for acting as Honorary Secretary, having been proposed by Dr. DESMOND, seconded by Mr. LORD, and carried, the proceedings closed.

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

	£.	s.	d.
Amount already contributed	344	3	0
Thomas Paget, Esq. (Leicester)	10	10	0
Dr. Armstrong (Gravesend)	10	10	0
T. H. Smith, Esq. (St. Mary Cray), additional	5	5	0

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

BATH AND BRISTOL BRANCH: MEETING.

THE first meeting of the session was held on October 17th, in the Victoria Rooms, Clifton; R. W. FALCONER, M.D., President, in the Chair. Upwards of fifty members and visitors were present.

Medical Provident Fund. R. W. Falconer, M.D. (Bath), and W. Budd, M.D. (Clifton), were elected Directors of the Provident Relief Fund.

The following resolution was proposed:

"That, in the opinion of this Branch, the Provident Relief Fund should at present only be available to members of the British Medical Association."

To this the subsequent amendment was proposed:

"That the Provident Relief Fund should be open to all members of the medical profession."

The amendment, being put from the Chair, was lost, only five members voting in favour of it. The original motion was then put, and carried by a large majority.

The following resolution was then proposed and carried:

"That, in the opinion of this Branch, the benefits to be derived from the Fund should not cease at the age of sixty."

New Members. The following gentlemen were elected members of the Parent Association and of the Branch: C. S. Barter, Esq. (Bath); Alexander Waugh, Esq. (Chilcompton); C. Board, Esq. (Bristol); and Joshua James, Esq. (Bristol).

Papers. The following papers were read.

1. Death during the Inhalation of Chloroform. By C. Gaine, Esq.

2. Notes on Cancer. By W. M. Clarke, Esq.
3. Report of a Case of Perinæal Section. By J. W. Teale, Esq.

SOUTH MIDLAND BRANCH: AUTUMNAL MEETING.

The eighth autumnal meeting of this Branch took place at Buckingham, on Tuesday, the 18th instant; the following members and visitors being present—viz., H. Veasey, Esq., Woburn, President, in the Chair; Drs. Bryan (Northampton); Francis (Northampton); Mackay (Stony Stratford); and Messrs. G. Ashdown (Northampton); R. Ceely (Aylesbury); W. C. Daniell (Stony Stratford); R. Death (Buckingham); G. P. Goldsmith (Bedford); F. L. Harper (Brixworth); G. H. Haslop (Buckingham); C. Spencer (Whitechurch); H. Terry, jun. (Northampton); and R. Watkins (Towcester). As visitors were present, John Manley, Esq. (West Bromwich); and the Rev. Archibald Currie.

The President opened the proceedings with some prefatory remarks respecting the Branch, and also referred to the Provident Fund.

Report. Dr. Bryan (Secretary) read the Report of the Branch, and stated that five new members had joined this year; whereby, after deducting the losses by removal and other causes, the numbers amount to ninety-two. It was much to be regretted that there had been several losses by default in paying arrears of subscriptions; and it was very important that they should be paid early in the year, by which the Secretary's work would be much lightened, and any applications from the General Secretary avoided. The funds of the Branch were in a tolerably good condition; the balance in the hands of the Treasurer at the present time amounting to £3 : 1 : 6; the expenditure for the year to the present time had amounted to £11 : 4 : 7. Dr. Bryan made some remarks explaining the constitution and objects of the "Medical Provident Fund".

The Report was confirmed and adopted.

Provident Fund. It was proposed by Dr. Francis, seconded, and carried unanimously—

"That there be no limitation of age in regard to participating in the benefits of the Provident Fund; that it be thrown open to the whole profession; and that accidents as well as diseases should be provided against."

New Members. The following new members were proposed and elected:—Arthur Evershed, Esq. (Amptill); Robert S. Stedman, Esq. (Sharnbrook); and G. H. Haslop, Esq. (Buckingham).

Papers. The following papers were then read.

1. On some Remedial Results in Epilepsy. By D. J. T. Francis, M.D. Five cases were given, in which the bromide of potassium was taken in doses varying from five to thirty grains, and persisted in for some months, with apparently most satisfactory results. The sedative power of the remedy manifested itself in a few days, and no injurious results followed. Nearly all the cases were in early life; the oldest being aged 25. A very interesting discussion took place, in which most of the members present took part.

2. Case of Puerperal Convulsions. By G. P. Goldsmith, Esq. In this case, bleeding at the arm had been performed, and delivery was effected by the short forceps. A good recovery followed, after a few days. Considerable discussion took place, which was shared in by Dr. Bryan, Mr. Ashdown, and Mr. Watkins. Mr. Watkins had had several cases within the last few years; they had made good recoveries without venesection, merely under the use of chloroform, shaving the head and applying ice to it, with enemata, and delivery as soon as possible.

Five other papers were on the list for the meeting, but were not read, owing either to the proposers not being present, or time having expired.

The next Annual Meeting was arranged to be held at Northampton, under the presidency of George Ashdown, Esq.

Dinner. The members and visitors then adjourned to the White Hart Inn, where they partook of an excellent dinner, and separated at an early hour, after a very pleasant and instructive meeting. All had previously partaken of a handsome luncheon, provided at the house of Robert Death, Esq.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will take place at the Fountain Hotel, Canterbury, at 3 p.m., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

Robert Bowles.

Folkestone, October 1864.

Correspondence.

TREATMENT OF PARTURIENT WOMEN.

Letter from Albert Napper, Esq.

"Magna est veritas, et prævalebit."

Sir,—Such is the apt motto adopted by Mr. Pope in his reply to a theory advocated by Dr. Graily Hewitt in a clinical conference on midwifery lately held at St. Mary's Hospital Medical School. Mr. Pope appears to have been so startled by Dr. Hewitt's bold divergence from the old *régime* of "Lowther, Haighton, Churchill, and Co.," that he feels it to be his incumbent duty to ward off the evils to be expected from its general adoption as much as in him lies, particularly as regards the advocacy of a full generous diet—the usual diet of health—for a woman immediately after delivery. That such a doctrine should appear to a practitioner of Mr. Pope's standing (eminent though he be) "monstrous, hideous, huge, and benighted," is not much to be wondered at; nor would I, upon the experience of a quarter, venture to question the dogmas of one whose experience extends over half a century, did I not know that, besides Dr. Hewitt, there are many eminent members of the profession who entertain the same views, and amongst them one, at least, of the most distinguished in this department of medical practice—Dr. Oldham. He, in his introductory address in assuming the presidency of the Obstetrical Society in January 1863, expressed his unqualified approval of the practice now advocated by Dr. Hewitt; and his remarks appeared to be generally acquiesced in by the members then present, and by none more cordially than by myself.

I have long since arrived at the conclusion, that the course of abstinence entailed upon parturient women immediately after delivery has been frequently attended with evil results; and had been cautiously feeling my way in the other direction, when I had the gratification of hearing Dr. Oldham express his entire approval of the practice, and state that he had been in the habit for many years past of allowing his patients meat and mildly stimulating diet, even on the very day of their delivery. Fortified by such high authority, I have since with confidence pursued this practice to its full extent, and have had as yet

no reason to regret it. On the contrary, I have found that women who, from a rapid increase of family, have ceased to be able to suckle their children, have, by adopting a liberal and stimulating diet immediately subsequent to delivery, been enabled liberally to support their offspring, and at the same time have recovered their wonted health in much less time than before.

That Mr. Pope should be wedded to a course of practice which in his hands has been most successfully pursued during so long a period, is very natural and reasonable; but since, in other hands, "milk-fever, puerperal peritonitis, puerperal mania, sudden deaths, and protracted convalescence," have been of no uncommon occurrence under the same system of treatment, it yet remains to be shown whether, under the more liberal plan above advocated, the results may not be far more favourable. So important a subject as this cannot long fail to meet with the consideration of the Obstetrical Society, on which occasion, I am sure, the members would be gratified by the attendance of Mr. Pope as a fellow.

I am, etc., ALBERT NAPPER.

Cranley, October 18th, 1864.

LETTER FROM THOMAS INMAN, M.D.

SIR,—Though I do not now attend other midwifery cases than two very near relatives, I have a vivid recollection of my past experience, and have many opportunities of collating it with present practice. When a student, I well remember my horror, and consequent remonstrances, at finding a woman take a quart of ale twelve hours after delivery, and announce her intention of continuing a practice she had already found benefit from. I watched the case earnestly, and to my surprise, found that the woman was right; for I had never then heard of a recovery so rapid as she made. A sister-in-law was the next patient who took her own treatment in hand. One day's trial of slops after her first confinement produced so much flatulence, etc., that she resolved to adopt her usual every-day diet, and, to my surprise, made a most rapid recovery. Since then she has had eight children, and adopted the same plan with all, and is always going about the house at the end of the first week. Since then I have adopted the same plan with another sister-in-law, and with my wife; and have found them make not only rapid recoveries, but free from a fear of accident. Prior to adopting this method, patients used to complain of excessive sweating, profuse discharge, flatulence, or else of fever; and, as experience has taught us that fevers, suppuration, excessive discharge, windy milk, erysipelas, puerperal inflammation, bronchitis, pyæmia, etc., are all encouraged by exhaustion or debility, we need only be surprised that doctors have required so long a period to learn so obvious a lesson; viz., that it is not wise to weaken still more a woman already exhausted by *labour—i.e., real hard work.* How severe the work I know; for, in conjunction with two other friends, I had once to deliver a woman with the long forceps, in consequence of puerperal convulsions. All of us took our turn at the delivery, and, at the end of three hours, were so completely "done up" that we had to send for a fourth. We finished, however, before his arrival. When we had time for refreshment, do you think we should have liked a basin of gruel? or to be fed on slops for the next four days, while our muscles were aching so much as to make every movement painful? I trow not. And yet each of us had only done one-third of the work the woman would have to do herself. Why, then, should a poor feeble, or any woman who has been exerting a force which few men can estimate, be treated as if she must have gained redundant strength by the process?

Such small experience as mine might well be sneered at, backed though it be by good sense. I therefore add, that the pupils who have attended my lectures, and the personal friends whom I have been able to influence, have repeatedly communicated to me the results of the doctrine indicated above (which I taught long before Dr. Graily Hewitt had taken his M.D. degree). Their words are uniformly: "I never have a bad case now after confinement. The old complaints we once were familiar with, or read of in books, have for us no existence." Some four years since, an old pupil told me that he had then attended two hundred cases; had treated them on the plan I had suggested; and that he never had any trouble with them—the patients were well and about again at the end of the week. Some of us enjoy a laugh occasionally in seeing how far London is behind, and that the people there are discussing the theory of what has with us become a firmly established practice; but we keep our chuckle to ourselves.

I am, etc., THOMAS INMAN.

Liverpool, October 1864.

CHLOROFORM IN FICTION.

SIR,—Your last number contains a letter, signed "C. K.", purporting to "denounce" a tale which is now being published in the Scotch periodical *Good Words.* Your correspondent's version is not only in itself a most confused muddle, but it is so different from the original, that it is scarcely possible he can have seen the latter. The story is not a "romance on chloroform", although a case of death from chloroform is one of its incidents. I have, in vain, looked for any mention of "spiritualists", or of "clairvoyance", or for "quotations of standard medical weeklies to condemn chloroform."

The facts are simply these. Two doctors meet to operate on Lady O. One of these, Dr. D., is an old man; the other, Dr. C., his partner, is not only young, but rash, headstrong, and conceited. Dr. D. has an intuitive perception (and this is the only part of the story with which we could find fault) that Lady O. is not a fit subject for chloroform, and opposes its administration. An accident calls Dr. D. out of the room; and Dr. C. gives larger quantities of chloroform in rapid succession. Dr. D. returns; the operation is performed; but Lady O. does not regain her senses. Dr. D. feels annoyed at his advice being rejected; but, like a good old man as he was, he keeps the secret, and shares the blame with his younger partner. To do this is very trying; for, when the old lady's will is read, it is found that she has left him her "enormous fortune" (£6000)! It looks ugly, and he is suspected; but he disarms suspicion by handing over the fortune to those who, by relationship and poverty, had a natural right to be the old lady's heirs.

This is the incident out of which "C. K." has concocted his ridiculous exaggerations. The whole affair is not worth the space these letters occupy in your JOURNAL. If the public make any deductions at all from Mrs. Wood's story, they will be: 1, that chloroform may be unwisely on improperly administered; 2, that, although "doctors differ", brotherly love and Christian forbearance are not unknown in the profession.

Permit me to add, that the public estimation of chloroform is such that no tale of fiction, however absurd, could in their eyes affect its value. Nor can I suppose that, however irritating this tale may be to a mere "chloroformist", it could for a moment be regarded in the light of a "foul libel" by such men as

"Dr. Simpson", or "all the best men at Guys"(?) As for "the wretched thing called *Good Words*," I dare say, many of your readers know that it is one of the most popular and best conducted periodicals of the day. Edited by a distinguished Scotch divine, Dr. Norman Macleod, its pages are adorned by the writings of such men as Isaac Taylor, Sir J. Herschell, Sir D. Brewster, Principal Forbes, and many others equally noted. Were "C. K." to become a reader of *Good Words*, he might yet be taught not to "denounce" what he does not know. I am, etc.,

W. G.

Torquay, October 19th, 1864.

THE CASE OF FATAL ATTEMPT TO PROCURE ABORTION.

LETTER FROM JOSEPH STEPHENS, M.D.

SIR,—You have drawn professional attention to the case of fatal attempt to procure abortion, which has recently been the subject of a coroner's inquest at Brighton.

Cases of fatal poisoning by ergot of rye, recognised as such, being rare in this country, a description of the symptoms of such a case shown during life, and the morbid appearances detected after death, will be, perhaps, of sufficient interest to warrant my occupying a certain portion of your space. I will, therefore, with your permission, lay before your readers my notes of the case, and my reasons for deposing that death occurred as the result of the poisonous action of ergot.

I first saw Susan Kingman at 18, King's Road, Brighton, at 10 A.M. on Monday, September 26th. I was told that she was a married woman, and was pregnant; and that it was thought her illness had some connection with her pregnancy. She was in bed, holding her head with her hands; the expression of her face was most anxious, and she complained of excruciating pain in her head; she was constantly retching, and could not retain a particle of either food, drink, or medicine on her stomach, although there was constant and intense thirst; there was præcordial tenderness, but no fulness; there had been diarrhœa, but it had ceased; the head was not hot,—but cold water had been used so freely that it was difficult to judge whether there was any departure from the normal temperature. The pupils were somewhat dilated and rather sluggish; the pulse was rather quick, but very small and feeble; there was a disposition to coldness of the surface of the body, and particularly of the extremities. She complained of great dryness and irritation of the throat, and requested my particular attention to its condition; the whole throat was intensely injected with blood, and on the left side of the soft palate was a dark patch, looking as if blood was effused beneath the mucous membrane. The skin had a yellowish tint. I considered it a case of acute gastritis, and treated it accordingly; the vomiting was, however, quite uncontrollable; the pain in the head continued; collapse rapidly supervened, and when I saw her at midnight she was evidently dying. She had vomited shortly before my arrival, but appeared now to have lost the power to do so, although retching was still incessant. She was partially conscious, and would swallow whatever was given to her with difficulty; she could not, however, speak, although she appeared to make an effort to do so. The extremities were quite cold, and the pulse was imperceptible. By unremitting efforts to maintain the heart's action and to keep up general warmth, by means of brandy and beef-tea, hot water bottles, hot blankets, mustard poultices, and every thing that could be thought of, life was prolonged until half-past seven A.M., when she died from asthenia, without convulsions.

During my attendance, my suspicions being aroused by the somewhat anomalous symptoms, and by my knowledge that idiopathic acute gastritis was, to say the least, extremely rare in the adult, I made minute inquiries into the history of the patient; and found that it was not true that she was married, but that she had been living in a state of concubinage; and I, moreover, elicited that she had been taking medicine in large quantities for a considerable period for the purpose of procuring abortion. I could not ascertain what this medicine was during the life of the patient; but after her death I succeeded in obtaining a copy of a prescription for a medicine she was said to have taken for many weeks. You have correctly quoted it. On being applied to for a certificate of death from natural causes, I, of course, refused; and subsequently communicated my suspicions to the police.

Under the authority of the borough coroner, Mr. D. Black, I proceeded, fifty hours after death, in conjunction with Dr. Vaughan Hughes, to make a *post mortem* examination, with the following results.

The body was that of a well formed woman, of about 26 years of age. The features were hollow and haggard; the eyes were sunken and dull; the pupils dilated. Dark grumous fluid was oozing from the mouth. The whole body was of a yellowish tint; in fact, semi-jaundiced. There were no external marks of violence on any part of the body; but the insides of the thighs were smeared with blood, which, on minute examination, was found to have issued from the vagina. The mammary glands were quite undeveloped; but the mammillæ were enlarged and elongated; the areolæ were distinct; and the skin of the abdomen had corrugations, such as are seen in those who have borne children. (It came out in evidence that she had two living children.) There was no mortification of the extremities.

On opening the abdomen, the peritoneal covering of the stomach and duodenum was seen to be of a rosy tint; there were, however, no adhesions. The liver was of normal size and healthy structure, but was turgid with blood; the gall-bladder contained bile, but was not distended; the bile-ducts were pervious.

Ligatures were applied, so that the stomach, duodenum, and about a foot of the jejunum, might be removed, with their respective contents, for more minute examination. The spleen was of natural size, but congested; the bowels were empty. The womb projected through the brim of the pelvis; and on removal, was found to contain a fœtus of four months; the membranes were entire, enclosing a considerable quantity of amniotic fluid; there was, however, slight detachment of one edge of the placenta, accounting for the issue of blood *per vaginam*. There was no appearance of injury to the os or cervix uteri.*

On opening the thorax, the heart and blood-vessels, lungs and pleura, were found to be perfectly healthy. The right auricle of the heart contained a small clot; the other cavities, a small quantity of dark fluid blood.

The œsophagus and pharynx were then removed for minute examination.

On opening the head, the meningeal vessels were seen to be turgid with dark blood. There was no appreciable quantity of fluid in the ventricles of the brain; although the lateral ventricles appeared abnormally large, as if fluid had distended them, but had been absorbed or had run down the spine. The

* There had been no uterine pain excited by the ergot, and, as the flow of blood only took place very shortly before death, I am disposed to think the slight detachment of the placenta was due to the violent vomiting, rather than to the induction of uterine contractions.

substance of the brain was healthy. With the exception of the parts mentioned as being congested, the body was remarkably exsanguine; and, except the small clot in the heart, the blood was everywhere fluid and very dark.

We finally proceeded to examine the viscera, which we had placed aside, as narrowly as time would allow. On opening the stomach, it was seen at a glance that its mucous membrane had been acutely inflamed; there were deeply injected, circumscribed, arborescent patches, extending from the cardiac to the pyloric orifice, especially on the posterior surface of the viscus, and grouped about the orifices. Over these patches, the mucous membrane peeled off with extreme ease, but nowhere else. There was a small quantity of heavy smelling, dark, coffeeground-like fluid, of a gummy consistency, in the stomach, and a thick mucus adhered to its walls. The first and second portions of the duodenum had the same appearances; the marks of inflammation, however, gradually diminished on proceeding downwards; the third portion of the duodenum showed but slight traces of it; and the portion of the jejunum was healthy. The œsophagus was quite rotten at its lower part; at the upper part, it was covered with inflammatory patches. The pharynx was extremely congested, and the mucous membrane was considerably thickened.

I then carefully secured the viscera, with their contents, in jars, and proceeded to the inquest-room.

It was now proved that the deceased had taken large doses of tincture of ergot and oil of pennyroyal for many weeks, to procure abortion; and I deposed that, in my opinion, the symptoms during life, and the appearances of the body after death, were fully accounted for by that fact.

The inquest was adjourned; and I took advantage of the interval to make a careful analysis of the viscera and their contents, so that I might be certain that she had not, in addition to the ergot, taken a mineral irritant. My examination was particularly directed to the detection of the salts of copper, as the sulphate is a reputed abortive, and produces somewhat similar symptoms and appearances to those observed. The result of my analysis was, however, a confirmation of my belief that she had died from ergot, as not a trace of any mineral poison was found.

On the resumption of the inquiry, the druggists who had, as was then proved, supplied the medicine for eleven weeks, produced a Dr. Roberts, who stated that Christison did not consider that ergot was a poison; that Taylor was mistaken on that point; and that I was altogether wrong in the opinion I had expressed. He stated that there was no more reason for calling tincture of ergot a poison than brandy; and that, in his belief, it could not primarily cause death.

The case stood thus, when the coroner produced Taylor *On Poisons*, and turned the balance in favour of the view I had expressed. Had it not been for this, as one doctor was pitted against another, the jury would have been in a dilemma, not knowing which doctor to believe.

I do not think any member of the profession will be for a moment in such a dilemma, as everyone, I presume, but Dr. Roberts, knows that ergot was first, I had almost said, discovered from its action as a deadly poison.

It will be well, however, to make it manifest that there would be no mistake about this being a genuine case of poisoning by ergot; and to do so, I will show how closely the symptoms and appearances coincide with those which had previously been recognised as characteristic of the action of ergot.

Malgré Dr. Roberts, Christison says the symptoms of ergot-poisoning are, *inter alia*, nausea, vomiting, headache, a small pulse, a yellow skin.

Taylor says it produces dryness and irritation of throat, thirst, burning pain in the stomach, vomiting, etc.; and the cerebral symptoms are headache, and sometimes giddiness and stupor. The appearances after death in a few cases, have been patches of inflammation on the mucous membrane of the stomach and small intestines; sometimes congestion of the brain, liver, and heart; sometimes the blood is black and fluid throughout the body, and the meningeal vessels are found distended, and there is effusion into the ventricles of the brain.

Pereira says, weight and pain in the head, dilatation of the pupils, and stupor, are the principal symptoms which indicate the action of ergot of rye on the brain; there is great depression of the pulse; nausea and vomiting are not uncommon; and the countenance is sometimes yellow.

Casper and Neubert give a case where, during life, there was great thirst, with frequent vomiting, præcordial pain, pallor, and coldness of the surface; and, after death, the mucous membrane of the stomach was found inflamed.

I have quoted briefly and imperfectly, out of consideration for the value of your space; but I think with sufficient fulness to prove my point.

These symptoms and appearances have been observed in cases of chronic poisoning, and also in cases of death from an excessive dose; and I think we may fairly take the case of Susan Kingman as a combination of both; for, after taking it for a considerable period in the prescribed dose, I have been informed, she became impatient at the want of effect, and sometimes took a larger quantity. In the recorded cases, ergot has usually been taken in powder or decoction, and would be much less irritating than the tincture combined with a large dose of the essential oil of pennyroyal. Hence, probably, the excessive amount of inflammatory action established by it in this case. The pharynx bore evident marks of long continued irritation; and I have little doubt chronic inflammation of the mucous lining of the pharynx, œsophagus, stomach, and duodenum had been going on for some time; and that, at the last, the fatal attack of acute gastritis was set up by taking a large dose of the medicine. Had it not been for the irritating form in which the medicine was taken, and for the large doses, it is probable the case would have gone on, and eventually developed the characteristic conditions constituting either "gangrenous" or "convulsive ergotism".

As to the immediate action of a large dose of ergot in this particular form and combination, we have pertinent evidence from a witness, who stated that, "after taking the medicine, the deceased appeared *very strange and faint.*" This corroborates what Headland says: "When given in an overdose, ergot has a dangerous action on the brain, producing at sometimes narcotism, at other times syncope." In this case, these two effects appeared to be combined.

In conclusion, I would endeavour to educe some benefit from the consideration of this painful case; and I would ask you, sir, and the profession generally, whether, in your and their opinion, it is proper for a druggist to consider a prescription as a sort of *carte blanche* for the continuous and practically unlimited supply of the medicine thereby ordered. My own opinion is, that a prescription should never be considered to authorise the supply of more than the quantity ordered *on one occasion only*. But in the case of poisonous drugs, and especially of those known to be applied to criminal purposes, I am convinced that it is the incumbent duty of the druggist to stipulate that such a prescription *shall be re-dated and re-signed*

ither by the original prescriber, or by some other legally ualified practitioner, before it is re-dispensed.

If this plan were invariably adopted, prescriber, lispenser, and patient would be comparatively safe; nd, on the occurrence of a case similar to the present ne, we should know "whom to hang".

I am, etc., JOSEPH STEPHENS.

5, Pavilion Parade, Brighton, October 18th, 1864.

Medical News.

APOTHECARIES' HALL. On October 20th, the following Licentiates were admitted:—

Dawson, John, London Hospital
Jones, George, Goswell Road
Locking, Benjamin, Coltman Street, Hull
Oliver, George, Bourne, Lincolnshire
Ward, Martindale Cowslade, Markham Square, Chelsea

As an Assistant:—

Smith, William John, Northampton

APPOINTMENTS.

WALKER, J. P., M.D., has been appointed Professor of Hygiene in the Medical College, Calcutta.

ROYAL NAVY.

BROWNING, Benjamin, Esq., Assistant-Surgeon, to the *Canopus*.
BUCHAN, Charles F., Esq., Acting Assistant-Surg., to the *Himalaya*.
DOBBIN, John W., Esq., Assistant-Surgeon, to the *Hawke*.
MANSFIELD, Pierce, M.D., Assistant-Surg., to Plymouth Hospital.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

CHAPMAN, J., Esq., to be Surgeon 3rd Administrative Battalion Middlesex R.V.
GILLIES, Hugh, Esq., to be Assistant-Surgeon 1st Argyllshire A.V.
STORMONT, H. J., Esq., to be Assist.-Surg. 1st City of London R.V.
SCARR, R. T., Esq., to be Honorary Assistant-Surgeon 1st Hertfordshire R.V.
TWEEDIE, A. C., Esq., to be Honorary Assistant-Surgeon 1st Selkirkshire R.V.

DEATHS.

DAVIS, Edward, Esq., Surgeon, at 17, Upper Belgrave Place, aged 60, on October 19.
DOVE. On October 14, at St. Austell, aged 74, Mary, widow of Thos. Dove, Esq., Surgeon.
EMERSON. On October 5, at Upper Norwood, Elizabeth, widow of A. L. Emerson, M.D., Deputy Inspector-General of Hospitals.
MORGAN, Moses, Esq., L.R.C.P.E., at 12, Charlotte Street, Bedford Square, aged 63, on October 19.
PROCTOR. On October 18th, at Waltham, Essex, aged 91, Harriet, widow of Alexander Proctor, M.D., formerly of Crewkerne.
*ROBERTSON, Archibald, M.D., F.R.S., many years Senior Physician to the Northampton General Infirmary, and one of the Vice-Presidents of the British Medical Association, at Clifton, aged 74, on October 19.
STEGGALL. On October 23, the wife of John Steggall, M.D., of Southampton Street, Bloomsbury Square.
THOMAS, Morgan, Esq., Inspector-General of Hospitals, at Queen's Terrace, Woolwich Common, aged 80, on October 22.

MR. FLOWER of the Royal College of Surgeons, has been visiting during the vacation the museums of Liège, Brussels, and other towns of Belgium.

TESTIMONIAL. A large number of members of Oddfellows at Wrexham have presented a testimonial to Mr. Cranmer, the assistant of Mr. Dickenson of that town.

VENEREAL DISEASE. There is a rumour that government is thinking of forming a committee to inquire into the treatment and prevention of venereal diseases.

A MEDICAL MAGISTRATE. Amongst the names of gentlemen who last week qualified for the office of magistrate for the County of Brecknock we are glad to note the name of one who has long been a member of this Association—James Williams, Esq., F.R.C.S. of Brecon.

OVARIOTOMY. M. Kœberle of Strasburg announces another successful case of ovariotomy. He has operated thirteen times and lost three of his patients.

YELLOW FEVER AT BERMUDA. Seven medical officers have perished by yellow fever between July 26th and September 7th of the present year at Bermuda. The *Montreal Gazette* publishes the following: "Yellow fever abating at Bermuda, and medical officers all recovering."

AMERICAN WAR NEWS. Assistant-Surgeon G. W. Ellis, United States Volunteers, formerly of Bombay, East India, is missing, notwithstanding the efforts of the Adjutant-General of the army to find him. The reported deaths in the Confederate army, returned at Richmond, up to December 31st, 1863, number 57,805.

KLEPTOMANIA. The *Ararat Advertiser* reports the following:—"A very uncommon case came before the Circuit Court on Wednesday. A female of hitherto excellent character appeared in the dock, charged with stealing some articles of baby clothing. The poor woman exhibited the most painful distress at her situation, having, according to evidence adduced, taken the articles from the promptings of a species of kleptomania induced through being enceinte. His honour Mr. Justice Barry, much to the relief of all present, acquitted her on her husband's recognisance of £50, to appear again if called on."

UNION MEDICAL CONTRACTS. The following question has been introduced to the Guardians of the Blackburn District by Mr. Corbett, the Poor-Law Inspector of the district. What is the present state of the medical contracts, and whether any arrangements have been made or are contemplated by the Guardians to carry out the recommendation of the Select Committee on Poor Relief, that in future cod-liver oil, quinine, and other expensive medicines should be provided at the expense of the Guardians?

THE NATIONAL MEDICAL REGISTRATION ASSOCIATION. We have pleasure in stating that it is the intention of the members of the National Medical Registration Association to invite Mr. Lavies to a public diuner, for the purpose of showing their sympathy and regard towards one, who has rendered valuable services, not only to the Association, but also to the profession. The difficulties with which this society has had to contend, entailed upon Mr. Lavies no ordinary amount of anxiety and considerable pecuniary loss. It is to be hoped that the members of the Association will embrace this opportunity of doing honour and justice to their president. The dinner will take place on the November 23rd, at the Freemasons' Tavern, William Fergusson, Esq., F.R.S., taking the chair. William Adams, Esq., 37, Harrington Square, N.W.; Dr. Tilley, South Lambeth, S.; and Jabez Hogg, Esq., Bedford Square, W.C., will act as honorary secretaries.

INSPECTOR-GENERAL OF HOSPITALS, MORGAN THOMAS, died at his residence, 2, Queen's Terrace, Woolwich Common, on Saturday last, at the age of 80 years. He entered the army as an assistant-surgeon in 1804, and served in the campaign in Italy in 1805, including the occupation of Sicily. He was also at the descent on the coast of Calabria, at the battle of Maida, and siege of Scylla Castle in 1806. He afterwards accompanied the expedition to Sweden, under Sir John Moore, and subsequently in Portugal and Spain up to the retreat to Corunna. He obtained the rank of surgeon in 1811, and in 1815 was present at the capture of Guadaloupe. He was promoted to be assistant-inspector, July 14th, 1836; deputy-inspector-general, January 16th, 1841; and inspector-general, April 1st, 1850. He had received the silver war medal with two clasps.

A New Name. M. Gibert has given homœopathy a new name—"homœoniaiserie."

Bequest. By will Zadoc Aaron Jessel, Esq., has left amongst others the following bequests. Jewish Hospital, Norwood, £100; London Hospital, £100; Free Hospital, Devonshire Square, £100; University College Hospital, £50.

Dr. W. H. O. Sankey has become the proprietor of Sandywell Park Asylum, near Cheltenham; he received the licence at Quarter Sessions, Gloucester, on the 18th instant, *vice* Dr. Hitch and Mr. J. Yorke Wood.

King's College, London. The result of the examination for the scholarships offered for competition among medical students beginning their first winter session was announced by the Council on Friday last. The following are the successful candidates:—For scholarships of £25 for three years, Baxter and Curnow; for scholarships of £25 for two years, Fiddian, Garrod, M'Gill, and Bland.

The Victor Townley Case. The visiting justices of the Derby County Gaol have tendered their resignation, on the ground that the refusal of the magistrates to ratify their recommendation for the dismissal of Mr. Gisborne, the gaol surgeon, who had given evidence in favour of Townley's insanity, implied a want of confidence in them, which materially lessened their influence in the gaol. Some discussion arose, which resulted in the visiting justices consenting to act for another quarter, in anticipation that, in the meantime, Mr. Gisborne would express his sorrow for what he had said and written.

Testimonial to Edward Daniell, Esq. At the anniversary meeting of the Chandos Lodge of Odd Fellows, at Newport Pagnell, held on the 14th inst., a testimonial was presented to Edward Daniell, Esq., who was about to retire from the post of surgeon to the lodge, which he had held from its establishment twenty-five years ago. The testimonial consisted of a silver inkstand, having a rich ink glass with silver top, together with a silver pen and pencil case and gold pen. On the inkstand was engraved the following inscription:—"Presented to Edward Daniell, Esq., by a voluntary subscription of the members of the Chandos Lodge, as a token of their esteem. Newport Pagnell, October 14th, 1864." Mr. Daniell gave a short address on the advantages of benefit societies, and also gave some useful advice to those present on other subjects. The vacancy occasioned by Mr. Daniell's retirement was filled by the appointment of Charles Terry, Esq.

An Indignant Druggist. A correspondent of the *Chemical News* is very angry with the Government Report on Poisonings. There may, however, be some truth in his remarks worthy of the prescriber's attention. "A great effort has been made to raise a storm of obloquy against us, for a failing which probably happens less often to us than to prescribers. These have an advantage which compounders unfortunately cannot command. Some one comes after them who can correct their blunders. I, for example, have had some experience in dispensing—as much as most indeed,—and I am not conscious of having caused the death of a single individual. But I am confident that I have saved more than a dozen lives by detecting the mistake of prescribers. Going into a West End shop not many months ago, I was shown a prescription in which a physician had ordered morph. hydrochlor. gr. iij; ext. hyoscyam. gr. ss., to be taken at bedtime. 'A general practitioner,' as Mr. Deane said, 'may and does make numberless mistakes with impunity, because the facts are confined to himself and his own surgery.' I could tell of a few, but I do not wish to throw stones. But there is one advantage which the general practitioner has over the chemist to which Mr. Deane did not allude—namely, that the former can sign certificates of death for his own patients. Perhaps if druggists could do the same for their customers, accidental poisonings would be somewhat fewer.'"

An Obscure Disease of the Brain. The Melbourne correspondent of *The Times* writes:—"I informed you that a convict was lying in gaol under sentence of death for shooting his partner dead while disputing over accounts. Some one started the idea that he must be insane; but the defence of insanity was not set up at his trial, and he was convicted. That one man should shoot another in cold blood, outside the Public Works-office, and surrounded by a group of friends, and should have concealed the pistol about his person for the purpose, could only be the result—in the opinions of certain doctors—of 'moral insanity,' 'moral exaltation,' or 'emotional insanity,' for thus was the alleged mental condition described. As was admitted by all, delusion there was none; but the son of the prisoner asserted that there was insanity in the family in England. The government appointed a commission of three of the most eminent medical men in the colony to examine the prisoner. They, after various long examinations, etc., pronounced him perfectly sane, and the law was left to take its course. Forthwith arose a perfect storm of remonstrant meetings, and of letters from medical men. The ministry being inexorable, were denounced as 'red-handed.' The most demonstrative of these agitators was Professor Halford, the occupant of the anatomy chair at the Melbourne University. In return for his speculations on the state of the prisoner, the latter on the scaffold bequeathed his body to the Professor. The Professor, having expressed himself in common with other medical men to the effect that extensive lesion of the brain would on a *post mortem* examination certainly be disclosed, watched the gaol authorities, got access to the prisoner's body after execution, and made off with his head to the University rooms. The gaol surgeons were in consternation, and appealed to the Sheriff. Law and justice were for a moment at fault. At length it was determined that the Sheriff, accompanied by a justice of peace and by a policeman, should proceed forthwith to the University, and demand the brains. On arrival of the formidable Sheriff, 6 feet 4 inches in height, at Professor Halford's rooms, the Professor was found surrounded by medical men and with the brain before him, the dissecting then proceeding. The Sheriff demanded the public property. Professor Halford asserted that the brains were his by bequest of their former owner. The Sheriff contended, with much force, that the brains were 'the government's brains,' and that a convict on the scaffold had no property even in his own brains. Finally, the gaol surgeons being present, it was arranged that the dissection should proceed, and at the end the brain was pronounced perfectly healthy. The Professor received a reprimand from the Council of the University, and so the foolish business closed. It may be remarked that had this convict been spared, he would, under the operation of an Act of Council here, have been entitled of right to his liberty on any two duly qualified medical men testifying to his sanity. Such a certificate could have been obtained from almost any two medical men in the colony, in which case we should soon have been startled by the spectacle of a man quietly walking about the streets, who only a few weeks before had shot a fellow creature with less concern than most men would exhibit in shooting a dog."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Pathological Society of London, 8 P.M.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Eastlake, "On the Management of the Third Stage of Labour"; Dr. Wade (Birmingham), "On a Case (Puerperal) of Embolism of the Pulmonary Artery."—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Dr. B. Squire, "On the Diagnosis between Syphilitic and Non-Syphilitic Diseases of the Skin."—Linnæan.—Chemical.

FRIDAY. Western Medical and Surgical Society, 8 P.M. Practical Evening for the Narration of Cases and Exhibition of Specimens. Mr. Holmes will give the Result of Three Successful Cases of Excision of the Hip-Joint, and will exhibit the Patients.

DISEASE IN MANCHESTER AND PRESTON.

MONTHLY RETURN of new cases of disease coming under treatment in the four weeks ending August 27th, 1864. (A) At 28 Pauper Charitable and Public Institutions in Manchester and Salford. (Sanitary Association.) (B) In 6 Poor-law Districts and 1 Dispensary at Preston. (R. C. Brown, Esq., Preston.)

	A. Manchester.	B. Preston.
Small-Pox	26	—
Chicken-Pox	1	9
Measles	66	10
Scarlatina	70	21
Diphtheria	1	—
Hooping-Cough	18	4
Croup	3	1
Diarrhœa	578	150
Dysentery	40	15
Cholera	—	—
Erysipelas	25	6
Puerperal Fever	—	—
Insanity	46	5
Bronchitis and Catarrh	493	64
Pleurisy and Pneumonia	48	7
Carbuncle	—	—
Accidents and other diseases	4140	414
Totals	5555	706

TO CORRESPONDENTS

** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

T. O.—The symptoms, as described in the papers, immediately attending the death of the Duke of Newcastle, indicate some sudden stoppage to the heart's action. We might conjecture—from the fact of the Duke's long illness—the formation of a clot in the heart, or of its sudden entrance into some one of the large cardiac vessels.

ERRATA.—In the Review of Dr. Handfield Jones's book on the Nervous System, at p. 440, column 1, 2 lines from bottom, *for* "the *juvantia* being such as modify the form", *read* "the *juvantia* being such as modify the power"; and at p. 441, column 1, 14 lines from bottom, *for* "In malarious and other fevers, pyæmia and suppurating foci may depend, etc.", *read* "In malarious and other fevers, in pyæmia and suppurating foci, they may depend, etc."

F. K.—We cannot undertake to answer the falsehoods and calumnies which are, week after week, published concerning this JOURNAL and its management. The key to all the ravings and wrath in which they are dished up, is very simple. It may be summed up in the words envy and malice. The JOURNAL has been successful beyond expectation in the hands of the present Editor. The number of associates has advanced since 1861 from under 1800 to over 2400. The influence of the Association and of its JOURNAL has never been greater than it now is; never have its annual meetings been more powerful; and never were the contributions to the JOURNAL more numerous and excellent. Envy, being ever dishonest and without principle, naturally seizes upon the occasion; and allows and aids malice and all uncharitableness in the doing of their usual kind of work. With such we cannot deal.

MR. R. B. CARTER AND THE JOURNAL.—SIR: I am anxious to place before the members of the British Medical Association a letter on the subject of the JOURNAL, containing the facts and arguments on which I should rest a motion that will be brought forward, by myself or some other, at the next annual general meeting. The motion will be directed to the suppression of the JOURNAL as at present conducted; and it is my wish that the associates should have the question brought under their deliberate consideration before the meeting takes place. In order to state my views fully and clearly, I might require to occupy three, four, or five pages; and my object in writing to you is to inquire whether you would insert a letter of such length, written with such an object, sufficiently early to allow it to be read and considered by the members before the meeting at Leamington. I shall therefore be glad if you will inform me, in an early number—1st, whether you would print such a letter at all; and, 2nd, whether you would print it within a month of receiving the copy. If your answers should be in the affirmative, it would probably be four or five months before I should act upon them. But I wish to know whether space and time are at my disposal. It appears paradoxical to ask any journal to assist in advocating its own extinction; but the BRITISH MEDICAL JOURNAL is in an exceptional position, and is the best channel for addressing the members on a subject that must interest all of them. I have therefore determined to state the nature of the communication that I wish to make, and to ask whether it will be admitted into your pages.

I am, etc., ROBERT B. CARTER.

Stroud, Gloucestershire, October 22nd, 1864.

[Mr. R. B. Carter's invitation to us to perform the Japanese operation of the "happy dispatch", is, doubtless, worthy of attention; but as we are responsible Editor of the JOURNAL at present, and have not yet vacated office in favour of Mr. R. B. Carter, we must be permitted to exercise Editorial judgment on his as on all other documents, before publishing them. EDITOR.]

ELECTRICITY OF THE METALS.—SIR: Notwithstanding your former refusals to admit my views in your columns, I again, on the principle "that a faint heart never won a fair lady", appeal to you on the ground of the new discovery of "Electricity of the Metals", and request insertion of the accompanying letter.

From daily experience, I am convinced that poultices, splints, bandages, and plasters, can be superseded by the use of tin plate splints.

Who can say that there is any great predilection, or even comfort, in poultices? Even the late Mr. Robert Liston denounced them as a mass of filth. Surely, straight splints are anything but scientific; also, bandages are well known to be indifferently and carelessly put on, and often shift through the motion of a limb. As to plasters, their efficiency is too often denounced by lecturers and hospital surgeons, as of no avail, or inconvenient.

It has been well observed, that pressure applied on the surface of a wound or diseased part, caused reparative process or absorption. This acquirement is fully obtained in the tin plate splint.

I am, etc., WILLIAM PARKER.

Bath, October 17th, 1864.

Extract from Letter.

"The electricity of the metals having been recently offered in a paper which was read before the Academy of Sciences at Paris, by M. Gaugain, and iron and tin, for the first time, having been especially named as producing this phenomenon, it is desirable in this brief notice to show how such combination of metals can be beneficially used (amidst contrary opinions) in the amelioration of human sufferings, as substitutes for many surgical applications; viz., splints, poultices, bandages, plasters, etc., which are now employed in a slovenly, filthy, and unscientific manner."

INTERMITTING RESPIRATION.—SIR: Will you kindly inform me where I can learn anything respecting the pathological meaning of intermitting respiration? I have lately had a case of disease of the mitral valves, in which the respiration ceased entirely for a period of fifteen, twenty, and even twenty-three seconds during every minute; this state of things lasting more than a week.

I am, etc., IGNOTUS.

[Our correspondent may safely trust himself to either of the works on Diseases of Women named by himself. EDITOR.]

W. K.—The Committee appointed by the Royal College of Physicians to inquire into the condition of the Army Medical Officers have, we believe, already had valuable information given them by capable authorities. Doubtless, they will be glad to receive any information which may tend to elucidate the subject on which they are engaged.

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—G. M. Phillips, Esq. (Hitchin), 10s. 6d.; G. T. Smeatham, Esq. (Great Missenden), 5s.; D. Rice, Esq. (Southam), 5s.; Wm. Allison, Esq. (East Retford), 10s.; C. P. Mann, Esq. (Cosford), 5s.

Amount previously announced, £89:9:6. Received at the *Lancet* office, £5:13.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, October 26th, 1864.

DR. E. MORRIS's letter shall appear next week.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary.*

Birmingham, October 1864.

COMMUNICATIONS have been received from:—THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; Dr. JOSEPH STEPHENS; Mr. W. LEGGE; Mr. J. VOSE SOLOMON; Dr. T. INMAN; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; Dr. R. FOWLER; Mr. STONE; Dr. GRAILY HEWITT; Dr. E. MORRIS; Mr. LEGGE; Dr. SANKEY; Mr. HAYNES WALTON; Mr. R. B. CARTER; Mr. R. S. FOWLER; Mr. MORTIMER GRANVILLE; Mr. R. BOWLES; Dr. A. RANSOME; Mr. T. TURNER; Dr. C. TAYLOR; Dr. THUDICHUM; Dr. MARSHALL; Dr. BRUSH; Dr. BRYAN; Mr. S. H. STEELE; Mr. W. MARTIN; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; and Mr. R. L. BOWLES.

BOOKS RECEIVED.

1. Indication of the Paths taken by the Nerve-Currents, as they traverse the Caudate Nerve-Cells of the Spinal Cord and Encephalon. By Lionel S. Beale, M.B., F.R.S. London: 1864.
2. Mémoires sur une Fonction Méconnue du Pancréas. Par Lucien Corvisart. Paris: 1864.
3. Introductory Lecture given at the Leeds School of Medicine. By Thomas Nunneley, F.R.C.S.E., President. Leeds: 1864.
4. A Manual of Qualitative Analysis. By Robert Galloway, F.R.S. Fourth edition. London: 1864.
5. Elements of Materia Medica. By Dr. William Frazer. Second edition. London and Dublin: 1864.
6. Photographs of the Diseases of the Skin. By A. B. Squire, M.B. No. III. London: 1864.

ADVERTISEMENTS.

ESTABLISHED 1848.

MEDICAL TRANSFER & PROFESSIONAL AGENCY,
50, Lincoln's-inn-fields, W.C.

Mr. J. Baxter Langley, M.R.C.S. (KING'S COLL.), begs to inform the members of the Medical Profession that he has undertaken the Medical Transfer and General Professional Agency business, till recently carried on by the late Mr. Bowmer.

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Locum Tenens, of high qualifications, reliability, and good address, can be despatched by an early train, after receipt of letter or telegram, stating terms, duties, and qualifications required. Fee, 10s. 6d.

Eligible and Genuine Practices for Sale. Mr. Langley begs to direct the attention of MEDICAL INVESTORS to his List of Practices and Partnerships advertised in the *British Medical Journal* of October 22nd. Several eligible openings for gentlemen wishing to purchase have since been placed in his hands for negociation; some of these he is not at liberty to advertise. Professional correspondents are requested to communicate (in confidence) what they require and the amount of income which they propose to secure, together with the amount of capital which they are prepared to invest in case they met with a Practice which commended itself to their judgment.—Professional Agency: Offices, 50, Lincoln's Inn Fields, W.C.

Partnership with Succession in one or two years, according to circumstances. Receipts upwards of £400 a year. Appointments £100. Easily worked; plenty of scope for increase. Population 6,000. Only two medical men. Double qualification required. Apply to Mr. Langley, 50, Lincoln's Inn Fields, W.C.

West-End Practice.—Mr. Langley is authorised to treat with a suitable Successor for the transfer of the whole or half-share of a General Visiting and Dispensing Practice in the best localities in the Western District. Income £1500. The vendor being seriously ill, an immediate arrangement necessary. Address, "S., 1022," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

Death Vacancy in London.—Mr. Langley is authorised to negociate for the immediate succession to a profitable middle-class practice, established twenty years, in one of the best districts of the city. Income of late incumbent, £800. Address, "S., 1,011," Professional Agency Offices, 50, Lincoln's Inn Fields, W.C.

Oxfordshire.—A pleasant old Country Practice for Sale. Receipts upwards of £500 a year. Appointments £142. Vendor of advanced age. Opposition feeble. Premium £500, with six months' Introduction, if necessary. Address, "1,028," Mr. Langley, as above.

THE

Hastings Prize Essay.

UROCHROME;

THE COLOURING MATTER OF URINE.

BY

J. L. W. THUDICHUM, M.D.*

PREFACE.

The author has selected a chemico-physiological subject for competition for the Hastings Medal, because it admitted of the combination of literary research with original investigation, and of the direct application of the results of this investigation to the practice of medicine. The greatest care was bestowed upon the original research, so that every datum there given may be considered as finally proved. But the application of the results to pathology and the practice of medicine could not (owing to the limitation of the space) be pointed out, excepting in a few propositions. These propositions the author pledges himself to prove at length hereafter.

The author has made numerous experiments, and always upon large quantities of material; so that upwards of one hundred gallons of urine were evaporated, and a similar quantity worked up in the natural state. His expenses to carry out his investigations have been very considerable. He has devoted a great part of his time to this inquiry during the past twelve months. He will consider himself highly honoured and amply rewarded should he be so fortunate as to become the first recipient of the Hastings Medal of the British Medical Association.

HISTORY OF INVESTIGATIONS ON THE COLOURING MATTER OF URINE.

Colouring matter is the most obvious of all ingredients of the urine. It has not to be discovered like urea or creatinine, but it strikes the eye at the first glance, touches the nose by its odour, and tastes bitter and nauseous when put upon the tongue. It is so prominent, and essentially characterising an ingredient of the renal secretion, that its study and consideration should precede that of any other. It is the alpha and omega not only of urinary analysis, but of urinary pathology.

Nevertheless, it has hitherto eluded the scrutiny of the inquirers who have endeavoured to extract it from the complex mixture to which it is peculiar. Each analyst, it is true, obtained a product more or less defined, and referable to or derived from the colouring matter. Each, too, named his product, without inquiring whether it had not been observed and named before. It was thus that urology became enriched with names apparently denoting different substances. Urophæine, uroxanthine, urerythrine, urrhodine, uroglaucine, urohematine, purpurine, indican, indigo-red, indigo-blue, oxide of omichmyl—these and other names indicate the stages of the inquiry, which had for its object the chemical knowledge of urinary colouring matter. But the results of these labours were so little satisfactory to critical minds, that Vogel, one of the latest authors on urology, declared it impossible that anybody should ever analyse the colouring matter of urine in accordance with the requirements of chemical science. If Vogel had been acquainted with the researches of Proust, he would not have ventured to express such an opinion.

Sixty-three years ago, a French chemist, then resident at Madrid, had more correct notions and better knowledge of the colouring matters of the urine than the authors of the newest treatise on urology. Sixty-three years ago, Louis Proust gave to science the account of researches, which for importance and variety of results, and correctness and beauty of description, stand unrivalled in the literature of animal chemistry; or, indeed, chemistry at large. He published them in the Spanish *Annales de Historia Natural*, March 1800, No. III, p. 275; and in the old *Annales de Chimie*, vol. xxxvi, p. 258. But the beginning of the century was not favourable to the spreading of information regarding purely scientific results. The invasion of Spain by the French destroyed Proust's existence at Madrid. He was robbed of the "silver vessels in which he had certainly evaporated two thousand pints of urine" by the soldiers of his own nation, and his laboratory was destroyed. Scientific men took no notice of his researches then as now. Of this neglect, Proust gently but justly complained; and republished the researches, with few additions or alterations, in 1820, in vol. xiv, p. 260 *et seq.*, of the new series of the *Annales de Chimie*. But it did not avail. Proust was before his time by more than half a century; and he was forgotten by his contemporaries as completely as he is ignored by our own. In 1844, Liebig (*Ann. Chem.*, vol. l, p. 161) drew attention to Proust's papers, remarking that they appeared to have escaped the attention of all authors who had hitherto written upon the subject of urine. But by misapprehending the nature of the bodies discovered by Proust, as derivates of the colouring matter of urine, and by declaring that they could only be obtained from putrid and not from fresh urine, he neutralised the effect of his own literary discovery, so far as the colouring matter was concerned, and Proust's researches were anew assigned to oblivion.

* Extract from the Report of Council, presented to the annual meeting of the British Medical Association, held at Cambridge on August 3rd, 1864.

"*The Hastings Prize Medal.* The adjudicators of this prize have forwarded the following report.

"'*To Sir Charles Hastings, M.D., D.C.L., President of the Council of the British Medical Association.*

"'Dear Sir Charles,—We, the undersigned, being the Committee appointed by the Committee of Council to adjudicate the Hastings Gold Medal for 1864 for an Essay on Physiology, beg leave to state that, of six essays sent in in competition, an Essay on Urochrome, bearing the motto 'Original Research', is the one most worthy of the prize.

"'We therefore inclose to you the letter accompanying the MS., containing the name of the author, with the seal unbroken; and we will ask you to be kind enough to break the seal, and to communicate the award to the President, Dr. Symonds. We will further ask you—in order that he may be present at Cambridge on Thursday next to receive the medal—to inform the author himself of his success, and to express to him our congratulations on the result of his learned and successful effort.

"'We remain, dear Sir Charles, yours faithfully,

"'W. SHARPEY, M.D.
B. W. RICHARDSON, M.D.
A. T. H. WATERS, M.D.

"'London, 29th July, 1864.'

"The President of the Council having broken the seal, and examined the inclosure, in accordance with the wish of the adjudicators, your Council has the pleasure to announce that Dr. Thudichum is the successful candidate."

I will here quote what Proust has said about the matters which he discovered, and which he declared to derive from the colouring matter of the urine.

"A fallow, odorous, and resinous substance, appears to me to be the seat" (I read *siège*, instead of *signe*, as probably misprinted) "of the odour, the colour, and the bitter taste of urine. If this resin were not dissolved in urine by the concurrence of so many salts, very little ammonia would suffice to keep it in solution, as it is very soluble in alkalies. If sulphuric or muriatic acid be mixed with an extract which has already been separated from its principal salts, there are immediately set free vinegar, benzoic acid, and resin, which deposits in the form of a black thick oil. On washing it with warm water, and collecting it in a beaker, it assumes the consistence of black pitch."

This description certainly only applies to extracts obtained from previously putrid urine; and from which, consequently, all the urea has been removed in the form of carbonate of ammonia. In so far, Liebig was quite justified in ignoring the word "*recent*", by which Proust describes the urine which served him for the extract from which he obtained the vinegar. If a similar extract is made from fresh urine, such as we define it now, neither vinegar, nor benzoic acid, nor resin, are obtained immediately on addition of an acid. It requires considerable management to obtain the resin from fresh urine; but in the manner to be described hereafter, it can be done with certainty. Liebig then erred only in this, that he asserted that these resinous matters could not be obtained from fresh urine. I continue the extract from Proust.

"It is possible, however, that this product does not exist in the urine as such, but in the form of an oily or greasy substance of the same colour as the urine; perhaps even its resinous character is only produced by the combined action of the air and the heat of the evaporating process. Nevertheless, as it is found with the same properties in various calculi, I do not hesitate in considering it as decidedly resinous. However that may be, its perfect solubility in alcohol, its pitch-like tenacity, and an aromatic odour which approaches that of castoreum, make me inclined to consider it as belonging to the inflammable or over-hydrogenised products.

"Its solution in alcohol does scarcely become pale when mixed with water; it becomes subdivided, and seems at first to dissolve; but afterwards it separates from the fluid, and then gives a black insoluble deposit.

"A very weak solution of potash dissolves it without evolution of ammonia; acids precipitate it from this solution, and with the assistance of warm water the particles reunite, and assume again the consistence of soft resin.

"It dissolves in the mouth and causes a very remarkable impression: it is an acrid bitter taste, which obliges one to spit in a disagreeable manner, analogous to the taste which is experienced when tasting the bulbs of arum. It is consequently its bitterness which is found in the extracts of urine, and in the urea which has not been sufficiently purified from it. Its brownish-yellow and dark colour is exactly the same as that which urine assumes on the surface which is in contact with the air. All these attributes do not permit me to doubt that it is the essential principle which colours and flavours the urine, and the linen moistened with urine when it is heated.

"Its resinous qualities are also supported by the results of its distillation. It fuses, puffs up, yields little or no water, a slight ammoniacal odour, a large quantity of thick oil, and above all a considerable quantity of charcoal, amounting to 46 per cent. I forgot to incinerate it and to examine its ash; I might have done it; I have had as much as eight ounces of this resin.

"It has also a singular disposition to become reduced to a powder when kept under water. It shows itself in this form even when it is precipitated from too clear an extract. In order to get it coherent and consistent, it is advantageous to take extracts of the thickness of a syrup of melasses. The resin contains benzoic acid, as, when kept in paper during drying, the acid becomes attached to the paper, having left the resin."

The singular disposition to become reduced to a powder when kept under water, can only be explained by the mechanical separation of the brown matter to be mentioned hereafter.

The account which Scharling (*Ann. Chem.*, vol. xlii, p. 265) has given of a body which he extracted from urine, and termed "omichmyl-oxyd", tallies to a great extent with the description which Proust gives of his resin. To guard against the changes which he supposed urine to undergo during evaporation, Scharling concentrated urine by freezing. The particles of ice were removed as long as they were colourless. When they became coloured yellow, the concentration was discontinued. Artificial freezing Scharling found unserviceable, as he could not succeed in making the urine freeze from above downwards, which seems necessary for allowing the solution of increased specific gravity to sink. Urine so concentrated, was mixed with an equal volume of ether, and allowed to stand for twenty-four hours or more, being shaken at frequent intervals. The ether dissolved a part of the oxide of omichmyle, a little urea, and several other matters, which were not determined. The extraction with ether was repeated several times, the ether was distilled off, and the residue was washed with cold, afterwards with hot, water. By this treatment, the urea and the other matters soluble in water were removed, while oxide of omichmyle was left.

Unless the urine upon which Scharling operated had become decomposed during the freezing, he could not have extracted the oxide of omichmyle. In case, however, the urine was not decomposed, then I incline to the belief, from many experiments which I have made upon this point, that what Scharling extracted in the ether was the yellow colouring matter of the urine in its undecomposed state, which, by decomposition under the influence of heat and acids, in particular, the distilling off of the ether, and the action of the hippuric and other acids probably contained in the ether, yields the resin of Proust, or oxide of omichmyle of Scharling. It was, therefore, a mere accident that Scharling obtained any of his oxide; the greater part of the substance furnishing it, the yellow colouring matter, he certainly lost in the washings.

For the purification of the omichmyle oxide, Scharling proceeded as follows. To decompose ammoniacal salts, which he alleges to have adhered to it, it was dissolved in caustic potash, the solution heated to ebullition, and afterwards precipitated with dilute sulphuric acid. The oxide was thereby precipitated in brown flocks. They were collected on a filter, dried, and dissolved in ether; the solution was filtered, and, after addition of a little water, was

aporated, when the pure oxide of omichmyle re-ained. The following are the chemical characters this substance.

It fuses in boiling water, forming a brownish-llow oil, which, on cooling, solidifies to a resin. It soluble in ether, spirit of wine, ammonia-water, lute caustic and carbonated potash and soda. The lution in spirit has an acid reaction. In its dry ate, it has a strong odour of castoreum; but on iling with water, a faint urinous odour is perceived. hen the ethereal solution is mixed with a very small uantity of spirit of turpentine, the mixture, after aporation of the ether, assumes a sweetish aromatic lour, resembling the smell of urine after taking irit of turpentine or juniper-oil internally. Heated rongly, after moistening with water, until decom-osition ensues, it gives out a strong penetrating lour of old urine. Heated more strongly, it takes re, and burns with a white strongly lighting flame. ed-heat leaves only a faint trace of ash. Boiled ith aqua regia, the oxide leaves a yellow semifluid sin. This boiling, performed in a retort, yields a reenish-yellow oil in the receiver, together with me nitric acid and water. This oil, boiled with ater, leaves a little yellow resin. The watery solu-on, on cooling, deposits scaly crystals, which are sily soluble in spirit, volatile, and, when saturated ith ammonia, produce a red precipitate in a neutral lution of chloride of iron. This makes it probable at the acid is benzoic, which Scharling believes to ave been produced by the action of nitric acid upon he oxide of omichmyle.

The benzoic acid was, of course, derived from the ippuric, with the existence of which in human urine charling was not acquainted when he wrote. The il was partly derived from the hippuric acid, partly om alcohols of the phenyl series, or phenylic alco-ol itself. The oxide of omichmyle was, therefore, ery impure, as is also evident from all other reac-ions. But it was nothing else than one of the in-redients of Proust's resin. (See Omicholic Acid.)

Had Scharling been acquainted with the proceed-ngs of Proust, he might have obtained his oxide in uantity, and employed for an useful purpose the abours which he wasted upon the chlorinated and itrated bodies extracted from the mother-liquor of itrate of urea. But, finding that his chloro- and itro-omichmylic acid turned out to be substitution-roducts of benzoic acid, which he had also obtained om his oxide directly, he, after the discovery of ippuric acid as a natural ingredient of the urine, ecame disheartened, and abandoned his researches.)michmyle-oxide was either forgotten entirely, or ragged on a pitiful existence in the small print no-ices of handbooks.

I repeated the experiment of Scharling upon urine oncentrated by evaporation on the water-bath. The thereal extract yielded the oxide, and yielded the ore of it the longer it was heated by itself after ae evaporation of the ether. No oxide was obtained, all superfluous heating was carefully omitted. From is I learned that the oxide was not contained as ich in evaporated urine, and that it was formed by eating the yellow ethereal extract with hippuric id. The yellow matter contained in the ethereal xtract, after purification, fitted the description, in me respects, which Heller has given of uroxanthine, id Schunck of indican. By boiling with dilute ids, it yielded the fallow resin of Proust, or the omichmyle-oxide of Scharling. It never yielded indigo-blue, although a matter was always obtained which had some features analogous to indigo.

Heller precipitated urine by acetate of lead, and evaporated the filtrate to dryness at a low temperature. He then extracted it with ether, which, after evaporation, left uroxanthine, a yellow matter, soluble also in water and alcohol. This, by treatment with acids at a higher temperature, decomposed, yielding a blue matter, uroglaucine, declared subsequently to be indigo-blue; and a red matter, termed urrhodine, declared to be identical with indigo-red.

Heller's urrhodine is "an uncrystallisable brownish red resin, of acid reaction (pigmento-resinous acid), whose solutions in alcohol and ether present so beautiful a red colour," that the name was hence derived. It contains nitrogen, and burns on platinum foil without leaving any residue. (See Omicholic Acid.)

Schunck treated urine with lead salts, and decomposed the precipitates by sulphuric acid. He obtained yellow solutions, which yielded him on standing, or on boiling, indigo-blue and indigo-red. He claims the yellow matter to be indican. This indigo-red, or indirubine, from urine, is not described any further than that it is extracted by alcohol from the mixture of substances which acids produce on boiling in a solution of the yellow matter termed indican. It has a fine purple colour in solution.

This process of precipitating urine with lead-salts, and decomposing the precipitates with acid, had been before adopted by Scherer. He employed alcohol with the hydrochloric acid, and evaporated the solution. The residue, after washing with water, he assumed to be the colouring matter of urine. It was a blackish brown matter, which could be powdered when dry. On burning, it left a mere trace of inorganic residue. It was insoluble in water, a little soluble in hot water, easily soluble in alkalies and alcohol. Its odour on combustion was peculiar, but differed from that of burning urine. A repetition of Scherer's experiments shows that he had obtained principally the red resin of Proust, or oxide of omichmyle of Scharling; mixed, however, with a considerable amount of impurities.

Scherer was succeeded by Harley, who adopted a new process, in so far as he evaporated urine, extracted with alcohol, treated the extract with caustic lime, and dissolved the lime compound so obtained in a mixture of alcohol and hydrochloric acid. From this acid solution the colouring matter was extracted by ether. This ethereal solution left a residue which was dark red, amorphous, resinous, and, dissolved in alcohol or ether, imparted to it a beautiful red colour. It was insoluble in acids, easily soluble in alkalies. On combustion, it left an ash, consisting exclusively of oxide of iron. There is, therefore, no doubt that what Harley isolated, and termed urohematine, in token of its supposed derivation from the colouring matter of blood, was one of the ingredients of Proust's resin and Scharling's omichmyl-oxide. (See Omicholic Acid.)

Marcet evaporated the urine to dryness, extracted with boiling absolute alcohol, and precipitated the urea by absolute ether. The mixture of ether and alcohol was decanted, concentrated on the sand-bath, and its acidity neutralised by some baryta water. After renewed concentration, a few drops of sulphuric acid were added, and the whole treated with a mixture of ordinary alcohol and ether. The fluid

separated into two layers, of which the uppermost was washed with water, filtered and evaporated at a low temperature. There resulted a colourless watery liquid, filled with crystals, which were not hippuric acid; and at the sides of the evaporating dish, red drops deposited. These united to form a resinous matter; had a strongly acid reaction; and, on standing twenty-four hours, crystallised in groups of needles, the centre of the group being in the centre of the drops. It was soluble in alcohol and ether only. The same product could be obtained from the urine without the addition of sulphuric acid, and is, therefore, claimed to have been present in the urine in the free state, or as an immediate principle. I believe this, again, to have been one of the ingredients of the red resin of Proust (and Scharling's omichmyl-oxide), encrusting crystals of urea or benzoic acid. (See Omicholic Acid.)

To my mind there is no longer any doubt that Proust's fallow resin, Scharling's omichmyl-oxide, Heller's urrhodine or indigo-red, Schunck's indirubine or indigo-red from urine, Scherer's colouring matter of urine as subjected by him to elementary analysis, Harley's urohematine, and Marcet's immediate principle, *are different expressions for one and the same mixture of substances—namely, of some of the products of decomposition by acids or ferments, under the influence of air, time, or heat, of a yellow colouring matter contained in the urine.*

Equal in importance to this fallow resin, in the appreciation of the whole subject of the colouring matter of urine, is another chemical compound, already described with great accuracy by Proust just sixty-three years ago, in the article already quoted, under the heading of "Particular Black Substance", in the following sentences.

"I have certainly caused two thousand pints of urine to evaporate, and all in silver dishes; this has put me in a position to seize certain products, which no doubt would have escaped me, had I worked upon smaller quantities. Such, for example, is the resin.

"I must now speak of a black matter, which acids separate at the same time with the resin. For a long time I have suspected that it might be a portion of the resin, which was altered in the relations of its elements, degenerated or hardened by a kind of particular over-oxydation; but I see on the other hand, that it differs from it by properties, which are too much pronounced for it not to be a substance of its own kind.

"It is a black powder, which separates from the resin when it is repeatedly washed with water.

"It is as insoluble in water as it is in alcohol, which latter purifies it from the last traces of resin.

"It dissolves with great facility in potash; but not after the manner of animal substances, which are all destroyed in it with evolution of ammonia and sulphuretted hydrogen.

"From this solution acids precipitate it in the form of a cheesy clot, which is black and voluminous; when dry it shines, and resembles asphalte.

"The resin of the urine is quite different; dissolved in potash, then precipitated by an acid, it collects as as a pitch-like matter, like a kind of turpentine; its residues make a dirty colour, and infect with their odour the liquids from which it is precipitated; but nothing of the kind occurs with the black matter; its separation is complete, and it leaves the liquids white. One hundred parts of this matter so purified give by distillation water, very little ammonia, a trace of oil, and 65 of charcoal residue, which is as much as is ordinarily yielded by common coal.

"This coal after incineration leaves much silica but I have not sufficiently examined how much, and what the other constituents of the ash are.

"As it is soluble in the most feeble solution of potash, I have no doubt that it is so in ammonia also, which is always so abundant from the destruction of urea. But what is it? whence does it come? It is found in the urine! Is it in its primitive state? Is it a quantity of carbon of which organic assimilation has disembarrassed itself? I know nothing about it; but I was obliged to make it known, because some day one may discover relations for it—a filiation which we do not expect at the present moment."

Here, then, is a substance obtainable from every urine, fresh or stale, sweet or putrid, which, having been made known to the scientific world, has nevertheless for sixty-three years eluded the scrutiny of the most caustic analysts, and escaped the notice of the most learned authors. Every person who has read the account which Heller gives of uroxanthine and Schunck of indican, and of their splitting up into indigo-red and indigo-blue, will of course conceive the probability of this matter being indigo. But it is not indigo. However carefully treated, it yields no crystalline sublimate of indigo-blue; it yields no aniline by dry distillation; and no volatile alkali is obtained amongst the products of its destruction by heat.

As it dissolves with a violet colour in fuming sulphuric acid, forming a sulpho-acid, the baryta-salt of which is insoluble, the substance has an analogy to indigo; but as I have never once, in many reactions obtained any blue matter, and always have obtained the brown, I have become incredulous as regards the occurrence of indigo among the products of decomposition of colouring matter. I can certainly not explain how the chemists who found indigo failed to find the particular black matter of Proust. I would certainly be less inclined to doubt the occurrence of indigo-blue as a product of decomposition of the yellow colouring matter, had I not the perfect certainty that the red matter, or red resin, the product of the decomposition of colouring matter already discussed, and claimed by Heller, Kletzinsky, Schunck and others, as being identical with indigo-red or indirubine, has nothing in common with this substance. Indigo-red, as described by Berzelius, is insoluble in dilute acids and alkalies, and thereby differs from the resin obtained from urochrome, which is soluble in both, in particular easily soluble in alkalies. Moreover, I have never found sugar* as one of the products of the decomposition of urochrome, even when I decomposed it under circumstances where sugar, when once formed, could not have been destroyed again. In short, I was thoroughly unsuccessful in finding indican, or any of its products of decomposition, indigo-blue, indigo-red, and sugar. I was unsuccessful in finding uroxanthine, which has the property of splitting up into uroglaucine and

* Schunck's reaction for sugar in urine which had been boiled with acids, is described as follows: "If the liquid filtered from the flocks be mixed with a salt of oxide of copper and an excess of caustic soda, it becomes greenish; *and if, after being filtered, it be heated for some time, it gradually deposits* a tolerably large quantity of suboxide of copper." The reduction of alkaline copper solution by sugar, appears at once, and is rapidly completed. As the boiled urine required *heating for some time*, in order gradually to deposit suboxide, this is of itself evidence *against* the presence of sugar. We shall see subsequently that urine contains always a powerful reducing agent, which is not yet known any closer.

rhodine. But I was always successful in finding a llow colouring matter peculiar to the urine, and, products of its decomposition, the fallow resin of roust, the particular black matter, and several vola- e substances to be discussed hereafter.

Having thus, as I believe, put the question of the louring matter of the urine upon its proper basis, shall next describe the experiments, which led to e above and the following conclusions. I consider at there is one colouring matter in the urine, to hich I appropriate the name of UROCHROME. By idation under the influence of air, this yellow atter passes into a red modification, corresponding the matter hitherto described as urerythrine. By composition under the influence of acids and time, of acids and heat, this yellow soluble matter, as ell as its red modification, yield three insoluble es: the fallow resin of Proust, or "Uropittine"; a sinous acid, corresponding with omichmyl-oxide, Omicholic acid"; the particular black matter of roust, or "Uromelanine"; and several volatile odies; amongst them, perhaps, a neutral essential l of peculiar properties, and several acids. Perhaps fixed soluble product of decomposition remains in e mother liquor. Under any circumstances, the rocess of decomposition is very complicated, and will et require considerable study before it can be satis- ctorily formularised.

While I shared the impression, that evaporation of e urine destroyed the colouring matter, I employed etallic salts for its precipitation from variously pre- ared urine. Salts of iron, tin, copper, lead, and ercury, were thus employed upon large quantities f material, and the precipitates further treated as ar as appeared expedient. Each of the experiments fforded important information. Some yielded cu- ious reactions; the most remarkable being those of hloride of iron and nitrate of oxide of mercury. When I had found that unchanged urochrome could e extracted from evaporated urine by means of ther, I combined the methods of precipitation, in hich lead and mercury salts had been found to be ost useful, with those of extraction. But ulti- ately, I found it practical to prepare a concen- ated extract of urine, and to precipitate the uro- hrome by lead and mercury salts, and to disregard ntirely the slight change which takes place in a nall portion of the urochrome during evaporation. 'or I had found that an extract of urine boiled for x hours with ten per cent. of concentrated sulphuric cid, did yet contain a large amount of unchanged rochrome; the colouring matter was protected from he effect of the acid by the urea in the same manner s I have shown* the hippuric acid to have been nder the same circumstances.

MODE OF OBTAINING UROCHROME.

Prepared Urine.

The urine is made alkaline by dissolving in it ised or unslaked caustic baryta (5 *grammes* to 1 *tre*) contained in a little sieve suspended in the fluid. When the fluid, after brisk stirring, remains strongly lkaline, it is treated with a saturated solution of cetate of baryta, as long as a precipitate is thereby roduced. The deposit is allowed to settle during velve hours, after which the fluid is filtered.

Urine thus prepared is free from phosphoric, sulphuric, and carbonic acids, and has lost a portion of its uric acid. It contains free alkali, combined acetic acid, and a little baryta, besides the other ingredients of urine. Nitrate or chloride of barium should not be employed in this preparation, as the presence of nitric acid and an augmentation of chlorides, interfere with subsequent operations for the isolation of urochrome by means of mercury-salts.

Limed Urine.

The urine is treated with unslaked lime in the form of powder, or slaked lime in the form of dry powder, until it presents a strongly alkaline reaction; after twelve hours standing, it is filtered.

Urine thus treated contains no phosphoric acid; if it do give a precipitate with chloride of calcium, enough lime has not been added. It contains free alkali, particularly lime, and is in a fair state of preparation for the application of lead-salts.

Prepared Extract of Urine.

The urine is evaporated over the free fire to one-tenth, and filtered from the phosphates, urates, and gypsum. It is then slowly evaporated on the sand-bath, until a pellicle of urates forms. After cooling and filtering, it is evaporated on the water-bath to a syrup, and allowed to cool slowly with the water-bath, to effect a good crystallisation of chloride of sodium, urea, and other salts. The decanted syrup, if necessary, mixed with a little water, is treated with best calcined magnesia, until alkaline, and until a filtered sample, treated with acetic acid and chloride of iron, does not give any immediate precipitate. The extract is then filtered. An extract thus prepared, contains neither phosphoric nor uric acid, a diminished amount of sulphates, and a small amount only of chlorides. It contains free alkali, particularly ammonia and creatinine, but no magnesia. It is, therefore, particularly suitable for the application of lead-salts.

Mode of Obtaining Urochrome from Inspissated Urine by Ether.

Fresh urine is evaporated on the water-bath, treated with a little hydrochloric acid in the cold, and extracted with ether. The ethereal solution, on distillation of the ether, leaves a residue which deposits hippuric acid on mixing with water and standing. The acid is separated by the filter, and the washings are united with the filtrate, whereby a deposit of resin is produced. This is allowed to subside, and the fluid is separated again by filtration or simple decantation, the resin adhering mostly to the walls of the glass vessel. The fluid now represents a beautiful bright saturated golden-yellow solution, having a strong odour of phenylic acid, mixed with a reminiscence of the ether. It contains hippuric acid, phenylic acid, and a trace of hydrochloric acid, besides urochrome, which constitutes the greater part of its ingredients. A solution of basic acetate of lead is now added to this fluid; at first, this causes only a turbidity, and no permanent precipitate is produced. It is mostly only after large quantities of basic acetate solution have been added, that a permanent bay-coloured, or Naples yellow, flaky precipitate of considerable bulk is produced. When the fluid is almost colourless, and the acetate produces no further precipitate, all the urochrome is in insoluble combination with lead. This precipitate is now collected on a

* In my "Researches on the Physiological Variations of the uantity of Hippuric Acid in Human Urine."—*Journal of the Che- ical Society*, February 1864, ser. 2, vol. ii, p. 55, *et seq.*

filter, and washed. It is well disposed towards this operation, which must, therefore, be performed thoroughly. It may even be removed from the filter and boiled with water, and filtered while hot; for too much care cannot be taken to remove chlorides, which adhere with great pertinacity to all compounds of urochrome.

This compound of lead and urochrome may be suspended in water, and decomposed by sulphuretted hydrogen, when a yellow watery solution of urochrome is obtained, after boiling with the sulphide, cooling and filtering free from any gross impurities, but still mixed with a trace of phenylic acid.

To free it from these slight impurities, the lead compound of urochrome, instead of being decomposed by sulphuretted hydrogen, which requires subsequent boiling to remove the excess of this agent, is decomposed by the cautious addition of dilute sulphuric acid in the cold, while the salt is triturated in a mortar. A slight excess of the acid is useful to decompose the salt entirely, but is immediately neutralised by the addition of some carbonate of baryta. The yellow solution is now separated by filtration, treated with baryta-water until alkaline, and then treated with carbonic acid until neutral, and allowed to stand. By this treatment all resin is removed from the solution, which is now purely yellow.

To this solution, pure neutral acetate of mercury is now added, as long as a precipitate is thereby produced; the limit has to be ascertained by repeated filtration of small samples. When this point is attained, the bay-coloured precipitate is separated by the filter, washed with cold water, removed from the filter, triturated in a mortar with water, and again placed upon the filter, and washed until the filtrates are neutral and free from impurities. In case the precipitate change its colour to dark or grey, it must be decomposed by sulphuretted hydrogen in water, and again treated with baryta and acetate of mercury. When the mercury-compound on washing retains a bay-colour, it is free from resin, calomel, and phenylic acid; and, on decomposition in water in a flask, in a current of sulphuretted hydrogen, will yield a yellow solution of pure urochrome, which, after the removal of the sulphuretted hydrogen by boiling in a current of hydrogen, cooling, and filtering, is clear and bright.

Mode of obtaining Urochrome by means of Lead-salts directly from Urine.

Prepared or limed urine is treated with neutral acetate of lead until an excess of it ceases to react. The precipitate is collected on a filter, and washed. The filtrate, without the washing water, is treated with basic acetate of lead until it ceases to react. The precipitate is filtered off. To the filtrate some ammonia is added, and the precipitate filtered off. Each of these precipitates is now separately treated as follows.

It is placed in a mortar, and triturated with dilute cold sulphuric acid, cautiously added, until a sample filtrate shows an excess of sulphuric acid when treated with baryta-solution and nitric acid. To the filtrate from the lead-sulphate, carbonate of baryta is added, to remove excess of sulphuric acid; and, after careful mixing without employment of heat, and some standing, during which the baryta salts settle well in the yellow fluid, the latter is separated by filtration. The filtrate is made alkaline with baryta-water, treated with carbonic acid, and filtered again. It is now precipitated with acetate of mercury; and the urochrome-mercury is washed completely with cold and boiling water, until clean and neutral. It must remain of a bay-colour, and not become grey or dark. If it do so, it must again be decomposed by hydrothion, and the urochrome retransformed into lead-salt by precipitation with neutral acetate and ammonia; the precipitate, after washing, decomposing with sulphuric acid, treatment with baryta as described, and filtration, yields a fluid from which acetate of mercury precipitates pure urochrome-mercury.

The three lead-precipitates from urine by this treatment yield one and the same colouring matter. They need not, therefore, be treated separately, unless to do so offers a convenience or a satisfaction to the inquirer. The urine may be precipitated in one operation by neutral acetate of lead and ammonia, until colourless. The employment of hot urine and hot reagents condenses the bulky precipitate, and makes it more manageable. The employment of heat after precipitation has the same effect, but is less convenient. Large quantities of materials and large sized vessels and utensils are requisite to obtain a notable quantity of product.

Prepared Urine and Corrosive Sublimate.

To prepared urine a saturated solution of corrosive sublimate was added, until it ceased to produce any precipitate. The white deposit was isolated, washed on the filter, transferred into boiling water, again filtered, and then decomposed in spirit of wine by hydrothion. The yellow filtrate was allowed to stand for six days exposed to the air, to deposit sulphur; and, after a second filtration, tested.

Boiling did not change its yellow colour. The addition of hydrochloric acid made the colour dark. Nitrate of mercury produced a pale flesh-coloured precipitate, which became a little redder on boiling. The fluid, shortly after boiling, became turbid, and deposited a precipitate. (Reaction for urochrome.) Acetate of mercury caused a copious precipitate, entirely soluble in nitric acid, leaving a yellow solution. (Reaction for urochrome.)

Nitrate of silver caused a white copious deposit which was not entirely soluble in nitric acid, but left some chloride of silver.

Acetate of lead caused a copious white precipitate shrinking on boiling, and yielding chloride to the water. Acetate of lead and ammonia precipitated the whole of the colouring matter, leaving a colourless fluid.

Evaporation of the filtrate left a brown residue (decomposed urochrome, insoluble in water), and some soluble matters, amongst them chloride of ammonium.

The precipitate by sublimate in prepared urine therefore, contained urochrome, hydrochloric acid and ammonia, which passed into the alcoholic solution. With the sulphide of mercury, there remained uric acid and xanthine, and probably much urochrome.

The alcoholic solution was now treated with acetate of lead, and a little ammonia to alkalinity. The copious yellow precipitate was removed and washed the filtrate was colourless. The precipitate was transferred from the filter to a mortar, and carefully mixed with dilute sulphuric acid, added in slight ex-

ess. When the sulphate of lead was settled, the ellow solution was filtered. This solution was now reated with carbonate of baryta until neutral and ree from sulphuric acid, and, after standing, fil-ered. To the solution, acetate of mercury was dded as long as a precipitate was produced. The nixture was heated, the precipitate well washed vith water, boiled in water, and again washed. There emained a yellow or fawn-coloured compound of rochrome-mercury, which, after decomposition by ydrothion in little water, with a little spirit added, ielded a yellow solution of urochrome. Hydrothion vas driven off by boiling. The solution then pre-ented all the characters and tests of a solution of ure urochrome.

The urine filtered from the sublimate precipitate vas of a paler colour, and rather greenish ; on stand-ng, it deposited grey flakes of a compound contain-ng reduced mercury. When this reducing action vas completed (probably due to phenylic and cre-ylic alcohol), the fluid was filtered again. It was ow treated with acetate of lead and ammonia, which roduced a yellow precipitate, leaving a colourless luid. The washed lead-compound decomposed by ulphuric acid, treated with carbonate of baryta, as bove described, and ultimately with acetate of mer-ury, yielded, after decomposition of the urochrome-nercury, a solution of pure urochrome.

The urine, before the application of the lead, had ielded the pink reaction with nitrate of mercury. The urochrome did not yield the pink reaction. Con-sequently, the pink reaction was due to a body re-naining in the filtrate from the lead-compound. This filtrate was evaporated to a small bulk, and re-nained colourless almost to the last, when it as-sumed a slight amber tint. It did not yield the pink reaction with nitrate of mercury any longer. The body of which it was a sign had been vola-ilised.

Urochrome from Extract of Urine boiled during many hours with Sulphuric Acid.

Prepared extract of urine was treated with con-entrated sulphuric acid, added drop by drop under agitation. The slight precipitate which formed (gypsum) was removed, and the fluid put into a retort on a sand-bath connected with a condenser. Distillation was now proceeded with, and carried on for six hours, the water being occasionally replaced, and more acid added, in the form of dilute sulphuric acid.

There remained in the retort a dark red fluid, mixed with flakes of resin and brown granular mat-er. The fluid was decanted and filtered, and, on standing, deposited crystals of hippuric acid. This circumstance showed that the action of the acid had been directed mostly against the urea and a portion of the urochrome, and that some urochrome might be undecomposed. The fluid was therefore evapor-ated on the water-bath until it filled with crystals of sulphate of ammonia, soda, and other matters. The mixture was extracted with spirits of 56 over proof, and the dark brown solution again evaporated, until it formed a second crystallisation. This was again extracted with spirit, and the spirit was driven off. A syrup remained, crystallising but sparingly. A third extraction left an uncrystallisable syrup.

This syrup, diluted with water, was treated with carbonate of baryta, and boiled until all sulphuric acid was precipitated. It was next precipitated with acetate of lead in slight excess, a few drops of ammonia being added. A copious precipitate of uro-chrome-lead, with some carbonate and oxide of lead, ensued. This was washed and boiled in water, de-composed by sulphuric acid, the excess of acid re-moved by carbonate of baryta, and the solution of urochrome precipitated with acetate of mercury. The urochrome-mercury, purified by boiling in water, was suspended in water with a little spirit, and de-composed by hydrothion. After standing and filter-ing, a solution of urochrome was obtained, having all the properties of urochrome obtained from fresh urine and fresh extracts. The syrup, after boiling with baryta-carbonate, had a neutral reaction, con-tained baryta in solution, yielded an immediate co-pious precipitate of nitrate of urea with nitric acid, a slight precipitate with chloride of zinc and spirit, and a copious one with corrosive sublimate. This latter probably contains a product of decomposition of urochrome, and deserves further investigation. The distillate from the retort was acid, and had a fearful odour. It was neutralised with carbonate of soda, and evaporated to a smaller bulk. When it was perceived to evolve a strong urinous smell, the evaporation was interrupted. It was now extracted with repeated quantities of ether ; the ether was eva-porated or distilled off at a gentle heat in the water-bath, when an *essential oil* was obtained as a residue, which had a powerful odour, a yellowish colour, be-came milky on mixing with water ; on being heated with nitrate of mercury, gave a splendid purple reac-tion, and did not change the solution of silver even on boiling. It consequently contained no phenylic or cresylic alcohol, and was evidently an oil of pecu-liar properties—*the smelling principle of urine.* In the sequel, it will be termed THE VOLATILE OIL OF URINE.

Purification of Urochrome.

However great the care may have been with which the mercury-compound (by acetate) of urochrome has been washed, the solution of the colouring matter obtained by decomposing the salt with sulphuretted hydrogen will always be found to contain some hy-drochloric and acetic acids. The former can be en-tirely removed by shaking the solution with freshly prepared oxide of silver. But the silver combines with a great part of the urochrome, forming a bulky precipitate ; while the urochrome which remains in solution also contains a considerable amount of ace-tate of silver in solution.

This solution is yellow, but much brighter than before treatment with silver oxide. It has an alka-line reaction, yields no precipitate with nitrate of silver, but a precipitate with nitrate of mercury (which becomes red on boiling, as does also the fluid in which it is suspended), and a precipitate with acetate of mercury. It is freed from silver by hydrothion, and the filtrate evaporated to dryness on the water-bath. Pure urochrome now remains, in the form of an uncrystallisable yellow solid matter.

Physical and Chemical Properties.

On evaporation of a pure and neutral solution of urochrome, it remains in the form of yellow crusts. They are, however, not entirely re-soluble in water.

It is easily soluble with a purely yellow colour in

water, least in alcohol,* more in ether, very dilute mineral acids, and alkalies.

Its watery solution, on standing, even when precluded from contact with air, assumes a darker colour verging towards red, and becomes red at last. It next becomes turbid, and deposits flakes of resinous matter. This decomposition is effected more quickly by the agency of heat.

When a yellow, somewhat acid, watery solution of urochrome, such as can be obtained without the employment of oxide of silver, is evaporated in the open air on the water-bath, it becomes covered with a red film of resinous matter. The fluid, on cooling, becomes turbid; but ultimately is cleared up by the deposition of more resin, which was dissolved in the hot fluid.

The same acid watery solution, evaporated in a retort in a current of hydrogen, is decomposed. Resin is formed, which is dissolved in the acid liquid with a red colour; but falls down on cooling in the form of flakes. These under the microscope are seen to be composed of red non-crystalline granules. A highly acid, clear, colourless, stinking distillate, passes into the receiver. The ultimate residue in the retort is syrupy, and remains so when repeatedly treated with water to remove resin, and re-distilled in the hydrogen current.

Acids effect a similar transformation by mere contact, immediately by boiling. Hydrochloric acid immediately precipitates resin by boiling; but retains in solution much resin, of which the greater part is precipitated by the addition of water. Dilute nitric acid also effects this decomposition; but the solution cannot be concentrated, as can the hydrochloric acid solution. The hydrochloric acid solution, after evaporation of most acid and neutralisation of residue, does not yield the reaction for sugar with an alkaline solution of copper. Boiled with caustic potash and a little oxide of lead in solution, urochrome apparently undergoes no change; no sulphide of lead is deposited.

From its watery solution, urochrome is precipitated by nitrate of silver as a gelatinous mass, entirely soluble in nitric acid; neutral acetate of lead throws down a white and flaky precipitate; basic acetate of lead, a bay or yellow coloured flaky precipitate. Acetate of mercury produces a yellow fawn precipitate. Precipitation by this reagent is complete from neutral solutions. Nitrate of mercury produces a white precipitate; which, after boiling, becomes pale flesh-coloured; it is entirely soluble in nitric acid. The supernatant fluid assumes a pink colour.

Decompositions. (*Red Resin, Uropittine, Omicholic Acid.*)

When an acid watery solution of urochrome, or a mixture of urochrome and of a quantity of mineral acid, is boiled for a sufficient length of time, the fluid assumes a dark red or brown colour, and drops of resin are seen in it. On the addition of water, or on cooling and standing, it deposits red or brown flocks, which can be worked into a lump by kneading with a glass rod, and removed. By repeating the boiling of the mother liquor, some more resin can be obtained; but the subsequent portions show already, by their black colour, that they are not so pure as the first portions.

When this resin is allowed to stand under water or kneaded with a glass rod, a brown powder separates from it, which is evidently mechanically mixed with it. (Uromelanine.) This powder also remains undissolved, when the resin is extracted with alcohol. Boiling alcohol dissolves a little of this brown powder, and deposits it again on cooling. If, therefore, the resin is dissolved in boiling alcohol and filtered hot, the solution has to be filtered a second time after standing for twenty-four hours.

The alcoholic solution of the resin thus obtained is of a magnificent ruby red colour. The addition of water causes at first an opacity in it; soon, however, the greater part of the resin is deposited in the form of reddish-brown flocks. If the alcoholic solution is evaporated to a high state of concentration and poured into cold water, the resin is deposited in a granular form. If the coloured liquid is now filtered off, and the granules are agitated in hot water, they again coalesce into the original soft red resin. On drying and standing, the resin becomes hard and brittle. In hot water, it becomes adhesive like tar, and dissolves a little. It has a peculiar powerful smell, which is evidently the basis of the smell of castoreum. Heated on platinum, it fuses and under boiling emits a powerful and disagreeable odour. It next burns with a strongly lighting flame and is ultimately entirely consumed.

Purification of Red Resin.

The red resin was purified by fusing it repeatedly in hot water, until, on the addition of cold water, it became immediately hard and brittle. It was next dissolved in a small quantity of hot alcohol; and this solution, after filtration, thrown into a large quantity of cold water. The red powder which was deposited was washed in the filter, and dried *in vacuo* over sulphuric acid. [It was found to be a mixture of substances, which were separated as follows.

Separation of Uropittine from Omicholic Acid.

The dry resin was extracted with ether, as long as this agent dissolved anything. The ethereal solution contained all the omicholic acid; the residue, constituting the main bulk of the red resin originally employed, contained all the uropittine.

Uropittine.

When the residue, which was quite insoluble in ether, was boiled with absolute alcohol, it mostly dissolved, and, on cooling, deposited a brownish-yellow matter in crystalline granules. (The crystals are probably minute microscopic rhombic octohedra. These granules, after repeated re-crystallisation from absolute alcohol, in which they were ultimately sparingly but entirely soluble, represented a pure well defined chemical body, to which, as being apparently of neutral properties, but having the main peculiarity of the red resin—namely, that of fusing by heat—the name of uropittine was given. It was subjected

* After I had ascertained this peculiarity of urochrome, I ceased, of course, to employ any alcohol in its preparation. Wherever, therefore, in the course of the above experiments precipitates of urochrome with metallic salts have been decomposed in alcohol or spirit of wine, I should now under the same circumstances employ water; the disadvantages of the higher boiling point of water, to which the solution must be exposed for the expulsion of sulphuretted hydrogen, notwithstanding. This slight solubility in alcohol of urochrome also explains in a measure the scanty success of former researches for its isolation; in almost all of them, alcohol was employed at one or other of the stages of the proceeding, and, instead of being extracted, the urochrome was left behind.

to elementary analysis, and yielded the following results.

First Analysis.

The substance was dried under the air-pump.
Taken for analysis ..... 0·2884 *grammes.*
Carbonic acid found ..... 0·5786 „
Equal to 55·13 per cent. of carbon.
Water found ..... 0·1503 „
Equal to 5·87 per cent. of hydrogen.

Second Analysis.

Substance taken for analysis... 0·3520 „
Carbonic acid found..... 0·7170 „
Equal to 55·46 per cent. of carbon.
Water found ..... 0·1677 „
Corresponding to 5·28 per cent. of hydrogen.

Third Analysis: Determination of the Nitrogen.

Substance taken ..... 0·3157 „
Combustion-tube, before and after combustion, cleared by means of carbonic acid gas current.
Volume of the nitrogen gas obtained ..... 32·5 *cub. centim.*
Temperature ..... 15° *centigrade*
Barometer, 30·08 inches = 764·03 *millimètres.*
Quantity of nitrogen, by weight 0·0382 *grammes.*
Equal to 12·10 per cent. of the substance taken.

At the beginning of the combustion, the glass-tube broke, and the mixture of substance and oxide of copper, traces of the uropittine being perhaps already decomposed, had to be transferred into another glass tube, in which the analysis was completed. A portion of the nitrogen may, therefore, have been lost.

The above elementary analyses lead to the formula $C^{18}H^{10}N^2O^6$ as representing the composition of uropittine.

	Found.						$C^{18}H^{10}N^2O^6$ Calculated.
C	55·13	.....	55·46	.....	—	.....	55·67
H	5·87	.....	5·28	.....	—	.....	5·15
N	—	.....	—	.....	12·10	.....	14·43
O	—	.....	—	.....	—	.....	24·74
							99·99

The above formula for uropittine may be considered as hippuric acid, in which one equivalent of hydrogen is replaced by amide (NH^2).

Hippuric acid, $C^{18}H^9NO^6$
Uropittine, $C^{18}H^8(NH^2)NO^6 = C^{18}H^{10}N^2O^6$

The true hippur-amide being known, and not corresponding in its properties with uropittine, we have to consider the latter body only as isomeric with hippur-amide.

Omicholic Acid.

The ethereal solution of this body, as obtained by extraction from the mixture of substances termed red resin, is of a bright port-wine red colour, and a peculiar, independently of the ether, penetrating odour. On spontaneous evaporation of the ether, the acid remains as a syrup; ultimately, as a resinous hard residue, in the body of which no crystallisation is to be perceived. It is easily soluble in absolute alcohol; and this solution, when poured in water, deposits nearly the whole of the acid as a flaky red precipitate.

When its ethereal solution is allowed to evaporate spontaneously, a few needle-shaped crystals are deposited at the highest points reached by the ether. They are probably another body, and not omicholic acid (possibly benzoic acid; the resin from putrid urine always contains some benzoic acid.)

The quantity of this acid was so small, that no analysis or other experiments could be advantageously undertaken with it.*]

Black or Brown Matter—Uromelanine.

The matter which remains undissolved when the red resin is dissolved in alcohol, is washed repeatedly with alcohol, dissolved in caustic potash, precipitated by acetic acid, and again washed with alcohol. A powder is thus obtained; which may be black, or brown, or even have a violet tinge, according to its state of subdivision.

It is soluble in acetic acid, more in hot than in cold; and from this solution, nitrate of mercury precipitates a red matter.

On dry distillation, it gives out white fumes, which condense to an oil; but no sublimate of any kind is obtained. The fumes, or oil, are neutral, bleaching, rather than changing like acid or alkali, the colour of litmus. They give no aniline reaction. But, with nitrate of mercury, they give an exquisite red reaction and precipitate. A very bulky, dense charcoal of the bulk of the original particles remains.

Nitric acid dissolves the matter without effervescence. After evaporation, two matters are left—one soluble in alcohol, the other insoluble. The solution gives the red reaction with nitrate of mercury.

Concentrated fuming sulphuric acid easily dissolves the black matter, forming a red or purple solution. Immediate addition of water precipitates all coloured matter, and the liquid is white and clear. But when the concentrated mixture is allowed to stand overnight, water precipitates a coloured portion, another coloured portion remaining dissolved. Carbonate of baryta precipitates all coloured matter on boiling, and the filtrate is again white. Consequently, the baryta-salt of the sulpho-acid is insoluble in water.

[The recently precipitated body, well washed, suspended in water, and subjected to the action of chlorine, yields a brownish substance, soluble in boiling alcohol. While the spirit is being heated, some of the substance melts to a brown resin, which dissolves by continued heating with new alcohol. The solutions, added together, yield, on cooling, yellowish-red amorphous flakes. These flakes are not again entirely soluble in alcohol, probably because the chloro-compound undergoes a change during the heating with the alcohol. This supposition was further confirmed by the results of an elementary analysis of the chloro-compound.

Elementary Composition of Uromelanine.

First Analysis.

Substance taken for combustion 0·2862 *grammes*
Carbonic acid obtained..... 0·5985 „
Representing 0·1632 carbon, or 57·02 per cent.
Water obtained ..... 0·1452 „
Corresponding to 0·0160 hydrogen, or 5·59 per ct.

Second Analysis: Nitrogen Determination.

Substance taken ..... 0·2765 „
Volume of nitrogen obtained... 30·0 *cub. centim.*
Temperature ..... 175° *centigrade.*
Barometer, 30·16 inches = 766·06 *millimètres.*
Weight of nitrogen obtained... 0·03501 *grammes*
Equal to 12·66 per cent.

* The brackets denote passages which have been added by the author since the prize was awarded.

These analyses yield the formula $C^{12}H^7NO^4$.

	Found.	Calculated.
C	57·02	57·6
H	5·59	5·5
N	12·60	11·2

The endeavour to control these analyses by repetition, and to determine the equivalent of uromelanine, had to be deferred on account of the necessity of printing the Essay. It is probable that the formula above given may have to be multiplied. Uromelanine presents a certain analogy to the green colouring matter of bile, cholochloine, the composition of which, according to my latest analysis, is $C^{36}H^{18}N^2O^{10}$. If the formula of uromelanine be trebled thus: $3(C^{12}H^7NO^4)=C^{36}H^{21}N^3O^{12}$—a formula is obtained, which may be considered as cholochloine, in which one atom of hydrogen is replaced by amide (NH^2), and to which two atoms of water have been added.

$$C^{36}H^{21}N^3O^{12}=C^{36}\begin{cases}H^{17}N^2O^{10}+2HO\\H^2N\end{cases}$$

The formula and properties of uromelanine differ so widely from those of indigo-blue ($C^{16}H^5NO^2$), as to require no further comment.]

Mode of Obtaining Uropittine and Uromelanine from Urine directly.

The mixture of resin and black matter can be obtained from urine in the following manner.

(*a*) *From Fresh Urine.* A quantity of prepared extract of urine is put into a capacious beaker, and mixed with concentrated sulphuric acid, added, drop by drop, while the fluid is being agitated. A trace of xanthine [a little uromelanine, and much gypsum, are] precipitated in flocks. After filtration, the fluid is diluted with water, and distilled in a capacious retort. When the fluid has been reduced to one-half, the black resin will be seen adhering to the sides of the glass, and to the platinum which it is well to put into the retort to prevent bumping. The boiling is now interrupted, and the fluid allowed to cool. Fluid and resin are separated by decantation or filtration. The particles of resin are united by fusion in hot water. They are then washed, dried, and the resin is extracted from the black matter by solution in alcohol.

(*b*) *From Putrid Urine.* Putrid urine is treated with a little lime in powder, or saw-dust, and filtered. The dark brown filtrate is evaporated in an open dish over the free fire. Although it soon assumes a strongly acid reaction, nothing but ammonia passes away. All froth which rises during the evaporation is carefully skimmed off. When black particles begin to appear on the surface, it is allowed to cool, filtered, put into a retort, mixed with dilute sulphuric acid, and distilled. A mixture of hydrochloric, benzoic, acetic, and another acid, passes over, together with a stinking matter, which deposits in flakes when the distillate is left to stand. The residue in the retort soon deposits the resin as a soft tar on the surface of the fluid, the sides of the vessel, and the platinum, put into the fluid for safe boiling. The resin is separated mechanically and by the filter, washed, and separated into its constituents by alcohol. The uropittine and uromelanine thus obtained present the same essential properties as those obtained from fresh urine.

The mixed resin obtained from putrid urine has some peculiarities by which it is distinguished from the resin obtained from fresh urine.

It has the smell of asphaltum when fresh, mixed with that of castoreum. Its taste is slightly bitter, and highly nauseous. It does not dissolve in the saliva to any great extent.

The black matter, after separation from the resin by alcohol, and purification by precipitation from potash, falls down as a bulky deposit, but shrinks on drying. It ultimately becomes hard, black, and shining, and breaks like asphalt. It differs, therefore, in its physical appearance, from the uromelanine obtained from fresh urine.

The resin, or uropittine, from putrid urine, is also peculiar in this, that it is much darker than the resin from fresh urine, and contains some benzoic acid, which is never present in the resin from fresh urine. From this it can be separated by precipitating its alkaline solution by acid in hot water; collecting the resin by kneading; and decanting the liquor, which contains the benzoic acid and some resin in solution.

RESULTS AND THESES.

1. The colouring matter of the urine, to which the name of urochrome is given, is one of the most interesting compounds in the list of organic and physiological substances.

2. It can be isolated in a pure state; and then is yellow, easily soluble in water, less in ether, and least in alcohol.

3. When its quantity [in equal bulks of solution] is increased, its colour still remains purely yellow. Consequently, the hypothesis of Vogel, that the urine of healthy and sick persons becomes darker in proportion to the increase of colouring matter, is fallacious.

4. Under various processes of decomposition, urochrome yields a red resin, consisting mainly of uropittine [having the elementary composition $C^{18}H^{10}N^2O^6$, and of omicholic acid, mixed with small quantities of undetermined matters], black matter, uromelanine [having the elementary composition $C^{12}H^7NO^4$], and other products.

5. By a simple process, probably of oxidation, urochrome passes into a red colouring matter, urerythrine, which [sometimes] colours red the urine of disease, and any deposits of urates contained in it. Frequently, this oxidation is only effected after emission. The red colour may also be due to omicholic acid, which is a little soluble in ammoniacal salts.

6. The fœtor of decomposed acid or alkaline urine is due to the uropittine and omicholic acid, and substances derived from them. It may be increased by, but is not primarily due to, carbonate of ammonia.

7. The urine of man contains an essential oil, which is volatile; has a strong peculiar odour; a curious reaction with iron chloride; and yields a diagnostic pink reaction with nitrate of mercury on boiling.*

8. Human urine also contains cresylic alcohol, which is obtained, along with urochrome, by one of the processes for its isolation.

9. One of the principal features of uræmia is the retention in the blood of urochrome. It is there de-

* This reaction is always obtained at the end of Liebig's quantitative analysis for urea, and has excited the curiosity of almost every inquirer who used that method. I have successfully used the appearance of the first trace of pink after the disappearance of all greenish yellow colour, as the sign that all urea was precipitated and excess of mercury solution present. The soda-test always confirmed the conclusion derived from the pink colour.

composed, and yields uropittine and omicholic acid, which, circulating in the blood, vitiate all tissues, can be found in the crusts on the teeth, and their smell can be perceived in the breath and the perspiration.

10. When colouring matter is retained, the typhoid symptoms of uræmia are prominent. The treatment with acids, under those circumstances, has to be set aside, as promoting the retention of the poisonous uropittine and omicholic acid, and a treatment with alkalies has to be substituted. The skin must be purified by washing, and repeated perspiration induced, until the effluvia do not any longer smell of uropittine.

[11. From healthy human urine, neither indican, nor uroxanthine, nor any other substance yielding by decomposition with acids indigo-red and indigo-blue, can be extracted; neither does it yield indigo-red or indigo-blue by boiling with acids.]

12. Urochrome has no immediately apparent relation to the colouring matters of the blood or the bile. It is a derivate of albuminous matter, and the most essentially characterising ingredient of urine.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

TWO CASES OF AMPUTATION AT THE SHOULDER-JOINT.

By Henry Lowndes, Esq., Junior Surgeon to the Hospital.

Case I. William Myers, aged 36, a carter, was admitted into the Northern Hospital on June 16th, 1864, at 8 P.M., with the following injuries, inflicted by a horse. The right humerus was fractured in the upper third; there was a deep lacerated wound in the front, and another still more extensive in the back of the arm; and the hand could be passed freely through them both down to the fracture and up towards the axilla, where the end of the lower fragment lay. The pulse could be felt at the wrist; the elbow was much contused; the bone was not much comminuted, but one or two small loose pieces could be felt. There was a large contusion over the right scapula and the right side of the chest. He was a good deal collapsed. He said he had been attacked in the stable by an entire horse of which he had charge. It appears to have first seized him by the arm with its teeth, and then to have got him down and kicked him. The soft parts of the arm were so much injured, that my colleague, Mr. Hakes, agreed with me that amputation was necessary; and at 10 P.M., I removed the limb at the shoulder-joint. Mr. Hakes was able to compress the axillary artery very securely, by passing a finger into one of the lacerations. I was barely able to save sound skin enough to cover the wound. The brachial and two other vessels were tied with ligatures, and a vein that was troublesome was secured with an acupressure needle and wire. He was directed to have brandy freely given through the night. He had thirty drops of laudanum on admission.

June 17th, 11 A.M. He was heavy and had slept a good deal; his breathing was much oppressed, and mucous *râles* were heard in the trachea and bronchi. The pupils were contracted. Emphysema had appeared on the right side of the chest, and extended upwards on the neck. Pulse 120; tongue dry and furred. He was ordered to have a strengthening plaster applied over the right side of the chest from the sternum to the spine.

℞ Ammoniæ carbon. ℈j; spiritûs ætheris sulph. comp. ʒij; aquæ ad ℥viij. M. Sumat ℥ss alternis horis.

He was ordered to have an ounce of brandy every two hours; also, ice and lemonade. He had passed urine; had been rather delirious.

9 P.M. He was much the same, but not delirious.

June 18th, noon. The emphysema had extended to the left side. His breathing was still much oppressed; tongue moister; pulse 120.

June 19th, 12.30 P.M. I dressed the stump, which looked well; there was a free discharge of serum. Wet lint was applied. He was ordered to have an enema of castor oil. At 5 P.M., he was seized with a violent pain on the right side, with great distress in breathing; pulse 134; respiration 56. Hot fomentations were ordered, and brandy every hour. At 9 P.M., the pain was a good deal less severe; pulse 120, sharp and hard; the face was flushed; the skin was hot; the bowels had been moved. He was directed to take a grain of powdered opium every four hours; to continue the brandy every two hours; to take beef-tea in small quantities frequently; to have turpentine applied to the side, and the stump poulticed.

June 20th, noon. He was decidedly better; pulse 108; respiration, 40; tongue much furred; skin cooler and moist. The stump was rather inflamed. He had slept a little. 9 P.M. He was still improving; and had taken a little bread and milk.

June 21st. Pulse 108, rather weak; tongue dry and brown. His breathing was still oppressed. A friction-sound was distinctly audible on the right side. The face was congested; the neck still rather emphysematous. He had slight delirium. The stump was suppurating freely, but sloughy in parts. He was ordered to omit the opium, and continue the ammonia and ether. A small blister was applied over the seat of pain; and half a grain of muriate of morphia was given at bedtime.

June 22nd. Respirations 44; pulse 120. He had slight delirium. The skin was hot; the tongue brown and dry. He had not slept well. An ounce of brandy was ordered to be given every hour.

June 23rd, 11 A.M. Pulse 132; respirations 32. He had slept better. There was great discharge from the stump. His respiration was very easy and natural; appetite better. In the evening, he seemed still a little better; but, about 3 A.M. on the 24th, the stump began to bleed; and, before this was found out, a very great quantity of blood was lost, and the patient died about a quarter of an hour after the house-surgeon had reached him.

Post Mortem Examination, thirty hours after death. (From notes by Dr. Roberts, Junior House-Surgeon.) The stump was very sloughy. The axillary artery was found firmly ligatured and appeared quite healthy; it contained a firm clot, partially decolorised and undergoing organisation; the inner coat of the artery was tinged with the absorbed colouring matter. The exact source of the bleeding was not determined; but it came from the neighbourhood of the posterior circumflex artery, which lay in a mass of bloody slough. There was fracture of the third, fourth, fifth, and sixth ribs, on the right side. The broken ends of the fifth projected inwards, and

had punctured the lung. There was bright uniform and capillary redness of the costal pleura about the seat of fracture; some effusion of lymph, principally on the pulmonary pleura; about an ounce and a half of yellow fluid in the pleural cavity. There was no inflammation of the lung-substance, except at the seat of puncture. There was emphysema of the cellular tissue of the mediastinum.

Remarks. The severe injuries to the chest sufficiently account for the collapsed state of the patient on admission. Although I had used acupressure in the three last amputations I had had, I did not try it in this case, partly because of the scanty and unsound flaps that were left, and partly because I thought the ligatures could be applied more rapidly, and I feared any loss of blood in the patient's state. The chest-symptoms had abated, and I was beginning to have good hopes of his recovery, when the hæmorrhage carried him off.

Case II. Francis Riley, aged 4, was admitted into the hospital on June 22nd, 1864, with the right arm crushed by the wheel of a lorry. It was completely shattered quite up to the shoulder-joint; and there was only just skin enough left to form a covering after amputation. This flap of skin was pretty sound; but was a good deal detached from the muscles under it, which were much injured. The face and forehead were contused and swollen; and there was a severe contusion of the right thigh. At 8 P.M., chloroform was given, and I removed the limb at the joint, making the flaps entirely of skin. Acupressure was used; and the axillary artery was secured by a long needle passed through the integuments, and a tape passed over its ends. Three smaller vessels were secured by small needles on the face of the wound, with looped wires passed over their points and twisted round their hafts. The flaps were brought together with sutures. A drachm of brandy every two hours was given.

June 23rd, 10 A.M. He was going on well; had slept a little; breathing rather oppressed. 7 P.M. I found him labouring under general convulsions, which had seized him about 5 P.M., and had continued with very little intermission. His face was swollen and flushed. As the stump looked rather tense, I removed the sutures, and also the three small needles, and took off the tape from the large one. Five minims of laudanum were given; and in an hour's time, as the convulsions had not ceased, three minims more.

June 24th. He had dozed a good deal in the night; he was free from convulsions, but was unconscious, and had not spoken. He was ordered to have milk and lemonade, and four minims of laudanum at bedtime.

June 25th. He had a restless night; was quite conscious; pulse 160, very small and weak. The outer angle of the stump was rather sloughy. The contused portion of the thigh was sloughing; and a piece of dead fascia that seemed very tense was slit up. The draught was ordered to be repeated every night; and a drachm of wine to be taken every half-hour. At 12.15 P.M., about sixty-four hours after its insertion, the long needle was removed.

June 26th. Pulse 148; tongue white; breathing oppressed.

June 27th. He had had a little magnesia, which has operated, and he was better. Pulse 140.

June 28th. He had slept well. The stump was nearly clean. Pulse 140.

June 29th. He was much improved; pulse 124; tongue clean and moist. He could take more food.

From this time, he went on well. A small granulating surface was left, which was difficult to heal, as underneath it lay the edges of the glenoid cavity continually moving about. One or two abscesses formed in the neighbourhood; but he became plump and well, and was discharged on September 18th, 1864, well, with the exception of a slight sinus still discharging a little.

Remarks. One point of interest in this case was the severe attack of convulsions. I was not sure whether it arose from the injury to the head, or from the loss of blood and exhaustion, or from the irritation about the stump. The fact of the convulsions being aggravated by handling the stump seemed to favour the latter view; and the removal of all tension and points of irritation, together with the use of opium, seemed beneficial.

With regard to acupressure, I may say that I have used it in five cases, all in the present year. In one, an amputation of the thigh high up, for severe injuries and hæmorrhage, the patient died from shock within a few hours. The other cases were, an amputation of the thigh in the middle third, secondary; of the leg, secondary; at the wrist-joint, primary; and at the shoulder-joint, primary (the case just related). All these made good recoveries. In one other amputation of the leg, I could not succeed in securing the vessels with the needles, and was obliged to have recourse to the ligature.

In general, I have not found the use of the needles difficult. I have seen no hæmorrhage follow their removal; and trust that, by using them in suitable cases, we shall help to lessen the mortality after amputations.

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

ABSTRACT OF A PAPER, ON THE DIFFERENCE IN THE SUSCEPTIBILITY OF JOINTS.

By James V. Bell, M.D., Rochester.

[*Read at Rochester, Sept. 30, 1864.*]

The author pointed out the difficulty of foreseeing the amount of mischief that may ensue upon any injury of joint, in consequence of difference in the susceptibility of joints. This difference is due to the following causes: *a*, anatomical and physiological; *b*, diathetic; *c*, morbid state of system present at the period of injury; *d*, accidental.

The author recommended the removal of dead portions of bone from the cavity of joints, in the place of excision, in selected cases, and at a medium period; viz., neither too hastily nor too tardily.

Dr. Bell narrated the heads of several cases.

Case I. A publican sustained a compound comminuted fracture of the patella by a fall from a cart. The recovery was perfect. The treatment consisted in the application of twelve leeches within the first twenty-four hours; and in the use of tartarated antimony, digitalis, and opium, for a fortnight, and of iodide of potassium subsequently.

Case II. A man met with compound comminuted fracture of the olecranon. Unhealthy inflammation of the soft parts supervened on the fourth day; the joint became disorganised; pyæmia occurred; and death was the result.

Case III. A man received a lacerated wound of the knee-joint without injury of the bones. Traumatic delirium set in on the fifth day; and death occurred about the tenth day.

Case IV was that of a youth, whose knee-joint was twice injected with iodine without the supervention of much local inflammation or general disturbance.

Progress of Medical Science.

MEDICINE.

Bulimic and Syncopal Dyspepsiæ. The *Bulletin Général de Thérapeutique* for August 15th gives, under this title, an extract from a work by Dr. Guipon, to which the Civrieux prize has been awarded by the Academy of Medicine.

Bulimic Dyspepsia has been several times met with by Dr. Guipon, independently of any other affection than nervous gastric disturbance. Its essential character is not only an exaggeration of the appetite, but also an actual increase of the digestive power. Normal digestion supplies the wants of the economy, and imparts a feeling of being satisfied; in bulimia, on the other hand, although digestion takes place regularly, the sensation of appeased want is not felt, or is only transient. Bulimia, in its simple form, is in fact a disease characterised by excess and exaggeration of function; and is the converse of atonic dyspepsia, where the digestive power is lessened. Bulimia may, however, be accompanied by other dyspeptic symptoms, such as pain, acidity, or pyrosis; these are relieved by taking food, but reappear when the digestive process—rapidly performed—is completed. Dr. Guipon has met with the disorder in both the acute and the chronic form. The latter is much the more obstinate and strongly marked; and of it he gives the following description.

The patients complain that they are dying of hunger; that they constantly require to take food for their nourishment. It is in vain that they multiply their repasts, and take meat six, eight, or even fifteen times in the day; they are always in the state of persons suffering from excessive hunger and inanition; they feel fatigued and languid, are much depressed, and their intellectual faculties are weakened. Sleep even does not interrupt the morbid hunger; to obtain rest, the patients are obliged to take food several times during the night.

For the treatment of bulimia in the acute form, or in the chronic form when not of long standing, medicine possesses means of more or less efficacy. In inveterate cases, the medical art is less successful. Bulimia, when temporary, is almost always connected with some general disturbance, especially hysteria; and hence the remedies which act on the nervous system generally will influence the digestion. Antispasmodics, sedatives, emollient or calmative baths, will be the remedies that will present the greatest chance of success, when used in combination with suitable hygienic regulations. In the chronic form of more or less duration, therapeutic means have in most cases only relatively advantageous results. Opium and its preparations retard digestion and the solicitations of the appetite; but, like all palliatives, they soon fail in producing this effect, or give rise to symptoms which necessitate the suspension of their employment. It is the same with the various narcotics, applied internally or externally; with nitrate of bismuth, arsenic, iodine, etc. The remedy which has seemed to M. Guipon to succeed best, has been raw meat, minced. In a very obstinate case, by means of this, he succeeded in procuring more lasting relief than had been afforded by a host of medicinal substances variously combined. The failure of strength, which is always so great and remarkable in bulimic patients, notwithstanding that a state of *embonpoint* is often very perceptible, is scarcely relieved by tonics. This condition has always appeared to Dr. Guipon to be in proportion to the over-activity of the digestion; so that, in fact, the less bulimic patients eat, the better condition they are in. With this increasing weakness and feeling of exhaustion, it naturally follows that the patient becomes discouraged. As a prophylactic measure, less copious and less frequent meals would be proper; but how can patients be expected to submit, who are constantly tormented by hunger, and obtain relief only by satisfying it? The advice to lessen the food is easy in theory, but almost impossible in application. The use of large quantities of wine has not appeared to Dr. Guipon to produce any appreciable result.

Syncopal Dyspepsia was admitted as a variety of dyspepsia by Sauvage, but has since been rejected. Dr. Guipon observes, however, that the occurrence of syncope during digestion does not indeed constitute dyspepsia; but that, when difficult digestion, attended with more or less pain, and without flatulence, is frequently accompanied by syncope, this characteristic symptom is at least sufficient to entitle the disease to be considered as a special form. Feeble, impressionable, anæmic females, in a state of pregnancy, are the most predisposed to the disease. The digestive function, slowly and painfully performed, appears to absorb all the powers of the economy; there is a feeling of fatigue, the circulation becomes slow, and the harmony of the functions is broken; the pulse becomes weak, the respiration is lowered, the eyelids cannot be raised, sensation is diminished or lost, and the extremities become cold. This state is sometimes of equal duration with the digestive process. If the patient is or wishes to remain in a state of rest, the circulation, and sometimes the respiration, are entirely interrupted, and true syncope is produced. The patient either remains sitting, or, what is less dangerous, falls on the floor, and gradually recovers; remaining, however, plunged during several hours in a kind of syncopal torpor. Dr. Guipon distinguishes three varieties of the disease: the simple form, which has just been described; the gastralgic, which is accompanied by more or less severe pain in the stomach; and the syncopal dyspepsia of pregnant females. The occurrence of the last named form is accounted for by the frequent diminution of the blood-corpuscles in the first half of pregnancy, in connection with the marked nervous susceptibility and disturbance of the digestive function which attend this condition.

The treatment of syncopal dyspepsia must generally be that of general atony—of chloro-anæmia. Tonic ferruginous medicines must be continued until the symptoms have disappeared. The digestive function itself, being the occasional cause of syncope, should be lightened as much as possible; and for this purpose, the meals should be multiplied, and consist only of light and easily digestible food; such as soups, meat-jellies, hashed meat, soft boiled eggs, chocolate, etc. During meals, all excitement and exertion, and fatiguing position, must be avoided; and, during digestion, any tight articles of clothing must be loosened. Parties, where there is excitement and more or less vitiated air, and prolonged meals, must be carefully avoided. If the disease continue in spite of these precautions, the horizontal position must be assumed after each meal, and a sinapism applied to the epigastrium. If the syncopal state persist, ordinary remedies must be employed; such as ether, friction of the temples with strong vinegar, inhalation of ammonia, and sinapisms. When the disease is accompanied with hysteria, antispasmodics, given either with iron, or in enema, an hour before each meal, will aid in preventing the attack. Finally, an attentive study of the proximate causes of the syncope will often shew what is produced by difficult digestion of certain articles of food. These, then, are to be abstained from if of little importance; but, if otherwise,

proper remedies must be administered, among which tonics, sedatives, pepsine, and alkalies, will always hold the foremost place.

Poisoning by Eating Tobacco. Dr. J. Le Briert was called in February last to see a woman, aged 46. She was much emaciated; but her health had been very good. She had been married twice, and had had five children. For some time she had had mental trouble; and, four years ago, a daughter eleven years old, to whom she was much attached, died of typhoid fever. From this time she became addicted to alcoholic drinks, and adopted the habit of eating tobacco in all forms, using it each week to the value of about two *francs*. When Dr. Le Briert saw her, she was nearly voiceless; she could only utter with difficulty a few confused sounds. Respiration was difficult and sighing; the pulse weak and slow. The heart scarcely beat. The pupils were dilated, and insensible to light; the eyes were haggard; she was almost blind. There was not complete deafness, but hearing was very sluggish. The face was pale, emaciated, and heavy; the tongue trembling, red, and dry. The patient had very painful dyspepsia. The abdomen was retracted. She had had no evacuations for a considerable time without the help of clysters or purgatives; at first, however, she had had diarrhœa and vomiting. She passed her urine involuntarily; had cold perspirations, and could not sleep. Nothing could be done in this case, but to prescribe soup, coffee, and acidulated drinks. On the next day, the patient's voice resembled that of a choleraic person; deglutition was impossible. The chest was expanded with difficulty; the inspiratory murmur and the movements of the heart were almost imperceptible. She died in the course of a few hours. (*Gaz. des Hôpitaux*, 21 Juillet 1864.)

ANATOMY, PHYSIOLOGY, & PATHOLOGY.

Aneurism of the Cœliac Axis. Dr. Luigi Concato relates the following case. A man, aged 38, who had been ailing for several years, while working in the environs of Bologna, on November 11th, 1861, was seized with extreme prostration, and pain in the stomach radiating to the lumbar region. The medical man who was called to him detected a pulsating tumour in the epigastrium. On his admission into hospital, on November 18th, palpation, percussion, and auscultation of the chest gave negative results, with the exception of slight exaggeration of the second sound at the origin of the aorta. The pulse was from 70 to 80, intermittent. In the epigastric region was a projecting tumour, which became insensibly confounded with the neighbouring parts; there was no change of colour in the skin. The tumour was about three inches in diameter, and nine-and-a-half in circumference. There were heard over it a murmur synchronous with the arterial diastole, and also one coincident with the respiratory movements.

The patient died suddenly on March 7th, 1862. On *post mortem* examination, the heart was found to be slightly enlarged; the walls of the left ventricle were hypertrophied. The pulmonary artery and the aorta were dilated; the semilunar valves of the latter were thinned; its internal surface was of a deep yellow colour, had lost its smoothness, and was scattered with yellowish white patches. The abdominal cavity, on the left side, contained coagulated dark blood: this being removed, the epiploon was found partly covered by the stomach, partly extending beyond its lesser curvature, and raised by a large clot; it covered a hemispherical tumour as large as the head of a six months' fœtus, consistent in its upper part, but soft and fluctuating inferiorly. This tumour extended backwards as far as the lumbar vertebræ, to which it was adherent by loose connective tissue. Above and to the right of the upper half was an irregular opening of about the size of a franc: by introducing the finger into this opening, a very friable mass, feebly adherent, was removed. On looking into the cavity through the opening, there was seen in the posterior part an elliptical aperture with smooth edges, communicating with the anterior part of the aorta. The calibre of this vessel was normal both above and below, and at the level of the tumour, to which it was adherent. The renal and mesenteric arteries were normal. The cœliac axis was replaced by the tumour which has been described. The splenic and hepatic arteries could be recognised immediately above the median circumference and at the anterior part of the tumour; the coronary artery of the stomach could not be found. The aorta was quite healthy. (*Annali Univ. di Medicina*, and *Gazette Méd. de Paris*, 2 Juillet 1864.)

Lesions of Nutrition consecutive on Hemiplegia of old standing. A woman, aged 79, under the care of M. Charcot, died in the Salpêtrière, having been hemiplegic during three years. The paralysis appeared suddenly, but was not attended with loss of consciousness; the left arm was affected, and speech was lost; there was also facial paralysis on the same side. Some hours afterwards, the left leg was paralysed. Motion alone was impaired; sensation was even exalted, and the patient sometimes complained of pain in the left side. The left forearm was warmer and more coloured than the right, and its integument was scaly.

On *post mortem* examination, there was found a patch of yellow softening, occupying some of the convolutions at the anterior part of the brain. The deeper parts of the encephalon presented no change. The nerves of the paralysed side were notably enlarged, from the deposit of connective tissue between the nerve-tubes. The muscles of the same side were atrophied, friable, of a reddish-yellow colour; and under the microscope presented granular deposit of fat in the fibres, from which the transverse striæ had disappeared. There was also an increased number of nuclei in the sarcolemma, and a large number of embryo-plastic nuclei between the fibres. The joints of the affected side presented the appearances ascribed by M. Tessier to prolonged immobility: softening, loss of polish in the cartilages, and hyperæmia of the synovial membrane. The extremities of the bones were also much thinned, and the thickness of the compact tissue was much less than on the other side. The medulla of the bones had undergone senile fatty transformation on both sides, and was on the left side the seat of more or less extensive ecchymoses. (*Gaz. Méd. de Paris*, 9 Juillet 1864.)

Epithelial Tumours of Nerves. M. Cornil states that, in patients who have epithelial tumours, the nerves frequently become similarly affected, either from being contiguous to the morbid tissue, or at a distance from the part primarily affected. These neuromata present for consideration the lesions of the envelopes of the nerves, and of the nerve-tubes. The lesions of the cellular envelope of the nerves which M. Cornil has found, are of two kinds. In one, there is a hard semi-transparent tumour, yielding little fluid on pressure, and formed of a tissue of closely set alveoli, which contain small round cells or nuclei. The other consists of neuromata of less firm consistence, yielding on section an abundance of thick fluid, which flows from alveoli visible to the naked eye, with vascular papillæ on their inner surface. In this form of the disease the epithelial cells are large, flattened,

and prismatic or many-sided, with several prolongations. Of the nerve-tubes, a small number are diseased; in these the medullary substance is granular, and is transformed into fatty molecules, which are sometimes united into a granular mass. This change in the nerve-tubes, which extends into the entire peripheric end of the nerve, produces very severe continuous pain, sometimes attended with exacerbations which, in certain uterine tumours, constitute the chief characteristic symptom. (*Journal de l'Anat. et Phys.*, and *Gaz. Méd. de Paris*, 6 Août, 1864.)

Organic Lesion of the Nervous Centres in General Paralysis. M. Joire has described as a lesion invariably attending the general paralysis of the insane, the development, on the anterior and inferior surface of the fourth ventricle, of small mammiliated projections or granulations, resembling the *cutis anserina*. The appearance is marked in proportion to the duration of the disease. In patients who die at an early stage, the granulations are numerous, very small, and appear like scattered grains of sand. In cases of long standing, the projections are large, whitish or transparent, and of a sufficiently firm consistence to feel like rugosities. They attain their greatest development at the lower part of the floor of the fourth ventricle, at the level of the point of divergence of the restiform bodies. The lesion is generally attended by more or less considerable dropsy of the ventricles and meninges. It is sometimes accompanied by softening of the superficial layer of cerebral substance in which it is seated; this layer has then a gelatinous semitransparent appearance, and is easily raised by the handle of the scalpel. In five or six cases, M. Joire has found similar granulations, generally very small and numerous, in the parts forming the floor of the lateral ventricle. (*Bulletin Méd. du Nord*, and *Gaz. Méd. de Paris*, 27 Août, 1864.)

Influence of the Pneumogastric Nerves on the Submaxillary Glands. M. Oehl finds that, by applying the galvanic current to the pneumogastric nerves, or to their central end, if divided, an increased secretion is produced from the submaxillary glands—the increase being greatest on the side on which the stimulus is applied. The augmentation appears to be independent of the sympathetic; for, while the secretion produced by irritating the pneumogastric nerves has the characters of ordinary saliva, that which appears—rarely—when the sympathetic is galvanised is much less in quantity, is thick and less transparent, and requires for its production a longer application of the stimulus. This agrees with the results arrived at by Czermak, Cl. Bernard, and Eckhard. When the lingual nerve and chorda tympani are divided, galvanisation of the pneumogastric nerve does not produce an increased secretion on the side on which the section has been made; while, on the other side, an increase is produced. When both lingual nerves are divided, no effect results from galvanising the pneumogastric; but, when the lingual nerve is divided so as to leave the chorda tympani connected with the central part of that nerve, then there is an increased flow of saliva after galvanisation of the *par vagum*. These facts, according to M. Oehl, prove that the salivation which accompanies the nausea and precedes the vomiting produced by excitation of the pneumogastric nerve, is due to a reflex action of that nerve, conducted to the lingual nerve by the chorda tympani. It is probable also, that stimulation of the gastro-intestinal mucous membrane acts on the submaxillary gland in the same way as in the salivation attending the presence of intestinal worms. The secretion of the submaxillary glands is energetically excited by introducing into the stomach stimulants—such as infusions of mustard or pepper—so long as the pneumogastric nerves remain intact. The reflex action of the pneumogastric does not extend to the parotid gland. (*Gaz. Médicale de Paris*, 27 Août, 1864.)

Reviews and Notices.

Clinical Lectures and Reports by the Medical and Surgical Staff of the London Hospital. Vol. I. London: 1864.

We are glad to find another hospital issuing its volume of Reports. This combination on the part of the members of a hospital staff has advantages in many ways; it is indicative of energy and of mutual good feeling. The hospital is then no longer represented merely by a number of scattered individuals, but by a body of men; and we see, so to speak, what it is doing for medical science. The efforts of each contributor gain, if not in intrinsic value, yet in importance and effect, by association with other valuable work; and every good paper reflects credit on all the rest. The volume before us in this way sustains and advances the reputation of the London Hospital, and of each member of the staff.

Mr. Hutchinson is the chief representative of the surgical division of the staff. Among his contributions, we find a Clinical Lecture on Leucoderma, with eight cases. The diagnosis of this affection (absence of pigment) from pityriasis versicolor, and from bronze-skin disease, is clearly given; the main points being the unnatural whiteness of the patches of skin affected, and their well-defined, convex, or spreading margins. He gives also a report of five cases of true Leprosy, a disease rarely seen in this country, and never arising here. His "conjectures" as to its pathology and etiology may almost be termed conclusions, so clear seems the chain of reasoning on which they are founded. They are, briefly, that it is specific in character, due to endemic influences, of which food seems to be the most potent, the offending article of diet being probably fish, as the disease occurs only near the sea.

Of greater importance is a long series of cases of Cerebral Amaurosis, brought forward by the same surgeon as evidence on the question of the causation of a common form of this affection by the use of tobacco. This evidence is alarmingly one-sided for smokers, and, until neutralised by a similar list of cases observed with the same care and pointing in the contrary direction, must be held to give a high degree of probability to the hypothesis which connects smoking with the symmetrical amaurosis due to atrophy of the optic nerve.

There is further an interesting Clinical Lecture on Pemphigus and its Curability by Arsenic, with fragments of others, all well worth careful reading.

Mr. Maunder supplies a number of cases more or less interesting, and attempts to trace the mode in which Hospital Gangrene was propagated in a recent outbreak of that disease.

Mr. Curling's name appears in connexion with some rare Fractures and Dislocations of the Vertebræ. Mr. Couper gives somewhat prolonged accounts of a Hernia without Sac, and of an attempted Reduction of a Dislocation of the Jaw of four months' duration. Mr. Little gives his experiences of the Prussian Camp in the Schleswig-Holstein Cam-

paign. Some Gold Medal Reports complete the surgical portion of the book. If, as the editors say, they deserve permanent record, in our opinion this it not exactly the place for them.

From the physicians we have Gleanings from the Field of Observation, by Dr. Andrew Clark, varied and fragmentary for the most part, as the title indicates, but all valuable. We may mention the note concerning the Products of Pneumonia, and the Observations respecting a hitherto unnoticed Condition of the Urine in Disease (a violet reaction on the application of the sulphate of copper and potash test), and its probable Relation to the Habitual Exhalation of Ammonia from the Skin and the Temporary Occurrence of Albumen in the Urine, as very large handfuls, or indeed whole sheaves, rather than gleanings.

From Dr. Davies we have a Clinical Lecture on Acute Rheumatism treated by free Blistering, with tabular statements of ten cases. The results of this treatment are most remarkable. The pain is quickly removed; the temperature of the body falls; the pulse becomes less frequent; and the urine neutral and abundant. The recovery is rapid and complete. The theory is, that there is a determination of the blood-poison to the inflamed joints, and that this is removed in the serum of the blisters. A broad strip of the emplastrum lyttæ is applied all round the limb, near but not over the affected joint, and allowed to remain till free vesication takes place, after which the escape of serum is encouraged by poultices. Should the results obtained by Dr. Davies be confirmed on more extended trial, we shall not only have an important remedy for acute rheumatism, but the theory may be applied to the obstinate cases of chronic rheumatism and so-called rheumatic gout.

Dr. Hughlings Jackson contributes a Clinical Lecture on the Study of Diseases of the Nervous System; a number of interesting Cases illustrating these affections; and a paper on Loss of Speech—its Association with Valvular Diseases of the Heart, and with Hemiplegia on the Right Side, etc., the main points of which have already been brought before the profession. In his most important speculations, he has been anticipated by M. Broca, as he mentions; but much merit remains with him. He was the first in this country to remark the association of loss of speech with right hemiplegia; and from this and other observations in epilepsy, etc., he arrived independently at the conclusion, or hypothesis rather, that the faculty of language was seated in the *left* cerebral hemisphere. The numerous cases given are by no means of equal value; and we think their mutual relations and their bearing on the question would have been much more clear if Dr. Jackson had observed throughout the distinctions he has laid down in his preface between language and speech, and had classified his cases accordingly. This is of greater importance than appears at first sight, or even, in our opinion, than is recognised in M. Broca's distinctions into "the general faculty of language," and "the faculty of articulate language." There is a vast interval between the loss or derangement of a mental faculty—language—and the loss or destruction of one means of exercising this faculty—speech; this, again, being different from the mere loss of the power of articulation.

We cannot do more than mention Dr. Ramskill's contributions on Dilatation of the Heart, with Difficulty of Articulation, etc., and on two cases of Algesia and Hyperæsthesia; or Dr. Down's successful application of Bantingism, and of the Ammonia treatment of Scarlatina; or Dr. Barnes and Mr. Heckford on the Causes and Conditions of Still-Birth; or the Notes of Cases by Dr. Woodman.

The volume, in truth, contains much valuable matter; and the London Hospital may be congratulated on its appearance.

Hooper's Physician's Vade Mecum: A Manual of the Principles and Practice of Physic; with an Outline of General Pathology, Therapeutics, and Hygiene. Seventh Edition, greatly enlarged and improved. By William Augustus Guy, M.B. Cantab., F.R.C.P., Professor of Forensic Medicine, King's College, etc.; and John Harley, M.D.Lond., F.L.S., M.R.C.P., Assistant-Physician to King's College Hospital, etc. Pp. 791. London: 1864.

This venerable practitioner's guide has during some years past undergone from time to time a process of rejuvenescence at the hands of its able editor, Dr. Guy, who has on the present occasion associated with him as his colleague, Dr. John Harley. The whole of the first part, on General Pathology and Therapeutics, occupying in this edition 280 pages, was added to the original work by Dr. Guy. It now consists of six chapters, viz.: 1, Health and Disease; 2, Causes of Death; 3, Outline of Physiology and General Pathology; 4, Examination of the more important Symptoms and Signs of Disease; 5, Hygiene; 6, General Therapeutics.

The second part—that on the Practice of Medicine, answering to the original work of Dr. Hooper—has been generally brought down to the level of the latest improvements in pathology and practice. Among the principal alterations which this part has undergone in the present edition are the following. In the division of General Disease, additions and alterations have been made in the chapters on Dropsy, Fevers, Diphtheria, and Gout. In Special Disease, the authors have amended the chapters on Diseases of the Brain and Spinal Cord, and have made additions regarding the Administration of Chloroform, and on various diseases of the Circulatory System, as well as on Chest-Diseases, including the Special Diseases of the Larynx and the Use of the Laryngoscope. Every chapter has, in fact, received additions in which most of the recent investigations of the diseases of various organs are noticed.

There seem, however, to be a few matters of practical interest, which the editors have passed over too lightly; such, for instance, as the formation during life of fibrinous deposits in the heart and large vessels, independently of inflammation of these parts. The importance of an acquaintance with this phenomenon is, we think, sufficiently established to warrant its notice in a book of the kind before us. Again, we cannot find any reference to wasting palsy or progressive muscular atrophy.

On the whole, however, the editors have well performed their task of epitomising modern medical knowledge for the use of the practitioner; and we have pleasure in commending this, the most recent result of their labours, to the favourable consideration of our readers.

ADDRESS ON CHEMISTRY, IN ITS RELATIONS TO MEDICINE AND ITS COLLATERAL SCIENCES. By WM. BIRD HERAPATH, M.D. Lond., F.R.S. L. & E. Read before the British Medical Association, 1863. Bristol: 1863.

THIS Address was, as our readers know, read at the Bristol meeting of the Association. Dr. HERAPATH now publishes and prefaces it with remarks, in which he accuses the BRITISH MEDICAL JOURNAL of "having purposely curtailed and refused it proper admission to its pages." But his preface is a complete justification of our having omitted the very few "objectionable" passages to which he alludes. Thus he himself, it appears, considers it necessary to assure his friends that, in those "passages which have been most condemned, he merely intended to object to members of the clerical profession restricting science within the literal text of the Holy Scriptures." In fact, he has to make explanations, and in some sort apologise to his friends for the insertion of the very passages which he condemns us for omitting. More than this: we find that he himself even does not exactly reproduce his own original text. Why, then, object to us for having omitted a few lines or words? At page 9 of his now published Address, for example, we find the following lines of text, and appended foot-note.

"The bearing of Organic Chemistry on Medicine may be further illustrated by that glorious gift of science to humanity so well known as chloroform, whose wondrous powers of alleviating pain and banishing mortal agony entitle it to the well-merited appellation of the 'divine essence'.*"

* "In the original address, 'the appellation of the divine essence or holy spirit' was employed by the author in the same sense as we say holy water, or the divine Dante; but as some of the more bigoted members could not perceive the real meaning of this expression, it has been thought possible that the public generally may be equally misled by their prejudices, and thus the objectionable portion has been omitted."

Is Dr. Herapath fair in condemning us for having omitted passages which he admits "have been condemned", and which he himself designates as "objectionable"?

TESTIMONIAL TO THE MESSRS RUMP. On October 14, at a public dinner, nearly seventy gentlemen, including the Earl of Leicester (Lord Lieutenant), H. Lee Warner, Esq. (High Sheriff), the Rev. J. W. Methold, etc., being present, a testimonial was presented to the Messrs. Rump, surgeons, of Wells, Norfolk, on their retirement from long and extensive medical practice—Mr. Rump, senior, having practised in the town for upwards of fifty years. A committee had some time been formed for this purpose, and the appeal, as anticipated, from the high esteem in which the Messrs. Rump are held, was cheerfully responded to both by rich and poor. The sum of £253 was collected, and with this amount an elegant service of silver plate was purchased, consisting of four corner dishes, a soup tureen, and two small sauce dishes, with ladles to match. In addition to the plate, an illuminated book was prepared, containing the name of every individual who had subscribed to the testimonial (without any sum of money being placed against the name), and the following heading:—"To Hugh Rump, and Hugh Robert Rump, this service of plate is presented by a number of friends and patients, to preserve the remembrance of the wise and prudent care of the father during more than fifty years' extensive practice, the rare skill and knowledge and energy of the son, and the uninterrupted humanity and kindness of both."

British Medical Journal.

SATURDAY, NOVEMBER 5TH, 1864.

THE PROVIDENT FUND.

UNDER the auspices of the British Medical Association, what promises to be a most excellent institution—the Provident Fund—has been fairly launched into existence. The machinery for working it has been formed; and an honourable Board of Directors, in whom the profession has full confidence, has been elected to carry out the scheme. We would, therefore, earnestly beg those who feel a warm interest in the success of the undertaking, to leave it for the present in the hands of the Directors.

Wisdom—calm, calculating wisdom—must stand at the helm, if stability is to be given to the Fund. A Provident Fund of this kind naturally excites our sentiments and our feelings; and assuredly all of us desire sincerely that the members of our profession should have every kind of benefit which a provident fund can afford them; but we must sternly remember that schemes of this nature are, above all others, liable to fail through indulgence in warmth of feeling. We must, therefore, beg our brethren to allow the matter now quietly to pass into the cold calculating hands of the actuary. Science must take up the scheme, at its present stage, in order to fix it on a firm and secure basis. A failure of this particular Fund, at this present moment, would be a serious calamity to the whole profession; for it may be safely affirmed that if, under the auspices of our Association, the scheme should fail, it would have little chance of being revived again in the hands of private individuals. What has ever been the bane, and in many cases the destruction, of Funds of this kind, has been the attempt to do too much; sentiment has carried away reason. We would, therefore, earnestly press upon the profession the necessity of their advancing slowly in the matter, in order that they may advance *tuto et jucundè*. *Festina lentè* must be the motto of the Directors at this present moment.

We venture to press these considerations, which are really merely the dictates of prudence and common sense, upon our brethren, because we know that the Directors, and especially their indefatigable Chairman, are overwhelmed with proposals and urgent demands touching the distribution of the benefits of the Fund. Assuredly the Fund is incapable, at its present stage of existence, of doing all that is asked of it; and assuredly, therefore, we, as wise men, must be content not to try to get more benefits out of it than the men of calculating science—the actuaries—tell us it will legitimately produce. To do so would, indeed, be playing the old game of

killing the gold-egg-laying goose, in order to get all at once at the golden eggs. Calm consideration will satisfy every one that a scheme like this must undergo development; that it cannot possibly become all at once a full and perfect institution, meeting all the wants of our profession. Calm reason, therefore, bids us to begin at the beginning, and not launch out at starting into great designs which may endanger the success of the whole concern. The homely proverb of "half a loaf being better than no bread" is the proverb to fit us at this moment. We must, at starting, drive quietly, and be content with a Provident Fund alone. As we grow in strength, and our muscles enlarge, then we may go into further good things; we may indulge in a Widows' and Orphans' Fund, and, in fact, gradually advance step by step, until at length, as all of us sincerely hope, we may one day find the Provident Fund developed into a great medical assurance association, capable of meeting and providing for all the accidents touching health and life which may fall upon the members of our profession.

ENUCLEATION OF EYES.

We cannot but congratulate the profession upon the numerous ophthalmological critics, reviews, etc., which have lately sprung into life. Ophthalmic surgery and diseases of the eye have been, during the few past years, studied with remarkable industry; and, as every one knows, very great differences in opinion and in practice have been the not unnatural result. A critical study of the new practices and proposals of the day will necessarily lead to the separating of the wheat from the chaff; and will, no doubt, one day bring us to something nearer settled rules of practice than we have arrived at, at present.

The subject of what, in modern language, is called the Enucleation of the Eye is one, amongst others, which would, we cannot but think, be the better for a little canvassing. This operation, once so rarely performed, and still so rarely performed by many eye-surgeons, appears in the practice of some of our modern ophthalmological authorities, an affair of what we may call every day occurrence. Either in connexion with, or co-incidentally with, or as a mere sequence of, iridectomy, has enucleation of eye become, in some hands, quite a common operation.

We, of course, offer no opinion as to the value of the operation in itself, or as to its desirability or rather necessity as a daily operation; but we cannot but note this very important fact, plain to every one; viz., that the practice of some eye-surgeons in this respect is in direct opposition to, and therefore in some sense a condemnation of, the practice of other eye-surgeons. It cannot, assuredly, be a matter of indifference to the patient that he should, or should not, have his eye enucleated. The operation must be good or bad for him, a desirable thing or a thing not at all to be desired. But as the practice at present stands, there appears to be no rule to guide the hand of the eye-surgeon; so that, in fact, the enucleation (or otherwise) of the eye will, in a given case, depend entirely upon the school of surgery into whose hands the patient may haply fall. But we must all acknowledge this to be a misfortune; and would all gladly see unity of practice exist upon the point. What, for example, are we to think, and what will the public say, when they meet with facts like the following?

In a translation of Zander on the Ophthalmoscope, the translator, Mr. R. B. Carter, incidentally tells us that he has enucleated at least a hundred eyes. His words are: "I have performed the operation" (enucleation of the eyeball) "more than one hundred times."

Then, on the other side, and as a contrast to this practice, we are informed that not so many as one hundred eyes have been enucleated in the Westminster Eye Infirmary since its foundation.

One single country surgeon, with, of course, a limited experience, has enucleated more eyes than have been enucleated by some eight metropolitan eye-surgeons, at a London eye-hospital, during something like half-a-century of practice!

We are not, let it be understood, venturing to criticise the practice of the Westminster Eye Hospital, or the practice of Mr. R. B. Carter; nor have we any opinion to offer on the point of practice. Our duty and intention are simply, for the sake of science and humanity, to mark the discrepancy in practice, and to call upon those who thus differ on such a very important point to subject their methods to a severe criticism; and so out of opposition to bring unity. As we started off with saying, we now conclude with saying, one practice must condemn the other. Both cannot be right; and, therefore, in the meantime, humanity suffers and eye-surgery requires enlightenment.

A PUZZLING CASE.

The inquiry as to the death of the gas-inspector, King, to which we referred last week, has terminated in an open verdict. It remains, therefore, undetermined when and where the injuries he received were inflicted, and by what means. Apparently, they were not the result of accident; since, besides the fatal fracture, there were numerous bruises, some of them on the top of the head. The pathological evidence does not fix within a few hours the exact date; nor was this to be expected; and there would be no difficulty in admitting the possibility of the injuries having been inflicted in the park, were it not that the sufferer passed under the eye of the resident medical officers of St. George's Hospital, and

that their evidence is so positive as to the drunkenness and as to the absence of all trace of injury. Leaving this evidence out of consideration, the case would be the not uncommon one of insensibility from concussion of the brain mistaken for insensibility from alcohol, the compression by effused blood coming on later. If, on the contrary, we accept fully the statement that, when admitted into the hospital, he had received no serious injury, the charge is very definitely brought home to the police of beating the poor fellow to death, or at least of allowing him to beat himself to death, since there seems to be no suspicion of ill-treatment subsequent to his discharge from custody. Circumstances thus either give the testimony unusual value as fixing the responsibility of a crime, or throw upon it the discredit of causing much of the confusion in which the case has been involved. Further particulars are promised, in the form of a report to the governors of the hospital, which, it is said, will give another colour to the affair; at present, as we have said, it is remarkable for the contradictions by which it is obscured.

There can be no doubt that the Poor-law medical officers are much more indebted to Mr. Griffin than appears on the surface. It was not to be supposed that all the evils with which he had to contend would disappear at the first breath. What Mr. Griffin has done, is to enlighten authority as to facts; and to prepare the minds of people for a coming reform. That his influence has not been exerted in vain, is certain; that it will tell much more powerfully in the future than it does at the present moment, we verily believe. For this reason, and because, in our opinion, Mr. Griffin has played the part of an earnest and disinterested lover of his professional brethren's interests, it is that we call upon medical men to do him fitting honour in the matter of a testimonial.

The Commissioners in Lunacy have issued the following advertisement, which is well worthy of the attention of the profession. It makes clear the state of the law on a point which has been hitherto not generally understood.

"*Lunacy.—Single Patients.* Office of Commissioners in Lunacy, 19, Whitehall Place, October 10th, 1864. The Commissioners in Lunacy, having reason to believe that many persons of unsound mind are illegally received or taken charge of, and that the law relating to insane persons not in asylums or licensed houses, but under individual care as 'Single Patients', is extensively violated, desire to draw the attention of medical practitioners and others to the provisions of the 8th and 9th Victoria, cap. 10, sec. 90, as amended by the 8th section of 16 and 17 Vic., cap. 96.

"By these enactments, no person (unless he derives no profit from the charge, or be a committee appointed by the Lord Chancellor) can receive one patient in any unlicensed house, neither can any person take care or charge of any one patient as a lunatic or alleged lunatic without the same form of order and medical certificates as are required upon the admission of a patient into a licensed house, copies of which are to be sent to the Commissioners in Lunacy, together with other particulars, which are fully stated in printed instructions to be obtained on application at the office of the Commissioners, 19, Whitehall Place.

"By the first mentioned Act, every person neglecting to comply with the requirements of the statute is liable to prosecution for a misdemeanour.

"By the interpretation clause, the word 'lunatic' is declared to mean 'every insane person, and every person being an idiot or lunatic, or of unsound mind.'

"According to the law as laid down by the judges of the superior courts, the provisions and penalties of the Act apply to all cases of insane persons taken or retained under care or charge in unlicensed houses, whether or not they were of unsound mind when first received.

"The Commissioners will feel it their duty, in cases of violation of the law hereafter brought under their notice, to proceed by indictment against the offending parties.

"By order of the Board,

"W. C. Spring Rice, *Secretary*."

The entries at the Liverpool School of Medicine are more numerous than they were last year. There is, moreover, a decided improvement in the class of students, as compared with former years. The regulations as to preliminary examination, etc., are, therefore, doing good here, as in the case of the Manchester School last week alluded to.

What have the Medical Council to say in answer to the remarks on the *Pharmacopœia* made by Mr. Sandford, President, at a late meeting of the Pharmaceutical Society?

"The *British Pharmacopœia*—much as was said about it last session—was still unexhausted. It had been reported that a new edition would be issued, but he believed the report to be incorrect; and it was therefore necessary that the members should come to some understanding as to which *Pharmacopœia* should be in use. At the present time, a patient might have a prescription made up in one establishment with Infusion of Gentian P.B., and in another with the infusion made according to the *London Pharmacopœia*; and one or other was sure to be accused of a mistake. The members, therefore, ought to come to an understanding as to which they would work by."

From this it would appear that the druggists are thinking of settling the question for the doctors, and, in fact, of deciding which *Pharmacopœia*—the old London or the new British—shall be the accepted one in daily use. It certainly would be a curious climax to the history of the new *Pharmacopœia*, if the druggists were to decide which of the two should be the one for use, and should refuse to keep two sets of preparations of drugs in their shops. No one could deny that their refusal would have in it a show of reason.

M. Vanzetti of Padua has communicated to the Parisian Surgical Society his experience of digital compression, as a cure of aneurisms, during the years 1863 and 1864. His cases are eight in number, two of them being cases of false aneurism resulting from bleeding in the arm. In all his cases except one, digital compression produced solidification of the aneurism. The pressure was kept up from six to one hundred and twenty hours, and was performed by M. Vanzetti himself, by his pupils, and by non-professional assistants. Often it was suspended during the night, in order to let the patient have a good sleep. In the two cases of false aneurism, the pressure was applied both on the wounded artery and the vein; and in both the solidification of the aneurism was rapidly effected—viz., in six hours. It was to these two cases, and to this new method of applying digital pressure, that M. Vanzetti especially calls the attention of surgeons. If further experience confirm his experience,

"Surgery will have gained a simple, easy, and singularly effective method of treating and of curing a surgical operation, the cure of which, under all circumstances difficult, has been considered impossible without resorting to the knife."

The communication of M. Vanzetti, we read,

"Was listened to by the Society with the greatest attention, not only on account of the importance of the subject, but also by reason of the elegance of the form in which it was introduced. The spiritual professor of Padua, in his anecdotical narrative, united to Italian *finesse* the piquancy of Gallic wit in its purest form."

M. Velpeau related the case of a young man under his care in La Charité, who had a diffuse aneurism of the popliteal artery, in which solidification of the tumour was produced by digital pressure in twenty hours.

"The patient was suddenly seized with violent pain in the calf of the leg; and on the following day appeared a very painful swelling in the popliteal space."

M. Meyer, in a sketch which he gives of the constitution, height, etc., of Christian and Jewish populations, particularly in the town of Fürth, makes out that the length of life of the Jew is greater than that of the Christian; that of the Jew being 37, and of the Christian 26 years.

L'Union Médicale thinks that the Minister of War, in his report showing the improvement in the health of the French army, might have said a word in favour of the excellence of the medical service. It is suggested that the works of the medical man probably may count for something in the diminution of the mortality of the troops.

The aspect of the medical profession in France, in relation to quackery and the illegal practice of medicine, gives little hope of any good being derived from the interference of the government. The famous Fourcroy drew a sketch of the deplorable quackeries of his day; and on the strength of his report was founded the law of Ventôse, in the year 11 of the Republic. The terms of this law are clear. It declares that no one can enter the profession of medicine without due examination. It distinctly defines the powers of doctors, of *officiers de santé*, and of *sages femmes*. The object of the legislature was to protect the ignorance of the people against the cupidity of quacks; and to encourage those who devoted long years to study. But what has been the action of the law? The law is daily violated with impunity. *Sages femmes* take under their charge a number of diseases having no connection with accouchements; and quacks of every kind infest the country districts. And, in the meantime, the public prosecutor shows no sign. Is this silence an admitted incapacity or unwillingness on the part of authority to interfere with free trade in physic? If a well governed or much governed country like France can obtain no satisfaction for its medical men by the legal suppression of quackery, may we not ask, Is it likely that we shall be more successful in England?

We have already called the attention of our readers to the real or supposed curative influence over hooping-cough of the vapours which are disengaged from the matters used in the purification of coal-gas. M. Commerege has given the Academy of Medicine a report on the subject, drawn from the observation of the effects produced in 142 children affected with hooping-cough, who had been brought under the action of the gases in the gas works at St. Maudé. His conclusions are to the effect, that the treatment produces excellent results, and at all periods of the disorder. When it does not cure, it greatly ameliorates. In general, twelve *séances* are required for the cure; and each *séance* should be of two hours' duration. However young the patient, no danger results from the exposure to the gases. Then again we have Dr. Bertholles, who informs the French Academy of Medicine of the effects observed to result from the inhalation of the vapours disengaged from the remains of the materials used in the purification of gas, by children having hooping-cough. "The register of the coal works at Ternes show that, during the past six months, 901 patients have been subjected to the vapour-treatment; and that of these 219 were cured and 122 relieved. The favourable results are probably to be attributed to the ammoniac gases and the tar-vapour associated with it."

It is difficult to understand upon what grounds M. Kœberlé, who is undoubtedly merely a copyist of the English in the matter of ovariotomy, demands of his Academy of Medicine, that his name be admitted as a candidate for the Barbier prize, on the strength of his doings in ovariotomy.

Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[*Continued from page* 497.]

The Sections resumed again early on Wednesday, the 21st. The Medical Section, after some preliminary business, listened to an address by Dr. Stamm of Berlin, on the Possibility of Destroying Epidemic Puerperal Fever. He discussed the various modes in which puerperal fever might originate, and said that the tainted fingers of accoucheurs were not sufficient to explain its genesis in all cases. Impure air had as much to do with it as any other agent. In the year 1862, an outbreak occurred in the obstetric clinic of Professor Braun (we believe, of Vienna); and it was then shown that by a methodic ventilation of the rooms, without any regard to the state of the weather, the mortality was signally reduced. He then showed how rarely such a fever occurs to poor persons giving birth to their offspring in the open air almost, and how prevalent it is with primiparæ and persons who have sustained some injury during labour, and therefore remain longer exposed to the influence of noxious emanations. He further strengthened this argument by showing that this fever prevailed in winter more than in summer, because, in cold climates, the people did not ventilate their rooms during winter; and that the mortality from it was much lower in England than anywhere else, because there the ventilation of rooms was better attended to.

About a fortnight before this discussion, I was present at a meeting of the Medical Society of Frankfort on the Maine, where the same subject happened to be under consideration. I learned that in this town of about forty thousand inhabitants there occurred a certain number of cases of puerperal fever, and that about twelve or fifteen *per annum* represented the entire mortality from this disease. The speakers all agreed that what was commonly termed puerperal fever was not a disease *sui generis*, like scarlet fever or typhus; but that under that name a variety of diseases were understood, which were incidental to the puerperal state, or accidentally complicated it; and that no discussion on the subject was of much value, so long as these various pathological conditions were not held apart, and defined and diagnosed with greater accuracy. It will be perceived that this is the old theory of Stoll, worked out into intolerable generality by Eisenmann. Since Ferguson and Locock, not to speak of younger English authors, wrote on the subject, much progress has, no doubt, been made; but as much at least remains to be done in differentiation as Helm had done in his monograph in 1840. I will adduce the so-called scarlet fever or purpura of puerperæ as a subject for immediate inquiry. Since the late observations on the purpura after surgical operations, it is incumbent upon all observers to study the difference or similarity of the two symptoms, and to ascertain whether the puerperal can be considered as a traumatic purpura; and, next, what is the nature of the relation between the trauma and the effect upon the general system and the skin. Meanwhile, all should make it clear to themselves, and to others, that "puerperal fever" is only an expression of convenience, used to signalise acute and dangerous diseases incidental to the puerperal state. That these are frequently caused and can be destroyed in the manner indicated by Dr. Stamm, I have not the slightest doubt.

Professor Seitz of Giessen next spoke on a peculiar phenomenon observed by auscultation in lungs in which caverns are forming. In the beginning of the inspiration, a sibilant noise is heard, which changes suddenly into uncertain, bronchial, even amphoric breathing. I have myself carefully observed the phenomenon in the *clinique* of Dr. Seitz, and found it very striking. It occurs only in and about caverns, and not rarely is the only symptom of existing caverns; but it is much more rare than the other well known symptoms of caverns. Not rarely it disappears in the same case at times, and reappears at others; it is sometimes very marked, at others indistinct. From experiments with an india-rubber tube, it appears that the noise in question is produced by the entrance into the cavern of air *through a narrow aperture*, which, with the progress of the inspiration and the distension of the cavern, becomes also distended. Professor Seitz also exhibited a new form of plessimeter, and showed its advantages. They are considerable, as I can testify, having had one, presented to me by the inventor, for now several weeks. With Seitz's plessimeter and Radcliffe's thimble, a man is armed for any amount of percussion. With me, these instruments are constant residents of the pocket.

Professor Mosler presented a new case of scleroma of the skin in a single lady aged 28, distinguished by the circumstance that the disease has been proved to have commenced with a lymphatic dropsy of the face and the upper and lower extremities—in fact, with the same group of symptoms which have always been stated as constituting the beginning of the elephantiasis Arabum. The swelling was succeeded by hardening, discoloration, and retraction of the skin, which can yet be observed in many places, although the patient is much improved. On the chest, reaching nearly to both breasts and over the clavicles, the skin is in that state which has latterly given rise to the distinction of a particular kind of scleroma of the skin; namely, the cicatrising form. Of the many remedial agents employed in this case, large doses of iron, cod-liver oil, and vapour-baths had the most effect.

In the Mineralogical Section, Von Dücker spoke on the mode of formation of the Swiss Mountains, which he explained as the result of a kind of shrivelling of the crust of the earth, without any elevation from below. Professor Streng showed a new map of the Hartz Mountains. He also spoke of the Ice Mountain at the Dornburg, near Hadamar. The slopes of that mountain are constantly covered with ice, produced by the evaporation of water, which trickles through the pores and interstices of basaltic, loose, gravel-like layers.

The Section for Physics was entertained by Professor Poggendorff with an account of the phenomena which are observed with certain modifications of the metallic connections of Ruhmkorff's Induction Coil.

The Section for Botany got manna to eat. Director Haidinger of Vienna had sent a great number of the *Parmelia esculenta*, which had fallen as a manna-rain near Karput, in Asia Minor, in the month of March of the current year. He has published a longer account of this phenomenon in the reports of the meetings of the Austrian Academy of Sciences. This parmelia is a lichen, and was particularly noticed for the first time by Thénard, who, on the 3rd of August, 1828, presented some to the French Academy; this had been collected by a Russian general of the Persian army, in the neighbourhood of Mount Ararat. It there fell from the air, having been carried by the

wind from the rocks where it grows. In its moist state, it can be eaten by animals and man. It explains the statement in the Jewish records about "man-hu". What is commonly termed manna now, a peculiar kind of sugar, is the inspissated juice of ash-trees, and cannot be supposed to have fed the Jews in the desert.

Both the foregoing Sections had yet much matter brought under their notice, which was of great interest and importance to their respective listeners. The Physical Section met again in the afternoon, to witness remarkable demonstrations of sounds produced in iron and steel rods while they are magnetised, and in metal tubes through which an interrupted current passes in an induction-coil.

The Section for Midwifery and Diseases of Women discussed a number of single cases brought under their notice by Professor Rindfleisch. In a case of miliary abscesses in the heart of a puerpera, he found, not pus, but vibriones. Here is another proof of the necessity of further study regarding the puerperal diseases. There were yet cases of papilloma cysticum from the vaginal portion, of fœtus in fœtu, of vagina divisa and uterus duplex, of congenital atresia duodeni (with which a child had managed to live for four weeks), all interesting in their kind, but offering no scope for more general considerations.

Anatomy and Physiology were up at seven o'clock, and saw a kymographion of Professor Fick in motion, to which a poor cur furnished the arterial power. At eight o'clock, they were again in their old meeting-place, the Academic Aula, and appointed a commission to investigate a glass in which "beans" had been preserved for several weeks, the glass being hermetically closed. The commission, consisting of Professors Henle, Schaaffhausen, Dr. Schmidt of Frankfort, and several others, found in the contents of the glass no moving organisms, but only the dead bodies of some vibrios, whose age could not be determined. Dr. Preyer then spoke on the Revivification of Muscles which are already in the State of Rigor Mortis. In his experiments, he had used muscles set artificially into a state of rigor by injecting cold water, or warm water of 45° C., or chloroform. A solution of 10 per cent. of chloride of sodium, or solutions of carbonate and nitrate of sodium, injected in such muscles, changed their properties in some degree, and restored irritability. Preyer concludes that the irritability of muscles depends upon fluidity of the muscular plasma.

Dr. Rosenthal made a communication on the Causes of the Respiratory Movements. He maintains that they depend upon the irritation of the *nœud vital* by blood containing carbonic acid. When the blood contains more oxygen, it extinguishes the irritation of these ganglia.

Dr. Rüdinger demonstrated some sharp dissections of nervous fibres which pass from the anterior and posterior roots of the lower intercostal nerves to the sympathetic, and thence to the splanchnic nerve. Then there were communications on the epitrichium, the uppermost layer of the epidermis; on amœboid movements in the spermatic cells of mammalia; on a malformation in the genitals of a male pig; and on the normal position of the womb; whereupon the meeting adjourned.

In the Zoological Section, there was a communication by Chevalier Frauenfeld, on the Metamorphosis of Insects. Professor Pagenstecher remarked, in the discussion, that the larvæ of the small fly Cecidomya, which live in residues from the preparation of beet-root sugar amongst anguillulidæ, show a kind of asexual multiplication resembling that of echinococcus. He observed such larvæ with embryos in the interior. Forrester Hartig spoke on the dorsal vessel of the insects, and on the varieties of circulation. After some discussion, he made a communication on the Parthenogenesis of the Cynipidæ. He had during twenty-five years reared gall-flies from galls, but only obtained female individuals from the genus cynips and neuroterus.

The Section for Chemistry and Pharmacy was opened by Dr. Buff with a communication on the Volume of Cyanogen and its Compounds. He alluded to the anomaly presented by cyanogen, in that it was an apparent exception to the law discovered by Kopp concerning the specific volume of fluid compounds of like elements. As cyanogen can be transformed into methylamin, the speaker assumes that the nitrogen of the cyanogen is active with only one affinity, the carbon with only two. He detailed some experiments, and came to the general conclusion, that the specific volume of the elements is dependent upon the number of equivalents with which they are active.

Dr. Thudichum of London spoke of a sulphuretted product of decomposition of animal substances, which could be extracted from the mother-liquor of leucine and tyrosine by means of ether. He had named it "thiotherione", in token of its origin and its 19.9 per cent. of sulphur. He described its properties, and stated that he had also found it in pathological livers. He believes it to be poisonous, and to contribute to the dangerous symptoms of malignant jaundice. Dr. Remelé described the composition of the precipitate which sulphide of ammonium produces in salts of the oxide of uranium. He found it to be oxisulphuret, Ur^2O^2S. Professor Böttger demonstrated Bothe's process of silvering glass, and produced magnificent mirrors. He also described and demonstrated a new method for extracting selenium from the mud of sulphuric acid chambers. Dr. Frank described the salt-mines at Stassfurt, in Prussia; and illustrated his lecture by means of drawings and specimens. These mines are remarkable by their yielding large quantities of potash and magnesia salts, besides a little boracite. These salts occur in peculiar combinations, mineralogically known as carnallite, kieserite, boracite, and tachhydrite. The rock-salt had been found upwards of one thousand feet thick, and was not yet penetrated. Many great manufactories of all kinds had arisen round the mine. I have myself been at Stassfurt, and seen the mine, and been struck with its beauty, richness, and the admirable manner in which it is managed. The country all round looks like the busiest part of Lancashire. It is an inexhaustible treasure of Nature which lies there eleven hundred feet below the surface. The descent is made in two minutes. Arrived below, you are at once greeted by the salute of the German miner, "Glück auf!" You of course reply, "Glück auf!" and thus, constantly exchanging friendly greetings with every person you meet in the deep, you pass through the sparkling, vast, hall-like galleries. In the working galleries, men are naked, merely wearing a slight pair of trousers. The heat is near blood-heat. Gunpowder is used to blast the salt; and this produces so much sulphuretted hydrogen that, after a series of mines have been sprung, the miners are obliged to desert that part for a time, until the noxious gas has become diffused. I studied this feature from a medical point of view. I found so much sulphuretted hydrogen in the mine, that it blackened my silver watch. Much of the rock-salt is so pure, that it only requires to be ground in a kind of coffee-mill and between stones, to be ready for use as the finest and whitest table-salt. Having loaded my pockets with specimens of crystal salt, transparent like glass, and so pure that it can be fused with a blowpipe at the sharp edge without cracking, and

with fine specimens of the other minerals, particularly the sulphate of magnesia with only one equivalent of water, but insoluble in water, which I intend to try as a medicine in certain digestive derangements,—I ascended the shaft again in two minutes, meeting halfway, as before the up-going, so now the down-going cage, as a kind of apparition or flying Dutchman.

However, from this digression into the Stassfurt mines, I return again to the Chemical Section of the Congress at Giessen. Professor Strecker of Tübingen related the results of his experiments on the reduction of nitro-compounds by means of sodium-amalgam. Dr. Naumann then made a communication on the effect of bromium upon benzoic ether and nitrobenzoic ether, whereupon the meeting closed.

The Section for Surgery received some important communications. Professor Weber of Halle gave a lecture on the Effects of Common Water upon Wounds and Ulcers. He thought water was by no means an indifferent agent, and should be substituted by milk, vegetable resinous extracts, or, best, a solution of common salt in water of a certain degree of concentration. In such salt water he had let patients bathe chancrous sores with the best effect; ulcerations on the feet he had kept for a long time in such solutions, and cured them; nay, he had performed thoracentesis upon two patients while they were immersed in a bath of such salt water, and cured their empyema. In the clear salt water, it could be seen how at the expiration the thick pus issued through the wound, and how at the inspiration the salt water entered the thorax and washed out the pus. Professor Bardeleben next gave his experience on Schinzinger's method of resetting a dislocated head of the humerus. In this process, the operator puts his left hand against the chest of the patient, and, extending the arm with his right hand, rotates it outwards. The head is said to return into the capsule without pain, and easily; the operation requiring no chloroform. In one case of Bardeleben's, the operation did not succeed, but the ordinary method afterwards restored the head to its place; in a second case, fracture of the surgical neck took place, and a pseudarthrosis remained. In the discussion, Professor Roser remarked, that the method was older; and that the rotation had to be made, not outwards, but inwards. In one case, he had himself torn off the tuberculum minus; but the patient was well satisfied with his arm. He said that he replaced every dislocated humerus without pulley or assistant. After several successful and unsuccessful cases of treatment by this method had been related, Professor Bardeleben reported a case in which the point of a knife had penetrated the skull, and had then broken off. He made room in the substance of the bone by means of a little chisel and hammer, and then withdrew the point of the knife. Pus ran out of the opening; the symptoms of encephalitis ceased; and the patient recovered. Roser remarked, that the chisel in such cases had first been used by Stromeyer. Professor Textor showed an exostosis which he had successfully removed from the frontal bone of a girl. The meeting of the Section then adjourned.

[*To be continued.*]

Popular Medical Works. Mr. Banting, of corpulence notoriety, has, he tells us, sold 50,000 copies of the third edition of his pamphlet. On the sale there is a profit of £171, and this sum he distributes as follows:—To the Printers' Pension Society, £50; to the Royal Hospital for Incurables, £50; to the British Home for Incurables, £50; to the National Orthopædic Hospital, £10:10.

Association Intelligence.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General.]	Medical Department, Birmingham Library, Birmingham.	Thursday, November 10th.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will take place at the Fountain Hotel, Canterbury, at 3 P.M., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

Robert Bowles.

Folkestone, October 1864.

HULL BRANCH: GENERAL MEETING.

The second general meeting of the Hull Branch was held at the Vittoria Hotel, Hull, on Thursday, October 27th, 1864. It was attended by a large number of members and visitors. The chair was taken by James Dossor, Esq., President.

The minutes of the last general meeting were read and confirmed.

Medical Provident Fund. On the proposition of Mr. J. H. Gibson, seconded by Dr. Carnley, Dr. H. Munroe was unanimously elected a Director of the Provident Fund.

Communications. The following communications were made:—

1. Ascites cured by Elaterium and Aqua Regia. By J. H. Gibson, Esq.
2. Remarkable case of Lithotomy. By K. King, M.D.
3. The Peculiar Application of Photography to the Recognition of Deceased Persons. By J. Dossor, Esq.
4. Case of Osseous Deposits in the Muscular Structure of the Heart. By J. Brownridge, Esq.
5. Microscopic Examination of Hair taken from the Female Bladder. By H. Munroe, M.D.
6. The Magnesium Light was exhibited by T. Walton, Esq.

Dinner. The members of the Branch, with their visitors, then dined together, and spent an agreeable evening.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

The second meeting for the eighth session, 1864-65, was held at the West Kent General Hospital, Maidstone, on October 28th; S. Monckton, M.D., in the chair. Twenty-one members and visitors were present.

New Member. Matthew Algernon Adams, Esq., of Maidstone, was elected a new member (subject to the regulations of the Association respecting confirmation at the Branch annual meeting).

Death of a Member. James Connell Prance, Esq., late of Maidstone, was reported, with regret, as deceased. He practised for about fifty years. He left books and instruments to the West Kent General Hospital.

Communications. The following communications were made.

1. Case of Severe Injury to the Brain; the patient surviving thirteen months. By F. Fry, F.R.C.S.

2. Case of Spontaneous Withdrawal of the Arm, and Cephalic Birth, succeeding to Arm-presentation. By George H. Furber, Esq.

Discussion. The discussion that was referred, in September, to the present meeting, was resumed. The result was as follows.

Resolved: to continue the present number of meetings annually—viz., four; to meet at hospitals, when there be such institutions in the towns at which meetings take place; to continue the custom of a dinner after each meeting; to limit the charge of dinners to 10s., inclusive of wine; and to continue the rate of the present district subscription—viz., 2s. 6d.

It was announced that the number of members amounted to sixty-one, besides four honorary members.

Charles J. Pinching, Esq., of Gravesend, was appointed (subject to his approval) chairman of the next meeting, in March 1865.

Dinner. The members and visitors adjourned to dinner at the Mitre Hotel.

Correspondence.

TREATMENT OF PARTURIENT WOMEN.

Letter from William Legge, Esq.

Sir,—In the few remarks I propose making on this subject, I cannot pretend to offer anything original; and I trust it will not be thought to savour of presumption, if I advance, or maintain, sentiments which may be at variance with those of some, whose age and experience challenge deference; but believing, as I do, that correct and successful practice may be materially assisted by the contribution of carefully observed facts (the relative value of which must be the same, however limited the sphere of observation), I venture to submit the results of my experience, in the opinion I have formed as to the most judicious management of puerperal women, especially with regard to their dietetical treatment. That there is a great change of opinion and practice in such treatment, few will deny; and I think we are justified in regarding it as one of those evidences of advancement in the intelligent practice of medicine, which meet us in every branch of our profession, and mark the present as an era of scientific progress, when none may rest upon their oars, and all adopt the motto,

"Ne cede malis, sed contra audentior ito."

A retrospect of the steps by which this improved position has been attained, induces a comparison, which cannot fail to be disadvantageous to the past; yet we must not too hastily censure the seeming deficiencies of our predecessors, nor plume ourselves on the possession of knowledge, either gained by the light of their mistakes, or the result often of their experience.

In reviewing the practice of the past generation, we can scarcely be surprised to find that the very general adherence to depletive measures in the treatment of disease, influenced the management of the puerperal state; for the fact that parturition is simply a natural physiological process, not an abnormal occurrence, was totally unrecognised. As a disease it was regarded; as such it was treated; low diet was strictly enforced, and (as we cannot but conclude) with disastrous effects. In dismissing the idea of disease we also dismiss the necessity for interference, save in the shape of assistance; hence it follows that, if such interference be practised, the result will be evil. Now, if this view of the case be correct, our great aim must be to give such assistance to the powers of Nature, as shall enable the patient to rally from the exhaustion consequent on the nervous shock, the severity of the labour pains, and the subsequent hæmorrhage. First in the catalogue of means to this end comes sleep,

"Tir'd Nature's sweet restorer."

In some cases this is most difficult to obtain, and every one must be familiar with instances where wakefulness has persisted through many weary hours, despite all means used to subdue it. I have found this generally associated with a tendency to secondary hæmorrhage. I am accustomed, regarding sleep as of the utmost importance, to administer from forty minims to one drachm of vinum opii; although this may seem a large dose, I have never found it too large, and in its satisfactory effect far preferable to repeated smaller doses; the severity of the after-pains is mitigated, and the patient awakes greatly refreshed. An idea even now prevails that these after-pains are necessary, and a provision of nature for ensuring the due contraction of the uterus; but experience proves that no patients do better than those in whom these are controlled; moreover, where the pains are excruciating, the uterus will be found firmly contracted; and, again, the absence of these pains in primiparæ is a negative proof that they are not essential.

In illustration of the impunity, or I should rather say the advantage, with which full doses of opium can be given, I may cite a recent case in which, after a severe labour, with arm-presentation requiring version, hour-glass contraction of the uterus necessitated the introduction of the hand for the removal of the placenta. Great prostration followed; one drachm of vinum opii procured quiet sleep; on the recurrence of pain the next morning, accompanied by accelerated pulse, the same dose was repeated with the best result, and the patient recovered without a bad symptom.

With regard to that *quæstio vexata*, the administration of alcohol in cases of flooding, I think all who have encountered this terrible foe must concede, that, however ingenious the theories which dispute its efficacy, alcohol is our sheet anchor, and the actual fact of its efficacy is evidenced by the satisfactory result of its adoption.

In the subsequent management of the lying-in woman, there are two important points which, instead of securing the attention they merit, are unfortunately too often neglected. I refer to the proper application and *retention* of the abdominal bandage; and to the strict confinement to the recumbent position for a sufficiently long period after delivery. Whilst it is not necessary always to confine a patient to the bed, *sitting* up should be prohibited, and the sofa insisted upon. The neglect of these precautions is the undoubted source of much subsequent suffering, as is evident by the frequency of prolapsus uteri among the lower classes.

In the present day, fortunately, the duties of the medical attendant are not considered to be ended with the successful termination of labour. In former days, insuperable obstacles presented themselves to the practitioner who attempted to interfere with the routine of the lying-in room. Ignorance, the parent of a thousand quackeries, here held undisputed sway, and by the aid of her ready myrmidons, a body of illiterate, superstitious nurses, actually coerced the doctor into at least a tacit sanction of practices repugnant even to common sense. So powerful was the hold acquired by this sisterhood, that opposition was either felt to be useless, or dreaded, lest it should evoke resistance detrimental to professional success. Now the case is altered, and questions formerly considered as either too unimportant to merit his atten-

tion, or as pertaining peculiarly to the province of the nurse, are referred to the medical attendant. Foremost amongst these, the question of diet claims his notice; and here, in deciding upon the quantity and quality to prescribe, it must be borne in mind that, as a rule, we have to deal with a woman who, up to the moment of labour setting in, has enjoyed her usual, or even more than her usual health; has pursued her daily avocations, and has indulged in an ordinary substantial diet (as I have before said, the idea of disease we dismiss from our minds.) Well, then, in this state of active health she becomes subjected to a sudden shock, great physical exertion is undergone, considerable hæmorrhage occurs, and there is imminent, in addition, a drain upon the system from the lochial discharges, and a still greater will ensue when the mammary secretion is established. Are we now to cut off the pabulum which has hitherto maintained the normal condition of health, and prepared our patient for enduring the physical and mental strain to which she has been subjected? Shall we, in fact, having garrisoned our fortress, cease to pour in the supplies which shall enable it to defy the siege? Common sense suggests the answer that the diet should be so suited to the patient's requirements, sufficiently substantial without being too stimulating, that the exhausted powers may be rapidly recruited, and the mother enabled to supply the demands of her infant.

It is not necessary to enumerate the precise forms in which such diet should be supplied; every practitioner who adopts the broad principles stated, will decide for himself, according to circumstances, what to give, and what to withhold; and if the treatment here indicated be followed out, we shall have little cause to dread the bugbear of former days, milk fever with abscess of the breast; a liberal diet is the best preventive of such sequelæ, but they are the certain result of deficient nutrition and "slop diet." So far indeed, from its being necessary to restrict our patient to tea and gruel, the very fact that the poor, who by force of circumstances are so restricted, suffer most from inflammation of the breast, may be accepted as a proof of the inadequacy of such diet to meet the requirements of nature.

In concluding these brief observations, I am anxious to disclaim any intention of speaking dogmatically on matters which embrace such diversity of opinion among the leading men of our profession. I shall be satisfied if they elicit the comments of our associates, from which I, for one, may gather assistance in the decision of those weighty questions, which often in the lonely cottage, at the dead of night, demand from the anxious practitioner a prompt reply and unhesitating action. I am, etc.,

WILLIAM LEGGE.

Wiveliscombe, October 24th, 1864.

LETTER FROM J. MORTIMER GRANVILLE, ESQ.

SIR,—The conventional style of reasoning on medical subjects is unfortunately too irregular for the purposes of instruction. The *truth*, to which correspondents are so fond of adverting in the language of ancient Rome, will scarcely be served by the quotation of phrases from a Latin Delectus, or the mere iteration of personal opinions. If anything is to be gained by an argument, the means, as well as the end, must be respected by the disputants. Logical reasoning may produce correct judgments; but the result of false argument must be a fallacy.

The subject of diet and regimen in relation to the parturient state, is far too important to be treated erroneously; and the gentlemen who are favouring your readers with their opinions on the matter, will confer a public benefit by abandoning the time-honoured method of loose reasoning, and cannot fail to develope the good points of their respective theories by a course which shall place before their readers the premises as well as the inferences of their deduction. Dr. Graily Hewitt affirms a principle of treatment. Mr. Pope, with the aid of certain Roman authors of undoubted antiquity, denies the doctor's affirmative; and Mr. Legge runs to the rescue; yet, after all, the estimate we form of the opinion of these three gentlemen, very much depends on what we happen to know of themselves. Dr. Graily Hewitt's opinion may be worth much, on account of his well known position in the medical world; and that of Mr. Pope not so highly appreciated, because his name is not familiar to the mass of the medical public. But, in spite of appearances, it may chance that Mr. Pope is right, and the doctor a victim to some obstetric delusion. The same principle applies to all discussions; and as the correspondence (if not, occasionally at least, the other parts) of the JOURNAL is not so useful as it might be, on account of this defect in its character, I venture to suggest a change which cannot be less acceptable than beneficial to all who care less for persons and opinions than facts and just inferences.

In accordance with the method I seek to advocate, permit me in conclusion, to submit a few propositions for the consideration of the gentlemen engaged in the discussion referred to.

1. Parturition is not a disease, but the performance of a natural function.
2. The dangers attendant upon it are essentially asthenic.
3. Absorption of poisonous matter is more likely to take place in a depressed, than in a well sustained condition of the nervous and circulatory systems.
4. Irritative fever is a state of reaction following, and *dependent* upon a previous state of depression.
5. A course of treatment which will prevent the depression and render the absorption less probable is rational in theory, and may be expected to prove good in practice.
6. A course of treatment which does not prevent, but rather favours the depression following labour, and on the principles of human physiology favours absorption, is irrational in theory, and must be defective in practice.

As a mere matter of personal opinion, I may remark that, so strongly does my view of the requirements of the parturient state accord with that taught by Dr. Graily Hewitt that, if it became a question as to the method to be adopted in any particular case, I would decline remaining in attendance whilst the orthodox gruel system was employed. I could give you details of more than two hundred cases treated on this principle, since the commencement of the present year, with uniform success; the average of cases being perfectly recovered in ten days from the day of delivery. For more than four years, I have adopted no other plan; and nothing could induce me to return to the method advocated by Mr. Pope. Physiological science and actual experiment have developed the laws of treatment, which Dr. Graily Hewitt and the President of the Obstetrical Society, Dr. Oldham, have so ably propounded.

I am, etc., J. MORTIMER GRANVILLE.

Bristol, October 1864.

LETTER FROM C. SWABY SMITH, ESQ.

SIR,—With much pleasure have I read the letter of Mr. Napper, which appeared in the BRITISH MEDICAL JOURNAL of Saturday last. Most freely do I endorse his opinions upon the treatment of parturient women. Though not a Fellow of the Obstetrical Society, I

have always felt interested in it, and read with pleasure and satisfaction the various discussions that have there taken place; and I may say none with greater pleasure than the remarks made by Dr. Oldham in his introductory address, when assuming the distinguished office of president of that society; and proud am I to have been the pupil of so distinguished an obstetrician. Ever since I first saw his opinions as to the efficacy of a more liberal diet early after confinement, have I adopted that plan, and I may say with almost unexceptional success. Still there are cases which will not allow of such a liberal scale, and you will naturally ask which they are; they are simply those cases in which the patient has neglected a proper attention (which is of paramount importance) to the state of her bowels during her period of pregnancy, which cases, if treated in the liberal manner now advocated, will in all probability be followed by puerperal fever; but, of course, this danger, if taken in time, is to be obviated either by active purgation by the mouth, or by what I have found answer still better, stimulating enemata, and then the liberal diet may with safety be proceeded with. I am, etc.,

C. Swaby Smith, M.R.C.S.E.

Burbage Wilts, October 31st., 1864.

PERINÆAL SECTION *versus* PUNCTURE OF THE BLADDER.

Letter from Edwin Morris, M.D.

Sir,—I was much pleased to find in your Journal of October 15th, that Mr. Paget had replied to my letter, as regards the relative merits of puncture of the bladder and perinæal section in impassable stricture.

The question is of such vast importance to the patient, as well as of interest to the surgeon, as to which plan of treatment shall be adopted; assuming that we have reached that point when the distended bladder must be relieved. This controversy will not, I trust, be regretted; and will, I sincerely hope, lead to some practical good for the unfortunate sufferer.

Mr. Paget recommends me to "read again, and with more attention, my cases and remarks published in the Journal of July 2nd, 1859." I beg to state, that I have done so, and with care (and I hope others will do the same); and after much thought, and consideration, find but little to praise and much to condemn.

As Mr. Paget has drawn my attention to his article upon the subject above alluded to, I hope, sir, I may be permitted to criticise freely his remarks; and I hope, ere I close this letter, to induce even Mr. Paget to modify his views with regard to the two methods of treatment, and to retract the following paragraph in his letter: "The section, always viewed as severe, attended with after-peril, and uncertain in practicability and degree of success. The puncture now described, simple, certain, devoid of peril, and free from objection for persons above 60. .....The results of perinæal section must be shown far to outweigh in benefit those of puncture, and must very much exceed those of Dr. Morris's present description to change my feeling." We shall see.

It will be necessary to revert to my two cases which, singularly enough, I had under treatment at the time when Mr. Paget's communication appeared, and were at that time wearing elastic gum catheters—one from necessity, the other from preference.

The condition of these two men, Frederick Smith, aged 63, and John Whyley, aged 72, when admitted into the Infirmary (the former on May 24, 1864; the latter, July 26th, 1864), was most deplorable and agonising. The retention had existed some time; and their danger was imminent. In Whyley's case, the penis was "distended and discoloured"; and, afterwards, a sloughing of a portion of the integuments towards the base of the penis took place, laying bare the muscular structure underneath. This was caused, I have no doubt, by the forcible attempt made to pass an instrument through the stricture. This man appeared in an almost hopeless state of semi-insensibility; and it was imperative that I should at once decide whether I should puncture the bladder or divide the stricture through the perinæum. And in adopting the latter course, I hope I shall be thought justified by the surgical profession, as the sequel will show. It is only right that I should add, that I had, throughout the treatment of both cases, the co-operation and able assistance of my partner, Mr. Steven, who is quite willing to endorse all I have stated respecting them. The man, Frederick Smith, left off the use of the gum catheter in August; and on September 26th was discharged cured; able to micturate freely at pleasure, and without any artificial aid whatever. The man's occupation is that of a drover; and I have not seen him since. He promised, whenever he comes into this neighbourhood, to call upon me. The other man, John Whyley, is still in the hospital, but quite cured. The perinæal wound has been quite healed; and no catheters have been used for the past three weeks; the ulcer at the base of the penis has closed over. He has become quite robust and healthy-looking; and can retain his urine for any reasonable length of time, and, when necessary, pass it with the greatest freedom. On Saturday last (October 22nd), I passed a No. 8 silver catheter without meeting with the least obstruction. He is ready to leave the sick ward at any time.

With due deference to Mr. Paget, I must still claim for my patients a better state of things than his; and I hope that he will admit that the time has arrived for preferring the state of my patient to that of his. They are both, like his, "freshened in condition, erect, and free in gait"; and—what is far more important in contrasting the two cases—are as well as ever they were, before their unfortunate malady. I cannot imagine a more wretched condition than that of one of Mr. Paget's patients—Mr. N.; who, at the age of 60 years, "submitted to have a well curved trocar introduced above the pubes", for relieving his distended bladder; afterwards, a "gum elastic tube about three inches long," with a silver shield, like that of a bladder-trocar, was introduced, with a "wooden plug made water-tight", and secured round the pelvis by a "thin elastic webbing". And "this has been his only resource for now seventeen years. The tube he changes himself nearly every day." The unfortunate man has been thus deprived of the use of a most important organ; in fact, for seventeen years, the very existence of a penis has been altogether ignored.

Mr. Paget gives another case, related by the late Mr. Norman of Bath; where, after puncturing the bladder above the pubes, "an opening was left through which a female catheter was habitually introduced for micturition. No urine escaped, except when the catheter was passed; nor did a drop ever pass through the urethra. In this course, the patient, an old man, held on smoothly for two or three years."

Are these cases for one moment to be allowed to be placed in juxtaposition for contrast, under parallel circumstances, with those of mine; especially that of John Whyley, aged 72 years, who, under very adverse circumstances, underwent the operation of the perinæal section for the cure of his impassable stricture—"hopelessly impermeable"—and who is now perfectly cured, and free from all artificial appliances and disagreeable encumbrances? The case is, in fact,

a great triumph of surgical art—a marvellous recovery.

Mr. Paget admits, with his usual candour, at least one objection which "may possibly weigh against its general adoption" (*i.e.*, puncture); viz., that which relates to seminal matters. He states that, when urine cannot pass, semen cannot; nor can we assume for our present plan, that it would at all restore the function. Mr. Paget does not consider this as an objection in practice; inasmuch as "he would then only lose it a few years, probably very few, earlier than his compeers in age." Indeed! is it not notorious that the desire for, and capability of, intercourse clings to old men with great tenacity? and to deprive them of that solace and satisfaction in their declining years is, to say the least of it, a cruel act. Again, he says, "Indeed, what have we to promise from any other course? Has the result of perinæal section been investigated in regard to this point? In what proportion of operations does its groping dissection spare the parts sufficiently to leave this function intact?" No, no, Mr. Paget; you must know, this "groping dissection" is not correct; but that it is a plain-sailing, straight-forward operation, from beginning to end, without fear of emasculating the patient.

I must differ entirely with Mr. Paget, when he states "I believe it will not be long before perinæal section is looked back upon as a matter of history; and its performance, when a grooved instrument can be got through the stricture, is stigmatised as a mere flourish of the knife, discreditable to surgery and sound judgment."

I must leave this strongly worded paragraph to the consideration of Mr. Syme, the originator of the perinæal section—that masterpiece of surgery, which the highest state of intellect could only have suggested, and the most determined perseverance have carried into practice. I am, etc.,

EDWIN MORRIS.

Spalding, October 23, 1864.

A PUZZLING CASE.

LETTER FROM THOMAS INMAN, M.D.

SIR,—In your concluding paragraph, you express the idea that a man who has seen a fall must notice a bruise. Allow me to inform you, as a matter of fact, that what is called "ecchymosis", or the mark of a bruise, rarely if ever appears at the time of the injury. I have known three days elapse ere any discoloration has appeared. This point is important in medico-legal inquiries.

Allow me still further to call your attention to the fact that bruises leave two marks—one on the surface of the skin (points of abrasion or puncture); another in the skin (effusion of blood). The first is seen at once; the second, only after an interval. There is a third appearance, which none but an observant and experienced eye would note; viz., a white-waxy look of the skin, arising from the total absence of blood, the vessels having been forcibly emptied, and possibly broken. It is this form which is followed by the most intense and most tardy ecchymosis. A witness may speak of one of these marks, and be understood in another sense.

I am, etc., THOMAS INMAN.

Liverpool, October 1864.

[We were not ignorant that ecchymosis (one result of a bruise) does not instantaneously follow the injury. As Dr. Inman points out, bruises leave two or more kinds of mark; and for this very reason we employed the general word "bruise", which comprises them all, instead of the more scientific terms "abrasion", "ecchymosis", "contusion", which indicate a particular description of mark. We may point out, moreover, that it was by no means implied that a man who had seen a fall would necessarily notice a bruise. The point of the paragraph referred to was, that having seen the fall, and having looked for the mark, a man would be more likely to see it than if he had not witnessed the fall, and had no special reason to suspect the existence of any injury. EDITOR.]

FISTULOUS COMMUNICATION BETWEEN THE BOWEL AND BLADDER.

LETTER FROM GEORGE D. GIBB, M.D.

SIR,—Dr. Henry Goode's rare case of fistulous communication between the bowel and the bladder, published in your last number, I read with very great interest, as a somewhat similar one occurred to myself many years ago, in the person of a young married lady, who passed fæculent matter in her urine. There was, however, this difference in her case. The abscess was the result of acute peritonitis, and burst firstly into the bowel, and subsequently into the bladder. Her recovery was good and complete. The details of the case are published in the *Lancet* of April 20th, 1861 (page 384). So far as my acquaintance goes of the literature of the subject, the result is generally fatal, and recovery is the exception. I am, etc.,

GEORGE D. GIBB.

Portman Street, October 31st, 1864.

Medical News.

APPOINTMENTS.

BAZIRE, P. Victor, M.D., appointed Assistant-Physician to the National Hospital for the Paralysed and Epileptic.

REYNOLDS, J. Russell, M.D., appointed Physician to the National Hospital for the Paralysed and Epileptic.

*SIEVEKING, E. H., M.D., appointed Physician to the National Hospital for the Paralysed and Epileptic.

ARMY.

ASHTON, Staff-Assistant-Surgeon W., M.B., to be Assistant-Surgeon Royal Artillery, *vice* T. Kennedy.

CHALK, Staff-Assistant-Surgeon F. M., to be Assistant-Surgeon 2nd Foot, *vice* H. S. Ledge, M.B.

FERGUSON, Staff-Surgeon J., to be Surgeon 15th Foot, *vice* J. Clarke, M.D.

MARTIN, Sir J. Ranald, C.B., to have the local rank of Inspector-General of Hospitals while holding the office of President of the London Medical Board for the Examination of Officers of Her Majesty's Indian Service.

PAXTON, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon 30th Foot, *vice* D. Milroy, M.D.

WOODS, Assistant-Surgeon D., 19th Hussars, to be Staff-Assistant-Surgeon, *vice* J. Ferguson.

ROYAL NAVY.

LE GRANDE, Frederick W., Esq., to be Deputy Inspector-General of Hospitals and Fleets on the Retired List.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

HART, W., Esq., to be Honorary Assistant-Surgeon 2nd Surrey A.V.

LLEWELLYN, W. P. J., M.D., to be Surgeon 2nd Surrey A.V.

WILSON, J. W., M.D., to be Surgeon 3rd Middlesex A.V.

DEATHS.

BLETCHLY, Edmund, Esq., Surgeon, at 19, Tabernacle Row, on October 29.

CLUTTERBUCK. On September 9th, at Jhansi, India, aged 17 months, Lewis J. E., only child of J. E. Clutterbuck, M.D., Surgeon 42nd Royal Highlanders.

CRAIG, John S., L.R.C.P.Ed., at Stratford-on-Avon, on October 28.

FALCONER. On October 30th, at Bath, aged 19, Walter W., second son of *R. W. Falconer M.D.

*THORPE, George B., Esq., at Staveley, Derbyshire, aged 49, on October 25th.

Medical Minister of State. Dr. Lanza, a medical man, forms one of the present Italian ministry. He is minister of the Home Department.

The Edinburgh University Club will hold its second dinner meeting at the Wellington Club, at six o'clock, on Monday, the 7th inst.

Mr. Alfred Smee has issued an address, offering himself as a candidate for the representation in parliament of the city of Rochester.

The Professorship of Practical Anatomy in the Medical School of Trinity College, Dublin, has become vacant by the resignation of Dr. Barton. (*Dublin Medical Press.*)

We understand that Lord Wodehouse, the new Lord Lieutenant of Ireland, has conferred the office of Surgeon-in-Ordinary on Mr. Butcher. Dr. Hatchell, now Inspector of Lunatic Asylums, occupied the post under the Earl of Carlisle. (*Dublin Medical Press.*)

University of Edinburgh. The half-yearly meeting of the General Council (constituency of graduates) of the University of Edinburgh was held on the 28th ult., Sir David Brewster, Principal and Vice-Chancellor, in the chair.

"Dr." Henery. The charge against Osterfield Wray *alias* Henery, and Anderson *alias* Wilson, has been again adjourned to Tuesday next. Anderson *alias* Wilson was in a sufficiently recovered state from delirium tremens to be able to be brought up from the House of Detention.

Mr. Mitchell Henry, well known to the profession as once surgeon to the Middlesex Hospital, has issued an address to the electors of Woodstock, and intends to offer himself as a candidate to represent that borough in parliament. Mr. Henry's return would be a great boon to the profession; for he would be, in fact as well in word, a representative of medical knowledge in the House of Commons.

National Hospital for the Paralysed and Epileptic. The medical staff of this hospital, previously consisting of Drs. Ramskill and Radclyffe, physicians, and Dr. Hughlings Jackson, assistant-physician, has been increased by the appointment of two physicians, Drs. Sieveking and Russell Reynolds; and an assistant-physician, Dr. Victor Bazire.

Scoundrels. An officer of the Royal Navy writes to a daily paper: "A set of blackguards, trading under the title of 'surgeons,' have been in the habit, for some time, of sending their filthy publications to officers of ships forming the Channel fleet. I hope the recent exposure of one of these disgusting vagabonds will lead to the discomfiture and ruin of the whole lot. One of their dirty books was lately sent to a married officer in the army, and opened by his wife."

Military Hospitals at Chatham. A portion of the invalids have been transferred from the garrison hospital to Fort Pitt hospital. Under the new arrangements, Fort Pitt is intended for a hospital for the entire garrison, the other military hospitals being closed. The buildings at Brompton hitherto used as the garrison hospital will be converted into quarters for the troops of the line.

English Weeds at the Antipodes. In New Zealand, our common English weeds or plants are supplanting the native flora. The water-cress of our brooks has become a positive nuisance to the New Zealander; indeed, the rivers of the country threaten to be choked up by the intruder. One stream, called the Avon, is so filled with water-cress that the annual cost of keeping the river free from the weed is said to exceed £300 a year. The stems grow to a length of twelve feet, and a diameter of three-fourths of an inch.

University College Hospital. The following legacies are announced, viz., £50 by the late Zadok Aaron Jessel, Esq., £100 by the late Henry Lloyd, Esq., and £5,000 by the late Jacob Stiebel, Esq.

Glasgow University. The winter session of the Glasgow University was formally opened on Monday at a meeting held in the common hall of the college. The Very Rev. Principal Barclay occupied the chair.

The Sale oe Haschisch has been interdicted by the Turkish government, except for purely medicinal purposes. The *Gazette Médicale d'Algerie* wishes for an analogous prohibition in Algeria, where its abuse is carried to an alarming extent.

Quarterly Mortality in England. The deaths in the quarter ending September 30th, were 112,133. The annual rate of mortality for the quarter in England and Wales was 2·139 per cent., against 2·000 as the average. With the exception of the summer of last year, the death-rate was higher than in any previous corresponding season since the cholera summer of 1854. The causes which operated to produce this excess attacked town and country.

Harvest Home at the Stafford County I[illegible]atic Asylum. The annual festivity of "harvest [illegible]ne," lately took place in the grounds of the institution. Between 200 and 300 of the inmates, of both [illegible]es, partook of old English fare. The order and de[illegible]earn observed was astonishing. After dinner tobacco was served out to those who wished to indulge in a pipe (and the number was by no means small), and a variety of amusements and games was provided.

Election of Medical Officer of Health [illegible] Marylebone. On Thursday week the election [illegible] medical officer of health for the parish of Maryleb[illegible] in the room of the late Dr. Dundas Thomson, [illegible] place, and, as was expected, resulted in the appointment of Dr. Whitmore. The ballot between Dr. Stevenson and Dr. Whitmore, the two candidates selected as having the highest numbers at the previous meeting, opened at eleven and closed at one; having been closed, the scrutineers announced the result to be—Dr. Whitmore 81; Dr. Stevenson 15.

Sale of Cyanide of Potassium. Suicides by means of cyanide of potassium have of late been so frequent as to suggest to chemists much more caution in retaining this highly poisonous salt. It is true that photography is a very popular art, and electrolytic gilding is occasionally practised by amateurs; but we may recommend chemists only to retail the salt to those personally known to them. By so doing many suicides will no doubt be prevented, and something will also be done to avoid the forced restriction on the sale of such articles which will inevitably be placed if the use of the cyanide for the purpose of suicide should extend. (*Chemical News.*)

Army and Navy Medical Services. The competitive examinations of the army medical service are held at Chelsea, usually in the months of February and August. The candidate is not required to produce any other qualification than his license to practise; but in the naval service a candidate must produce all his certificates. He is examined by Dr. Hooker on Natural History, Botany, Chemistry, and Materia Medica; by Dr. Parkes on Medicine, Therapeutics, Pathology, Pharmacy, and the writing of Prescriptions; by Mr. Hewitt on Surgery and Surgical Appliances; and by Mr. Busk on Anatomy, Physiology, and Comparative Anatomy. For the first two days his examination is a written one; on the third and fourth days he is examined *vivâ voce;* and on the fifth and sixth days he is tested by the diagnosis of disease at the bedside in the hospital, and by operations on the dead subject. A certain number of can-

idates, whose answering has been satisfactory, but ot sufficiently so to entitle them to a place, are ffered appointments on the Coast of Africa, at Sierra eone, Gambia, and Cape Coast Castle. If the can- idate accept the appointment, he is sent out at nce, without the period of probation to which others re subjected at Netley Hospital. He is allowed to pend a year at home, on full pay, for every year pent in Africa; and the entire period at home and broad counts as service for pension. The promotion only too rapid, owing to the dangerous nature of he climate; and we have known the rank of full urgeon reached in five years from the date of ap- ointment as assistant-surgeon. The competitor, ho has been so happy as to obtain a place, is obliged o undergo a probation of four months at Netley Hospital, near Southampton, where he is compelled o attend the following lectures—viz., Hygiene, by Dr. Parkes; Pathology, by Dr. Aitken; Military urgery, by Mr. Longmore; and Tropical Diseases, y Dr. Maclean. The candidates also attend the ospital, to make themselves acquainted with the sys- em of recruiting, and the modes of keeping the army iedi- returns. They are also called on to make *ost mortem* examinations, to operate on the dead od- and pass through laboratory practice on the io- s of recognising the qualities and adulterations f- d, and on microscopic examination of morbid ssues and of adulterations of food, etc. During this rel minary training, the candidate is understood to e in her Majesty's service; he wears uniform, is nder military discipline, and receives pay at the of 5*s.* per day, and 2*s.* per day for lodging money, I provided with quarters in the hospital. At the ns- nation of the four months he is again examined eri e subjects in which he has been instructed dur- ig that period, his marks are added to those ob- ined by him at the competitive examination, and is position on the list of merit determined by the tal. He is then gazetted to his regiment, and en- ys all the rank and honour, pay and privileges of an ssistant-surgeon, as provided by the regulations. In roportion as the demand for appointments in the my has decreased, the ardour for those in the navy as augmented. The pay in both services being the me, the expense of living in the army being so much reater, the number of applicants for naval appoint- ents has rapidly increased. The curriculum is in most all respects the same as that of the army. The aminations are held at Whitehall, but they take ace at no stated period, and are frequent or at long tervals, according to the number of candidates pre- nting themselves. As soon as the list contains ght or ten names the candidates are summoned to ondon, and are at once examined on Anatomy, Sur- ery, Medicine, and Chemistry, by the Director-Gene- l, and by the Deputy-Inspector of hospitals. The ost noteworthy fact in connection with the examin- ion is, the importance attached to a sufficient know- dge of Latin; the candidate is obliged to translate ssages from Gregory's Conspectus; and unless this rt of the examination be satisfactorily passed, the ndidate is not permitted to proceed further on the ial of his competency. The successful competitor not subjected to any probation at Netley Hospital, t is at once appointed as acting assistant-surgeon his ship, and enjoys from the publication of his gazette" all the pay, privileges, and advantages of s rank. (*Dublin Medical Press.*)

Gratuitous Medical Services. In our judgment e of two things should be demanded of all these *asi* charities;—either that their privileges be con- ed to paupers, or the professional attendants be re- nerated for the time and services rendered those able to pay; and the voice of the profession at large should be raised against the practice now too frequent, of indiscriminate gratuitous service. The general profession, as well as those who serve, has a clear moral right to the income of which they are thus deprived. Section 9 of Article 5 of the National Code of Medical Ethics, reads as follows. "A wealthy physician should not give advice gratis to the affluent, because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might be justly claimed." (*American Medical Times.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8 P.M. General Meeting. Dr. Gibb, "On Throat-Cough"; A. Balmanno Squire, M.B., "On Diseases of the Skin caused by the Arcus."—Epidemiological Society, 8 P.M. Address by the President.—Entomological.

Tuesday. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Robert Lee, "On the Nerves of the Heart"; Dr. Gibb, "On Removal of a Growth from the Epiglottis."—Zoological.—Ethnological.

Wednesday. Microscopical.

Friday. Astronomical.

TO CORRESPONDENTS

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Communications.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

An Associate's opinion quite agrees with our own—that *in futuro* an embargo should be laid upon the epistolary lucubrations of the gentleman alluded to.

Query.—The Royal College of Surgeons will assuredly not grant its License in Midwifery to any person who is not qualified to practise Surgery.

India Medical Service.—A surgeon writes from India: "The medical men out here are in arms at this new Warrant of Sir C. Wood's. Owing to the regimental reductions, there will be next to no leave for them."

D. H.—We regret that we cannot find the paper from which the extract was made.

THE DAVENPORT BROTHERS.—We really cannot occupy our space and insult the intelligence of our professional brethren by any serious allusion to the legerdemain tricks of these Yankee gents. The only interest which such a tale can have with members of a scientific profession, is the exhibition thereby afforded of some serious fault or gap in the instruction of what are called the "educated" classes.

CORONER AND MEDICAL FEES.—A correspondent writes:—"A few days since, an assistant of mine, who is M.D., M.R.C.S., attended an inquest, and made a *post mortem* examination for me; *i.e.*, the summons was made out to me, as the principal, although I knew nothing about it, and Dr. —— had investigated it, and made the examination. The coroner took his evidence, and then refused to give him the fee, because he was not registered, stating that he was *legally* precluded from so doing. Was he *legally* precluded from giving the fee? I believe that he is legally warranted in withholding it, as I did not attend the inquest; but he insists that he is *legally* precluded from giving it. I wish to convince him (if he is wrong) that he was not legally precluded from giving it."

[We have obtained the best opinion to be had on the point referred to, and it is this: "A coroner cannot be legally compelled to pay a non-registered practitioner, as a medical witness. There is certainly no law to prevent him; and in the case of his taking the evidence of a qualified medical man, he breaks the spirit whilst adhering to the letter of the law. In giving evidence, the law does not require that a man should hold any license to practise at all His evidence must be taken for what it is worth. He can, however, only recompense him as an ordinary witness. In the case of a medical man asking another to make a *post mortem*, or give evidence for him, the coroner can refuse to take the evidence, if he please; but if he takes it, he is bound in honour to pay for it, although he cannot be compelled to do so." EDITOR.]

INTERMITTENT RESPIRATION.—The phenomenon means simply "exhaustion" of the respiratory muscles. It is common on the approach of death; it is common under nausea; it is produced by such poisons as digitalis; it follows or accompanies convulsive attacks, as sighing; it is common amongst delicate females or males. Its analogue is intermittent action of the heart, which it usually accompanies. When any organ acting rhythmically is exhausted, it loses its rhythm. Irregularity then implies exhaustion from one cause or another. The natural deduction is, that "diffusible stimuli" are indicated. Practice endorses the inference. The prognosis in such a case is grave, so long as the symptom lasts. T. I.

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—H. C. Wildash, Esq. (East Ashford), 10s. 6d.; R. Davies, Esq. (Dunmow), 5s.; T. A. Stephenson, Esq. (Radford), 5s.

Amount previously announced, £91:5. Received at the *Lancet* office, £5:13.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 2nd, 1864.

COMMUNICATIONS have been received from:—Mr. J. VOSE SOLOMON; Dr. W. B. HAY; Dr. J. B. PITT; Mr. POPE; Dr. THOMAS INMAN; Dr. H. HARE; Mr. C. S. SMITH; Mr. T. WALTON; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. RICHARD GRIFFIN; Mr. J. N. RADCLIFFE; Mr. R. B. CARTER; Mr. OLIVER PEMBERTON; Dr. THUDICHUM; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; Dr. GEORGE D. GIBB; THE HONORARY SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Dr. MORGAN; Dr. KIDD; Dr. R. FOWLER; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. C. RADCLYFFE HALL; Dr. J. THOMPSON; Mr. F. FRY; Mr. G. H. FURBER: AN ASSOCIATE; Dr. F. J. BROWN; Mr. G. D. R. MACCARTHY; Mr. S. WOOD; Mr. GAINE; ANTICACOETHES; and Mr. WHARTON JONES.

BOOKS RECEIVED.

1. De l'Emploi Thérapeutique des Lactates Alcalins dans les Maladies Fonctionelles de l'Appareil Digestif. Par J. E. Pétrequin. Paris et Lyon: 1864.
2. Quelques Mots sur l'Acide Lactique et les Lactates Alcalins et Terreux. Par M. Burin du Buisson. Paris et Lyon: 1864.
3. A System of Surgery. Edited by T. Holmes, M.A.Cantab. In Four Volumes. Volume the Fourth. London: 1864.
4. First Help in Accidents. By C. H. Schaible, M.D. London: 1864.
5. Dilatation of the Lacteals. Further Observations on the Waxy or Amyloid Form of Bright's Disease. On a Case of Syphilitic Affection of the Liver. By T. G. Stewart, M.D. Edinburgh: 1864.
6. An Address to the Students of St. Bartholomew's Hospital. By G. W. Callender. London: 1864.

ESTABLISHED 1848.

J. Baxter Langley, Professional and MEDICAL AGENCY, 50, Lincoln's Inn Fields, W.C.

Eligible and Genuine Practices for TRANSFER at present on Mr. Langley's Register:—

895.—Unopposed Country Practice. £500 a year. Premium by easy instalments.
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919.—Nucleus of General Practice, with Retail, in South London. Price £100, in two instalments.
922.—At a fashionable Watering Place. Receipts £300.
943.—A Nucleus on the South Coast. Easy terms.
946.—Well established Retail, with private connection. Cash receipts £5 weekly. Price £150.
948.—In a large town in the Midland Counties. £1800 a year. Two years' Partnership Introduction.
951.—Within fifty miles of London, a well-established Practice of £1500. Half-share for negotiation.
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957.—In a healthy town in Lincolnshire. Population 10,000. Average receipts £350.
962.—Excellent Nucleus, in a good market town, about fifty miles from London. Cost of coming in £75.
965.—In Derbyshire. Receipts £300. Appointments £89. Premium £200.
969.—In a pleasant village, within a mile of the sea. Population 2000. Price £300.
971.—Partnership in Somersetshire. Average receipts £800 a year.
972.—Old established Country Practice. Receipts £400. Terms very moderate.
974.—Old-established Practice in Leicestershire. Receipts £400. One year's purchase required.
975.—In a market town in Lincolnshire. Receipts £200. Very transferable. Terms liberal.
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981.—A Branch Practice of £300 in Bucks. Terms easy. A capital opening for a single gentleman.
982.—In Yorkshire, near the sea, a Nucleus. Price £50. Appointments £35 a year. Receipts £170.
983.—Country Practice near a large town. Receipts £200. Appointments £140. Price £150.
984.—Excellent unopposed Practice in a manufacturing town. Receipts £500. Appointments £100. Price £500, by instalments.
985.—Unopposed Country Practice. £500 a year. Appointments £150. Price £500, in two payments.
988.—Nucleus in the North-East district, upon very easy terms.
989.—Private Practice, in a beautiful spot, within thirty miles of London. Receipts £250. Appointments £100. Price £150.
990.—In Somersetshire. Receipts £250. Appointments £50. No Premium. Furniture, etc., at a valuation.
991.—Devonshire. Average returns £300, increasing. No opponent within five miles. One year's purchase.
994.—A Branch Practice in Somersetshire. Succession secured. Receipts £360. Appointments £150. Price £250.
995.—Capital Nucleus in Warwickshire. Price £100.
997.—In an improving district in Yorkshire. Receipts £400. Appointments £150. Unopposed and perfectly transferable. Price £400, by instalments.
1004.—Village Practice. Receipts £240. Patients of a good class. Easy work. Premium £200, by instalments.
1005.—Excellent Private Practice, with retail and appointments. Income £500. Rent £50. Price £400.
1005A.—Capital well established Family Practice in one of the best towns in Nottinghamshire. Receipts upwards of £1000. Appointments £70. Premium £1,500, by instalments properly secured.
1007.—An old established Practice in Cheshire, with the very highest connections. Appointments £60. Income £600. Terms liberal.
1008.—Small well established Country Practice, with good connections, easily worked. Receipts £300. To an immediate purchaser, very easy terms would be offered.
1010.—In a good town, on an island on the coast, an increasing Practice. Receipts about £300. Terms 250 guineas.
1015.—West-end Practice. Income £600. Premium £1,000, with six months' introduction.
1017.—Well established Retail, in a fashionable watering-place. Receipts £1,000 a year. Premium one year's purchase; perfectly transferable.
1018.—Private Practice, with open Surgery, in Lambeth. Price £120.
1019.—Famliy Practice in a beautiful town in Surrey. Price 360 guineas. An excellent opening.

PROFESSIONAL and MEDICAL AGENCY, 50, LINCOLN'S INN FIELDS, LONDON, W.C.

Original Communications.

N THE RECENTLY IMPROVED METHODS OF EXTRACTING IN CASES OF CATARACT.

By Charles Taylor, M.D., Honorary Surgeon, Nottingham Eye Dispensary.

HARMING as have been the results obtained from dinary extraction by simply making a flap of one lf of the cornea, and successful as the operation s been in restoring sight to thousands of blind rsons, the inevitable percentage of failures which s ever attended that method, even in the hands of e most skilful and accomplished surgeons, has ways left something still to be desired in this, one the most brilliant and delicate of surgical operaons.

Not only do we find a series of cases where premare escape of the aqueous humour, laceration of the s, protrusion of the vitreous body, hæmorrhagic effuon, and prolapse, are causes of disaster in the hands unpractised operators; but there are others also still umerous where, in spite of the most skilful operaon and solicitous after treatment, acute suppuration the cornea, preceded by slight iritis, and coming soon after the completion of the operation, entails evitable loss of sight. In cases such as these, the ost accomplished operator is perfectly helpless, and n only witness with regret the entire failure of his ost sanguine expectations. As might be anticiated, ophthalmic surgeons have, since the introducon of the operation, been endeavouring to diminish e risks attending extraction. Various forms of nife have been employed—convex, concave, and ckle-shaped. The upper, lower, and lateral sections ve been adopted, and the general mode of operting varied *ad infinitum*. All this has been ne, however, without materially diminishing the verage of failures; which, in some cachectic conitions of body, extreme age, marasmus, and certain iseased and deteriorated conditions of the eyeball self, becomes swelled to so great an extent as to nder the operation one of such gravity that many rgeons decline these cases altogether. Certainly, e improved methods now at our disposal may be ckoned as not among the least important additions ophthalmic science, which has of late years, especilly since the introduction of the ophthalmoscope, een so greatly enriched by the labours of our profesonal brethren in Germany.

My attention was first directed to this subject by e following observation, which occurs in Von Gräfe's lassic memoir on *Iridectomy*. He says, when speakg of extraction in cases where glaucoma was comlicated with cataract, and where iridectomy had een performed for the relief of the former condition: It is evident that it is not very pleasant to extract nder such circumstances, and yet the results are ore successful than would *à priori* be expected; and believe that extensive statistics would show results ot inferior to those of extraction under normal conitions." As these were cases essentially of eyes in dvanced stages of disease, and consequently in most nfavourable conditions for surgical interference, the uccess attending the double operation could not fail occasion surprise. While pondering on this imortant observation, however, my attention was dicted, by the kindness of my friend Mr. Carter of Stroud, to a pamphlet, published by Albert Mooren, M.D., *On the Diminished Risks of Corneal Suppuration after Extraction of Cataract*; and, as no translation of this paper has yet been published, it will be necessary for me to avail myself largely of the facts therein detailed, in the course of my observations on his method. Mooren was led to conclude that the occurrence of slight iritis was the starting point of all the inflammatory phenomena which led to acute suppuration of the eyeball and consequent loss of sight, and that the inflammation always commenced in that part of the iris compressed during the exit of the lens. He says:

"One is led by these facts to consider whether it be not possible either to prevent the occurrence of iritis in extraction, or at least to deprive this inflammation of its dangerous characters. Through an exact study of my operation cases, I believed myself to have arrived at a solution of this problem. Some years ago, in two cases in which the iris was much pulled in the passage of the lens, I had cut off the injured portion as in iridectomy; and, remarkable to say, no reactionary symptoms followed. In this procedure I saw at that time only an evil, and practised it through extreme necessity; not with any idea of preventing inflammation, but only to guard against prolapse. For a long time I remained in the same view; and until I obtained additional similar experience, I gave the matter no more attention. . . . . In March 1859, I had occasion, through the unfortunate result of two extraction-cases, to observe what an extraordinarily important part is played by the iris in the healing of the corneal flap. There came to me a big, fat, corpulent, full-blooded peasant's wife, entering on her sixtieth year, to undergo extraction in both eyes; the removal of the lenses was accomplished without any difficulty. After completing the operation, the idea struck me that this patient, on account of the great plethora of her head, might probably suffer from iritis, and the more as her enormous corpulence forbade her to remain long at rest, and compelled her to spend part of her time sitting upright in bed, even at the very point of applying the bandage. I introduced an iris-hook under the cornea, in order to withdraw and cut off a portion of the iris; on one side the manœuvre was completed; on the other, the pupillary margin slipped from me before I could seize the moment to cut it. In consequence of the pulling which the iris had sustained, this part inflamed with such severity, that on the second day the cornea was already totally infiltrated with pus. The other eye healed without any disturbance, and the patient to this day enjoys with it unimpeachable vision.

"Three days later, the same unpleasant accident occurred to me with another patient. Here, also, the iris slipped from the hook, and the rapidly developed iritis produced likewise destruction of the cornea. I had thus gained the knowledge that the seizure of the iris with a hook was a dangerous manœuvre, from which evil consequences might be expected; just as perfectly as the instrument satisfied every desire when the iris is immediately secured and cut, so extraordinarily dangerous is it, when the membrane slips off again, and is thus exposed to repeated traction. The application of the common iris-forceps, such as the one commonly used in iridectomy, would from time to time entail this consequence, that, in great unsteadiness of the patient, or by strong turning of the eye in an opposite direction, complete dialysis would be produced. In order to render deviation of the eye, and consequent slipping of the iris impossible, it would be necessary to hold the globe with a hooked forceps. But let us think of the extreme danger involved in such a proceeding. Nearly half of the cornea has been separated from its periphery by the section; the lens is removed; the vitreous body

is only held in place by the thin posterior wall of the capsule. How light soever might be the pressure, and on whichever side it came, when the traction of the forceps was felt, bursting of the empty capsule and escape of the vitreous humour would be the first, and most natural result; at all events, to complicate the operation in such a manner for the sake of avoiding inflammation, would double the risks of extraction rather than diminish them. The procedure would be dangerous, and consequently is inadmissible. Another solution of the problem was therefore necessary.

"The first opportunity offered itself in May 1859. A woman, past seventy years of age, with faded wrinkled skin, and of such weakness that she could only walk when supported by a stick, compelled on account of great exhaustion to spend most of her time in bed, presented herself to me for extraction. Under these circumstances, it was evident that the least iritis would be followed by sloughing of the cornea; plainly speaking, the state of things seemed to me so desperate, that I did not undertake to operate without some feeling of repugnance. I determined, therefore, to divide the operation into two parts. Acquainted with the small risk attending iridectomy, I first made this from below. The healing process was completed without disturbance, and the patient was ordered the most strengthening diet. Three weeks later I performed extraction by an inferior flap. I thus had the advantage, first, that in premature escape of the aqueous humour the iris would not be pinched between the lens and the knife; secondly, that the cataract itself had not to be pressed through a narrow pupillary opening. In this way were two conditions obviated, which in the ordinary method of operating greatly promote the occurrence of iritis; as a fact, the fortunate result entirely surpassed my expectations. The healing process went on without any signs of reaction; and, fourteen days later, the eye no longer shewed a trace of vascular injection.

"In the month of June, a second eye was offered to me for extraction, in which the chances of success by the use of the usual operation would have been very small. Encouraged by the favourable result I shortly before obtained, I determined to practise again the same method. This case occurred in a lady of 76, my own aunt. The patient had been blind for several years, and shewed that delicate skin upon the face and hands at which, with reason, all operators become alarmed. This sign may be observed in more than three-fourths of the instances of threatened sloughing of the cornea. First, iridectomy was performed; fourteen days later, extraction. The cornea proved to be extremely thin, and wrinkled itself upon the completion of the section, the centre and the cut edges sinking in; on the third day, the eye was opened. An insidious iritis had developed itself without pain, and had produced grey exudation masses in the pupillary space. The whole treatment consisted in the administration of decoction of cinchona. Three weeks later, all inflammation had subsided; but under its influence the pupil had become in great part closed, and the patient had only a very small amount of vision.

"A long illness that shortly afterwards befell me, did not allow me until autumn to think of opening the pupil by operative means. The patient underwent the renewed iridectomy without any inflammatory reaction. Four weeks later, with $2\frac{1}{2}$ convex, she read No. 3 of Jäger's test-types; and this lady still enjoys such excellent vision, that at present she occupies nearly all her time in reading and writing. This case proved to me, more than the former had done, that the supervening iritis which, under other circumstances, would have totally destroyed the eye, had been deprived of its dangerous characters.

"Likewise, it seemed established that, by this method, the occurrence of disturbing processes might be prevented. It remained, therefore, to determine the limits within which it should be preferred. Speaking for myself, I could not but arrive at the feeling, that extraction, as it had heretofore been taught and practised, was no longer to be desired in opposition to my method of diminishing its dangers. *I saw my method, not only as a supplement, but as an absolute necessity in extraction.*"

I have preferred, in the above extract, to give Dr. Mooren's reasons for the adoption of a preliminary iridectomy as nearly as possible in his own words. He does not recommend his operation, however, to the entire exclusion of the ordinary method; but only in cases where, from the state of the patient's health, or the condition of the eyeball itself, the ordinary operation is almost certain to fail. Thus, he always makes a prior iridectomy, in cases of great age, complicated with general debility; in cases of disease likely to interfere with, or prevent, the healing process, such as severe cough, asthma, persistent vomiting, or affections which preclude long maintenance of the recumbent posture; a thin, silky, debilitated state of skin; or such an amount of constitutional cachexia as would lead the surgeon to anticipate disaster as the result of any operation.

The existence of pupillary adhesions, a diseased or deteriorated condition of the lens or eyeball itself, are also indications for his method of operating. Thus, if the pupil be thoroughly dilated with a drop of atropine solution, the lens will readily pass through the pupillary aperture, and there is so much the less indication for a preliminary iridectomy. Again, if the cataract have a small nucleus, surrounded by much cortical matter in coherent masses, the escape of some portions of this soft matter into the anterior chamber is so apt to provoke an insidious iritis, with subsequent suppuration of the globe, that, in this condition of the lens, a careful prior iridectomy is the only safe method of operating. The worse the patient's condition, the longer must the interval between the iridectomy and subsequent extraction be. In Mooren's cases, a fortnight or three weeks only was allowed to elapse; but six weeks is the shortest interval now adopted. I may mention that Mooren's practice, with the exception of Von Gräfe's, is the largest in Prussia, if not in the whole of Germany; he having had 578 operations in 1860, and 622 in 1861.

Since 1859, up to the period of the publication of his pamphlet (1861), Mooren practised his method in every case where the ordinary operation appeared certain to fail, with such brilliant results that he feared the incredulity of his readers; and, instead of contracting his narrative to a simple percentage proportion between successful and unsuccessful cases, thought it necessary to verify his statistics by giving the names and addresses of all the patients operated upon in this manner. Here are one or two average specimens.

"Frau Greis, from Eberfeld. Iridectomy, October 14th. Extraction, October 22nd. Very pasty individual, with thin skin, and very insufficient dilatation of pupil. She is so asthmatic, that she seems every moment on the verge of suffocation, and is always, therefore, in the highest state of agitation. On completing the section, the cornea wrinkled itself very much; the removal of the lens was attended by very great difficulty, both from the unsteadiness of the patient, and also from firm adhesion between the cataract and posterior capsule. Tedious healing. Granulation, with much spasm of the lids. Recovery, with tolerable vision.

"Frau Berger, from Viersen, only fifty years old; but a picture of weakness, decrepitude, and anæmia. The left eye had undergone reclination elsewhere,

nd the uprisen lens irritated the eye. I attempted s removal. Upon introducing the knife, however, he aqueous humour and the vitreous humour of like onsistence trickled forth, and the sclerotic fell into vrinkles. These conditions, together with circumcribed capsular opacity of the right eye, led to the onclusion that the vitreous humour was perfectly luid in the right eye, also. Iridectomy, Sept. 8th. The cornea wrinkled itself; the effused blood required ourteen days for its absorption. The patient was o feeble as to be kept in bed for three weeks. She eft her bed for the first time on the day before the xtraction, which was performed on October 1st. Full liet. A secondary cataract remained, and, together with an insidious iritis, produced an obstructed pupil. In the beginning of December, therefore, a second ridectomy was required. Very satisfactory vision. In both the operations, the cornea fell completely; nd the patient's condition of marasmus was so exreme, that my assistants, and also Dr. Ruschhaupt, who witnessed the operations each time, earnestly endeavoured to dissuade me from performing them."

Without quoting further from Dr. Mooren, I will now detail two or three cases in which I have performed his operation; which will, I doubt not, be all the more satisfactory, as I shall be able to show you the patients.

Case I. Ann Allwood, of Mansfield, a feeble, cachectic individual, in her 56th year, consulted me in May last year on account of an amaurotic condition, with partial lenticular opacity of the left eye. On ophthalmoscopic examination, I found the retina extensively diseased; the vitreous body fluid, and crowded with shred-like patches, which floated freely to and fro; and her vision so much impaired that she required a guide in the street. The right eye had been useless for some years; having, in addition to a perfectly fluid vitreous body, indicated by a remarkably tremulous iris, a hard, calcareous cataract. As she had some perception of light with this eye, I thought it possible that she might be benefited by extraction; and, accordingly, proposed the operation. I also considered this an excellent case to test Mooren's method, as the patient's health was very bad, the eyeball extensively diseased, and an ophthalmic surgeon had assured her that any attempt at extraction would be followed by suppuration of the globe. Iridectomy was performed early in June; extraction three weeks later. The patient recovered without a bad symptom. Ten days after the operation, there was scarcely a trace of vascular injection; and it was only on careful inspection that the fact that she had recently undergone extraction could be ascertained. After the operation, she had increased perception of light, but no useful vision. The ophthalmoscope revealed extensive disease of the retina and vitreous body.

Case II. Alice Duffield, Nottingham, a decrepid, pasty individual, in her 77th year, with thin wrinkled skin, and so feeble that she had required the support of a stick for some time past, had been in very bad health, and had suffered three slight paralytic attacks. Her medical attendant assured her that she was not fit to undergo the operation. I thought this a good case for Mooren's method; and accordingly performed a superior iridectomy on the left eye early in August last year, extracting a month later. The patient was very unruly; and the cornea was wrinkled and depressed in the centre. The lens was extracted without difficulty. She was perfectly comfortable, and without a bad symptom for five days; when, contrary to orders, she got up, removed the pad, and exposed her eye by looking out of an open window. Acute catarrhal ophthalmia, culminating in a very sharp attack of iritis with closed pupil, was the result. Three months later, therefore, when the eye was quiet, I performed a second iridectomy, opening up the pupil, and restoring good vision. Eighteen months previously, when she was in much better condition, I performed ordinary extraction on the right eye. There was an escape of fluid vitreous humour, and considerable prolapse of the iris, followed by general iritis, turbidity of the humours, and the establishment of a corneal fistula through which the aqueous humour drained slowly for months. The eye was, however, ultimated saved, after she had undergone considerable pain and discomfort.

Case III. Josiah Falconbridge, a very feeble patient, wasted by poverty and disease, in his 68th year, was suffering from chronic psoriasis, with patches of ulceration on the skin, and had recently been an inmate for three months of a general hospital on account of chronic disease of the bladder, which necessitated his rising several times each night. He was also afflicted with ingrowing lashes, which had caused a patch of ulceration on the lower half of the cornea of the left eye, which was the site of a hard senile cataract. This was altogether one of the most unfavourable cases for operation that could well be conceived. Iridectomy was performed on July 2nd, 1863. Owing to a very prominent brow and great emaciation, the eyeball (very small and hypermetropic) was so sunken, that I had great difficulty in introducing the iridectomy-hook. Extraction was performed three weeks later. On opening the eye on the seventh day, the corneal surface was covered with pus, the result of severe conjunctivitis, caused apparently by the irritation of the lashes. The wound was quite healed; the cornea perfectly clear. The conjunctivitis yielded in a few days; and the patient recovered with excellent vision.

Case IV. Mary Rame, a feeble patient, with thin, wrinkled skin, in her 65th year, was much reduced by poverty, confinement, and depression of spirits, the result of blindness caused by hard senile cataracts in both eyes. Iridectomy was performed in the left eye early in August last year; extraction six weeks later. The lens was very large, and surrounded by soft coherent matter, some of which floated into the anterior chamber, and which, owing to her unsteadiness, it was impossible to extract. She did exceedingly well for five days; when, owing to the irritation of the lens-matter or to some unexplained cause (I did not see her after the operation), severe iritis was developed, ending in closed pupil. I have not yet had an opportunity of remedying this defect; but do not doubt that a second iridectomy will restore her excellent sight.

Case V. Ann Fox, aged 65, with hard senile cataracts in both eyes, was in reduced health, owing to depression and confinement, the consequence of blindness; and very obese, so that she could not maintain the recumbent posture for any length of time. She would probably have done well with the ordinary operation; but, as she was excessively anxious as to the result, I gave her the choice, and she selected the safer procedure by Mooren's method. Iridectomy was performed on the right eye early in August last year; extraction six weeks later. She recovered without the least unfavourable symptom; has excellent distant vision, and reads diamond type.

I found in these cases that the coloboma iridis was completely concealed by the upper lid; that the pupil was about the normal size; that it was influenced by a strong light, dilated by atropine, and contracted by Calabar bean. The patients did not complain of dazzling; and the only inconvenience attending the operation was its division into two parts, separated by a somewhat long interval.

Mooren publishes sixty selected unfavourable cases,

of which the two I have quoted are fair specimens. These cases, he states, would have been lost with certainty by any other proceeding—an opinion confirmed by Dr. Ruschaupt and his two assistants, Drs. Meisner and Josten. The operations were attended by the remarkable result of only two failures. In one of these, when not under the doctor's care, the eyelashes became inverted, and raised the corneal flap; in the other, there was, at the time of the operation, complete retraction of the corneal flap—in itself, tantamount to a local mortification. Prior to the adoption of his method, eleven failures in ninety-seven operations, or more than one in ten, was the average of failures with ordinary cases presumably favourable in the hands of the same operator.

The cases most likely to fail by the ordinary, or indeed any method, are those where the cornea is extremely thin—a condition mostly observed in cachectic and aged individuals; a condition, moreover, which it is impossible to diagnose with certainty prior to the completion of the section. We may always, however, suspect its existence when the skin is extremely fine and thin. There are three degrees of this condition; the first, marked by a central depression of the cornea, often with transverse wrinkling immediately on completing the section; a second, where the shrinking is such as to cause withdrawal of the flap; and a third, where there is more or less positive retraction. This complete retraction implies absolute loss of the elastic properties of the cornea; and, whenever it exists, leads to total destruction as soon as the ordinary reaction attains the height of an inflammatory process.

My experience of Mooren's method is, that there is much less danger of subsequent inflammation; and that, when this does occur, it is robbed of its dangerous properties. The preliminary iridectomy affords a permanently large pupil, through which the capsule of the lens is very readily incised, and through which the lens itself passes with the greatest ease. After the operation, the edges of the corneal flap are most easily replaced, and there is no chance of that *bête noir* of extraction, prolapse, to disturb the healing process. If the inferior section (the one always used by Mooren) be adopted, the remains of the lens are removed more easily; any portions left, too, are less liable to press upon and irritate the iris, when this membrane offers to them a diminished bearing surface.

There are three objections to Mooren's method. The first is, the deformity occasioned by the removal of a portion of the iris; the second, the liability of the patients to unpleasant dazzling through the enlarged pupil; and the third, the inconvenience attendant upon the division of the operation. The first two cease to be objections when the upper section (the one which I have always adopted) is used. The last is indeed a most serious contraindication, and one that must necessarily limit the operation. This is so palpable a fault in Mooren's operation, that in the two other improved methods of extracting to which I have briefly to direct attention (Jacobson's and Schufte's), the iridectomy and extraction are combined. Jacobson makes the iridectomy the last step of extraction, and gets rid of the obvious dangers of manipulating the globe after incision of the cornea, pointed out by Mooren, by doing the whole operation when the patient is profoundly under chloroform. He, like Mooren, by continually inspecting the healing process after ordinary extraction, established the fact that the portion of iris corresponding to the flap, and compressed by the lens in its exit, is that in which inflammation always commences. This is the centre of all risk to the eye; and, to be danger-free, this must be got rid of. He keeps his patient for twenty-four hours without a large meal, and for some hours without solid food. He pours chloroform on a compress with a wax cloth back; hold it at a little distance, until the fauces and larynx have become accustomed to the vapour; and then moulds its edges (after a fresh supply of chloroform) to the face, so as to admit very little air, and to push anæsthesia rapidly. When the patient is nearly fit for operation, the compress is somewhat removed, and more air given with the last portion of chloroform. The patient being in such a condition that the contact of instruments produces no action whatever of the muscles of the globe or lids, the latter are held apart by an assistant, and Jacobson proceeds to make an inferior flap, with the line of incision not in the transparent tissue, but in the vascular limbus corneæ, so as to get a larger opening for the lens, and to place the wound nearer than usual to the materials for repair. For a large or externally softened lens, he makes his puncture and counter-puncture half a line below the horizontal meridian; for a smaller or hard lens, somewhat lower. This being premised, and also that he selects a knife of a breadth corresponding to the semidiameter of the cornea, he proceeds, sitting on the edge of the bed in a convenient position, to seize the conjunctiva and subconjunctival tissue with toothed forceps, below and to the inner side of the cornea; with the disengaged hand he enters the knife at the junction of the cornea and sclerotic, carries it quickly through and out at a corresponding point, and pushes it gently on with its edge inclined slightly towards the iris, so that nearly all the external wound will be in the conjunctiva. The knife, being carried on as far as convenient, is gently withdrawn, leaving a central isthmus undivided. If the blade be too narrow, this isthmus will contain a bit of cornea; but if it be of right width, it will consist of conjunctiva alone. Von Gräfe's fleam-shaped cystotome is then introduced, and the capsule freely opened; and then the isthmus is divided; its corneal portion, if any, with the point of the knife, in the line of the original incision; and its conjunctival portion with scissors, two lines farther down on the globe. The lens is started by digital pressure through the lids, directed in the first instance from above backwards and downwards, so as to make it rotate and present its lower edge at the pupil; and any *débris* are eased out with the scoop in the most delicate conceivable way. The lower segment of iris is then drawn out with proper forceps, and cut off close to the ciliary margin. The conjunctival space and the line of incision are cleared of blood and coagula; and the lids are closed. If the cornea be in right position, Arlt's compress is applied immediately; but if it be depressed, Jacobson waits from five to thirty minutes for a resecretion of aqueous humour to elevate it. The operation being a bloody one, there is a little delay between its stages, on account of conjunctival bleeding obscuring the parts and requiring removal. Between each two stages, the anæsthesia must be noted, and, if necessary, more chloroform given; the lids being, in the meantime, closed and supported by a ball of charpie and gentle pressure. No step must be taken without certainty that it can be completed with passive ocular muscles. If vomiting occur, the lids must be closed, supported by a ball of charpie and the hand; and the patient raised to a sitting posture, to vomit; then laid down again, and more chloroform given. The anæsthesia is to be maintained until after the application of compresses, which are applied in every case to both eyes.

For twenty-four hours after the operation, each patient has the undivided attention of a nurse, who anticipates all his movements, supports his eye if he

should vomit, and so forth. If any pain, or especially any *heat*, be felt in the eye, iced poultices are applied over the compresses, and changed every few minutes for hours together. If this be insufficient to give speedy relief, and if the patient will bear depletion, four leeches are applied in front of the ear, and each replaced by a fresh one as it falls, so as to take blood continuously until benefit is derived. From forty to eighty leeches have been used in this way to a single case; and this treatment is had recourse to promptly, before mischief is allowed to make head. Jacobson does not hesitate to open the eye for inspection on the second day, and, after the third, commences the systematic instillation of atropine, to prevent adhesions between the pupillary margin and the coagula left for absorption after iridectomy. Jacobson claims ninety-eight cures in one hundred operations, presumably ordinary cases. I have not tried his method, as I conceive that chloroform vapour, concentrated to the required extent, must of itself entail some risk, especially in patients whose health is such as to render the ordinary operation inadmissible. Again, I think escape of the vitreous humour would be favoured by the position of the incision; while the excessive attention to minutiæ, the risk of vomiting, and the extraordinarily careful nursing required, are all such self-evident contraindications, that I need not dwell upon them. None of these, however, apply to Schufte's, or more properly Waldau's, method of scooping out grey cataracts—an operation which, first received with caution, afterwards, owing to several failures, viewed with disfavour, is now rising so rapidly in estimation as to threaten, in the words of Mr. Critchett, to supersede the old method of flap-extraction altogether. In this operation, the lids are kept apart by the ordinary wire speculum; the operator then fixes the eye with a pair of forceps: and, with one of Jäger's bent iridectomy-knives, proceeds to incise the cornea close to the sclerotic, so as to form a curved slit from three to four lines in extent. With a hook or forceps, a portion of the iris is then drawn out, and about one-fifth of its extent removed. It is well, in doing this, to leave a slight belt at the ciliary margin, so as to afford support to the vitreous, and prevent its escaping or prolapsing. The capsule of the lens is then freely opened, and any superficial softened matter coaxed out with the scoop of the ordinary curette. Critchett's vectis-spoon is then glided between the posterior surface of the cataract and the hyaloid membrane. As it passes behind the equator of the advancing lens, the handle is slightly sloped backwards; and, when its centre has reached the posterior pole of the lens, with a gentle lever movement it is cautiously lifted into the anterior chamber, and extracted. The greater part of the cataract is removed at once. Any remaining portions, however, must be carefully fished out with the spoon; while the globe is lightly rubbed with the lids from time to time, so as to wash any fragments concealed behind the iris into the pupillary area. Critchett's spoon brings away the cataract, or, at any rate, its firm nuclear portion, unbroken, and does not take up more room than a thin metallic layer. The introduction of this instrument has greatly facilitated the performance of Schufte's operation, and will render it much more general. It also enables us to deal with all varieties of cataract, however dense. The risks attending this method are, that the hyaloid may be ruptured, and the vitreous allowed to escape. There is also danger of bruising the iris between the cornea and spoon; and also that fragments of the lens may be left in the anterior chamber, probably concealed behind the iris. Any of these accidents may retard the progress of the case, or even seriously compromise the eye. If they are avoided, however, and there is much less risk of such accidents since the introduction of Mr. Critchett's spoon, there can be no question that the patient's chances with a comparatively small elastic slit in the cornea are far greater than with a large semicircular flap. Scarcely any after-treatment is necessary, and the eye need not even be closed. There are many objections to the old scoop with flat bottom and steep edges, originally used by Schufte. It was apt to become entangled in the substance of the lens before it had passed behind its posterior surface; to break it up, and push portions into the space behind the iris, where they excited destructive inflammation. Hard senile cataracts also could not thus be removed.

These facts will perhaps account for the ill success which has attended this operation in the hands of many surgeons. Mooren adopted it in thirty-two cases, with the decidedly unfavourable result of losing ten eyes. He also states that other surgeons were similarly unfortunate. A friend of mine performed the operation in two cases—in both the globe suppurated; and an eminent London ophthalmic surgeon informed me that he had tried it in three cases, the eye being lost in each. The only case in which I have performed the operation was one of traumatic cataract, in which, owing to the development of glaucomatous tension, it became necessary to perform iridectomy; and I subsequently extracted the lens with Mr. Critchett's spoon. In spite of the above facts, Schufte's is just now the operation *par excellence* at Moorfields; and I do not doubt that it will ere long occupy a similar position elsewhere.

I must not omit to mention that linear extraction, with and without iridectomy, is fast superseding the old operation of solution by needles, drilling, and discission, in a number of cases of fluid and semifluid cataracts. There is no risk of escape of the vitreous humour, collapse of the globe, or hæmorrhagic effusion; and the results are, as Mr. Hart observes, in some respects incomparable. Of the various modifications of this operation, none yield such speedy and charming results, as Mr. Teale's revival of the ancient Persian method of extraction by suction. The operator must first, with two needles, tear up the anterior capsule, so that it may curl back from the area of the pupil, and be lodged behind the iris. Then, opposite the margin of the fully dilated pupil, make an incision in the cornea with a broad needle; through this opening, the suction-curette is introduced, and is gently buried in the opaque lens, which is then extracted by suction. Mr. Krone makes a very useful valve instrument for this purpose; and Mr. Weiss has two—one with a valve, and the other with a mouth-piece. I prefer the latter. Great care is required, to avoid injuring the posterior capsule. This instrument may also be used in cases where extraction by flap is contraindicated, such as, *e. g.*, diabetic cataract. The patient sees after the second or third day; and moderated light may be admitted in forty-eight hours after the operation.

In conclusion, I may perhaps be permitted to mention that I have endeavoured to simplify the ordinary operation of extraction by semicircular flap, by carefully dividing the capsule with a fine cutting needle, as the first step of the operation, when the pupil was fully dilated with atropine; extracting as soon as the few drops of aqueous evacuated had been resecreted. I have thus avoided what always appears to me a difficult and dangerous part of the operation—incising the capsule when one-half of the cornea is converted into a flap; the patient's eye rolling in all directions; the iris in contact with the cornea; and the pupil, *in spite of atropine*, reduced to a point. The risks of pressure in this condition almost preclude the possibility of fixing the eye; and the difficulties of incising

the capsule freely and carefully, the dangers of scratching the iris, obscuring the operation with blood, oppressing the eye, breaking up the lens, and thus exciting the first steps of what may prove a destructive inflammatory process, are self-evident.

Since the above was written, I have had further opportunities of testing both Schufte's and Mooren's operations, with excellent results. I may also mention that, at the recent Heidelberg Ophthalmological Congress, Professor Jacobson stated that, in 140 operations, he had only lost three eyes. In one remarkable case, a patient, aged 85, was kept narcotised for three hours, and inhaled upwards of six ounces of chloroform. In an animated discussion which ensued, concerning various points connected with extraction, the general feeling appeared to be in favour of iridectomy only in special cases such as I have pointed out above. Von Gräfe also expressed an opinion contrary to the generally received notion, that of two cataracts the less ripe one afforded the best results from operation. Mr. Critchett, at this meeting, also stated that he had met with such success with Schufte's method and his own modified spoon, that he now never thought of performing the usual flap operation.

PROTRUSION OF THE EYEBALL: BEING THE SUBSTANCE OF A LECTURE.

By Haynes Walton, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

PROTRUSION OF THE EYEBALL.

Protrusion of the eyeball arises from several mechanical causes, which are very dissimilar in their kind, and in each there is an amount of detail that could never be supposed by any one not much engaged in ophthalmic practice.

Every one does not know the difference between a protruded eyeball and an enlarged one, and an error is very excusable in the inexperienced. Congenital enlargement has been met with, but very rarely; and, while the proportions of all parts remain the same, the greater absolute magnitude is very apparent. Enlargement from disease always carries the evidence of diseased action, if not in the altered form of the cornea, or in the increased size of the chambers of the eye from greater aqueous secretion, certainly in the bulging and altered colour of the sclerotica. In mere protrusion of the eye without distinction of causes, the upper eyelid covers the eye, and hangs down lower than usual, is more or less paralytic and puffed, with its surface generally of a dusky red colour, and traversed by large veins. On the other hand, in actual enlargement the eye is remarkably uncovered, and presents a staring appearance, while the upper eyelid is merely pushed forward and retained in that position, but is in other respects unchanged.

For the sake of convenience, I shall arrange the causes that thrust the eye out, under those that exist within the orbit, and those that are external to it. It occurs to me to remark that, in no other subject in the range of ophthalmology is the knowledge of anatomy and surgery so needed, alike for diagnosis and for treatment. He must be a well educated and practical surgeon, accustomed to surgical operations in general, who is justified to undertake all the instances of disease that should come under this classification. It is here that the limited province of the "oculist" of old is so apparent. First, then, of causes within the orbit.

Venous Congestion. Under this head I venture to place the projecting eyeballs of the anæmic person. Different opinions still prevail about the origin of it. However, I believe in the cause assigned.

Few persons can have failed to notice in some females, for the most part pale, more or less prominent eyes, which are usually rolled about in a vague and hysterical manner, especially while speaking. There are marked degrees of the prominence. Sometimes you are attracted by a peculiarity merely, and you look twice before you are sure what is wrong; and sometimes the prominence horrifies you at a glance, and disagreeable enough it is then. The eyelids are generally puffy, and the conjunctiva reddened, and the pupils dilated. Males are not exempt from the disease; but so seldom does it occur in them, that I have never met with an example.

Associated with protruding eyeballs is enlargement of the thyroid gland; not always, it is true, but nearly always. I have not seen it absent, and the increase seems due to the simple enlargement of the glandular structure. In a single case only that I find on record, was the goitre of the cystic variety; and here it was very large.

There is generally some heart-disturbance, or, more correctly, disturbance of the circulation. The cardiac impulse is great; the sounds are loud and audible over the entire chest; and in the large vessels a systolic venous murmur is perceptible. It is difficult to judge of the natural pulse, as there is such susceptibility to excitement, that the asking of a few questions produces emotion.

My colleague, Mr. R. Taylor, has published an analysis of twenty-five cases, collected from his own practice and that of others. Of these, twenty were females and four males; of one, the sex is not mentioned, but from the context, the patient appears to have been a male. Three deaths occurred, in each instance in males. In two, there was a *post mortem* examination. Both of these had long suffered from extensive organic disease. In one, related by Sir Henry Marsh, there was considerable dilatation with hypertrophy, chiefly of the left side of the heart, and some amount of valvular disease, chiefly of the right. The right internal jugular vein was very much dilated. In the second, detailed by Dr. Begbie, the heart was large and soft, and flaccid; all the cavities, but especially the ventricles, were dilated; the valves were larger than usual, having accommodated themselves to the increased size of the cavities, but they were otherwise normal. The internal jugular veins were much dilated.

As a rule, however, it does not appear that organic disease of the heart is at all necessary to the production of this peculiar condition of the eyeball. The palpitation, which is invariably complained of, is due to anæmia. This, in the few instances in which the affection occurs in males, may result from extensive disease of the internal organs, from extensive and long continued loss of blood from piles, or from any other cause productive of destruction of the red corpuscles. In females, the starting point of the disease is almost invariably some form of exhausting discharge in connection with the uterine organs.

I cannot say that the impairment of sight is a consequence of this affection. It has never existed in any of the cases that I have so examined; in fact, there is no disease of the eyeball proper.

Of the actual nature of the pathological change in the orbit causing the protrusion, we are certainly ignorant so far as demonstration goes. It has been attributed to inflammatory swelling of the orbital contents, not sufficiently active to produce suppura-

ion, or to cause effusion into the orbital cellular exture; and to loss of tonicity in the orbital muscles, o that the globes, as it were, drop forwards. The ast is, perhaps, the least likely of these unlikely hings. There is not any loss of voluntary power, hich I think would be inevitable, were there loss of onicity on the orbital muscles; and the freest move- ient of the eyes may be combined with the greatest rotrusion. Again, in the most debilitating diseases, ith perfect muscular prostration, the eyeballs do ot protrude.

I am inclined to attribute the protrusion to conges- ion of the deep-seated veins of the orbit, which I think ffers a better explanation than any other of the vari- ble amount of the exophthalmia, and of the readiness vith which the eyeballs can be replaced by gentle ressure. Mr. Taylor, adopting Dr. Marshall Hall's iews as to the spasmodic contraction of the muscles f the neck in paroxysmal and convulsive diseases, uggests that this may be the cause of the impeded eturn of the blood from the head; and this view is upported by the fact that, in the only two *post mor- em* examinations that have been made, the internal ugular veins were found to be much dilated, as hough there had long been some cause of obstruc- ion at the lower part of their course; and, as in neither case was there any solid growth which could have impeded the circulation, it is not unreasonable to suppose that the obstacle was due to muscular spasm. But if this were true, how is it that there is no cerebral congestion, when the return of the blood from the brain is so checked?

It has been supposed that, if venous obstruction be the cause of the protrusion, to enlargement of the thyroid gland must the obstruction be attributed. The reader must decide how much this is worth, when he is told that considerable protrusion of the eyes is met with when there is not any perceptible thyroidal swelling.

From what has been said as to the nature of this disease, it will be obvious that the treatment must be directed towards overcoming the exciting cause of the anæmia, which, in the great majority of instances, depends upon uterine disorder. In addition to the special means which may be adopted for this purpose. pure air, nutritious food, and some preparation of iron will be invariably found useful; and those who believe its efficacy, may apply iodine locally over the thyroid gland. I have not seen complete recovery in any case, although several are recorded; but I have met with considerable amelioration; and in all that I have treated, improvement has followed the steady employment of the means I suggest.

Abscess. An abscess may form within the ocular tunic, and the symptoms would be protrusion of the eyeball, and pointing or swelling externally between it and the eyelid.

Pus may be deposited in the orbital cavity without the ocular tunic, and whether it be acute, subacute, or chronic suppuration, the physical characters will be the same; namely, the bulging of the orbital portion of the eyelid corresponding to the seat of the suppur- ation. The formation of pus is, according to my ex- perience, a common orbital affection; and when, with protrusion, there are the usual constitutional symp- toms attendant on abscess—the pain, with or without movement of the globe, the redness and puffiness of the eyelid, and the throbbing—we should early endea- vour to discover the deposit by an exploratory punc- ture, made, if practicable, within the eyelids, in the probable direction of the abscess.

Inflammation of the Orbital Areolar Tissue, Idiopa- thic and Traumatic. With the protrusion from this cause, there is always much swelling and redness of the conjunctiva—chemosis, as it is called. As an idio- pathic affection in various stages, it is not uncommon. It would not answer any practical end to notice in detail the degrees of chemosis that occur; it is enough to say that in the worst cases it stands out as a vascular tumour, and thrusts the eyelids com- pletely aside. It may be limited in extent, and con- fined to the upper portion of the conjunctiva. As in very slight cases there is but little protrusion of the eyeball, it may be the only objective symptom, and it is always the most marked one. There are rarely absent the pain and the constitutional disturb- ance.

The traumatic variety is that most frequently met with. It occurs after severe blows about the temples, or on the margin of the orbit. Of course, all the contents of this cavity are always more or less in- volved. With the protrusion, the eyeball is generally restricted in its movements; sometimes it is motion- less. I have been surprised to find the vision af- fected in all the severe cases that have come under my notice; and in all that I have been able to watch, it has never been restored.

The treatment consists in rest, leeching, or cupping at the temple, and incisions into the chemosis. It is decidedly wrong to attempt to press back the swollen conjunctiva by pulling the eyelid over it and apply- ing a compress, as the eyelid is apt to suffer, while the disease is not thereby arrested; and it is equally improper to excise any part of the membrane, as I have seen done, for contractions follow, and entro- pium is likely to ensue. It is not necessary to dwell on general treatment.

A very rare form of this kind of protrusion is hy- pertrophy of the orbital areolar tissue, just as occurs in elephantiasis. In the only case I have met with, there was no loss of ocular movements. The conjunc- tivæ were highly injected, of a coarser structure than natural, and bolstered out around their ocular attach- ments by the posterior swellings, which were dense and doughy. Vision was perfect. There was much pain. I lost sight of the patient. I learn from the few cases which are recorded, that the disease is pro- gressive, and the conjunctiva becoming dry and cuti- cular, the cornea gives way by slough or ulceration, and the eyeballs collapse. Very severe pain had in- duced the surgeons to resort to extirpation.

[*To be continued.*]

NOTES ON HERNIA.

By John Thompson, M.D., F.R.C.S., Bideford.

Umbilical hernia occurs with such frequency in infancy, that it might, without impropriety, be termed "infantile hernia". It is sometimes congenital, but most frequently first makes its appearance some months after birth, when the muscular movements of the abdomen and lower extremities become forcible. Probably, in most cases the umbilical aperture has not been thoroughly contracted, and an expansion rather than rupture of tissue takes place. I have been struck with the comparative rarity of the com- plaint after the first year, which is explained on the supposition that the orifice of the umbilicus is then fully occluded.

The appearance of this hernia in infancy is pecu- liar, presenting a protrusion like a filbert or walnut, seldom exceeding the latter in size, except it be con- genital; its delicate softness and elasticity on touch exceed these properties in the finest caoutchouc manu- factured. It is not often met with in the adult; but when it occurs, is generally in females who have borne many children, and are past the middle period of life. Its size may then vary from an orange to a

melon; and on handling, a peculiar boggy elastic feeling is communicated. An impulse is perceived in each variety of this hernia on the patient coughing or otherwise making forced expiration. I have never read of any other affection simulating this disease; and the following case, as affording an instance, may therefore interest.

A child, about five or six years of age, had suffered from fever, believed to be typhoid; but, during the convalescence, a small tumour appeared at the umbilicus, accompanied with pain, tenderness on pressure of the abdomen, and sickness.

I found, on being called in, a protrusion at the umbilicus exactly resembling umbilical hernia; it could not be returned, and was accompanied with great tenderness of the abdomen, pain, sickness, and constipation. It looked to me a case of strangulated umbilical hernia; and, as the objective and subjective symptoms were so unfavourable, relief by operation seemed a forlorn hope. In no long time, the tumour became discoloured, gangrenous, and sloughy; and within a few days from its first appearance, gave way; but, instead of stercus, there issued pus, and this in large quantity, without admixture. The case was now explained to be abscess bursting at the umbilicus; and my fears respecting artificial anus or fæcal fistula were dissipated, as no connection with the intestine had been formed. Pus continued to issue from the opening for two or three weeks; it then ceased; the child's health became restored; he grew well; and is now a robust adult.

I believe the case was one of secondary abdominal cellulitis following fever. I have found this externally in the sheath of the rectus; and there seems no reason why it might not occur within the abdominal walls, and probably in the fascia propria; that it was not glandular abscess, seems clear from the subsequent history of the patient.

It is generally recommended to treat simple reducible umbilical hernia in the child by applying compresses of wood, lead, or lint, kept in place by plasters or bandages; or by elastic bandages with conical projections of India-rubber, or balls inflated with air, to make pressure at the umbilicus; the whole of which I deem to be very unsatisfactory. As many months, or even a year or two, may be necessary for the cure, the employment of plasters for such periods on the delicate skin of the infant, I hold to be hardly possible, reflecting on the irritation and filth which must occur, and, moreover, that the warmth of the child's skin in this situation is continually loosening the most adhesive preparation. Ordinary bandages will shift position with the multitudinous movements of the child, notwithstanding the greatest care in their application. The wide elastic bandage, with a cone to press on the umbilicus, will sometimes fit and keep in position, but as frequently it will not; it is questionable, however, whether it be advisable to have conical pressure exerted in this disease, lest it retard the contraction of the umbilical aperture. Another objection to the elastic bandage is, that it will not wash; a matter of consequence where an article is required to be worn on the body of a young child for months, and even years. Feeling these objections, I designed a little apparatus, which I have recommended to my patients for a great many years, and which I will briefly describe.

An abdominal support is to be made of two layers of thick calico; it is to be open behind, where some strings or a lace should be placed; the body must have several cords of stout bobbin drawn between the layers from top to bottom, to prevent folding; and, in the part which covers the umbilicus, a pocket of about two and a half inches square, opening inwards, is to be formed, which is to receive a square of gutta percha, about the thickness of moderately stout tapping leather, with the edges pared or rounded by a file; a few stitches may then be made to keep the pocket closed. There should be shoulder- and thigh-straps to keep it in place; and it then may be worn either on the outside or within the child's linen. The warmth of the abdomen moulds the gutta percha into shape, which thus effectually covers the umbilicus, and repels the hernial protrusion. It is well to have at least two abdominal supports of this kind for each patient; a soiled article can thus be replaced by a clean one, the gutta percha being removed from the one to the other. In this way, the case is managed effectively, and with due attention to comfort and cleanliness.

Obstruction, or strangulation of this hernia, may occur in the adult, as I have myself seen; but in respect to infantile umbilical hernia, I never saw, heard, or read, of a case of strangulation. A very large proportion of the cases are never placed under professional treatment; and being left to nature, with the assistance of the support afforded by the usual dress of the infant, do well. I knew a practitioner of large experience who left these cases to the care of the parents, with the assurance that they would be cured, and no untoward results were known to follow. The assistance of the surgeon may, therefore, be rather an aid than a necessity—valuable in expediting, rather than ensuring, the recovery of the patient.

DISLOCATION OF THE HEAD OF THE RADIUS.

By Henry Hare, M.D., Great Baddow.

The following case, which occurred in my practice on September 28th, may be considered of interest.

A boy, about 10 years of age, was thrown from a donkey, pitching on his hand. When he came to my surgery, I found the left arm hanging down by his side; the hand being in a state of pronation. I could easily bend the forearm upon the arm, and also extend it fully; and that without giving pain. I could effect supination and pronation, with the infliction of little uneasiness. The head of the radius could be felt on the outside of the external condyle of the humerus. It was perceived and felt to move under the finger on effecting supination and pronation. The ulna was normal in its position; and without fracture. There was no fracture of the radius. The appearance of the forearm that struck me most, was that of a depression behind, beneath the olecranon, along the margin of the ulna, making the whole of that bone prominent, brought out, as it were, in relief, when the hand was in a state of pronation. The tendon of the biceps muscle felt somewhat tense. The depression appeared less, when the hand was put in the state of supination; but did not disappear altogether. I diagnosed dislocation of the head of the radius outwards.

I made an unsuccessful attempt at reduction by extension; grasping the boy's hand with my right, and his arm with my left hand. I afterwards put my knee in the bend of the elbow, and flexed the forearm; the head of the radius immediately returned to its normal position with a snap.

When I saw the boy next morning, the arm appeared quite normal, with the exception that behind, the margin of the ulna remained somewhat prominent; and there was a slight appearance of depression (a muscular effect, I imagine) about the middle, along the margin of the ulna.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

DEATH DURING THE INHALATION OF CHLOROFORM.

By Charles Gaine, Esq., Bath.

[*Read Oct. 17th*, 1864.]

John Dowling, aged 15 (a twin), was admitted into the Bath United Hospital, August 27th, 1864, with a very bad talipes varus of the left foot, which conservative means had failed to benefit.

Ulceration of the bearing point of the foot having set in, it was decided that amputation, and an artificial limb, would be the most efficacious method of remedying this state of things. The boy and his friends were particularly anxious that the operation should be done, and expressed a wish that chloroform should be administered to him; the boy particularly urging it.

I was requested by Mr. Gore to administer it to him. Before commencing the inhalation, I examined the outward formation of the patient, which, with the exception of some slight malformation of the walls of the chest (which will be subsequently described), was very good. The head was large, and the facial expression indicative of great intelligence. I made a careful examination of the heart-sounds; which were, as far as auscultation could guide me, quite normal. I then proceeded to administer the chloroform on a small napkin (the ordinary mode of administering it at this hospital). It is my usual custom to commence with a small quantity (ten or fifteen minims at a time), held at a distance of an inch or two from the nostrils or mouth; this to be repeated, at short intervals, until anæsthesia is produced.

There was very little excitement apparent, though the heart's action, for the first minute or so after commencing the inhalation, was slightly increased; but the tone and character of the impulse were quite normal. Respiration was also natural; the eye was steady, and the pupils of ordinary size. This temporary acceleration of pulse having passed, it continued steady (about 76) until the operation was commenced. The time occupied, from beginning the inhalation to the commencement of the operation, was from ten to twelve minutes, and the quantity of chloroform used was about three drachms, by measure.

During this time, the patient was quite composed; and inhaled the chloroform without its producing any of the phenomena presented in most ordinary cases, and which are indicative of transition from stage to stage towards anæsthesia. The eye remained sensible to touch, and the pupil unchanged, until within ten or fifteen seconds prior to the commencement of the operation; it then contracted slightly. The muscles were relaxed; the pulse and respiration remained unchanged.

Mr. Gore now commenced the operation; and, simultaneously with the entrance of the knife, the boy made two strong convulsive starts, and screamed out, clearly indicating that anæsthesia was not complete; and almost synchronously with the second spasm, the heart's action suddenly failed. I immediately called Mr. Soden's attention (who was assisting at the operation) to the state of the pulse; and restorative means were immediately commenced, to endeavour to resuscitate him. The means used were, cold affusion; ammonia; drawing forward of the tongue; pressure and counterpressure on the chest, to imitate the respiratory movements; and the use of the galvanic battery, which produced marked action of the respiratory muscles of the chest, neck, and face. These measures were persevered with for some time; and though there were two or three convulsive respiratory efforts, they proved but illusory, and life may virtually be said to have ceased when the heart failed. I may here remark that, after the second muscular spasm, the pupils became enormously dilated, and maintained that condition to the last. It may, also, be worthy of special notice that, from first to last, there was no stertorous breathing.

Post Mortem Examination, twenty-four hours after death. The body was well formed, with the exception of the left wall of the chest, which was somewhat deformed by the sterno-costal cartilages overlapping the sternum. This was, no doubt, occasioned by the cartilages accommodating themselves to the position which the body assumed consequent upon the talipes. The cartilages, more particularly of the seventh, eighth, and ninth ribs, were bent at a much more acute angle than the corresponding ones of the right side, and were also more dense and difficult to sever. Notwithstanding this malformation, the capacity of the chest was not diminished.

On removing the breast-plate, the parietal and intimate pleuræ were found adherent in small patches, more particularly on the right side. The pericardium and endocardium were healthy. The heart was somewhat small, but not abnormally so. The right ventricle was dilated, and filled with dark-coloured fluid blood. The left ventricle contained very little blood; but this was of the same dark hue and consistence as that found in the right. The left auricle and pulmonary artery were filled with blood. The valves were healthy. Microscopic investigation of the muscular fibres of the heart failed to discover any oil-globules.

The lungs were healthy, but congested, especially the lower part of the left; but this may probably be accounted for in intensity by *post mortem* gravitation; as the upper part of each lung was crepitant, though somewhat darker in colour than usual when healthy. The bronchial and pulmonary vessels of the lower part of each lung were gorged with blood. The larynx and trachea were healthy; also, the liver and spleen. The kidneys were both lobulated, nearly, though not to the same extent, as in the fœtal condition. The stomach and other abdominal viscera were healthy. The bladder was empty.

The dura mater was healthy; the sinuses contained little blood. The pia mater was natural in appearance. The arachnoid was opaque in patches, especially on each side of the vertex, corresponding with the glandulæ Pacchioni. There was no evidence of tubercle. There was subarachnoidal effusion of a small quantity of semi-opaque fluid. The brain was very large, but apparently healthy; weighing 1726 French *grammes*, or 60.89 ounces avoirdupois.* The convolutions were large, and prominently defined. There was no fluid in either ventricle.

The kidneys were both, as I have said, lobulated. This may be considered as an evidence of imperfect development; and may be viewed in that light, as having some relation with the congenital crippling and want of development of the limb.

On the other hand, the very marked development

* Nothing very definite has resulted from inquiries instituted with regard to the mental capacity of the boy. All agree that he was of a very good disposition, and that his intellect was certainly above the average in his station of life. But nothing very extraordinary is established to correspond with the unusual size and weight of brain.

[Since the paper was read, Mr. Gore has ascertained that the boy possessed a remarkable amount of natural talent; he was a good arithmetician and mechanic; and, at school, was far in advance of other boys of his age in general knowledge.]

of the brain stands in contradiction to the supposition advocated by Tiedemann (*Zeitschrift für Physiologie*, vol. iii, p. 4, 1829) and others, "that a primitive deficiency in the development of the nervous system is a determining element in the causative production of monstrosities by defect of limb, etc."

No opportunity offered of ascertaining the condition of the urine after his unexpected death. But, among other precautions to take in doubtful cases before administering chloroform, we may now add, perhaps, that an examination of the urine should be one. That a disordered condition of the blood in this relation may readily produce important and unexpected consequences, is well shown by the extraordinary rapidity with which ptyalism, and all the other effects of mercury, are produced in cases of albuminuria.

I have briefly recorded the leading phenomena of this remarkable case, as presented during life; also the *post mortem* appearance of all the important structures of the body; and I think it will be shown by the latter evidence, that there was no apparent organic disease that could account for death. It will be then to consider how far death may be said to be attributable to the inhalation of chloroform. And, if so, in what manner did this agent cause death? The quantity used was below the average, and the time occupied in inhalation unusually long. The absence of all the ordinary signs of transition from one stage to another, towards producing anæsthesia, is also remarkable, and is deserving of special notice. I have good reasons for calling attention to this; for, in more than one case of the kind which I have seen, and in which this apparent tolerance of the agent was noticeable, there was the greatest difficulty in rousing the patients from their lethargy; and at the same time they were *never* insensible to pain. The chloroform, instead of acting as an anæsthetic agent, appeared to act as a subtle poison, something similar in effect to a large dose of opium.

Inquiring physiologically into the cause of death in this instance, we must endeavour to show as clearly as possible in what manner (if death be attributable to the inhalation of chloroform) the agent acted so as to kill, and what condition of body during life renders it unsafe to administer it. *Firstly:* Was death caused by its paralysing influence on the heart? *Secondly:* Did it act as a direct poison on the blood? *Thirdly:* Was death the result of shock while the patient was in an imperfect state of anæsthesia? and, if so, how far may this be attributed to the influence of chloroform? All the phenomena carefully weighed, it would be difficult to assign the cause of death to any one of these, without taking into consideration the influence of the whole. In the first place, what caused the sudden paralysis of the heart? Secondly, what produced the thin, dark, fluid state of blood throughout the body, apparently utterly deprived of fibrine? Thirdly: Would death have occurred from the shock of the operation, had chloroform not been administered? I shall not attempt to theorise myself as to the immediate cause of death, as my object in bringing forward this case was simply to place the leading facts before the members of this Association, in the hope that discussion may elicit some hint which may in future cases prove of some useful practical value.

I will conclude by reading a letter from Dr. Richardson, of Hinde Street, London, in reply to my inquiry in reference to the cause of the dark and fluid blood after death.

"My dear Sir,—The blood is usually found to be fluid after death from chloroform. Not that chloroform in any way acts on the blood to prevent coagulation, but because, from the mode of death, the blood is left closely shut up in the circulation. Usually, indeed always, when the blood was normal before administration, coagulation takes place directly the blood is let out from the body. I have long, however, been of opinion that there are conditions of great fluidity of blood in which the effects of chloroform are very much intensified. It is probable that, in your case, the blood was abnormally fluid at the time of the operation; that it did not support the muscular power fully at its best; and that, absorbing the chloroform, such power as it did exhibit was sacrificed. This is the only light I can throw on the affair."

[A very interesting discussion followed the reading of the paper, in which the President (Dr. Falconer), Dr. Marshall, Dr. Herapath, Dr. Davey, Mr. Prichard, Mr. Mitchell Clarke, and others, took a part. The general opinion was, that the patient died from shock, in which it was doubtful if chloroform exerted any influence.]

Reviews and Notices.

A Treatise on Pharmacy: designed as a Text-book for the Student, and as a Guide for the Physician and Pharmaceutist. Containing the Officinal and many Unofficinal Formulas, and numerous Examples of Extemporaneous Prescriptions. By Edward Parrish, Graduate in Pharmacy; Member of the Philadelphia College of Pharmacy; etc. Third Edition, thoroughly revised, with important Additions. With 238 Illustrations. Pp. 850. Philadelphia: 1864.

We have in this able and elaborate work a fair exposition of pharmaceutical science as it exists in the United States; and it shows that our transatlantic friends have given the subject most elaborate consideration, and have brought their art to a degree of perfection which, we believe, is scarcely to be surpassed anywhere. The book is, of course, of more direct value to the medicine-maker than to the physician; yet has Mr. Parrish not failed to introduce matter in which the prescriber is quite as much interested as the compounder of remedies.

Without further preface, we will state that the work is divided into five parts, with an appendix. The first part is Preliminary, and contains chapters on Dispensary Furniture and Implements, the United States *Pharmacopœia*, and Weights and Measures and Specific Gravity. The second part is headed Galenical Pharmacy; the third, Inorganic Pharmaceutical Chemistry; the fourth, Pharmacy in its Relations to Organic Chemistry; and the fifth, Extemporaneous Pharmacy. The Appendix contains remarks on the Management of a Sick Chamber; Articles of Diet for the Sick and Convalescent; Estimates of Outfits; and Recipes for some of the more important Popular Medicines.

In the chapter on the *United States Pharmacopœia*, Mr. Parrish gives an interesting sketch of the history of that work. Up to the year 1818, British and European pharmacopœias had been used in America; but, in the year just named, a plan for an American pharmacopœia was first proposed, at the suggestion of Dr. L. Spalding, by the New York State Medical Society, and was carried out in 1820 by a convention appointed for the purpose. Since that period, it has decennially undergone revision, in which task a very

large share has been borne by a gentleman who is well known in this country as occupying the highest position among American physicians—Dr. George B. Wood of Philadelphia.

As a companion to the *Pharmacopœia*, Dr. Wood, with Dr. Bache, brought out in 1831 a *Dispensatory*. The relative position of these two works is thus defined by Mr. Parrish.

"Every physician who practises pharmacy, as most country practitioners do, and every druggist and apothecary, should possess a copy of each of these works; the *Pharmacopœia* for use as a guide-book in making officinal preparations, and the *Dispensatory* for reference as an encyclopædia of materia medica, therapeutics, and pharmacy."

In the United States Pharmacopœia, the English language alone has been used since 1840—the English and Latin languages having both been used in previous editions; the Latin names, however, of the medicines and preparations are still retained. In this respect, the work resembles the *British Pharmacopœia;* and also in the fact that the contents of the work—which consists of two divisions—Materia Medica and Preparations—are arranged alphabetically. A further resemblance may be found in the nomenclature adopted; the principle of the compilers being to use simple, well known, and readily intelligible names, rather than to follow the changes introduced in the progress of chemical or botanical science. Be it understood, that the *British Pharmacopœia* had not appeared in America, while the *United States Pharmacopœia* was in preparation. It is avowed in an extract from the preface to the *Pharmacopœia* of 1850, given in the present work, that the Pharmacopœias of the United Kingdom have been advisedly followed as closely as possible.

"It is of the highest importance that medicines having the same names should have the same composition; and, as British works on medicine are much read in this country, it would lead to never-ending confusion if the substances they refer to by name should differ materially from those known by similar names with us. It has, therefore, been a general aim to bring our pharmacy into as near a correspondence as possible with that of Great Britain; but in all cases in which greater purity or efficacy in the medicine, or greater convenience and economy in the process, or any peculiarity in the relation of the preparation to our own circumstances and wants, called for deviation from the British standards, modified or wholly original processes have been adopted."

In a section on Approximative Measurement, Mr. Parrish gives tables from Durand, Proctor, and his own observations, showing the great variation in the proportionate size of drops. As examples, in his own tables, we find the following: the figures representing the number of drops of different liquids equivalent to a fluiddrachm, as dropped from (*a*) minim measures and (*b*) pint or half-pint tincture-bottles.

"Acetum opii (*a*) 69, (*b*) 90; Acidum aceticum (comm.) (*a*) 102, (*b*) 73; Chloroform (*a*) 276.5; (*b*) 180; Liquor ammoniæ (*a*) 62, (*b*) 49; Oleum tiglii (*a*) 92, (*b*) 80; Spiritus ætheris nitrici (*a*) 148, (*b*) 90; Tinctura opii (*a*) 147, (*b*) 106;" etc.

The result of seven trials of dropping water from ounce-vials was, that 34, 48, 32, 48, 60, 50, and 65 drops respectively were found equal to a drachm.

The second, third, fourth, and fifth parts contain much matter of great pharmaceutical interest, in respect to the formation of various officinal and non-officinal medicinal compounds. At the commencement of the fifth part, there is a chapter on Prescriptions, intended for the instruction of the practitioner as well as of the druggist.

In discussing the question whether prescriptions should be written in English or in Latin, Mr. Parrish gives the preference to Latin; the object, in his opinion, being to combine conciseness with accuracy. Officinal names are preferable to common synonyms, which are often applied to different substances. Thus, in America, "snakeroot" may mean serpentaria, cimicifuga, asarum, senega, or eryngium, and perhaps other plants; while chamomile may be anthemis, matricaria, or maruta.

Mr. Parrish, as a pharmaceutist, gives some very useful hints to prescribers on the manner of writing prescriptions. Abbreviations he would have to be used with extreme care. While he does not altogether object to them, he would have every word written so fully that it can be mistaken for no other. As an example of the necessity of this, he relates that several years ago he received "a prescription for *hydrate of potassæ* ℥i, to be dissolved in water ʒiij (dose, a teaspoonful)." The medicine intended was hydriodate of potassa (iodide of potassium).

Another point on which Mr. Parrish insists, is the necessity of distinctly writing the signs denoting the weights and measures. American physicians must be very careless in this matter, when it is found necessary to state that

"There are not a few prescriptions on our files in which the sign intended has been reached only by guessing, or by reasoning upon the known dose of the drug, rather than upon the shape of the sign. A flourishing style of chirography is nowhere less in place than on a physician's prescription. . . . It is not easy to illustrate in print what an examination of the chirography of many prescriptions would make apparent, that the *reading* of a prescription frequently requires more skill and judgment than the *compounding* it." (P. 686.)

In conclusion, we can only express our high opinion of the value of this work as a guide to the pharmaceutist, and in many respects to the physician, not only in America, but in other parts of the world.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S., Professor of Practical Chemistry in the Museum of Irish Industry. Fourth Edition, revised and enlarged. Pp. 331. London: 1864.

In this new edition of his instructive manual, Mr. Galloway has laboured to render it a still more competent guide than it was before. He has divided the book into two parts; the first of which contains the matter of previous editions, with additions and alterations; while the second, in which an outline of organic analysis is given, is here introduced for the first time.

In his *Second Step in Chemistry*, which we had the pleasure of reviewing some time ago, Mr. Galloway introduced the new chemical nomenclature and notation. In the work now before us, he retains the old system; observing that

"Students who know the new language, know, or ought to know, the old; and, therefore, it will be no

inconvenience to them to meet with the old, as they will understand it, and will be able, if necessary, to translate it into the new."

We doubt whether all chemical students will agree with Mr. Galloway that it is not inconvenient to be obliged to learn two systems of chemical language. They would most probably prefer that there were but one system. Chemical science, however, is yet unfixed; and hence those who apply themselves to it must bear with the trouble attending occasional change in the estimate of terms and figures.

Whatever difficulties exist in the way of studying chemistry, from the cause to which we have alluded, Mr. Galloway has certainly done much to neutralise them, by the simple instructive manner in which he places the principal details of the science before his readers.

PRINCIPLES OF HUMAN PHYSIOLOGY. By WM. B. CARPENTER, M.D., F.R.S., etc. Sixth Edition. Edited by HENRY POWER, M.B.Lond., F.R.C.S., etc. Pp. 946. London: 1864,

THIS standard work on Physiology has again appeared, in a Sixth Edition. The volume has reached, and rightly reached, a position in professional estimation which places it beyond the field of criticism. We may truly say of it, in a word, that there is no more comprehensive and complete treatise on Physiology in the English language.

This sixth edition appears under the auspices of Mr. POWER; and Dr. CARPENTER tells us the reason why. Having retired from the position of teacher of physiology, Dr. Carpenter "did not feel it incumbent upon him to keep up with the progress of the science in detail"; and, moreover, he now "felt it his duty to devote such power as remains to him rather to the extension of the boundaries of knowledge by researches of his own, than to the co-ordination of the results elaborated by others." Dr. Carpenter adds that, with the exception of the first and second chapters, he "holds himself exempt from responsibility, in regard either to the scientific character or the literary execution of the present issue."

The editor, Mr. Power, tells us what alteration the present volume has undergone—in what respects, in fact, the edition of 1864 differs from that of 1855. The sections on the Function of the Cerebrum, which occupied 140 pages, have been now omitted. To the chapter on Food, etc., have been added the results of the experiments of Bernard, Adrian, and Eckhard, on the influence of the nervous system on secretion; Brücke's and Meissner's experiments on the formation of peptones, etc.; Ruge and Planer's account of the gases of the intestines are referred to; osmosis is described; etc. In the chapter on the Blood, a section on the Pneumatology of the Blood has been added. In the sections on the Circulation and Respiration, much new matter has also been given. To the chapter on Nutrition, has been added a new section on the Balance of the Vital Economy. The researches of Bernard, Pavy, Rouget, and others, as to the glycogenic functions of the liver, are detailed. The difficulties which still overshade our knowledge of the nervous system are pointed out. In short, the whole work has undergone complete revision; and the principles of physiology are brought up to or detailed in accordance with our present knowledge of the subject.

We sincerely congratulate Mr. Power on a successful completion of his very laborious and serious labours.

British Medical Journal.

SATURDAY, NOVEMBER 12TH, 1864.

THE ARMY MEDICAL SERVICE.

THE College of Physicians of London has undertaken an inquiry into the condition of the Army Medical Service. By this we suppose it is implied that the College will investigate the nature of the grievances under which our army medical brethren labour at this present time. It is much to be desired that the College would extend its field of inquiry, and include, in fact, the condition of the Navy Medical Service. Unless we are much misinformed, the navy medical officer labours under as heavy and as many grievances as the army medical officer. We would, therefore, venture to suggest to the College that it should delegate to its Committee power to embrace in its inquiry the Navy Medical Service.

The influence which the College of Physicians has with the Government is considerable. The Government, in matters of a medical character, has on several occasions applied to the College for advice and assistance. Doubtless, therefore, any recommendations from the College would be received by the Government with much consideration. We, therefore, regard this present inquiry as one of considerable importance to the interests of the army medical officer. From its position, the College naturally feels the responsibility which rests upon it in any recommendations which it may hereafter think proper to make to the Government or to any subordinate officials of the Government on the matter. It will, therefore, doubtless proceed with great caution, and advise or recommend only on a full assurance of the justice of the cause which it may advocate. In the meantime, it is the business of its Committee to make themselves masters of all the facts, and, having done so, to report thereon to the College.

We state the position of the case, because the Committee are now in a position, and in fact ready, and, we believe, desirous, to receive information from those who are capable of giving it, on the subject at present under their special consideration. They, of course, must be made assured of the existence of the grievances of which the army medical officer complains. They must have the exact nature of the grievances laid before them, and be fully acquainted with the way in which they operate, as prejudicial to the interests of the medical officer and of the public service. Of the actual existence of those grievances we have ourselves no kind of doubt.

We have no kind of doubt, from the many facts which have already passed under our observation, that those grievances are of a kind which render the position of the army medical officer very difficult and most anomalous, which place him in a position such as no other military man occupies. *The army medical officer has, in truth, no defined status in the army.* He is at the mercy of his commanding officer. And the result is what the Duke of Cambridge has so often repeated as a boast, and as an encouragement to the "doctors": "Only, says he, "do you behave well, and you will be treated well!" What would be thought by all the other officers in the army, if they were told that they would be treated, *not according to their rank, but according to their behaviour?* We have facts before us which satisfy us that the Committee of the College will find there is a real substantial work which they can take in hand; a positive, a cruel grievance, inflicted on the Army Medical Service by the prejudice of aristocratic officialism. Sure we are that, if the facts which are known to us were known to the House of Commons, the Duke of Cambridge and his Whitehall scaffolding, and the cobbling and ignorance and prejudice which are at work behind the hoarding there, would soon be removed, as injurious to the public service, and unjust to the medical officer.

THE Medical Council (as our readers may remember), at their last session, determined to take into consideration the amendments required in the Medical Act at an early period of their next session. In consequence, we suppose, of this resolution, the Branch Council in England are about to meet, in order to take the subject into consideration, preparatory to the assembling of the General Council; in order, doubtless, to prepare the way for the Council, and facilitate their operations in the matter. We would, therefore, call the attention of the profession to the fact, in order that it may, through its mouthpiece, the journals, aid and assist the Council by an expression of its opinions and its wants. The questions to be answered are: What are the grievances felt by the profession? and what are the alterations required in the Medical Act whereby they may be removed? We need not remind our readers, that it may be difficult to obtain any alteration in the Medical Act, unless a strong opinion on the subject be expressed by the profession at large. Indeed, and reasonably enough, unless the representatives of the profession —we mean the Medical Council—are assisted by the profession at large, they may be unable effectually to further the welfare of their clients. We would, therefore, invite our readers, in due season, taking time by the forelock, to discuss the subject; to express their feelings, and give utterance to their just complaints, concerning the defects of the Medical Act as it now stands law.

MR. TALLEY continues his injudicious and vain efforts at the extinguishing of what he considers to be illegal practice. Mr. Talley, with the best motives it may be, is, doubtless, injuring the cause he would serve. He is prejudicing magistrates and other authorities against attempts to put down quackeries and offences against the Medical Act. This week, again, we find him engaged in a vain prosecution.

"Dr. Charles Watson, of No. 1, South Crescent, Bedford Square, was charged with having falsely represented himself to be a physician and surgeon, in violation of the provisions of the Medical Act. The end of the case was, Mr. Flowers said that the case was clearly not made out, and the summons must be dismissed."

THE proper way to regard and treat what is called "spiritualism" is taught us by Mr. Faraday and Mr. Ward. Those of our contemporaries who solemnly undertake an investigation into, and seriously argue upon, such an exhibition of chicanery on the one side, and of educated ignorance and credulity on the other, seem to us to aid the delusion. The mere discussion of such a thing is a partial admission of the possibility of its truth. We suppose, that in most cases where the press has entered seriously on the subject, it has done so mainly for the object of working the delusion for its own benefit. At all events, to treat of such a degraded exhibition to members of the medical profession, is simply to insult them. Mr. Faraday and Mr. Ward have shown us how to deal with such an imposition and with such impostures.

"Mr. Faraday, in answer to a spiritual invitation, has sent the following characteristic reply. 'Gentlemen,—I am obliged by your courteous invitation; but really I have been so disappointed by the manifestations to which my notice has at different times been called, that I am not encouraged to give any more attention to them; and I, therefore, leave those to which you refer in the hands of the professors of legerdemain. If spirit communications not utterly worthless should happen to start into activity, I will trust the spirits to find out for themselves how they can move my attention. I am tired of them. With thanks, I am very truly yours, M. FARADAY. Royal Institution, Oct. 8.'"

"At Newcastle, Mr. R. Ward, proprietor of the *North of England Advertiser*, applied for a summons against the Brothers Davenport. Mr. Ward stated that the Brothers Davenport, by professing to show spiritual manifestations, had obtained money to the amount of about £100 from the people of Newcastle, and that he himself had been defrauded of a guinea. By their professions, the Brothers Davenport had induced large numbers to attend their *séances*, where certain alleged spiritual manifestations took place, but which he believed to be nothing but a swindle; and that the money, therefore, had been obtained under false pretences. He believed the manifestations to be a thorough swindle, and that the parties ought to be punished. The chairman said that he himself did not believe in those silly exhibitions; but he did not think the magistrates had power to grant a summons in the case. If people would be so foolish

as to pay their money to witness such exhibitions, it could not be said that they had been deluded by false pretences."

At the opening of the Faculty of Medicine of Paris on the 3rd instant, the Minister of Public Instruction was present.

"I am present" (he said), "in the first place, to render homage to our celebrated Faculty of Medicine; next to the skilful masters, who are the honour of our public education; and, lastly, to you, gentlemen, students, who are the hope of our future science, of the profession..... I am annoyed at hearing it said that physicians over the Rhine are more learned, and physicians over the Channel more practical, than French physicians. Young men, let me ask you to surpass the Germans and the English. I have often heard a discussion as to whether medicine is a science or an art. It is both one and the other. Your hand must be light, skilful, and ready; your head well stocked with knowledge. That is your programme. Fill your head with good ideas; and so make your hand firm and sure."

The following case of poisoning by chloroform is related by Dr. Macker in the *Gazette Médicale de Strasbourg*.

"A soldier, 27 years of age, who had been drinking hard for some days, took fifty *grammes* of chloroform early one morning. He was shortly afterwards found vomiting violently. He soon became insensible; was lying on his back, completely insensible; cadaveric look; extremities cold; eyes turned upwards convulsively; pupils enormously dilated; mouth half-open, and emitting a strong odour of chloroform; breathing stertorous; pulse 100, feeble; heart's action weak and irregular; complete resolution of limbs; general anæsthesia. In the course of a short time, respiration was occasionally suspended; pulse insensible; tracheal *râle*. Artificial respiration was performed; with frictions on the body, etc. No antidote could be administered, as deglutition was arrested. The lips were blue; the tongue swollen; the pharynx obstructed with mucus. Coffee-glisters were administered. This condition lasted up to nine o'clock; occasional contractions of the limbs being observed. The tongue was drawn forcibly forwards, and the mucus allowed to flow out by turning downwards the head. About ten o'clock, the pulse rose; the skin became warm; but anæsthesia continued. Towards the middle of the day, he was much better; and at one o'clock, when he became sensible, he was taken to the military hospital. He had no recollection of what had happened. Prostration followed; vomiting ceased; but the pupils remained dilated. On the following day, he was jaundiced; with no other symptom, except pain at the epigastrium."

The asserted evil results of marriages of consanguinity were discussed at length at the Lyons Medical Congress. Opinions on the subject were opposed *toto cœlo*. The difficulty of deciding the question lies in the fact that it is at present almost impossible to say whether the diseases said to be the results of such marriages are really their effects, or are only the effects of the accumulation and multiplication of hereditary pathological conditions existing in those who form marriages of consanguinity. The breeding in and in of carefully selected and healthy animals seems to tell in favour of the latter view of the case.

M. Liebreich has suggested another to the many ills—viz., mental disorders, cretinism, congenital malformations, deaf-dumbness, etc.—which are asserted to be the effects of marriages of consanguinity. The pathological item is one taken from his own speciality; it is pigmentary retinitis. Having noticed this affection in the child, issue of cousin-germans, and wishing to test its value as an etiological fact, M. Liebreich visited the Deaf and Dumb Asylums at Dresden, Breslau, and Berlin; and he found that, of 241 deaf and dumb, 14 presented the pigmentation of the retina; and from these cases he argues out his conclusions. We need hardly say that his interesting suggestion wants much strengthening before it can be received as a fact.

M. Masse informs the Academy, that a mixture of fifty *grammes* of water, fifty *grammes* of alcohol, and fifty *centigrammes* of creasote, will cure all skin-diseases which are produced by the presence of parasites.

M. Gailleton, surgeon in chief of L'Antiquaille at Lyons, gave the Medical Congress a complete and interesting account of the genesis and treatment of trichophyton.

This vegetable fungus, he says, possesses an energetic and contagious power such as to resist all means of cure. The fineness of the spores, and their great force of contagion, rapidly spread the disease in schools, etc. The dust of skin-disease hospitals is full of them. The isolation, therefore, of patients affected with trichophyton, is absolutely necessary to prevent its spread. For treatment, M. Gailleton recommends strong caustics to be applied to the isolated patches. He also advises that the heads of the patients should be covered, in order to prevent the dissemination of the spores.

Our readers will probably be interested and surprised to hear that there is an establishment (now fifty years of age) at Naples, where the cowpox is propagated amongst heifers.

The establishment is due to M. Galbiati. The heifer is brought to the door of those who are to be vaccinated. The conductor snips off a pustule with scissors, and presents it in a pair of forceps to the doctor who vaccinates. Vacciniferous cows, M. Palaschiano told the Lyons Congress, are seen going about the streets of Naples just like milking cows. There is a vaccine establishment at Naples; but its operations are confined almost wholly to the poorer classes. Ferdinand II, who supported this establishment, nevertheless had his children vaccinated from the cow; and so also do all those who can afford to pay five *francs* for the use of the vacciniferous animal. Since the annexation of Naples to Italy, this custom has spread; and, in fact, the cowpox is now generally used in the army and in schools. The propagation of the cowpox has during the fifty years been kept up from cow to cow. Sometimes it has been renewed by matter obtained from England. M. Galbiati, it may be added, has found the affair answer as a speculation. Besides the profit arising from the supply of matter, he has never found any difficulty in the sale of his animals as articles of food.

Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[*Continued from p.* 531]

The second general meeting took place on September 21st, at 10½ A.M. There were letters from high personages read, regretting that they could not be present. And this was indeed to be regretted, as it is supposed that the presence of royalty, even from the third step to the throne, would have had a mitigating influence upon some boisterous spirits, which exhibited in that meeting more than ordinary energy. Germans, no less than Englishmen, are lord-worshippers.* This was presently illustrated by an address to the Archduke Stephan, which was read by the second leader of business, Professor Leuckart. By the exuberance of its loyalty, the profundity of its submission, and the sublimity of its compliments, this address created a good many smiles. Happily, it did not produce any interruption of the decorum of the assembly, as it was not proposed that the meeting should vote it. It was simply announced that it would be laid open for signature by persons desiring to express their minds in such strains. If the address had been proposed for adoption by the meeting, it would certainly have been rejected; and I myself should have spoken and voted against it. This might have given unnecessary umbrage to the addressee, who had shown nothing but gentlemanly urbanity, and had not deserved to be addressed in abject language. The address received few signatures, and, I am sure, produced little edification to its enlightened recipient.

Then came the sad announcement of the melancholy death of one of the members of the Congress, who had been found dead in his bed. The meeting expressed its deep sympathy in appropriate terms and manner, and made arrangements for a proper representation at the conduct of the funeral. The German meetings during the last four years have all been accompanied by similar disasters. Thus the Königsberg meeting in 1860 had to be opened with the announcement that its intended president, Rathke, had died the night before of apoplexy. His inauguration address was found ready on his desk, and read to the deeply moved assembly.

The next business was the selection of a place of meeting for next year. A strong party propounded Dresden; but it then transpired that the Agricultural Congress would be held in that town next year, about the same time during which, according to the statutes, the naturalists and physicians meet. A patriot then proposed Flensburg, and gained some applause with his demonstrative proposition. But it came out that Schleswig-Holstein was quite exhausted, and not in the humour for festivities; and that at Flensburg there were no rooms even for meetings. Then somebody proposed Breslau. Of Hamburg, which was also thought of, it transpired that this free Hanse Town desired to treat the Association to its beauties in a future year, when the new Institutes for Science, which they were engaged in building, would be ready. Then the northern Germans, thinking to get a tour in the Tyrol at the same time, proposed Innspruck. The leaders of business proposed Hanover. It was soon evident that the choice lay between the last two places, and that Dresden and Breslau had no chance. A zealous gentleman now had a hit at Innspruck, saying it was so Roman Catholic and priest-ridden that an assembly like this would not be liked there—nay, not be quite safe. This was received with remonstrance by the meeting, and rejected with scorn by a speaker. Such a remark, he said, indicated the point of standing of the person that made it. All other persons in the room could only assume one of two points of standing with regard to it: they must either be above or below it. The effect of this was quite overwhelming. The meeting, however, after the agitation and applause had subsided, called for a division, which was accordingly taken. A close scrutiny was required, as the votes for Innspruck and Hanover seemed to be equally balanced, the Dresden party having plumped for Innspruck; but the tellers declared that Hanover had been victorious by a majority of sixty votes. Krause, the celebrated anatomist of that town, was elected first leader of business for 1865; and Karmarsch, Professor of Natural Sciences, the agitator for the unification of weights, measures, and coins in Germany, second leader of business.

Next on the list of proceedings was a popular lecture by Professor Remak, on Galvanism applied to the Healing of Diseases. Professor Remak waived his right to give the lecture; which was discreet, as most persons had already heard a great deal about the subject. But he also coupled his resignation with a request to be permitted to move a resolution instead, for the purpose of changing something in the standing orders of the meeting. This the meeting refused to do, amid much confusion, cheering, laughter, and presidential bell-ringing. All this arose from the circumstance that the business was not led, but allowed to drift its course; and that the time devoted to pure business matters was not sufficiently marked off from the time devoted to lectures on scientific subjects, either in the programme or in the mind of Professor Remak. At last the waters became quiet; and Professor R. von Schlagintweit delivered a lecture on the Trade Routes of Central Asia. This was listened to with the greatest attention, and excited general interest. It was illustrated by a series of large coloured views of the principal regions and towns through which the routes pass. The vivid delineations of the experienced and well known traveller were justly rewarded with general applause. The late King of Bavaria had the indiscretion to give to the brothers Schlagintweit the surname of "Salünlünski", as a memento of their Asian exploits. The name, a curiosity of itself, difficult to pronounce for a German well accustomed to the flexed or pointed vowels such as ü and ö, but quite impossible to thorough and untrained English lips, has drawn down much ridicule upon its recipients. This sentiment has been carefully nursed by their antagonists, and upheld by prints professing comicality, no less than by such serious publications as the *Athenæum*. But the travellers really deserve sympathy, as for an affliction; and this I beg my readers to extend to them. For they got a name imitating the well known surname given to Diebitsch after he had crossed the Balkan in 1828 —"Sabalkanski"—without the substantial accompaniments of such an elevated peerage. What struck

* "This morning, at eight o'clock, the *Salamis* was brought alongside of the Corporation Pier (Hull), and at a quarter past eight the prince was landed. He was received by the mayor, aldermen, and common councilmen, and the Danish consul, Mr. Clement Good. The pier was lined on either side with persons anxious to see the royal infant. Although the weather was rather raw, their desires were gratified. The infant prince was held up, and his face uncovered. Mrs. Davis, the wife of Mr. Sheriff Davis, on his Royal Highness being brought to the pier, went forward and presented him with a toy in the shape of a white fur rabbit." (*The Morning Star*, October 18th, 1864.)

me most in Schlagintweit's lecture was the account of the code of honour amongst robbers in Central Asia. The division of labour there is so complete that a robber never steals. Goods may be left on any part of the roads, and are as secure as in the warehouses in the London Docks. The predatory class, one and all, would be ashamed to take a thing which is left to the keeping of the good faith of all; but they would take the same goods from the caravans by pillage and murder, and think it a glorious deed. This is a new kind of chivalry, which I recommend to the attention of moral philosophers.

Dr. Dohrn of Stettin announced that there was a surplus in the funds of the Stettin (1863) meeting, and asked permission to employ it for scientific purposes. This was gladly given. Dr. Posner then commenced a lecture on Spirit and Tobacco, and their Influence upon Mankind. Whether this awoke the slumbering sympathies for an early glass and a cigar, or whether the people thought they knew all about it, I cannot tell. Enough—a general exodus commenced, the noise of which made the speaker inaudible for a long time. I confess that I was suddenly seized with a longing after the fragrant weed, to compose my shattered nervous system. All I know of the conclusion of the meeting is, that the President announced it formally at one o'clock, it having been virtually at an end some time before, Dr. Posner's eloquence being unable longer to fascinate the restless spirits by a subject which, one would have thought, by its sublimity, would rivet the attention of all.

The general meeting over, those who could yet stand more science rushed up to the Zoological Institute, to see some pigs which Dr. Mosler had infected with trichinæ and measles. I can affirm that I never saw such a miserable pair of pigs, and that I believe them to have suffered more from the want of ordinary care and cleanliness than from the diseases with which they were infected. "But," said the novices, "pigs are said to be very lame with trichinæ." "Ah!" said others, "that's the appearance of trichinous pigs! Well, they are easily recognised!" I thought it a duty to inform the assembled gentlemen that pigs, however much or little trichinised, would not offer the appearance of the present pigs, unless they were badly kept, starved, and allowed to lie in dirty and cold places. I adduced the experiments which I had myself made for a public purpose, as proofs of my statement; and said that trichinous pigs might die, suffer much or suffer little from trichiniasis; but that, the acute stage of the disease once over, they gained flesh and fat, continued to grow, and recovered their former health and unexceptionable appearance and appetite. If all the experiments instituted at the zoological establishment at Giessen have been made upon animals similarly kept, I think the evidence afforded by them to be much vitiated by this circumstance. I think that 25 per cent. of the severity found by these experiments, and a similar amount of the mortality from trichiniasis, have to be put to the account of the keeping of the animals. This explained to me also why Professor Leukart could not keep any rabbits alive which were infected with trichinæ. I have kept thirteen out of some fifty infected; and one gave birth to a nest of young ones four months after trichinosis. Others are likely to do so hereafter. With due care, cleanliness, proper food, and warmth, rabbits may survive trichiniasis, just as well as men and pigs.

Of the experimental pigs, the first, or trichinised one, was explored with the new harpoon of Professor Weber, of Halle; and a piece of trichinous pork was extracted and scrutinised under the microscope. Pig's-flesh shows better than rabbit's-flesh that the trichinæ are inside the sarcolemma; human muscle shows it best. The harpoon is a kind of trocar-stiletto, excavated behind the point, and sharp round the edge of the excavation, so that it cuts in being withdrawn. It does not tear like Middeldorpff's; and one does not run the risk of producing an abscess, as is the case with the latter. I should have been very glad to have had this harpoon during my studies of trichiniasis at Stassfurt and Dessau, where I was obliged to use the common incision for furnishing the proof absolute of trichiniasis; namely, a muscular fibre or two, with a few trichinæ, taken from the flesh of the living patient. I should now always try this harpoon before resorting to incision; and having seen it used, and used it myself, I can recommend it to all my readers. Tumours may also be explored with it advantageously, and sufficient substance obtained to make a satisfactory microscopic examination.

The second pig was not only trichinised, but also measled. The pectoral muscle being laid bare, was found richly dotted with bladder-worms of the size of lentils and peas. They all contracted actively while warm; and, under the microscope, were fully developed; rostellum, rings of hooklets, suckers being all clearly visible inside the retracted neck within the bladder. On examining the eyes of the pig, I failed to discover any cysticerci, either inside the bulbs or under the conjunctivæ; but the yellow discharge in the lower angles of the eyes was present, together with the conjunctivitis, and, on *post mortem* examination, the muscles of the eyes were found infected. Failing with the eyes, I tried the tongue. Having forced the mouth open by means of a piece of wood, I caused an assistant to draw the tongue forward with a hook; and, on examining its lower surface, found a very slight projection, indicating a measle below. I caused it to be digitally examined by several of the bystanders; and then excised the measle, which, under the microscope, showed itself as perfect as the rest. This operation is of practical importance, as a ready means of diagnosing measles in the live pig with certainty. It constitutes the essence of what, in exporting places and harbour-towns, is called measle-trying. The pig was killed in the evening; and exhibited in the Medical Section next morning. It was thoroughly measly; its heart being literally covered with bladder-worms, and presenting a great similarity to the heart of a calf which Dr. Mosler had infected with the eggs of tænia mediocanellata or saginata, the tapeworm which man receives from beef and veal. This heart Dr. Mosler has represented in two plates in his *Helminthological Contributions*. While, in the interest of science, I have freely criticised these experiments as to one particular point—namely, the keeping of the animals; for which, in this case, I know subordinates, and not principals, to be responsible; but subordinates acting for a stranger having no control over them, but only the inducement of the "backshish"—I must, on the other hand, fully acknowledge the assiduity and earnestness, and withal the success, with which Dr. Mosler has worked out these repetitions of the experiments of Küchenmeister and Haubner. For already Harvey has enunciated that experiments conveying important evidence to the mind could not be too often repeated, and that every repetition was certain to eliminate a collateral error or to extend collateral evidence. Therefore, the repetition of good experiments is a merit, conveying the confirmation of phenomena to the individual inquirer; and making him, and all those to whom he can demonstrate, additional witnesses to the truth of the original observation. The words of Harvey are the best answer which anybody can give to the clamours of sensation philo-

zoists and Pall Mall sentimentalists. We repeat experiments upon animals to promote the welfare of man. Indeed, Science is the greatest philanthropist; and its disciples need not fear the misdirected zeal of that company of feeble individuals, which insists upon saving brutes at the cost of men.

Never was a dinner more longed for, or better deserved by previous work, than the Association dinner on that 21st of September. The Physiologists had toiled from seven o'clock until nearly two without intermission. The other sections had mostly began at eight; and after ten o'clock, adjourned to the general meeting, which lasted till nearly one o'clock, as we have already seen. The Section for Physics, also, like the Physiological Section, had another meeting at one o'clock. At half-past two, all met again at Zinsser's Gardens, ready to dine. The dinner lacked the *éclat* of the first, or inaugural one, and the attendance was smaller; but it gained thereby greatly in what the Germans call *Gemüthlichkeit*, or, to represent the idea in some manner, the word not admitting of direct translation, we got it a little more comfortably, there was a little more elbow-room, a little less crowding, noise, heat, and hurry. We relished the principal convivial enjoyment, conversation. I had the gratification of sitting by the side of Metz of Darmstadt, the staunch defender of liberty, the leader of the German National Verein; his accomplished wife opposite gave the intellectual soprano to our more trivial or lower-tuned sentiments. Here, then, were law and lyric keeping me in countenance; again, opposite, a little to the left, sat Ule, a fertile and agreeable writer on natural things, the editor of the weekly periodical *Nature*, which entertains and instructs many thousand families of the Fatherland. Here, then, were the three kingdoms to take my subjects from, or put my creations in; but I had also a philosopher near, a man expert in the depths of minds and in those of mines; it was Herr Stein, the Mexican, so-called at Darmstadt, his birth-place and residence, because he spent his youth and made his fortune in that charming and charmed land. My left-hand neighbour was a brother in physic remarkable for his silence; I had met him years ago on a journey in the midst of the great basaltic phenomena of the Vogelsberg; he had given me specimens of chabasite such as the British Museum does not contain—it was Dr. Strack of Nidda. There was, therefore, recollection of agreeable times added to the other treats, of youth, travel, and abandonment to the study of nature, and of associations having for their centre the parental home. Great was the treat of those two hours. After that, the acquaintances, old and new, came by dozens. Then I sucked as the bee sucks, short and sweet; and left myself to the magic powers of assimilation.

The dinner-speeches were most trivial, with the exception of one, and that was very original and full of effect. It was given by Forstrath Hartig of Brunswick, our friend of the Botanical and Zoological Sections. His subject being the prosperity of the Association, he shortly reviewed its effect upon the national character. This brought him to the struggles of the Germanists in the time during and after the French wars; and immense was the applause when he related how "old father Jahn" had made Germans of them, and caused them to abandon French affectation. When a boy said "merci" instead of "Ich danke", Jahn took him on the knee, and gave him a flogging with a rope's-end. "So much I know," concluded the old Forstrath, in his most humorous style, "that of those whom Jahn let go from his knee and from under his rope's-end, none said again 'merci' then or ever after."

[*To be continued.*]

Association Intelligence.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will take place at the Fountain Hotel, Canterbury, at 3 P.M., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

ROBERT BOWLES.

Folkestone, October 1864.

SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held at the Lion Hotel, Shrewsbury, on October 19th; T. B. BARRETT, Esq,, President, in the Chair.

1. After some appropriate remarks relative to the objects and importance of these Branch gatherings, and the advantage each gained by the social and friendly discussion of professional matters, the PRESIDENT read some very interesting cases of rare Diseases of the Bladder and Kidneys, which he illustrated by wax models of the diseased structures.

2. The PRESIDENT also introduced and experimented with the Nitrite of Amyle and the Metal Magnesium.

3. A new Sling for Fractured Jaw, of his own construction, was shown by the President.

4. Several papers were read, and forwarded for insertion in the JOURNAL.

5. Mr. WOOD introduced some successful cases of Excision of the Elbow, in which the full powers of the arm were preserved; also a case of Amputation at the Shoulder-joint, in consequence of an accident to a child four years of age.

6. A fixed Ophthalmoscope, the invention of one of the members, Dr. Newman of Stamford, was exhibited, and much noticed. It has been found very useful in demonstrating the appearances of the interior of the eye in its healthy and diseased states; and for hospital purposes, where pupils have to be taught the use of this instrument, it was considered to be a very ingenious and efficient application of the principle for conveying the requisite instruction.

Medical Provident Eund. There was a long discussion upon the subject of the Medical Provident Fund, many of the members desiring further information as to the working of the system. There was, however, a strong desire expressed by the members generally to support it. The Director for this Branch was requested to report to the next quarterly meeting.

Dinner. The members and friends afterwards dined together, Mr. Moorhouse filling the place of Vice-President; and a very social and agreeable evening was spent.

Dr. Burd was elected Vice-President for the ensuing year, and one new member was added to the list of members.

GENIUS AND INDUSTRY. "Broussais, an ardent and violent disputant, a brilliant orator, energetic, and highly imaginative; Laennec, simple-hearted and modest, a patient and sagacious observer. How different their characters, and the results of their labours! Broussais has left a reputation brilliant, but ephemeral; whilst that of Laennec is solid and durable. The work of the one was the work of an agitator; the work of the other that of a real founder."

Reports of Societies.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[*Held at Bath, September* 1864.]

Physiological Aspect of the Sewage Question. A discussion on this subject was introduced by Dr. HUGHES BENNETT, who, after enumerating the difficulties attendant on the attempt to apply sewage to agriculture, said that all plans for the utilisation of sewage were interfered with by the assumption that there was something pestiferous or unhealthy in the fermentation, exposure, and smell of sewage. He agreed with Mr. Rawlinson, that the health of the people was the first consideration; but he could not agree with him that the risk to public health from the utilisation of sewage was such that it was better at any cost to remove it from towns and throw it into the sea. To prove the fallacy of that opinion, and remove some of the difficulties that surrounded the question, he laid down a series of propositions. The first was, that atmospheric air, strongly impregnated with odours of various kinds, was not necessarily injurious to health. In support of this proposition, he said that in those districts on the shores of the Mediterranean where large tracts of land were employed in the cultivation of odorous flowers, no epidemic was known to be produced by the atmosphere; that no injury to health had been shewn to result from an establishment which existed in one part of Paris for the distribution of manure; and that the condition of the Thames in 1858 had not been productive of the slightest bad effect in London. He had just come from Naples, which was a very volcanic region, and bubbles of sulphuretted hydrogen were continually springing up in the sea; while the drainage was very badly managed. The drains formed through the city were large slits, which threw the smell up, and the odour was so great that he never smelt anything like it elsewhere. The people were so satisfied that this smell was injurious, that rents at the top of the house were twice as much as the rents below. He found that Naples was not more subject to typhoid or other fevers than any other city. He had visited all the large hospitals in Naples, and amongst them the military hospital, which contained at the time 800 patients. The terrible dirty condition and effluvia at that hospital were such as he could not attempt to describe, and yet the medical superintendent told him that there was no fever caused in that way. There was only one case of typhoid fever in the house at a time. The second proposition was, that atmospheric air, without smell, was often most dangerous. In support of this, he referred to the marshes of Essex and Lincolnshire, the low grounds of Holland, the Campagna of Vienna, the Delta of the Ganges, the Guinea Coast, and other parts of the world, where the most pestiferous fevers prevailed epidemically, and yet these effects were never attributed to bad odours, nor did bad odours exist to any extent. Some deleterious gases, such as carbonic acid and others, had no smell; while others, such as carburetted and sulphuretted hydrogen, had smell; but in these the absence or presence of the smell had nothing to do with their unhealthy properties. The smell of the water of Leith had been described strong enough "to knock down the de'il"; but it was not pretended that any person whatever had suffered any inconvenience from the bad smell. Several persons living on the banks of the stream had declared that this was the healthiest part of the city, and the district surgeon, under whose house the water actually ran, repudiated the idea that it had any injurious effect. Smells, as smells, were neither injurious to health, nor were they a nuisance to those who lived amongst them. [*Much laughter.*] The people became accustomed to the smells. [*Renewed laughter.*] The sense of odour was really paralysed; as one might test, by holding to the nose for any time an odoriferous flower. [*Hear.*] His fourth proposition was, that deleterious gases arising from effluvia were only injurious by being carried into the blood; and to this end they must be sufficiently concentrated, and the atmospheric air proportionately diminished. The fifth proposition was, that emanations from drains and from sewage entering running streams were in no way dangerous. In support of this, he cited the statistics published by Dr. Littlejohn, officer of health of Edinburgh; and said that, according to the Registrar-General's return, the death-rate of the Leith district was 17·62 against 24·5 over the whole city. There was a general idea that, when sewage and other matter were thrown into the streams, they destroyed the fish. No doubt they did destroy the fish in the Thames in great quantities; but in the Eden at Carlisle, so far from the sewage being mischievous to fish, they actually increased in weight upon it. The sixth proposition was, that typhoid fever could not be proved to originate with the fermentation of sewage water. His own view was, that we were profoundly ignorant of the causes of epidemic disease. It had been said that typhoid fever originated with drains, and there were a great many coincidences to support that doctrine. There were a number of instances in which fevers had originated in a town where a drain had been opened near, or where the smell was more powerful than usual. But, without going into a great many examples, he might say that there were innumerable cases of emanations that had never caused epidemics to counterbalance those that could be cited on the other side. The seventh proposition was, that improving drainage by costly works did not necessarily remove disease. In Paris, where great improvements had been carried out, epidemics had not been diminished. The old town of Edinburgh had no draining at all up to a recent period, and old pupils at the University could remember that some years ago a case of typhoid fever was unknown there. It was said that the introduction of the water-closet system had brought the typhoid fever poison into the houses; that owing to an insufficient supply of water, the noxious gases now escaped inside instead of outside. That was a very plausible argument no doubt; but when he found that the disease in Edinburgh followed the failure of the potato crops, he believed that fevers originated from other sources than drainage. He considered that proper food and drink had much to do with the question. A paper had been read at Edinburgh, in which every cesspool was said to be a focus of disease. It was quite clear that where cesspools existed, the ground round them was saturated; and in that way animal matter, in a state of putrefaction, found its way into wells. The water was thereby poisoned, and drinking such water was favourable to disease. Dr. Macadam had shown that apparently pure water might contain most deleterious salts. Bad water, on the other hand, was often very bad to the taste; but it did not, therefore, follow that it should be injurious. The great seats of fever in our towns were the narrow closes where the dwellings were badly ventilated, and where insufficient and bad food, and many other injurious agencies were at work. If he were to say that any one of those agencies was the

cause of fever, he should be reasoning very erroneously. Dr. Budd was of opinion that drains might propagate, though they did not originate, fever. Attention ought to be directed to the prevention of the pollution of our rivers and streams, and to the consideration of how the sewage of towns could be best utilised, so as to return to the earth the fertilising qualities that had been taken from it. Human excrement, like that of all other animals, if properly employed, so far from being poisonous and injurious, was, in truth, the source of the growth of the vegetable, and thus of the animal world.

Dr. Livingstone believed it was most important to know that stinks were not the cause of fever in Africa. When they came down to Niamzi last February, they found that a large portion of the water of the river ran into a marsh about ten miles below; and, after passing through the marsh, it fell into the river at a point lower down. When it came out of the marsh it was as black as ink, and had a most abominable smell. They were obliged to stop at night in the midst of this smell. The white paint upon the two ships was turned quite black; all the brass work was turned to a bronze hue, and even the ropes were discoloured. He inquired of the natives if they had ever observed serious effects following these phenomena, but he was told that they never produced illness. This was actually the case as far as he and his colleague were concerned. From this and all their experience in Africa, they came to the conclusion that fevers did not come from the bad smells; he was of opinion that bad smells ought to be got rid of as soon as possible; but it would be a great mistake if medical men, or any one else, supposed that fever came from the presence of bad smells.

Dr. Kirk said that, in another instance in Africa, when passing by the side of a lake surrounded by mountains, they found the water much as Dr. Livingstone had described it in the instance he had mentioned, and yet in that neighbourhood there was never any serious fever. The water was used commonly for drinking purposes. For about twelve hours they had nothing but that water to drink; they used it without boiling. They saw the converse also. At one place, where the atmosphere varied from 80 to 100, when the grass was all gone and the leaves were off the trees, and the walls were free from decomposing matter, they suffered much. On passing a day in the mangrove swamps, where they never saw the sun, the fever did not come on; but on the following day a heavy perspiration came on, staining the clothing, and in that way perhaps the malaria passed off.

Dr. Macadam said that the waters of Leith were partly tidal and partly running. So far as Edinburgh was concerned, it was a running river, but it was tidal at Leith. A bad smell was not necessarily an injurious thing; and chemists no doubt lived in the midst of sulphuretted hydrogen without experiencing any ill effects from it. But sulphuretted hydrogen, as liberated from organic matter in a state of putrescence, was another question. It was an indication of something worse behind. There were other matters produced by the decomposition. These things, which proved so dangerous, had not yet been isolated; but they were evolved after the sulphuretted hydrogen, or might be evolved without the sulphuretted hydrogen being produced at all. He thought there was some use in washing and cleansing thickly populated closes, in order to remove organic matter clinging about the places. Miss Nightingale had directed attention to thorough cleansing of hospitals, to the purification of the atmosphere, to the removal of the causes of the distribution of pernicious gases; and her efforts were successful in a marked degree. Regarding the Leith district of Edinburgh, Professor Simpson's evidence went to show that the relative mortality in the district away from the river, was 100, against 160 close to the river. He could quite understand that where small quantities of sewage were discharged into a river, such sewage might not prove deleterious to fish, and might even tend to fatten them; but it was a different matter when it was thrown in in such large quantities, that the air of the water was materially injured. In Leith, instead of the proportion of oxygen in the water being about 28 per cent. as it ought to be, it came down to 4 per cent., and in such a liquid it was impossible for fish to live. He had tried the experiment, and the fish died upon the surface within a few minutes after they were put into the water. Dr. Bennett had said that the mortality of Edinburgh had not been reduced by improvements carried out there; but he (Dr. Macadam) was surprised some time ago to find that when the drain in the streets had been improved, the small drains from the houses were not connected with it; and it was a common thing with large houses to carry the drainage into a cesspool, and thence into a sewer in the street. The drains were frequently made of stone, and the sewage oozed through. He quite admitted that there were other causes than drainage affecting the mortality and general health of the people. But all this did not upset the notion that bad drainage was one cause of a high rate of mortality.

Dr. William Budd believed that Dr. Bennett was entirely right in laying it down as a fundamental principle, that foul gases had no power whatever to generate fever. He had endeavoured, in a series of papers which were published in the *Lancet*, and in the British Medical Journal, to prove that the notion that contagious fevers were engendered by noxious gases was irreconcilable with what was known of their actual gases. His idea was, that sewers never generated their poisons, but that they distributed them. The whole view of the influence of sewers in the generation of epidemic disorders arose from the fact, that the specific poisons which were the cause of the disease, were eliminated from the body, and carried into the sewer. We never should get very far in the work of prevention of these great scourges, until we realised the cardinal truths that it was in the living body alone that these poisons were generated, and that it was from the diseased surfaces of living bodies that the pestilential matter was given off. He was perfectly satisfied that the spread of diphtheria, typhoid fever, and even of scarlet fever, subtle as the poison might seem to be, might be prevented by destroying the specific exuvial before it was cast off and set at large amongst the community. To bring the present discussion to a practical issue, he proposed a resolution to the following effect:—

"That it is desirable that a committee should be appointed to report to the Association at some future meeting on the following question, viz: Whether the specific agent which is the cause of typhoid fever be ever generated *de novo* out of common sewage, or whether sewers only propagate this fever by the determination of the germ contained in the liquid discharge from people already afflicted with the disease."

The resolution was seconded by Dr. Richardson, and carried.

Dr. Richardson said that Dr. Snow years ago pointed out the difference between a bad smell and a poison. So far as this distinction went, he (Dr. Richardson) concurred with Dr. Bennett entirely; but there were some minor points in which he differed from him. He could not admit that they knew nothing of the origin of these epidemic poisons. Typhus fever arose from low and bad diet, and from overcrowding. With regard to typhoid, they had the clearest proof that the excreta of the disease taken

into the mouth produced the disease, and that it travelled mainly by water. Dr. Salisbury, while with the United States army, observed that a certain number of men rose every morning afflicted with camp measles. This disease was not different in any respect from ordinary measles, and it did not attack those who had it in early life. It was found that the straw upon which the men were sleeping, was covered with a description of fungus, and it was found, by actual experiment, that this fungus propagated measles. There were other classes of disease which occurred in epidemic form, with regard to which they exclude all idea of poison. He went with Dr. Bennett entirely, in saying that no organic poison could spring out of sewage matter; but the febrile condition that arose from imbibing gas from sewers had been tested by actual experiment. Cats, dogs, and every kind of domestic animals, had been subjected to air from sewers, and in all cases the symptoms were the same as those observed in human beings inhabiting close, ill-ventilated places—hot skin, quick pulse, and diarrhœa. While the temperature was low, and there was little evaporation, they might go on for a long time without any disease from sewers; but with a hot temperature, scarlet-fever and small-pox began to appear. It was of great importance that there should be such drainage as should absolutely and surely convey the poison away. The whole of the classes of disease he had referred to, with the exception of scarlet-fever, were intensified in their severity by the presence of bad air. Measles and typhoid fever were so acted upon; but he believed that small-pox was as fatal in the palace as in the humblest cottage.

The discussion was continued by Mr. McLaren, Dr. Cobbold, Professor Wanklyn, Mr. Michael, Dr. Crisp, Dr. Paul, Mr. Gillett, Mr. Ross, Dr. Gilbert, and Dr. Davy.

Dr. Bennett, in reply, said that he had succeeded in the object he had in view, which was to provoke discussion, and he should leave the room with the idea that a great deal of information had been elicited, that would be useful in the solution of this important question. He had never said that bad smells were good things. He disliked them as much as anybody, but the great point he wished to force forward was that this effect of smell upon the health of the public had been greatly exaggerated.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, October 5th, 1864.

Henry Oldham, M.D., President, in the Chair.

Four new Fellows were elected.

Cæsarean Section. A case of Cæsarean section which occurred in 1837, from the papers of the late T. E. Bryant, Esq., was read. The patient was four feet seven inches in height, and rachitic; the antero-posterior diameter of the pelvis was two inches and a quarter in the dry state, and the transverse diameter four inches. The operation was accomplished without difficulty; but the mother died about thirty-six hours afterwards, of low peritonitis. The child lived some weeks, when it died of erysipelas.

Dr. Greenhalgh had had some experience of the Cæsarean operation, having performed it four times; having been present in three cases where other practitioners had operated; and having recently, through the kindness of Dr. Winckel of Gummersbach, examined three women who had been the subjects of this proceeding. He expressed a conviction that in difficult cases of craniotomy, which were necessarily fatal to the children and too often to the mothers, the lives of most of the former would be spared, and the latter would stand an equally good chance, by the timely performance of the Cæsarean section. He detailed the case of a woman upon whom he had operated, who was reduced to such an extreme degree of debility by mollities ossium that those present considered it impossible that she could survive the operation; notwithstanding, she lived three weeks afterwards, and then died from rupture of the transverse colon, owing to the distortion occasioning occlusion of the rectum. The child was born alive, and continued to live. Dr. Greenhalgh strongly urged the early performance of the operation, before the membranes were ruptured or the mother exhausted. He considered that the incisions should be made in the linea alba, and as nearly as possible through the centre of the body, and not through the neck, of the uterus; in which, although there were fewer large vessels, yet there was far less contractile power, and consequently a greater liability to hæmorrhage, as happened in one case which he witnessed. The abdominal and uterine wounds should be held together by the fingers of an assistant, placed within the extremities of the incisions; immediately after the extraction of the fœtus and secundines, the finger should be passed from within through the neck of the uterus into the vagina, so as to secure a free exit for the discharges; the uterus should be firmly grasped by the hand, so as to obtain its firm contraction; and, when all fear of hæmorrhage had passed, the abdominal wound would be brought together by the interrupted suture, and still further secured by broad strips of adhesive plaster. As a rule, he administered no medicine, but met each symptom by its appropriate remedy. He mentioned one extraordinary case where the patient was up and about five days after the operation; she was, however, the subject of an enormous umbilical hernia.

Dr. Barnes observed that summaries of most of Dr. Winckel's cases would be found in the *British and Foreign Medico-Chirurgical Review*.

Dr. Playfair said that in the only case of Cæsarean section which he had witnessed, a difficulty was met with which he had not seen alluded to in descriptions of the operation, and which certainly had not occurred in the case under discussion, nor apparently in any of those described by Dr. Greenhalgh. In the case in question the uterus was opened near the fundus; and although no time was lost in removing the child, still the uterine parietes contracted with such rapidity and force that the head was caught in the incision, and some difficulty occurred in extracting it and the placenta. This was doubtless a fault on the right side, as it diminished the risk of hæmorrhage; but still it would be well to know how to avoid inconvenience from it. He had thought this might be done by commencing the incision near the lower part of the uterus, instead of at the fundus, when the head might be extracted first. The case to which he alluded also showed the risk of delay before operation. The patient was a healthy woman who might have done well, but she was allowed to remain so many days in labour before further advice was sought, that when seen the vagina was found in a state of slough.

Dr. Oldham recommended the incision to be made towards the lower part of the uterus.

Obstetric Binder. Dr. Eastlke showed an Obstetric Binder, for immediate use after parturition, which he had constructed, and which had been made by Mr. Salmon, of Wigmore Street. It was intended to supersede those which lace up like stays. The binder was very simple in its arrangement. It consisted of two parts, which were fastened in front with the greatest ease in less than a minute by means of four lappets with hooks and eyes. It had also a tail bandage which fastened before and behind, and was able

to support the diaper and keep the binder in its place. Dr. Eastlake had tried it several times with great satisfaction. The price was from five shillings.

Deformity. A description of a case of Deformed Arms was read, from Dr. Shortt, accompanied by photographs.

Missed Labour. By A. Wynn Williams, M.D. The author alluded to the little notice the subject had received hitherto, and thought the profession indebted to Dr. M'Clintock for his collection of cases. He wished, however, that some more practical rules were laid down. He then detailed two cases which he considered were of this class. He ventured to suggest that, as soon as attention was called to a case, the accoucheur should, after satisfying himself of the escape of the liquor amnii, the death of the fœtus, and the dilatability of the os, proceed (after allowing a reasonable delay, and after employing the recognised means adopted to cause contraction of the uterus) to turn and deliver.

Dr. Barnes said there was a perfectly ready and safe way of dilating the cervix should the case require it. Should the cervix be rigid, besides the dilators, he would use incisions, which plan he had employed in a case he detailed.

Dr. Greenhalgh did not consider that Dr. Williams' cases could be placed under the head of missed labour, and asked the President, who was the first to use the expression, what he considered the correct definition of the term. He (Dr. Greenhalgh) had never met with a case of missed labour.

Dr. Oldham said that he had used the term as the most appropriate he could find. It was a case in which the time of natural labour passed by without any pains, and the child was not expelled.

Dr. Braxton Hicks thought it highly important to be certain that the full term had really expired, as it was very difficult to say whether it had been reached in any case before a month at least had elapsed. In the cases recited, he thought that probably, although the children were dead, they would in due time have been expelled by natural efforts.

Further discussion arose, in which Dr. Fox, Dr. Eastlake, and Mr. Owen joined, and to which Dr. Williams replied.

Mr. Gant then gave a careful dissection of the pregnant uterus in a person who had died from "accidental hæmorrhage."

Donation. J. C. Bowring, Esq., has given to the Devon and Exeter Hospital £4000; the income to be spent in keeping up a ward for infants under seven years of age.

Gratuitous Medical Services. The practice of gratuitous medical services in public institutions, has so long been the habit of the profession, and has come to be so thoroughly interwoven with its operations and spirit, as almost to be regarded as a part of its ethics, and sustained by a sort of *esprit de corps*. In this we believe our noble profession stands alone. But not only do the physicians and surgeons of many of these institutions give their time, their skill, and their labour without pecuniary recompense, but they also deprive their brethren outside of the institutions, as well as themselves, of no inconsiderable amount of income which is rightly theirs. The amount contributed, in the shape of professional services, to the support of public charities, will be found on examination almost incredible. Several years ago it was estimated, if we remember rightly, to amount annually to about 2,000,000 dollars for the City of New York. (*American Medical Times.*)

Correspondence.

SECTION OF THE INTERNAL MUSCLES OF THE EYE.

Letter from Henry Hancock, Esq.

Sir,—In your number for October 22nd, 1864, Mr Vose Solomon labours very hard to deprive me of the credit of originating the operation for the relief of certain diseases of the eye, by division or section of the ciliary muscle; and, in pursuance of his object, makes frequent reference to a paper written by himself, in the British Medical Journal for 1863, vol. i, page 451; and gives a series of what he terms categorical answers, containing assertions so reckless, and contrary to fact, that I shall feel obliged by your giving me the opportunity of reply.

For the sake of convenience, and to prevent misunderstanding, I will offer my replies in detail, in the order in which the assertions are made.

Assertion 1. "Myotomy of the ciliary (the term myotomy being restricted to the sense in which it was understood prior to the introduction of subcutaneous section of muscle) originated, without question, with Mr. Whyte, in the year 1801. Whyte cut the muscle transversely behind the iris."

Reply. It is certainly a very remarkable—a perfectly original idea, and one which I venture to say is quite unprecedented, either in surgery or in any other science, to make a man the originator of an especial operation for the division of that, of the existence of which he has not the slightest conception. Mr. Whyte did not know that there was such a muscle in the eye as the ciliary muscle; nor did any one else, until the year 1847, when Mr. Bowman first demonstrated its true character. But, if Mr. Whyte had known it, even if he lived in the present day, he could not possibly cut the muscle transversely behind the iris; because it does not exist in that situation to be cut. Mr. Whyte does not make the slightest allusion to the ciliary ligament or ciliary bodies; his sole object was to evacuate the aqueous humour. His paper (*Medical and Physical Journal*, vol. vii, page 209), is entitled, "The Mode of Managing Ocular Inflammations" arising from exposure of the naked eye to the intense heat and vivid rays of a nearly vertical sun. After alluding to the consequent enlargement of the aqueous humour, and the anterior section of the orbit," he adds, at line 28, page 210: "I would have pierced through the tunics with a couching needle, and, entering the posterior chamber of the aqueous humour by an incision parallel to and behind the iris, permitted an outlet proportioned to the existing expansion." He does not give any diagram, but says, "that by this procedure he had extracted cataracts." Mr. Vose Solomon therefore *concludes*, that Mr. Whyte cut through such and such parts, and employed the same instrument for making the puncture as for extracting the cataract; and he accordingly favours his readers (British Medical Journal, 1863, page 450) with an imaginary diagram, in which Mr. Whyte's couching needle is represented as a weapon something between an ivory vaccine point, and a bleeding lancet, in shape and size. This is the sole foundation upon which Mr. Vose Solomon puts forward his assertion, "that myotomy of the ciliary (muscle) originated without question, with Dr. Whyte, in the year 1801." I leave it to the profession to decide, whether his assertion is not as imaginary as his diagram.

Assertion 2. Myotomy of the ciliary has also been practised "by Von Gräfe, in the performance of iridectomy for glaucoma, 1856-7. In this operation,

the muscle is cut *transversely*, and in *front* of the iris."

Reply. Truly, the ciliary must be a most surprising muscle; for, according to Mr. Solomon, it pervades all parts of the eye. First, we have Whyte cutting it through *behind* the iris; next, we have Von Gräfe cutting it transversely in *front* of the iris; and we shall soon have Desmarres, according to the same authority, cutting it through at nearly a quarter of an inch posterior to the iris, and even further back than that.

Be this as it may, Von Gräfe did not divide the ciliary muscle intentionally, or with any definite object. I believe, and I have published my belief, that the success of iridectomy depends upon division of the ciliary muscle, and not upon the removal of any portion of the iris. I have also published my firm conviction that, sooner or later, the correctness of this opinion will be admitted; and that the mutilation of the iris will be discontinued. But Von Gräfe and his disciples take quite a different view of the subject. They ignore the division of the ciliary muscle altogether; they attribute the success of iridectomy to the removal of more or less of the iris; and therefore, to assert that Von Gräfe practised myotomy of the ciliary muscle in the performance of iridectomy for glaucoma in 1856-57, is altogether incorrect.

Assertion 3. "Without question," Dr. Desmarres "first methodised and practised division of the ciliary muscle for the relief of glaucoma, in the sense in which the terms division, etc., are employed by Mr. Hancock; viz., a puncture or incision of muscle made *parallel* instead of at a right angle with the course of the principal fibres. Dr. Desmarres, in 1847, illusted the subject clinically, under the title of Paracentesis of the Sclerotic, in his *Traité des Maladies des Yeux.*"

Reply. It will scarcely be credited, after reading the above, that Dr. Desmarres does not say one syllable, either clinically or otherwise, about making the incision in the course of the fibres of the muscle. This will readily be seen by the following extract from page 775 of the edition of Desmarres' work, quoted by Mr. Solomon.

"We may perform paracentesis of the eyeball in several situations. When, after a needle-operation for cataract, we would simply give issue to the aqueous humour, by plunging an instrument (grooved on purpose for facilitating the flow of fluid) through the sclerotica, at three or four *millimètres* from the cornea, in the triangular space comprised between the external and inferior recti muscles. When, on the contrary, the operation is performed for the purpose of relieving the eyeball of a collection of fluid, such as obtains in subretinal dropsy, we should then introduce the needle much further behind the cornea; sometimes between the external and inferior, and sometimes between the internal and inferior recti muscles." M. Desmarres, it will be observed, does not here say one word as to the direction in which the incision is to be made; indeed, the only place where, in reference to paracentesis scleroticæ, he alludes to the subject, is at page 578, where, in enumerating the advantages attending the first stage of his own method of depressing the lens in cataract, he remarks: "In performing depression, as I am about to propose, we in the first place allow the aqueous humour to escape, and, should inflammation supervene, we can again evacuate the fluid without difficulty; so that here we have an easy method of combatting the swelling and inflammation of the interior of the eyeball." He then proceeds to describe that a small section should be made through the sclerotica, about 4 *millimètres* long, and 4 or 5 *millimètres* from the cornea, but in the *transverse*, or *exactly in the opposite direction* to that in which Mr. Solomon asserts he makes it. In no single instance in his observations upon paracentesis scleroticæ, does he illustrate, either clinically or otherwise, that the incision should be made parallel with the course of the radiating fibres of the ciliary muscle; and the only diagram in which he at all illustrates this fact, is in figure 48, page 579, wherein, as I have said before, it is delineated as made transversely, but so far behind the radiating or principal fibres of the ciliary muscles, that they could not possibly be divided.

Dr. Desmarres "illustrates the subject clinically" by three cases only: one in the section on paracentesis scleroticæ, page 775; the second at page 586; and the third at page 588 (I give them in this order as, in relating the first, he refers to the last two.) In all three, paracentesis scleroticæ followed in a few days the needle operation for cataract.*

In the first case (page 775), he does not define how, when, or in what direction the puncture was made; but in the last two, he distinctly states, as indeed he does in the first, that his sole object was to evacuate the aqueous humour; and that, to effect this, he *reopened the wound (je rouvris la plaie)* in the *sclerotic* made in the preceding operations for cataract. Mr. Solomon is equally incorrect in asserting that I make the incision parallel with the course of the radiating fibres of the muscle. I do no such thing. I make the incision, as I have, in my several published papers, always recommended it to be made obliquely across, thus cutting through not merely the radiatory, but also the circular muscle.

Assertion 4. Desmarres' practice was introduced into London "by Mr. Hancock, who commences his incision or puncture rather nearer to the margin of the cornea; but in all other particulars, carries out to the letter the directions given by the Parisian oculist."

Reply. I can most conscientiously inform Mr. Vose Solomon, that I have not the slightest wish or intention of pirating other surgeons' discoveries. Dr. Desmarres never operated for myotomy of the ciliary muscle prior to the year 1859, when I first brought that operation before the notice of the profession; it must, therefore, be evident to all that, in so doing, I could not possibly have introduced Dr. Desmarres' practice into London. Dr. Desmarres performed his operation solely for the evacuation of fluid; I perform mine expressly to cut through a particular muscle. He makes his incision transversely, and so much behind the ciliary muscle that he cannot possibly cut it. I make the incision obliquely through the muscle, and consequently much nearer to the cornea, as otherwise I should not reach the muscle at all. But this assertion is completely negatived by the following extract from a letter, sent to me by Dr. Chepmell, late House-Physician to King's College Hospital, dated Paris, 9th March, 1860.

"Dear Sir,—I have been much interested by the account given recently in the *Lancet*, of your operation for the cure of glaucoma, and struck by its decided advantages over that of M. de Gräfe, here so generally adopted. A few days ago, I drew Professor Desmarres' attention to the subbject, and at his request translated into French the aforesaid reports. In a clinical lecture to-day, he made very favourable mention of the operation; and expressed a desire to give it a fair trial, comparing the results with those of iridectomy. As, however, M. Desmarres seemed to apprehend some difficulty in avoiding the lens, and

* It is very surprising that, when he was about it, Mr. Vose Solomon did not assert that all those who had ever performed the needle-operation for cataract, had "methodised and practised division of the ciliary muscle."

in dividing the fibres of the ciliary muscle, owing to their direction being from before backwards, and not crossing the line of incision as described in the *Lancet* report, would it be asking too much to request of you to entrust me with a very precise and minute account of your mode of proceeding, of the point of entry of the knife, and of the exact direction and inclination to be given to effect the section."

With regard to the fifth and last assertion, I have only to observe that Mr. Vose Solomon's unworthy attempts to appropriate the merit of having originated the operation of myotomy of the ciliary muscle have been too frequently noticed and exposed, to require further comment from me here. I would only remind that gentleman that, in a question of this nature, he is bound to prove his point by precision and facts, and not by reckless assertion, speculative conclusions, and imaginary diagrams.

I am, etc., HENRY HANCOCK.

37, Harley Street, London, October 29th, 1864.

THE ENUCLEATION OF EYES.

LETTER FROM ROBERT B. CARTER, ESQ., F.R.C.S.

SIR,—In your leading article on this important subject, you have founded what is, I think, an incorrect inference, although a very fair one, upon some words of mine that you quote. It is extremely probable that my practice may differ in many respects from that pursued at the Westminster Eye Hospital; but, in this particular matter, the difference is perhaps apparent rather than real.

I was senior surgeon to the Eye Dispensary at Nottingham for the first three years of its existence, during which time my colleagues and myself treated somewhere about four thousand patients. In the vicinity of Nottingham there are many colliery and other villages; and these villages, as well as the town itself, sent to the new institution an accumulation of the spoiled eyes of years. Among the cases thus contributed, there were many of complete staphyloma of the cornea, arising from neglected purulent ophthalmia in infancy, and occasioning great deformity. Where one eye had been saved, the deformity of the other was often a hindrance to the prospects in life of the patient; and the removal of this deformity was the chief indication to be fulfilled.

During a portion of the same time, I was also surgeon to a third part of the Nottingham Union, with a population of 28,000 in my district; and I found among the poor numerous cases of the same description.

The operation of abscission of the cornea, as then practised, was not so well adapted to the condition and circumstances of these patients as enucleation of the globe; and hence I usually preferred and performed the latter. As since improved by Mr. Critchett, abscission is a better operation in such cases, because it leaves a better stump.

Of course, I have removed eyes for other causes than staphyloma of the cornea; but staphyloma of the cornea, in a populous district in which no eye institution had previously existed, and in which purulent ophthalmia among the poor had been largely treated by druggists or old women, or by bathing with the maternal urine, and only taken to a doctor when the eye was lost, has been the principal reason of the large number of my operations. Any other surgeon, placed under similar circumstances, would have much the same experience; and the circumstances of London hospital practice are very widely different.

I cannot dispute your statement about the connexion between iridectomy and enucleation otherwise than by my own experience. I have only been made acquainted with a single instance in which both these operations were done upon the same eye; and in that instance there was an interval of two years between them.

I may be allowed to point out that, in the book from which you quote, I have only advised enucleation of the eye in cases in which all surgeons would, I believe, agree in the propriety of performing it; and also that, knowing the somewhat exceptional character of my experience, I have based nothing upon it but a statement with regard to the small amount of danger that attends the operation.

In one last word, I must beg leave to question the correctness of your inference about the necessarily limited experience of a country surgeon. As far as ophthalmic practice is concerned, a "country surgeon" now in London (Mr. Woolcott) had for many years the largest hospital experience of any man in England, and, I believe, of any man in Europe.

I am, etc., ROBERT B. CARTER.

Stroud, November 5th, 1864.

POOR-LAW MEDICAL RELIEF.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your finding space for the following letter. I am, etc.,

RICHARD GRIFFIN.

Weymouth, November 9th, 1864.

"12, Royal Terrace, Weymouth, November 8th, 1864.

"MY LORDS AND GENTLEMEN,—I take the liberty of calling your attention to a report of the proceedings of the Southampton Board of Guardians, at their meeting on November 1st, in reference to 'expensive medicines'. In the speech of the mover of the resolution, it it stated, 'it was impossible for their medical officers, with their present pay, to give to the pauper patients such expensive medicines as those referred to in the letter.' My lords and gentlemen, this is the statement of a guardian of a large and influential incorporation, and was acquiesced in by the whole Board, as is proved by their resolution. For years past your medical officers, through me, have told you the same. Surely, then, you will no longer delay to apply a remedy for such a lamentable state of things. I earnestly entreat you at once to lay down a rule by which all salaries shall be fixed, and not leave it discretionary for one Board of Guardians to give a salary which averages less than one shilling per patient, whilst another Board gives a salary which averages many shillings per patient. The latter part of the speech of the Southampton guardian is as follows:—'For his own part, he hoped to see the time when that Board had a dispenser and dispensary of its own, and when their medical officers should be paid without having to supply medicines, but simply to prescribe them; for he believed it would prove of benefit to the town by the, in many cases, restoration of their poor, to the great relief of the rates.' Your medical officers, as a body, recommended to the Select Committee on Poor Relief, amongst other things, the establishment of dispensaries. The Committee unfortunately ignored that recommendation; but now that you have a similar recommendation from a Board of Guardians of a large and important town, I pray you not lightly to reject it, as its adoption would cure one-half of the evils complained of by your medical officers, and be of vast benefit to the poor. The salaries of your medical officers should be based on three payments: 1. Pay for medical advice and attendance a certain sum, in proportion to the number of patients and distance to be travelled. 2. Pay for extra medical services, as confinements,

accidents, etc. 3. In those unions, or parts of unions, where the inhabitants are widely separated, pay your medical officers a fixed sum per patient for medicine; but in all large towns, and parishes under local acts, establish dispensaries. In the metropolis, one dispensary might serve for two or more parishes. Adopt this course, and you will remove much of the ill-feeling which now exists.

"As the General Council of Medical Education and Registration of the United Kingdom is a legally constituted body, I think it would be well to consult them as to the amount to be paid the medical officers. If you adopt this course, I feel sure you will give general satisfaction.

"I have prepared a short draft Bill on the subject of medical relief, which is intended to be submitted to Parliament next session. If you desire it, I shall be happy to forward a copy for your inspection, and, I trust, approval.

"I have the honour to be, my lords and gentlemen,
"Your obedient servant,
"The Poor-law Board." "RICHARD GRIFFIN.

Extract from the "Hampshire Independent" of Nov. 2.

"SOUTHAMPTON BOARD OF GUARDIANS, NOV. 1. Upon the question of providing medicines, Mr. Dowman said that he doubted not the surgeons of Southampton would not think that he was saying more than he ought when he said it was impossible for their medical officers, with their present pay, to give to the pauper patients such expensive medicines as those referred to in the letter (from Mr. Hawley, a Poor-law inspector), and which were universally admitted to be almost the only specifics in certain cases. For his own part, he hoped to see the time when that Board had a dispenser and dispensary of its own, and when their medical officers should be paid without having to supply medicines, but simply to prescribe them; for he believed it would prove of benefit to the town by the, in many cases, restoration of their poor, to the great relief of the rates. He proposed, as a reply to the query, that it was, in the opinion of the Board, undesirable for the medical officers to supply any medicines whatever, but that guardians should have dispensaries, and be ready themselves to supply whatever medicines might be required. Mr. Cave seconded the proposition; it was carried unanimously."

TREATMENT OF PARTURIENT WOMEN.

LETTER FROM G. D. R. MACCARTHY, ESQ.

SIR,—As you have lately inserted in your JOURNAL several interesting and sensible letters on the treatment of parturient women, a subject well deserving our attention, I trust I may be allowed, after many years obstetric practice, to offer my opinion.

I beg leave to say that, with all deference to the talented gentlemen who wrote those letters, I am inclined to think the chameleon is neither positively blue, nor green, nor black, nor white; but must vary according to circumstances. Nor do I think it very difficult to decide, with the proper data before us, what is pretty near the right plan in any particular case. Basing our treatment (dietetic as well as therapeutic) on the surest dictates of common sense, we shall see it needful to take into our account the patient's constitution, especially as influenced by her pregnant position, during which it may have been modified and perhaps considerably altered before the occurrence of labour by various circumstances; also, the nature—easy or severe, quick or lingering—of the labour; the amount of hæmorrhage, etc. We must, in fact, deal with the case on common-sense principles—ordering either a low diet or a free one, as the patient is at the time strong and robust, or weak and much reduced. Again, we must be aware that there may be present in one of the latter class—even in a debilitated patient—symptoms of much feverish excitement, and subacute if not acute inflammatory action, so that even in that case a perfectly unstimulating if not a low diet would be proper. And there may have been such excessive hæmorrhage in a patient of a previously robust constitution as to require support.

Parturition is, perhaps, the greatest, and we are sure the most sudden, change of condition in the human frame, and one which would, *à priori*, but for the wisdom and goodness of the Creator, be one of extreme peril, and often fatal issue; but it is a natural and divinely appointed change; and therefore we may not wonder so much that thousands pass through it under different management, and with all sorts of diet, gruel, tea, arrow-root, broth beef, toast and water, ale, wine, etc., and yet how few deaths and even illnesses following!

But, notwithstanding this, we ought certainly to act with the greatest prudence and discrimination. I have seen a small quantity of stimulus given a few days after delivery induce great fever and danger. Of course, when speaking of the treatment of parturient females, we mean an indefinite period; that is, until the uterine system shall have so well recovered its unimpregnated condition, as not to be in danger from any great alteration in diet. I so far agree with Mr. Pope, a gentleman of long experience, that I think a moderate unstimulating diet during the first few days is the best and safest plan, and should hardly think of advising a patient to eat roast beef or any solid animal food the very next day; especially as the stomach is an organ which sympathises much with the uterine system.

I cannot but thank you for the encouragement you have given our brethren to discuss the subject, and feel therefore the more confidence in offering you my thoughts; and shall now also conclude with a bit of Latin: *In medio tutissimus.*

I am, etc., G. D. R. MACCARTHY.

Wrockwardine Wood, near Wellington, Salop, Nov. 1, 1864.

LETTER FROM THOMAS SKINNER, M.D.

SIR,—I am disposed to think that the discussions which take place in our JOURNAL on subjects of a strictly practical nature, are of the greatest importance to the interests of the public, as also of the profession; and, although Mr. Granville is inclined to think that the correspondence of the JOURNAL "is not as useful as it might be", on account of some "looseness of reasoning" on the part of the disputants, he forgets that all men are not equally endowed with logical powers, either by birth or education. I hail with delight the present discussion; because I am confident it is pregnant with much good to all concerned.

Any one who has received his obstetric education within the walls of the University of the Scotch metropolis during the present century must view the present discussion with feelings akin to wonder; and it must be a source of great gratification to all such, to see that the English schools of obstetricy are now beginning to teach a system of treatment in the lying-in room similar to that which they themselves have been taught during so great a lapse of time.

In the present instance, the thanks of the profession are most justly due to Drs. Oldham and Graily Hewitt, for their very excellent endeavours to dissipate the starvation or "slop" system in England; but certainly they are, no more than I am, entitled

'to run off with the harness", and claim originality n the matter; and, although Dr. Inman may justly ake credit for having taught his pupils the support- ng system of diet prior to Dr. Hewitt having ob- ained his degree, with equal truth can it be said, hat Professor Hamilton, in the University of Edin- ourgh, taught the same system *many years before he* (Dr. Inman) *was born*. So much for priority of laim.

As a pupil of Professor Hamilton's distinguished uccessor, and as one who has also had the best op- portunities of witnessing Professor Simpson's obste- tric practice, I can vouch for it that, without foolishly running into the opposite extreme, he, like his judi- cious predecessor, has always taught and practised a supporting, anti-slop treatment towards parturient females.

As I do not expect the above statements to pass unchallenged, I defer the other remarks which I in- tended to make, until the discussion is further ad- vanced. I am, etc.,

THOMAS SKINNER.

Liverpool, Nov. 5th, 1864.

LETTER FROM THOMAS POPE, ESQ.

SIR,—In his communication, Mr. Legge says, that pregnancy is not a disease. Now, diseases are of two kinds, natural and adventitious. Among the former may be classed pregnancy, small-pox, measles, etc.; and among the latter, syphilis and a host of others. Pregnancy is the primeval disease inflicted by the Almighty on Eve, in the melancholy denunciation, "And the Lord God said unto the woman, What is it that thou hast done? I will greatly multiply thy sorrow and thy conception: in sorrow thou shalt bring forth children." Here, then, is disease with a vengeance.

Mr. Legge next says, "We cannot wonder that a rigorously low diet, being considered indispensable to the treatment of severe disease by the past gener- ation of practitioners, should by them be enforced in the management of the puerperal process." This is, I presume, an innuendo, that I of the past generation have been so blinded and obstinate as not to keep pace with the vast strides of the arts and sciences of the present century; but I can assure him that I am as docile as any one of the present generation, that long after all useful knowledge, seeking her in the highways and byways, with the fullest consideration that Physiology and Pathology should always go hand in hand.

Who is it that advocates this rigorously low diet? It is not his humble servant myself; for I offer him the same advice as in my letter of September 16th— a mildly nutritious diet for the first three or four days after parturition; and then, and not till then, *cæteris paribus*, a generous diet.

I will now adduce a case in point. A surgeon is sent for to a frost-bitten patient. The remedy is warmth; if it be immediately applied, irremediable mischief must ensue. Just so, in a minor degree, is the advocacy of a generous and stimulant diet imme- diately after delivery.

I will now hasten to the last part of Mr. Legge's letter, where he talks of "breast-ill"; by which, I suppose, he means inflammation and suppuration thereof. This was of very frequent occurrence when I first entered the profession; for the treatment then was what he now patronises, even among the poor, as their well-to-do neighbours generally supplied them with mulled ale and other spiced liquors; but this was so productive of mischief, that many of the giants of our profession then paved the way for that happy order of things, of which I am an humble and truthful supporter. Who, now, ever hears of sup- puration of the breast, except from bad nursing?

To Mr. Napper I would, also, say, Ponder well my letter to Dr. Hewitt; and I would further say that, if a parturient woman would never emerge from such a diet as therein recommended, her health, strength, and longevity, would be better consulted than by his plan.

To Dr. Inman, my mercurial friend, I would say, Do not recommend women to consider themselves well, and go about at the end of the first week; as you must well know the danger of such counsel. Is the uterus in a fit state for such conduct?

As regards Mr. Granville's letter, how "the con- ventional style of reasoning", and "the truth to which correspondents are so fond of adverting in the language of ancient Rome", to say nothing of his personalities touching our excellent editor and my- self, with his very magisterial demeanour, in our number of to-day, can further the present important controversy, is to me astonishing.

The present advocates of the generous and stimu- lant diet at, and immediately after, parturition, are, as far as the subject has at present proceeded, of com- paratively recent growth; but I hope a phalanx of our veterans will appear on the arena more qualified to set the matter at rest. I am, etc.,

THOMAS POPE.

Cleobury Mortimer, Nov. 5th, 1864.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen passed their primary examina- tions in Anatomy and Physiology at a meeting of the Court of Examiners, on the 8th instant.

Clapp, Albert John, Cork
Cox, Pierre Georges, University College
Dalton, Thomas, Edinburgh
Fernie, James, Middlesex Hospital
Gittins, John, Guy's Hospital
Jamieson, Alexander Wallace, Edinburgh
Salter, Thomas Knight, St. George's Hospital
Shoolbraid, David, Guy's Hospital

APOTHECARIES' HALL. On November 3rd, the fol- lowing Licentiates were admitted:—

Adams, Arthur Bayley, Lymington, Hants
Benson, Joseph Henry, Cambridge
Gill, George, Liverpool Royal Infirmary
Reed, Walter Hugo, Tiverton, Devon

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. (Double Qualification.) The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Dods, George, East Lothian
Dods, James, East Lothian
Forbes, Daniel, Edinburgh
Gailey, Edgar, Annan
Grealy, John, Galway
Hackett, Arthur, Cork
Holmes, William, Cork
Mackenzie, William S., Sutherlandshire
Sullivan, Peter A., County Galway

And the following gentlemen passed their final ex- aminations, and were admitted L.R.C.P.Edinburgh, and L.R.C.S.Edinburgh.

Alister, William, Catherwood, Donaghadee
Campbell, Alexander Campbell, Aberdeen
Charteris, William, Dumfriesshire
Connellan, Edward, Cork
Elliott, James, Yorkshire
Graham, John MacWilliam, Mullabrack
Henderson, Edward, Edinburgh
M'Donald, Thomas, Ross-shire
O'Brien, Richard Dickinson, Ennis
O'Keeffe, John M'Naughten, County Kerry
Rockett, Joseph Hildreth, Yorkshire
Watson, James, Dundee

Royal College of Surgeons, Edinburgh. The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Johnstone, Charles H., New Brunswick
O'Hare, Thomas, County Down

And the following gentlemen passed their final examinations, and were admitted Licentiates of the College.

Kane, Hugh Smiley, County Antrim
Lytle, John Douglas, County Derry
Veitch, Andrew, Edinburgh

APPOINTMENTS.

*Hyde, George Edwin, Esq., appointed Surgeon to the Worcester Ophthalmic Hospital.

University of Oxford.

Brodie, Sir B. C., Bart.
Chambers, T. K., M.D.
Ogle, John W., M.D.
Rolleston, G., M.D.
Smith, H. G. S., Esq.
} Appointed Examiners in Medicine.

Army.

Hannan, Assistant-Surgeon J., 49th Foot, to be Staff-Assistant-Surgeon, *vice* A. Gibb, M.D.

Orwin, Staff-Assistant-Surgeon T. W., to be Assistant-Surgeon 49th Foot, *vice* J. Hannan.

Woolhouse, Staff-Assistant-Surgeon G. R., to be Assistant-Surgeon 19th Hussars, *vice* D. Woods.

Royal Navy.

Davis, William, M.D., to be Surgeon and Medical Storekeeper at Plymouth Hospital.

Domville, Henry J., M.D., to be Deputy Inspector-General at Bermuda Hospital.

Eastcott, James C , Esq., Assistant-Surg., to Plymouth Hospital.

Forbes, John G. T., Esq , Surgeon, to the *Victoria*.

Gordon, William L., M.D., Assistant-Surgeon, to Portsmouth Dockyard.

Johnston, William, Esq., Assistant-Surgeon, to the *Espoir*.

Le Grand, F. W., M.D., to be Deputy Inspector-General of Hospitals and Fleets on the Retired List.

Llewellyn, Owen J., Esq., Surgeon, to the *Magicienne*.

M'Swiney, John, Esq., Surgeon, to the *Formidable* (additional), for service with the Royal Marines at Deal.

Patterson, John H., M.D., Staff-Surgeon, to Deptford Dockyard.

Volunteers, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

Mackenzie, A. R., Esq., to be Surgeon 1st Administrative Battalion Ross-shire R.V.

Vass, J., M.D., to be Assistant-Surgeon 1st Administrative Battalion Ross-shire R.V.

BIRTHS.

Terry. On October 24th, at Newport Pagnell, the wife of *Charles Terry, Esq., of a son.

Williams. On November 9th, at 20, King Street, Portman Square, the wife of *A. Wynn Williams, M.D., of a daughter.

DEATH.

*Harrison, Philip, Esq., late of Diss, at Norwich, aged 64, on November 1.

Dr. Brinton has resigned the appointment of Physician to St. Thomas's Hospital.

Quadruple Birth. It is stated that a woman at Leamington lately produced four still-born children at a birth.

Scientific Congress in Naples. A scientific congress is about to assemble in Naples, to which all *savants* are invited.

Bequests. A Miss Fryer has left grand donations to Edinburgh charities; viz., £6000 to the Infirmary; £2000 to the Blind Asylum; £2000 to the Deaf and Dumb Asylum; and £1000 to the Dispensary.

The Surgeoncy to the Lord Lieutenant. We have received a communication from Mr. Butcher, to the effect that our announcement last week of that gentleman's appointment to the above office is not correct. (*Dublin Medical Press.*)

Medical Coroner. Dr. Beard, assistant-physician to the Sussex County Hospital, has been announced as a candidate for the office of coroner for East Sussex, in the vacancy occasioned by the decease of F. H. Gell, Esq.

Royal College of Physicians of Ireland. At the late annual meeting of the College, the Rev. William Reeves, M.B., LL.D., Secretary to the Royal Irish Academy, and Dr. Aquilla Smith, were elected Honorary Fellows of the College.

The late Mr. John Leech was originally educated for the medical profession, and passed some time under the charge of Dr. Cockle. His genius, however, led him away from the study of diseases; and so he entered into a field of art in which he was almost without a rival.

Testimonial to a Dispensary Surgeon. A piece of plate, of the value of £100, has been presented to Mr. Howitt, surgeon of the Preston Dispensary, "by a number of his friends, as a token of regard for the valuable services rendered by him to that institution during a period of nearly thirty years."

Memorial to Professor Miller. The friends of the late Professor Miller of Edinburgh have determined that some memorial is due to him. They propose, therefore, to raise a sum such as will procure new premises for the Medical Missionary Training Institution, in which he took deep interest. Already £1000 has been subscribed.

Apothecaries' Hall Prizes. At the recent examination for prizes in materia medica and pharmaceutical chemistry, annually given by the Society of Apothecaries, the successful candidates were: First, William Lively Shepard, of St. Bartholomew's Hospital, a gold medal; second, Stephen Wooton Bushell, of Guy's Hospital, a silver medal and a book.

Committal of a Druggist for Manslaughter. A druggist at Sleaford has been committed for trial by a coroner's jury, on a charge of manslaughter of his wife. The surgeons, who were called in when she was dying, found that she was suffering from unrelieved femoral hernia. The druggist appears to have been quite ignorant of the nature of her complaint, although he doctored her for it.

The Army Medical Service. A notice has just been issued from the army medical department by the Director-General, setting forth that a competitive examination for commissions will commence at Chelsea Hospital on February 20th, 1865. The subjects of examination are: Obligatory—Anatomy and physiology, surgery, medicine, including therapeutics, the diseases of women and children, chemistry and pharmacy, and a practical knowledge of drugs. Optional—Comparative anatomy, zoology, and botany, with special reference to *materia medica*. Candidates having the necessary qualifications to practise medicine and surgery under the Medical Act, and not being under 21 nor above 30 years of age, are eligible.

The Yellow Fever at Bermuda. At the military depôt on St. George's Island 27 of the officers were attacked by, and 16 succumbed to, the terrible disease; while about 160 men died amongst the troops. The deaths in the town at the same time were 200 from this cause alone. Of the officers who died five were surgeons or assistant-surgeons. The officers' mess was closed, their servants being dead, or in hospital. The native nurses employed by the government in the hospital demanded and received wages at the rate of £1 per diem. The crisis of the epidemic appears at the date of the last mail to have been past.

University of Cambridge. Brailey and Lankester have been elected to scholarships for Natural Science, at Downing College; and a gratuity of £20 has been awarded at this college to Dickson, on the ground of proficiency in Natural Science. D. J. Cooke has been elected at Sidney College. The scholarships are of the value of £40 *per annum*, and will increase according to the merits of the holders. These gentlemen have entered at the respective colleges with the intention of proceeding in Medicine.

The Contagious Diseases Act. Deputy Inspector-General of Hospitals and Feets, P. Leonard, M.D., now attached to the Royal Naval Hospital at Haslar, has been appointed by the Board of Admiralty to proceed to the various large towns having Lock wards in their hospitals, in order to make such a report as may be useful in carrying out the provisions of the Contagious Diseases Act, passed in the last session. Staff-Surgeon John L. Donnet, M.D., has been summoned to England from Lisbon, to act as chairman of a committee which is to receive and condense evidence upon the diseases in our seaport towns, so that some measures may be taken in connection with the new act of parliament to protect the health of our maritime population. The following is a list of the naval and military stations to which the Contagious Diseases Prevention Act is intended to apply. Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershott, including the limits of the parishes of Pirbright, Ash, Compton, Peper-Harrow, Frimley, Puttenham, Seale and Tongham, Elstead, Farnham, Birley, in the County of Surrey, Aldershott, Yately, Crondall, Dogmersfield, Winchfield, Hartley-Wintney, Cove, Eversley, Farnborough, Binstead, Bentley, in the county of Hants; Sandhurst in the county of Berks, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown.

Bulimia. A stone-digger, aged 24, of Lyons, was afflicted with bulimia, or insatiable hunger. His earnings being insufficient to satisfy his appetite, though he ate scarcely anything but bread, his fellow workmen used to contribute towards his support. Worn out by his sufferings from the presence of tænia, which aggravated his hunger, he at last hanged himself. The most remarkable case of bulimia of late years was that of a woman who died in Paris a few years ago. She was afflicted with bulimia from her infancy, and while still a girl used to devour as much as ten pounds of bread daily. Though not in indigent circumstances, she was twice arrested for stealing bread to satisfy her hunger. She was at length admitted into the Salpêtrière, and placed under the treatment of Esquirol; but to no purpose; for she left the Salpêtrière as voracious as ever. Her hunger varied in intensity. At ordinary times, she could manage with twelve pounds of bread per day; but for three or four months of the year she would eat from twenty to twenty-four pounds; and for ten consecutive years her appetite was greatly aggravated in spring. On one occasion, when she had thought of keeping Good Friday as a fast-day, she ate more than thirty pounds of food in twenty-four hours. As she advanced in years, her appetite became depraved; and she took a liking to grass and flowers, especially butter-cups, of which she would gather and eat an immense quantity. On a *post mortem* examination, her stomach was found exceedingly small, while her liver was unusually large, and all her other viscera quite sound and of normal size. (*Galignani.*)

Dr. Lankester on the Banting System. There is one result of diet that is at the present day exciting a large amount of public interest, and that is the tendency of the adipose tissue to become developed to such an extent as to interfere with freedom of motion and other healthful actions of the system. The tendency to deposit fat is undoubtedly a peculiarity of some individuals of the human race, as well as of whole races of the lower animals. The breeds of sheep, pigs, and oxen that fatten fastest are most valued for the meat market. This property more often depends on a power of consuming large quantities of heat-giving foods than on any other state of the system. It is generally, therefore, a very easy thing to reduce corpulent persons, by restraining them in the indulgence of heat-giving foods. Eat no butter at breakfast, and no bread at dinner is a receipe which, when scrupulously followed out, I have generally found act favourably on stout persons. An intelligent apprehension of the general facts I have mentioned will enable persons of a little energy to reduce themselves when and as much as they please. It is, however, a dangerous practice to attempt to reduce corpulent persons by empirical means. Strong exercise, sweating, vinegar, solution of potash, and abstinence from all kinds of heat-giving food, are alike dangerous, and must sooner or later end in disease or some fatal catastrophe. On the subject of reducing corpulence Mr. William Banting has given an instructive and amusing account of his own experience in a letter which he has published. Although not very corpulent, the adipose tissue had collected in those parts of the body which interfered with the circulation, and in the course of a few weeks, by discontinuing a most injudicious and unlimited dietary for one which his medical man had the great judgment to prescribe by weight, he soon lost his fat and the inconveniences that attended its presence. It would, however, be highly injudicious for any person, unless placed under the same circumstances, to follow Mr. Banting's course of diet. The diet he pursued,—for every one who knows anything about diet must hope he is not still pursuing it,—is objectionable from many points of view. Thus, excepting salmon amongst fish, and pork amongst meats, is fanciful. Salmon contain less fat than many fish, and lean pork is not so fattening as fat mutton. The exclusion of milk from the diet is also objectionable, as milk conveys, in the most digestible form, nutritive matter to the system. Again, the exclusion of potatoes from the diet is a great mistake, as they contain mineral elements that are not so abundantly supplied from other sources. Why champagne and port are excluded from the wines, whilst sherry and Madeira are admitted, would puzzle those who looked at the dietary from its antipinguidacious point of view. There is no reason in excluding beer, if ten or twelve ounces of wine be allowed. Provided a man be not of active habits, a dietary like this might quickly plunge him into evils to which those of corpulence are a mere trifle. (*Popular Science Review.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M.

TUESDAY. Pathological Society of London, 8 P.M.—Statistical.

WEDNESDAY. Meteorological.—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Clinical Discussion, "On Sore Nipples, Mammary Abscess, and Remedies for the Excitation and Suppression of the Secretion of Milk."—Zoological.—Royal.—Linnæan.—Chemical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

DIET OF PARTURIENT WOMEN.—We have received so many communications on the subject of the Diet of Parturient Women, that we have necessarily been forced to curtail some of our correspondents' letters. We would venture to suggest that the treatment of the question should be mainly practical.

NOT A BAD SUGGESTION.—SIR: Will you allow me to make a suggestion for the benefit of those gentlemen who are so anxious that the funds of the Association should be devoted solely to philanthropic objects: for example, to the payment of the oppressed medical man's legal expenses, to the support of the doctor's distressed widow and orphan, and so forth? I would suggest that those members of the Association who are desirous of their subscription being devoted solely to these laudable ends, should have their wish gratified; that, instead of being partakers in what they denounce as a worthless weekly journal, they should become simply scientific philanthropists. Let the Association alter its laws, so as to enable every member who prefers the philanthropy aforesaid to the JOURNAL, to have his wish indulged. And, *per contra*, let those who prefer the JOURNAL, with what they consider the great benefits it bestows on the profession, also indulge their tastes, and stick to their JOURNAL. In this way, every member of the Association would be enabled to have his tastes gratified, and exercise complete liberty of action; and, moreover, those multitudes who, we are told, would gladly join the Association, if it were not for the drawback of its JOURNAL, would be enabled at once to have all the benefits of association, which they so eagerly desire, without any compulsory payment to a JOURNAL, which they despise or dislike.

I am, etc.,

A SUGGESTIVE.

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—C. W. Chaldecott, Esq. (Dorking), 10s. 6d.; J. L. Jardine, Esq. (Dorking), per C. W. Chaldecott, Esq., 10s. 6d.; G. B. Norman, Esq. (Basford), 10s. 6d.; W. Cooke, Esq. (Tunbridge), 10s.; Dr. Sinclair (Halstead), 10s. 6d.; W. W. Howard, Esq. (Glossop), 10s.; W. V. Lush, Esq. (Salisbury Infirmary), 5s.

Amount previously announced, £92:5:6. Received at the *Lancet* office, £5:13.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 9th, 1864.

COMMUNICATIONS have been received from:—Mr. HENRY HANCOCK; Dr. THUDICHUM; Mr. CHARLES GAINE; Mr. JAMES ROBERTSON; Mr. T. M. STONE; Dr. R. FOWLER; Dr. RADCLYFFE HALL; Mr. R. B. CARTER; Mr. POPE; Dr. SKINNER; Mr. J. VOSE SOLOMON; Mr. G. D. MACCARTHY; Mr. S. WOOD; Mr. RICHARD GRIFFIN; Mr. GILCHRIST; Mr. SLOMAN; Dr. W. M. WHITMARSH; Dr. H. CANDLISH; Mr. J. B. CURGENVEN; Dr. J. B. PITT; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. CHARLES TERRY; Mr. T. A. F. SCOTT; and THE HONORARY SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY.

ESTABLISHED 1848.

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Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON THE NATURE, THE VARIETIES, AND THE TREATMENT OF ECZEMA.

By Erasmus Wilson, F.R.S.

The great prevalence of eczema, its manifold varieties, and its undoubted increase of late years among the population, will, I hope, be received as reasons sufficient for bringing the subject of eczema under the notice of the British Medical Association.

The prevalence of eczema is so considerable, that its name has taken root among the population, even as a "household word." There is scarcely a medical practitioner in Great Britain who has not, at this moment, a case of eczema under treatment; or who, within a limited period of time, has not had such a case brought within his observation. Eczema is common to all classes of society; is restricted neither by age nor sex; is equally frequent in the male and in the female; and is met with in the infant of a few weeks old, as commonly as in those who have reached the more protracted term of human existence. In one thousand cases of cutaneous disease of every denomination, there occur 298 instances of eczema; very nearly one in every thirty, or, in other words, thirty per cent.

The varieties of eczema are so strongly defined that the ancient writers, very naturally, assigned to them different names; and these varieties, possessing separate names, came to be considered, in the course of time, as distinct diseases. The Greeks, who, in great probability, adopted the popular names of these affections, called them psora, psoriasis, lichenes, and pityriasis; all of which terms represent forms of eczema.

In like manner, and with the same intent, the Romans made use of the words—scabies, impetigo, papulæ, and porrigo; terms which may be regarded as agreeing with the Greek appellations already mentioned; for example: psora comprehends scabies and impetigo; psoriasis and lichenes* correspond with papulæ; and pityriasis with porrigo.

To us, it seems that a greater source of difficulty in the way of scientific investigation, can hardly be conceived, than the appropriation of separate names to simple varieties of one and the same disease; yet, such was the case with regard to eczema; and to this cause we may trace much of the confusion into which cutaneous pathology had fallen at the time of the revival of learning, and on the clearing away of the mists of the dark ages, when learned physicians were called upon to extricate from the ruins of the Greek and the Roman literature, aided chiefly by the translations of the Arabian physicians, the descriptions of diseases of which, perchance, the exact parallel had ceased to exist among them, or had ceased to be as common as they were in earlier times; and the difficulties were increased by the absence of that art which has contributed so much to the enlightenment of modern times—the art of printing.

In the sixteenth century, Mercurialis and Riolanus did good service to cutaneous medicine by their study of the older authors; and by their personal investigation of these diseases. Plenck and Willan advanced our information still more considerably in the eighteenth century, and laid the foundation of the greater part of the knowledge which we possess at the present time. The descriptions left by the ancients, taken by themselves, were far from being clear; the element of diagnosis by which a stranger could determine their identity was wanting; that element was supplied by Plenck and Willan. These authors noted the redness, the vesiculation, the papulation, the pustulation, the desquamation, the discoloration, of cutaneous diseases; and upon these characters they formed their arrangement or classification. The student was no longer at a loss to decide upon the diagnosis, upon the identification of a disease; he discovered the disease with certainty, and he made it his study, so that he soon became independent of the scheme which had supplied him with this important faculty. By degrees, he arrived at a position which enabled him to see beyond the limit which his masters had attained, and to discover that, however much he might owe to their assistance in giving him the power to scale the ladder of learning, there were faults in their plan; and, it must be admitted, faults of a very serious kind:—that eczema, for example, was capable of presenting all those appearances which constituted the majority of the classes and orders of these authors; that it might be represented only by redness; or by papulation; or by vesiculation; or by pustulation; or by desquamation; and, consequently, that a simple case of eczema as it occurs upon different parts of the body of the same individual was liable to be taken to represent, at the same moment, all the different classes or orders established by our authors.

Therefore, while in the hands of the ancients eczema was designated, according to the diversity of its forms, by a variety names; the classification of Plenck and Willan, at the same time that it gave us help in defining the disease, perpetuated and even increased the same evil. In the classification of these authors eczema is one while an erythema; another while a lichen; anon, a vesicle; then a pustule; or even, a squamous affection. Such are the sources of obscurity which more modern views in respect of these diseases have in great measure removed; and for which medical science is especially indebted to the labours of Hebra. We no longer divorce eczema from itself, because it is one while erythematous; another while papulous; another while vesiculous, pustulous, or squamous; but, we speak of eczema erythematosum; eczema papulosum; eczema vesiculosum; eczema ichorosum; eczema pustulosum; eczema squamosum, etc. Those designations, which were the distinguishing signs of the classes and orders of Plenck and Willan, are still retained; but instead of being the heads of classification, are made to fill the humble office of exponents of forms or varieties of a given disease.

Let us now turn to the question: What is eczema? Eczema is an inflammation of the skin, attended with alteration of its structure, and derangement of its functions. It is more vascular than in health, its vessels being in a state of congestion; its sensibility is morbidly increased, sometimes taking on the character of itching, tingling, or smarting, and sometimes that of pain; it is thickened by infiltration of serum into its tissues; is sometimes fissured and sometimes œdematous; it exudes a serous lymph at various times and in various quantity, sometimes in excess-

* A Greek patient, who is at present under my care, suffering from eczema papulosum of the back of the hands and wrists, the lichen agrius of Willan, calls the disease "Xero-lichenes", the popular name for the disease in her own country, and the equivalent of "dry lichen".

sive abundance; the epidermis is sometimes raised into vesicles, sometimes wholly removed; and is reproduced unhealthily, so as to form muco-purulent secretions and squamæ of various size; and sometimes is replaced by a crust of greater or less thickness, resulting from the desiccation of the morbid secretions.

But eczema rarely presents all these characteristic symptoms in an equal degree; and the diversity of the symptoms; and the modification which those symptoms undergo in different parts of the skin, in different constitutions, and in different temperaments, are the foundation of its varieties. As the varieties of eczema are founded on the prominence of one or other of the symptoms of the disease, they may be easily designated and as easily recognised. For example: when the prevailing sign is redness, the eruption is an eczema erythematosum; when the pores of the skin are erected into the form of papulæ, the disease is an eczema papulosum; where there are vesicles, the variety is eczema vesiculosum; where excessive exudation of a serous or colourless lymph is the leading sign, the case is one of eczema ichorosum; where there are pustules mingled with the other signs, it is an eczema pustulosum; and, where, as in the chronic forms of the affection, the epidermis is scabrous and scaly, the disease is an eczema squamosum. These terms comprehend the principal forms of eczema dependent on symptoms; but additional terms suggest themselves naturally for different conditions; for example: the skin is sometimes cracked and fissured—eczema fissum. Sometimes the thickening and condensation of the diseased tissues, in a chronic stage of the affection, suggest the terms eczema sclerosum and eczema verrucosum. Sometimes the state of the part is aptly expressed by the term eczema œdematosum; sometimes, from the nature of the secretion, eczema mucosum. And, more than once, we have met with a case to which, on account of the severe pain by which it was accompanied, the term eczema neurosum was correctly applicable.

It is rare to find an eczema perfectly simple in its eruption, and capable of being represented singly by any one of the terms already mentioned. More frequently, two, or indeed several of the forms may be present at the same time, and sometimes even the whole. For example: in one case we may have an erythematous eczema combined with papulæ, which we should then distinguish by the name of eczema erythematosum et papulosum (eczema lichenodes); or, it might be an eczema erythematosum et ichorosum; or, if the exudation of fluid from the inflamed surface were the most striking feature, we should name it an eczema ichorosum, which might be, but in a less degree, erythematosum et papulosum; or even pustulosum. Or, the case might be one of eczema vesiculosum et erythematosum; or, an eczema squamosum (eczema chronicum), which is, at the same time, in part, fissum; and in part, ichorosum. These terms have the advantage of being simple, expressive, and clear; they rise to the mind as freely as the terms: red, pimply, oozy, mattery, or scaly; and, they render the narrator intelligible to every one conversant with medicine and medical language; while the commoner appellations eczema simplex and eczema rubrum, convey to the uninstructed in cutaneous pathology, either an erroneous idea or absolutely nothing at all.

Varieties of eczema are also derived from situation; from the part of the body attacked with the eruption. For example, we have eczema capitis; eczema faciei; eczema aurium; eczema palpebrarum; eczema oris et labiorum; eczema axillarum; eczema mamillarum; eczema umbilicale; eczema inguinum; eczema pudendi; eczema perinæi; eczema ani; eczema articulorum; eczema manuum et pedum; eczema dorsi manûs; eczema palmare et plantare; eczema digitorum; eczema unguium, etc. Moreover, we are taught by experience that in certain situations we shall be most likely to meet with one or other of the established varieties of the disease. For example: eczema capitis et aurium are commonly ichorosum in a recent attack, and squamosum at a later period; eczema articulorum, eczema axillarum, eczema inguinum, and eczema pudendi, are also very frequently ichorosum, and sometimes mucosum. Eczema of the fleshy parts of the forearms and legs is not unfrequently vesiculosum; as is also eczema digitorum. Eczema dorsi manûs is usually papulosum; while eczema palmare is squamosum et sæpe fissum.

The extent of the eruption is also to be considered in designating its varieties. It may be general or it may be partial. When partial, the patches of the disease may be single or multiple; they may be defined (figuratum); or diffused (diffusum.) Sometimes they suggest the idea of the dimensions and figure of a piece of money, nummulare; and sometimes they are bounded by a prominent ridge (marginatum) and spread by the circumference, while the inflammation subsides within the included area; this is especially the case in a curious form of eczema marginatum common in India, where it is known as the Burmese ringworm.

Willan and Bateman include all the varieties of eczema under the three heads: solare, impetiginodes, and rubrum, corresponding with the eczema vesiculosum, eczema pustulosum, and eczema ichorosum of our improved nomenclature. Hardy proposes four varieties; namely, simplex, rubrum, fissum (fendillé), and impetigo. Hebra employs the suggestive terms squamosum, papulosum (lichenodes), vesiculare (solare), madidans (rubrum), and impetiginosum.

It will be perceived that Hebra makes eczema squamosum the first of his forms of eczema; whereas I take it to be the last. Let me explain. Eczema erythematosum is commonly accompanied with desquamation; and when the eruption is general, this is remarkably the case. Now, Hebra selects the moment when it is coated over with scales as the type of this form of the disease. But, it must be remembered that the scales may be disposed of in a variety of ways; there was a time, before which they were formed; there is a time when they have ceased to be produced; there is an intermediate time when they may be removed artificially by dressings, poultices, or baths. What are we to call the disease when the scales and desquamation are no longer present? The answer is plain; the redness, the erythema remains; indeed, the erythema is always there; from the beginning before the scales existed, at the end, after they exist no more; hence, the term "erythematosum" appears to me to be more appropriate than "squamosum." Again, there are forms of eczema in which there is redness, but nothing deserving to be called scales; and, to these cases, which are numerous, the term "erythematosum" is especially applicable.

On the other hand, when eczema reaches its latest period, when it is chronic, there is still redness; but scaliness and desquamation are a more predominant character than redness; and it is to this period, that I prefer to attach the term "squamosum." Eczema squamosum, I regard as the chronic stage of eczema; whilst eczema erythematosum, which may also be chronic, applies with especial aptitude to the earliest stage of the eruption. Eczema squamosum is, therefore, in my view of the pathological indications of the disease, an eczema chronicum squamosum, and is the true representative of the much abused term psoriasis. Psora represents the more active, and especially

the exudative forms of eczema; and psoriasis, its chronic, its dry, and its desquamating form.

The Romans, who designated eczema by the name of scabies, drew attention to a characteristic distinction between its moist and its dry form—scabies humida and scabies sicca. The Greeks appear to have had the same object in view in employing the words psora and psoriasis; the former term corresponding with scabies humida, the latter with scabies sicca. The distinction is a radical one, and of the first importance in the study of eczema. Eczema siccum, which is represented by eczema erythematosum, eczema papulosum, and eczema squamosum, is specially distinguished by an absence of exudation, or by its presence in a very slight degree; whereas eczema humidum, represented by eczema vesiculosum, eczema ichorosum, and eczema pustulosum, is remarkable for the exudation of a serous and sometimes a muco-purulent fluid, often in astonishing quantity—a positive flux. According to our observation, the dry forms of eczema more than double in frequency those of the moist or humid kind; therefore, a classification that assumes for eczema a definition dependent on exudation as a pathognomonic sign, must, of a necessity, be incorrect.

A well marked example of eczema is an open page, upon which we may read, with the utmost distinctness, the pathology of the disease; and anything that may be wanting upon this page is supplied by the examination of a succession of cases. Let us note what such an observation teaches.

In the first place, there is redness: one while, uniform; another while, punctated. The cause of the redness is, congestion of the capillaries and smaller vessels of the skin. When the redness is uniform, the congestion is uniform; when the redness is punctated, the vascular plexus of the follicles is also congested. Sometimes the congestion of the vascular rete of the horizontal surface is primarily and chiefly apparent; sometimes the vascular rete of the vertical walls of the follicles is the first to show congestion, and the latest to retain it. When the latter is the case, our patients speak of an eruption under the skin; and we, ourselves, perceive a resemblance to the punctiform congestion of the exanthemata. Another phenomenon follows the congestion of the vessels of the follicles; namely, the erection of their apertures or pores: these latter become raised above the level of the adjacent surface, and constitute small pimples. This is the mode of formation of eczema papulosum.

Occasionally, we have the opportunity of observing another process by which an eczema is developed. There may exist a slight itching of a part of the skin; if the part be carefully examined, a reddish punctum is apparent in the substance of the skin; the finger passed over this punctum, discovers a hard granule; this is a congested follicle. If, to relieve the itching, we scratch the part, a papule arises; the head of the papule is torn off; a serous exudation follows, and then a small crust, which covers its summit. But, while the one original papule runs its course, the follicles around participate in the pathological process, and soon a small patch is formed, which presents all the characters of an eczema: there is an erythematous redness; there is papulation; there is slight exudation—papular at first, but afterwards general; there is incrustation, and there is desquamation.

Congestion, therefore, gives rise to redness; it gives rise, also, to papulation, and to a moderate amount of swelling; but there is another important pathological change which results from congestion, and that is effusion or transudation. The congested vessels are relieved from their distension by the exudation of the fluid portion of the blood, and this exudation causes thickening and condensation of the substance of the skin. Sometimes the transudation from the vessels occasions œdema (eczema œdematosum); sometimes it is effused beneath the epidermis, at the apertures of the follicles, and produces vesicles (eczema vesiculosum); a continuance of this process causes the separation of the cuticle from the cutis; and the discharge from the latter of a serous lymph (eczema ichorosum). In a different constitution, or in another region of the body, the distension of the tissues of the skin may occasion cracks and fissures (eczema fissum); from which an ichorous discharge may be poured out in greater or less quantity.

There is yet another pathological operation which occurs in the morbid skin, and that is, an alteration in the formation of the epidermis. Where two folds of integument have lain in contact for a while, and where, from the constant presence of heat and moisture, the cuticle has no power of acquiring its natural horny density, but remains soft and cellular, the surface of the derma is red, is denuded of epidermis, and secretes a copious muco-purulent discharge, which is, in reality, an aborted and morbid cuticular substance; a cuticle arrested at its cellular stage and partly transformed under the influence of inflammatory action and the low vitality of the part, into a fluid, which is principally mucus, but is mingled with a small proportion of pus. There is no lesion of continuity, or destruction of the epidermis, in this case; the muco-purulent matter is a simple secretion produced at the expense of the epidermis, a morbid conversion of that tissue into a fluid matter, which performs the same office to the otherwise unprotected derma, as that of mucus to the mucous membrane. This is intertrigo mucofluens; or, more properly, eczema mucosum.

Now, in ordinary eczema, a morbid alteration in the formation of the cuticular tissue takes place, similar to that just described. The copious exudation of eczema ichorosum is not merely a serous fluid expelled from the vessels in consequence of the overdistension of their parietes; it is a positive secretion in which the cellular elements of the cuticle take an active part, and bestow upon the fluid its special properties—for example, its density and frequent opalescent appearance. That same influence which causes the discharge of such immense quantities of fluid from the mucous membrane of the bowels in diarrhœa and cholera, is also active in eczema ichorosum. In the course of a few hours, several pints of fluid may be poured out from the denuded surface of the derma, partly, no doubt, by way of excretion, but not less actively also by way of secretion.

The pathological phenomena present and in operation in eczema, therefore, are not simply those of inflammation, but also involve a morbid aberration of secretion. The inflamed derma, which, at an early period of the disease, exudes largely a colourless lymph, at a later period may exude an opalescent and even a yellowish fluid; the consequence of the conversion of the mucous elements of the cuticle into pus. And the continuance of inflammation of the skin may so far lower the vitality of the surrounding tissues, that pustules may be developed around the circumference of the patch of eruption, and add fresh purulent matter to the morbid secretion; the case is, then, one of eczema pustulosum, or eczema impetiginodes.

In a disease of a secreting tissue, where inflammation is apt to continue for a considerable period, and where secretion is so greatly disturbed; where exudation takes place as the result of inflammatory changes, and as the result also of modified secretion, —we may expect to find crusts of various kinds

formed on the inflamed surface; some resulting from the desiccation of altered secretions, and some from imperfect formation and altered structure of the epidermis. It is in the power of the medical man to prevent these crusts from appearing at all; but where the case has been left to itself, or where the treatment has been misdirected, we may find spongy crusts of a greyish, yellowish, greenish, or brownish tint, or almost black; we may find them loose or adherent; we may find scabs of various degrees of density; or we may find, where alteration of the epidermis is chiefly concerned, scales of various thickness and magnitude—thicker, larger, and rougher in more recent cases; thinner and smaller in more chronic forms; and diminishing by degrees to the furfuraceous and farinaceous desquamation of psoriasis or pityriasis.

Eczema is a chronic affection, and has no specific course. Like other chronic inflammations, it has its beginning and its end; or, in other words, its rise and its decline, with an intervening period of activity of greater or less duration. In a severe case, the rise may present redness, heat, swelling, papulation, and sometimes vesiculation; this may be regarded as a first stage or first period of the disease. Next, there may succeed exudation, incrustation, and sometimes suppuration; this is a second stage, or second period—the stage of exaltation. Lastly, there will follow the third stage—the stage or period of decline—comprising desquamation, with redness and often thickening of the skin. We may regard such an example as a typical case of eczema; but the disease very rarely runs its course so simply. The first stage may linger on, and be lost eventually in the last, without the intermediate pathological phenomena; or the whole course of the eruption may be a successive repetition of the intermediate stage, without any alteration of the first. Even the last stage may exist in the form of thickening and chapping, without any preceding first stage. It is this great diversity of eczema in pathological characters that is assumed as the distinction of its varieties, and which contributes so much to the obscurity of diagnosis of the disease; whilst its irregularity of course enhances the difficulty of treating it successfully. It may be correct, therefore, to speak of a first, a second, or a third period of eczema, in relation to a given attack of the disease; but not so in relation to eczema in general; for, as we have endeavoured to show, in the great majority of examples of this affection, the regular succession of stages or periods is wanting; and it will be found more correct to employ the terms previously suggested as the proper designation of the forms of the disease. Again, in reference to the pathological phenomena presented by the disease during its three periods, the first might be named the erythematous, the papular, or the vesicular stage; the second, the exudative and encrusted stage; and the last, the squamous or desquamating stage.

Cause of Eczema. To conduct the treatment of eczema with success, it is necessary not only to know the habits and phenomena of the disease—in other words, its pathology—but also to be able to form some judgment as to its *cause*. Careful observation has convinced me that the essential cause of eczema is debility—debility of constitution, or general debility; and debility of tissue, or local debility. And further investigation has shown that constitutional debility may present itself in three forms; namely, as an *assimilative debility*, in which the organs of digestion and secretion are principally at fault; as a *nutritive debility*, where the powers of nutrition are chiefly concerned; and as a *nervous debility*, in which a morbid state of the nervous system takes the lead. In 300 cases of eczema, 278 were referable to general debility, and 22 to local debility; and of the 278 instances of general debility, the examples of assimilative debility were 143, nutritive debility 103, and nervous debility 32.

Debility stands in the position of a predisposing cause of eczema; but, as debility is itself due to certain causes, these latter must be regarded as bearing the relation of remote predisposing causes of the eruptive disease. Of the 278 cases of general debility already referred to, the remote predisposing causes, taken in physiological order, admit of being arranged under twenty-four heads, as follows: 1. Hereditary diathesis; 2. Strumous diathesis; 3. Weakly parentage; 4. Errors of diet; 5. Errors of hygiene—namely, air, exercise, cleanliness, and clothing; 6. Vicissitudes of cold, heat, and moisture; 7. Transitions of seasons; 8. Ungenial climate; 9. Excessive labour mental and physical; 10. Anxiety and affliction; 11. Sexual excess; 12. Vaccination; 13. Dentition; 14. Excessive growth; 15. Deranged digestion; 16. Deranged menstruation; 17. Uterine, reproductive, and puerperal derangements; 18. Fevers, eruptive and malarious; 19. Gouty and rheumatic diathesis; 20. Constitutional and organic disease; 21. Nervous shock and fright; 22. General cachexia; 23. Hæmorrhage; 24. Local injury or disorder.

If we consider them in the order of their numerical importance, the arrangement in reference to the leading remote predisposing causes would stand as follows: Deranged digestion, 51; errors of diet, 33; weakly parentage, 21; vicissitudes of cold, heat, and moisture, 21; anxiety and affliction, 16; hereditary diathesis, 16; ungenial climate, 14; constitutional and organic disease, 14; excessive labour, mental and physical, 11; uterine, reproductive, and puerperal derangements, 11; errors of hygiene, 10; gouty and rheumatic diathesis, 8; deranged menstruation, 7; fevers, eruptive and malarious, 7; excessive growth, 7; vaccination, 7.

In reference to the three subdivisions of the remote predisposing causes—namely, assimilative, nutritive, and nervous—the most numerous remote predisposing causes of assimilative debility are met with under the heads of—deranged digestion, 49; vicissitudes of cold, heat, and moisture, 13; constitutional and organic disease, 12; and anxiety and affliction, 11. The chief remote predisposing causes of nutritive debility occur under the heads of—errors of diet, 28; weakly parentage, 13; hereditary diathesis, 12; vaccination, 7; excessive growth, 7; and errors of hygiene, 6. The most numerous remote predisposing causes of nervous debility are met with under the heads of—anxiety and affliction, 5; excessive mental and physical labour, 4; ungenial climate, 4; uterine, reproductive, and puerperal derangements, 4; nervous shock and fright, 3; weakly parentage, 3; and vicissitudes of cold, heat, and moisture, 3.

After the remote predisposing and the predisposing causes of eczema, follow the exciting causes, which are best illustrated by the group of local causes. Of the twenty-two cases referable to local debility, the exciting causes admit of being assembled under the following heads; namely, cold; heat; moisture, with cold or heat; clothing, bedding, etc.; friction; local irritants; local injury; varicose veins. The most important groups in numerical value were, cold; local injury; heat; local irritants; and varicose veins.

Treatment of Eczema. If the foregone premises with regard to the causes of eczema be correct, the treatment of eczema resolves itself into a treatment of debility—a treatment of constitutional debility, and a treatment of local debility; and the influence which we are called upon to exercise over our patients is one which shall have for its object to restore

power, and thereby to regulate function and to confirm health; for health is nothing more than correct function united with normal power.

In general terms, our constitutional treatment must be directed to the regulation of the functions; and, concurrently with regulation of functions, to the restoration of the tone, the vigour, the vitality of the general system. In the most numerous group of cases, those which depend upon debility of assimilation, our attention is principally directed to the digestive organs and the secretions. In the next most numerous group, those which are due to nutritive debility, the digestive and secreting organs must also be carefully examined, although they are less likely to be faulty than in the preceding group; and we are enabled sooner than in the former case to resort to our strengthening remedies. The same remarks apply to the third group, originating in nervous debility; while, in these latter, we have to deal with the special indication of weakened power of the nervous system.

A more particular direction is given to our treatment by the recognition of the remote predisposing cause. The commonest of the remote predisposing causes of eczema we have seen to be derangement of digestion and errors of diet; we have but to include the consideration of these causes in our general treatment for regulating the digestive organs and secretions and restoring tone, and our treatment will be complete.

Next to the preceding comes a group of causes in which the laws of hygiene have been infringed: for example, vicissitudes of cold, heat, and moisture; errors of air, exercise, cleanliness, and clothing; climate; and seasons. These various causes are too suggestive to call for special comment. The same may be said of another group of remote predisposing causes; namely, weakly parentage, hereditary diathesis, and strumous diathesis. Then comes a group, of which labour in excess, both mental and physical, together with anxiety, affliction, nervous shock and fright, and mental distress of every kind, are the leading features. Next we have debility proceeding from the morbid operation of functions natural to the body: for example, dentition; excessive growth; and sexual excess. After these, there are the disorders of female functions; deranged menstruation; together with uterine, reproductive, and puerperal derangement. And, lastly, there is the debility which is due to the existence of other diseases: for example, vaccination; general cachexia; eruptive and malarious fevers; gout and rheumatism; hæmorrhage; and visceral disorder.

The question, therefore, How shall we treat a case of eczema? is not so simple in one sense as might be imagined, inasmuch as it demands a lengthened inquiry into constitution and cause; but simple enough in another sense, because it involves no more, but quite as much, as the treatment of any other disease to which the human constitution is liable. To treat an eczema judiciously and correctly, we must know the sex and age of the patient, together with the predisposing cause, the remote predisposing causes, and the exciting cause of the disease. It may be that our treatment must be directed to the restoration of digestion and secretion; or to the strengthening of an exhausted vitality; or to combating an inherent and inherited weakness; or to the improvement and sustainment of defective power; or to the regulation of disorders of the female system; or to the cure of visceral or of organic disease. In a word, the highest and best qualities of medical art and science must be put in practice, with foresight and discretion, for the treatment of an eczema; the universal must submit to become the handmaiden of the special.

The agents of the constitutional treatment of this disease, our remedies, belong chiefly to the class of aperients and tonics; while, as adjuvants, we have recourse to sedatives, alteratives, and stimulants. Our best aperients are: sulphate of magnesia; and the purgative extracts, either alone, or when specially indicated, united with blue pill or calomel. These remedies clear away accumulated ingesta and secretions from the alimentary canal; they restore a torpid and lethargic function, in this sense performing the part of derivatives from the inflamed tissues; and they promote healthy secretion. But aperients require to be used with great judgment; they must neither be carried too far, nor continued too long; our object should be to imitate nature as closely as possible; and above all, to avoid lowering the powers of the constitution. Nothing reanimates the energies of the organism so much as the healthy operation of the natural functions of the body; this should be our aim; and, when so applied and skilfully used, an aperient, instead of producing exhaustion, becomes a powerful tonic to the entire frame. The sulphate of magnesia in small doses possesses all these good qualities; it restores the function of the alimentary and urinary mucous membrane, and agrees with most constitutions. Some there are, to whom the warmer aperients or the mineral purgatives are more suitable; but this is a matter that can be determined only by observation. Again, we are influenced in our selection of an aperient, often by the season, and often by some collateral object, such as derivation; in the spring and summer saline aperients and neutral salts may be indicated; whereas, in a colder season we should prefer the warmer remedies; and, in seeking for a derivative we should possibly prefer aloes to Epsom salts.

Besides their direct effects of removing obstacles and promoting normal secretion from the mucous membrane, aperients have the property of rendering absorption and nutrition more active. How usefully, on many occasions, do we put this property of aperients to a purpose in removing effusions into the tissues, in carrying off waste humours, and stimulating nature to be more eager in the assumption of fresh material. It is marvellous, how much may be accomplished by the judicious use of remedies; and with what certainty the results, which we seek to obtain, may be secured. If we run the eye down our list of remote predisposing causes, other remedies suggest themselves which may be combined with our aperients to adapt them to a particular purpose; let us instance rheumatism, which draws our thoughts towards the iodide of potassium; gout, towards colchicum; and uterine diseases, towards alkalies and iodine.

If we turn our attention, in the next place, to the tonics, which may be found suitable for the treatment of eczema, we find: simple vegetable bitters, cinchona and quinine, chalybeates, the mineral acids—hydrochloric, nitric, sulphuric, and phosphoric; and above all, arsenic. Among simple vegetable bitters, with what respect must we speak of gentian, calumba, orange-peel, quassia, chirayta, chamomile, and hop; in infusion or decoction; in extract or in tincture; in combination with the mineral acids, or with ammonia, soda, or potash. How admirably cinchona and quinine perform their part; cinchona in decoction or tincture, or liquor, with sulphuric acid or with ammonia; and quinine in solution, with an excess of sulphuric acid. How perfect a remedy is one grain of quinine, with one drachm of sulphate of magnesia, seven minims of dilute nitric acid, and an ounce and a half of infusion or roses, both as a gentle aperient, a corrector of acidity, a promoter of mucous secretion, and as a tonic. Then the chalybeates, iron and its salts, the sulphate, the tincture of the hydrochlorate,

the citrate, the superphosphate, the iodide, and the citrate of iron and quinine. Next, the mineral acids combined with the bitter tonics, and especially the nitro-muriatic and the phosphoric. Again, as a nutritive tonic, we have the cod-liver oil; and our list of remote predisposing causes will discover several sections in which that remedy is peculiarly applicable; for example: strumous diathesis, excessive growth, and sexual excess.

All that precedes applies to any disease of the human frame; whether it be of the lungs, the heart, the liver, the brain, the kidneys or the womb; the treatment now under consideration is catholic and not special; its aim, to bring back normal function, and so to restore health; it is the routine of the physician's art; but there is a remedy which possesses a special influence on the skin, and has long been held sacred in cutaneous medicine, namely, arsenic. When all has been effected that can be accomplished by aperients, alteratives, derivatives, and tonics, then comes the reign of arsenic; and at that moment, arsenic is triumphant. But arsenic must be regarded, not as our common weapon, but as our reserve; to be administered when it can do no harm, and when there is every probability of its doing good. Arsenic is a tonic, a tonic which influences chiefly the nerve-substance, and not only gives force to, but improves the nutrition of the nervous matter; in this way it operates upon the trophic system of nerves throughout the economy; and in cutaneous medicine we have evidence of its remarkable powers upon the skin. Arsenic accelerates those actions of the skin which tend to its nutrition and renovation, and therein it becomes a healer of its eruptions, and a valuable aid to the cure of eczema. But arsenic, above all medicines, must be handled with judgment and care; it must be jealously watched, lest it give rise to any unfavourable symptoms, and its use must be suspended at once if there exist even a doubt of its healthful operation. Above all, it is to be borne in mind that only at the right moment is arsenic applicable, and that right moment can only be determined by watchful care, or by long experience.

Our *Pharmacopœia* is rich in preparations of arsenic; but the most valuable are, the liquor potassæ arsenitis, and the liquor arsenici chloridi; the dose of the former applicable to an adult suffering with eczema, is two to four minims; and of the latter, double that quantity. Some years ago, in a paper on Eczema Infantile, I laid before the British Medical Association a formula for the administration of Fowler's solution; and experience has assured me that no better form can be employed for its administration.* Arsenic should always be administered in small bulk, and the formula in question gives one drachm of fluid as the dose, and always on a full stomach, or, if possible, in the midst of a meal. The object of these precautions is obvious; arsenic is intended especially as an improver of nutrition, and therefore should be made to enter the stream of blood with the chyle; in its nature it is an irritant to the mucous membrane, and, therefore, it should be administered at a time when the lining membrane of the stomach is coated with mucous secretion, and at the same time when, by mixing with the mass of the meal, the remedy is largely diluted.

All the processes of renovation which depend upon nutrition are slow; hence, as we look for the good effects of arsenic in the improvement of nutrition, we must be prepared to continue its use for a considerable time. This is another reason for administering arsenic in small doses, independently of the suggestions to the same effect gathered from experience. Indeed, by employing it in larger doses, we naturally frustrate the objects which we ourselves have in view; we set up the irritant action of the medicine; we excite nausea, sickness, pain in the stomach, or alimentary canal, prostration of nervous power, or cough, and then we are compelled to suspend it. While, on the other hand, administered with judgment and discretion, there is no safer medicine in the *Pharmacopœia*; and, at the same time, in my opinion, there is none to equal it in excellence and usefulness.

To be a successful practitioner in the treatment of eczema, a medical man must be an accomplished physician; to manage the local treatment with success, he must also be an able surgeon. The local treatment of eczema must be conducted according to the general principles of surgery. The inflamed part must be soothed in the acute stages of the disease, it must be supported and stimulated during the chronic stages, and it must be excited to a new action in the most chronic stage of all. To soothe, we must employ water-dressing, unguents, cerates, well adjusted bandages, and rest. To give local tone, we must have recourse to stimulant applications of various kinds.

The water-dressing is useful where there is heat, pain, itching, or tension, but should not be continued beyond the period during which those symptoms exist; for, when prolonged for too great a time, it lowers the tone of the tissues and perpetuates the eruption. In our list of remote predisposing causes, it will be seen that one amongst them is "moisture with heat," the exact condition which at one moment of the disease we employ with advantage in the use of the water-dressing. Whereas, we could hardly adopt any more certain means of producing eczema artificially, than by the application for a long time of water-dressing to a healthy part of the skin. This operation is often seen in practice, in the eruptions which follow the lengthened use of poultices.

When the local inflammation partakes of the subacute character rather than the acute, and when the water-dressing has effected the purpose for which it was applied, we may have recourse to cerates or ointments. As a preliminary to both of these appliances, all crusts and sordes should be carefully wiped or washed away from the inflamed part; if they be dry and hard, the water-dressing or the ointment-dressing may be applied with a view to soften them, and then they should be removed, and the dressing with the ointment nicely adjusted, and, wherever practicable, secured in position by a bandage; where this cannot be done, then we must have recourse to adhesive straps. In selecting an ointment, the best with which I am acquainted is the benzoated ointment of oxide of zinc. It should be spread thickly on the lint; the dressings should be shaped so as not to overreach the sound skin; and the roller of elastic cotton bandage should be put on smoothly, and with a view to produce equable pressure on the eruption, and support to the vessels of the limb. On a part of any extent it is more convenient, and we avoid wrinkles thereby, to apply the dressing in slips, and dispose them in the manner of a many-tailed bandage; and when a limb affected with eczema is carefully packed up in the manner described, it may be left for twenty-four hours, and in more chronic cases for forty-eight hours, without disturbance; then it should be unpacked, re-dressed, wiped with a soft napkin to remove sordes, and packed up again for a similar period. While packed up in this way, the itching of an eczema commonly ceases, and the patient is saved from the annoyance and suffering of that disagreeable symptom, while the skin returns gradually to its healthy condition. If there should be heat and burning of the limb when packed, the bandage may be

* R. Vini ferri ℥iss; syrupi simplicis ℥iij; liquoris potassæ arsenitis ℥j; aquæ puræ ℥ij. Misce. Fiat mistura; ℥j pro dosi.

sopped with water, and then we get the advantage of the water-dressing superadded to the tonic treatment.

Where great irritability prevails in the constitution of the patient, we require to have recourse to sedatives; and where irritability is present in the part, we may find it difficult to contrive a dressing which will perfectly suit the eruption. Sometimes grease of all kinds acts as an irritant, and then we are driven for a while to the use of lotions or powders. Sometimes a sedative, such as the acetas plumbi, added to the ointment, relieves the irritability; sometimes a more stimulating application, such as the unguentum resinæ flavæ, or the ointment of juniper tar. At other times, we may put an end to the irritability by pencilling the surface with a weak solution of the nitrate of silver in nitric ether. Again, we rarely fail to relieve the irritability by undressing the part, washing it thoroughly with the juniper tar soap, drying it, and dressing and packing it up again as before. The successful treatment of eczema needs many resources; but only such as may be explained on the recognised principles of physiology and surgery.

The erythematous form of eczema yields very kindly to the benzoated ointment of oxide of zinc; so also do the moist forms of the eruption, the dressing being aided by moderate compression with a bandage. Eczema ichorosum must be followed up patiently with this plan of local treatment, until the ichorous secretion ceases to be formed, and the eruption heals. But the chronic forms of the disease represented by eczema squamosum, require a stimulant treatment. Washing with the juniper tar soap, dressing with the unguentum resinæ flavæ, pencilling with a solution of nitrate of silver, or a strong lixivium of potash. Whenever these stronger local remedies are used, the eruption should be subsequently dressed, *more dicto*, with the benzoated ointment of oxide of zinc, and then carefully packed up.

In the moist forms of eczema, there is always a considerable quantity of serous lymph present in the tissues of the skin; and, until that serous fluid is removed, either by absorption from within or by excretion from the part, the skin cannot return to its normal state. It is to the presence of this fluid infiltrated in the substance of the skin, that the chronic forms of eczema owe their thickening, their induration, and their rupture; the latter giving occasion to fissures and cracks, and being most conspicuous where the skin is naturally thick and wrinkled, as on the hands and fingers, or the feet, behind the ears, along the borders of the mouth, and in the cleft of the podex. For this state of the skin, in an aggravated form, there is no remedy to compare with a solution of caustic potash. That application seems to purge the skin of its abnormal fluids, to promote absorption, and to give energy to nutrition; and it is amazing with what rapidity the cracks will heal, and the most chronic state of disease get well under this treatment.

Medical Students in Paris. The number of medical students is decreasing in Paris, as well as in London. In 1863, the number of new students was 357; in 1864, it is 327.

The Lavies Testimonial Dinner. We wish to remind our professional brethren that this dinner is advertised for Wednesday next, the 23rd, at Freemasons' Hall. We hear that a large gathering is expected; amongst others, John Brady, Esq., M.P., J. Tidd Pratt, Esq., R. Lush, Esq., Q.C., Dr. Copland, Henry Hancock, Esq., John Erichsen, Esq., etc.

Transactions of Branches.

HULL BRANCH,

A PECULIAR CASE OF LITHOTOMY.

By Kelburne King, M.D., Hull.

[*Read October 27th*, 1864.]

On October 26th, 1863, I was summoned by Mr. Burnham, surgeon, of Preston, in this neighbourhood, to go to that village, and to take such instruments with me as I would require for the operation of lithotomy. Dr. Sandwith of Hull accompanied me. On arrival, we found our patient to be a farm labourer, about seventy years of age; and we received the following account of his history.

Thirty years ago, he had been operated upon for stone in the bladder, by the late Mr. Fielding of Hull; and shortly afterwards found his symptoms return. Since the time of the operation, he had never been able to pass urine through the urethra, but evacuated the bladder through the fistula which remained in the perinæum; and of late, since his symptoms became aggravated, he thought that a great part of the urine passed through the anus. He was in an extremely emaciated condition; was in great and constant pain; and was so reduced by suffering, that he was glad to submit to anything that might be proposed for his relief.

On examination, the urethra was found to be occluded, and perfectly impermeable to any instrument which I had with me. There were several sinuses in the perinæum; and, on passing the finger into the rectum, I found that a fistulous opening existed about two and a half inches from the anus, opening into the bladder, and permitting the finger to touch a calculus. From this examination, it appeared that the calculus was of very great size, as it could be felt in all directions, filling up the space usually occupied by the bladder.

As no staff could be passed, and the man was reduced to a state of the greatest misery and depression, the following operation was performed, after consultation with Dr. Sandwith and Mr. Burnham. I passed the index finger of my left hand into the bowel, and placed its point upon the stone; then introduced a strong, straight, probe-pointed knife through the anus, and passed it up to the finger already introduced, turning the sharp edge forwards. An incision was then made through all the soft tissues—bowel, sphincter, and perinæum—strictly in the middle line, from the sinus in the rectum to about an inch in front of the anus. Free scope being thus afforded, the forceps were introduced; and it was found that the stone occupied the whole interior of the bladder, which seemed to be moulded, as it were, upon the calculus. By the use of scoop and forceps, the walls of the bladder were lifted off the stone, which was then, after some difficulty, shaken out of its position; and finally, though not without some expenditure of time and patience, was removed. The last stage of extraction was facilitated by the fracture of the calculus into two pieces.

The old man was a good deal exhausted at the close of the operation; but, when I saw him half an hour afterwards, he was smoking his pipe, and declared himself to be feeling tolerably well.

I have not seen him since; but I believe he recovered without a bad symptom; and I heard of him as following his usual out-door occupations some weeks after.

The stone, which was globular in form, weighed 6 oz. and 2 drs., and measured $7\frac{1}{2} \times 8$ inches in circumference; and there was a great deal of *débris* besides. It was exhibited to the meeting.

I think this case deserving of notice on the following grounds.

Firstly. The great size and weight of the stone, and the advanced age of the patient. I should think that few patients have recovered from the operation of lithotomy, from whom heavier stones have been extracted. It is the largest I have ever seen removed.

Secondly. The operation performed was as nearly as possible the old one *on the grip*. No instrument could be passed along the urethra, to serve as a guide; therefore I had only to choose between a free incision forward in the middle line, or the high operation. Considering that the limits of the operation in the former direction were distinctly defined, that there was no risk of wounding any important artery (he did not lose more than a tablespoonful of blood), or indeed any vital structure, and that I have had no experience of the high operation, I decided at once to proceed in the manner described; and I believe that, from the small size of the bladder, it was the safer plan to pursue. The result has been perfectly satisfactory; and I put the case on record as an additional evidence of the power of Nature to restore health, even in the most unfavourable circumstances, after the offending cause—that which has been acting as the source of irritation—has been removed.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By Frank Workman, Esq.

[*Read July 20th*, 1864.]

I might well feel some diffidence, gentlemen, in undertaking the office of your orator, remembering how, last year, Mr. Marsh adorned it with all that felicity of diction, elegance of composition, and copiousness of research could afford, had I any intention of attempting to rival him. To this, however, I make no pretence; for, putting out of the question the singular literary ability he displayed in the accomplishment of his task, he possessed, in the seclusion of the dispensary, a much greater amount of quiet leisure than has fallen to my lot. And you will remember, moreover, that Lord Bacon says: "Certainly, the best works, and of greatest merit for the public, have proceeded from unmarried or childless men." I trust, therefore, that you will be satisfied on the present occasion, if, instead of imitating the brilliant commentary to which you listened last year, I confine myself simply to the task of somewhat abridging the different papers and topics which have come before us during the past session. We have been lately somewhat taken to task for the falling off of the numbers of pathological specimens and original papers from earlier days, when greater vigour prevailed; and have been told that some of our evenings have been dull, flat, and unprofitable. I fear that we must listen with contrition to the voice of admonition and reproach, and confess that more might have been achieved by a Society enrolling among its members so many men whose abilities and opportunities should have suffered no meeting to pass without some noteworthy specimen or interesting paper. I yet venture to hope that, on reviewing the labours of the past season, you will see that your meetings have not been entirely barren either of valuable papers or interesting debates on topics bearing on our profession.

Some of my predecessors have, I see, arranged their subjects under different headings, such as nervous, pulmonary, or visceral; but I do not see my way to any such division of the papers at present under review, for the reason, that they seem to have taken this year a very wide range, and not to have much connexion one with another, with the exception of the class of tumours, of which we have three specimens. I shall, therefore, take them very much in the order in which I find them in the minute-book.

Perforation of Heart. Mr. G. May opened the session by exhibiting a large heart, with a rent in the left ventricle, which produced nearly sudden death. The patient—a Mr. T., in the sixty-eighth year of his age—had been a strong, tall, and generally healthy person, until seven or eight years ago, when he had a severe attack of inflammation of the right lung, which persisted for several weeks, accompanied with a copious expectoration of muco-purulent matter. He eventually recovered, with a lung damaged, but not spoiled; that is, it was generally permeable to air, and continued to perform its function. The attack, however, left a tendency to occasional expectoration in small quantity, and with a little blood; but not to affect his health or activity. Two days before his sudden death, Mr. May was requested to see him, when he found him suffering from active vomiting. This history gives the suspicion of gastric irritation from undigested food taken after a long walk. The vomiting subsided in a few hours; and the next day he was on the sofa, much better, though languid. He transacted business, joined his family as usual, and passed a tranquil night, until 6 A.M., when he awoke, and complained of great distress and pain in the sternum and throat; he fell back on his pillow, and became unconscious; soon after which, he was seen by Mr. G. May, who found him pale, perspiring, unable to swallow, pulse imperceptible, sounds of heart obscured by the mucous *râles* which precede death—in short, dying.

A *post mortem* examination was made twelve hours after death. The body was found to be well nourished. The liver was congested. The pericardium was filled with clotted blood. The heart was large, weighing nineteen ounces, being at least seven ounces more than natural. The cavities were dilated; the walls thin; the muscular tissue pale. The heart was covered with fat, but did not show much fatty degeneration. In the left ventricle, on the posterior surface, near the septum, was a rent about three-eighths of an inch long, communicating by a sinuous passage with the exterior of the left ventricle. There was no sign of atheromatous degeneration in the arteries or valves. A small portion of the columnæ carneæ were changed into fat.

This examination shows that it was a case of perforation, not of rupture, of the heart; for the endocardial membrane was normal, and the wall of the heart of its natural thickness. The canal of communication between the ventricle and pericardium was oblique; the inner opening not visible, and obscured by a columna carnea; the outer opening small and of a rounded form, with irregular edges. The case was clearly one of interstitial abscess opening into the ventricle and pericardium; and it is not improbable that the escape of the pus into the ventricle, and thence into the circulation, was the cause of the vomiting; and that the pains in the thorax and throat, which were complained of during his last attack, and which were much aggravated before death, may be readily explained by the connexion of a branch of the recurrent nerve with the cardiac plexus. Dr. Hope has the merit of first describing this disease, and its consequence, perforation, as distinct from rupture. Dr. Quain, who has published a very able paper on Fatty Diseases of the Heart, describing with minuteness and accuracy its different

forms of disease, does not admit the views of Dr. Hope as to perforation; nor does Dr. Sieveking; but Rokitansky has noticed and explained this important pathological condition, and fully confirms Dr. Hope.

Ossification of the Aortic Valves. Another interesting specimen of disease of the heart was contributed by Mr. WALFORD; but the interest in this case lies in a different condition from the former, which was remarkable from the extreme rarity of its occurrence; so much so, that eminent authorities on that very class of disease had not met with it, and in consequence doubted its existence. Mr. Walford's case, on the other hand, belongs to a class of very common occurrence; but very rarely indeed is the disease met with in such a highly developed condition.

Mrs. J., aged 52, had been actually suffering, he told us, for three or four years; but had manifested undoubted symptoms of heart-disease for a much longer time. The symptoms latterly were, the greatest possible distress on the slightest exertion; she had great difficulty in lying, being generally obliged to sit, resting her elbows on a table. Vomiting was a frequent, and at last an uncontrollable evil. On listening at the apex of the heart, a peculiarly rough rasping sound was heard, likewise audible over the base; latterly, however, this ceased. She had no dropsy; and, considering the very small quantity of nourishment taken, she lost very little flesh. A *post mortem* examination showed a heart not remarkably enlarged; but, on opening its cavities, the valves of the aorta were found ossified in the greatest possible degree, so as to admit with difficulty a small sized quill. The mitral valve was also ossified, but to a lesser extent.

It seems remarkable that, with such an impediment to the circulation, no dropsy should have existed; but I believe this is less frequently found associated with aortic than with mitral occlusion.

Abscess of the Lung. The next case we have presents some resemblance to Mr. May's in the early history of the patients. Fortunately, in the one I am about to read, the abscess affected an organ more tolerant of injury than the heart, and more susceptible of relief by the administration of remedies. It is a case of abscess of the lung, reported by Dr. WELLS, producing visible enlargement, not only of the side affected, but of the corresponding mamma.

Miss S., aged 64, had been an invalid for the last twenty-five years. Her illness commenced with repeated attacks of inflammation of the lungs, for which she was frequently bled. The left was the side most affected; and in it an abscess formed after one of the attacks. Seven years afterwards, when Dr. Wells first attended her, she was still suffering from constant dyspnœa, cough, spitting of blood, and attacks of an asthmatic character, rigors during the day, nocturnal sweatings, and frequent feeling of faintness. There was also a good deal of hysteria in the case. No signs of tubercular deposition could be found. There was no increased dulness on percussion. The respiratory murmur was clear and natural; and the heart beat in its normal position. The resonance on percussion was, perhaps, a little in excess of the respiratory murmur. Lately, her general health had improved, and she had gained strength. The singularity of the case lay in the visible enlargement of the left side of the chest; not only did the ribs bulge, but there was a decided enlargement of the left mamma as compared with its fellow. About three years ago, when she was severely suffering from dyspnœa, and the ribs on the left side were much bulged out, Dr. Wells gave her a strong emetic, with the view of disgorging the lungs of anything capable of being dislodged. A large quantity of matter, consisting mainly of pus and mucus was vomited; and the relief obtained was very striking, and duly appreciated by the patient, who had accordingly, since then, continued the practice of taking an emetic, at first twice, latterly only once a week. There was generally a sensible diminution of the bulging of the ribs when the vomiting had been copious.

The explanation of this case seems to be, that the cavity of the abscess became lined with false membrane, the secretion from which filled it, so that it pressed on the surrounding lung, and produced dyspnœa; while the strong contraction of the walls of the chest produced by an emetic forced this out, and again gave room to the lung to play. It seems remarkable, that so large a cavity as this must have been, should have existed in the lung without approaching, at any point, its surface so nearly as to have betrayed itself to auscultation. We must conclude that its position was central, and that it was environed by a layer of healthy lung-tissue. The enlargement of the mamma is a striking example of the sympathy existing between the lung and the ingument over it; for, as the circulation in the two organs is entirely distinct, the increased flow of blood to the mamma, causing its enlargement, cannot have been due directly to the increased flow to the cyst to supply its secretions; but only to the sympathy between the two.

Uterine Polypus. To Mr. Harrinson, the Society is indebted for one of the most valuable papers of the session; valuable alike for the novelty and originality of the means resorted to, and the perspicuous way in which they are described; and as a model which his junior hearers may endeavour to follow in the papers which, it is to be hoped, will abound when we next meet. I should be sorry to mutilate so graphic a paper; so I give it at length as I find it.

"On Feb. 21, 1863, I was called to a lady in urgent distress from retention of urine. The catheter was used; and at this term I was not allowed further examination with the view of discovering the cause of the obstruction. The difficulty recurred April 27; and the following history was elicited. She was 35 years of age. When lifting a bedstead nine months before, she strained herself. At the time, she was unwell, and excessive pain and discharge followed. Since then her periods have been more profuse, and at rather shorter intervals; the two last were, however, more scanty. In the intervals, she has had a profuse, thin, watery discharge. Since the accident, walking has not been easy; and she has had a difficulty in relieving the bladder; twice requiring the aid of the catheter. This story shows that hæmorrhage was not a prominent sign; nor anæmia a notable feature. It was the retention of urine that led to the discovery of her condition. On examination, I found a polypus filling the vagina. The ostium vagina was narrow. The perinæum was thick, and so rigid that one finger could with difficulty be introduced. The portion of the polypus encircled by the os uteri was as large as my wrist, and was attached to nearly two-thirds of the cervix, close to the orifice. Through the remaining third, the finger could be readily passed into the uterus; but not so far as to reach the limit of the polypus, so as to be able to reckon the size of the intrauterine portion. Two days afterwards, Mr. May saw her. We found that the great bulk had passed up again into the uterus. The orifice of which was as widely dilated as before. Attempts to bring the polypus down were fruitless; and we were obliged to wait till it again descended. This occurred June 20th. Mr. May and Mr. G. May then saw her; and it was determined, in the first place, to dilate the external parts, as their rigidity rendered manipulation impossible. The two smallest sizes of Barnes's uterine dilators were first cautiously

introduced and dilated; the process occupying an hour. But a still larger was found requisite; so No. 3 was used under the influence of chloroform. The dilatation was thus carried to the size of a child's head. I introduced my hand into the vagina, and brought down a portion of the polypus outside the external parts. Its attachment to the cervix uteri was fairly brought into view; but still its precise extent could not be ascertained, as the polypus could not be sufficiently evolved. Three methods of dealing with it then presented themselves: 1, excision; 2, removal by *écraseur*; 3, ligature and disintegration. The last was the plan adopted. Two fingers were passed as high as possible, thrust into the polypus, and then brought downward, tearing it in their course. It was thus extensively lacerated, and some portions pulled away. There was a considerable flow of venous blood. The vagina was plugged with lint. Sunday morning. She had had a fair night; some oozing of blood. The plug was withdrawn. In the evening, she had a severe rigor, coupled with hysterical symptoms; and followed by heat, profuse perspirations, and rapid pulse. She was ordered some hot brandy and water, and a grain of opium, at bedtime. The next morning, she was comparatively comfortable; and got into the drawing-room at the end of the week. Profuse muco-purulent discharge followed, of highly offensive character; for which she used chlorinated solutions. July 4th. It was still found impossible to get a ligature round the whole of the remaining polypus. It was lacerated still further, and a large piece ligatured and cut off. No plug was used. Considerable oozing followed for several hours. She recovered from this operation without any unfavourable symptom. July 11th. The polypus was soft and lacerable. A piece as large as two fists was readily separated, No plug was used. Free oozing followed. July 18th. I pulled several small pieces away, mostly from within the os uteri. July 25th. For the fifth and last time, I pulled away all that could be seized within the os uteri. August 1st. Nothing was projecting from the os, which was reduced to its normal size. The site of the insertion of the polypus was marked by an elevation or thickening of the cervix, which, from this date to Nov. 1st—three months—has shewn no tendency to increase. Mr. May, after careful examination, advised that nothing further be attempted at present. The catamenia did not return for some weeks from the last operation; and since then, at irregular intervals and in smaller quantity. She has no mucous discharge. She is about as usual, and has regained her strength and good looks. The investing capsule of the polypus was white, thick, and very tough; so as to be with difficulty perforated by the finger. Among the soft structure were some hard nodules, two of which I show you. The greater part of the large mass removed at the third operation was soft at the time, and soon afterwards became diffluent, and could not be preserved. The operation performed must be called disintegration rather than enucleation. The intention was so to disturb the natural feeble vitality of the polypus, as to render its disintegration easy, and to cause it to shrivel and die. This end was satisfactorily answered by the means employed, as specially seen at the third operation. It must be confessed though, that it was rather a hazardous proceeding. The danger would be from hæmorrhage and pyæmia; and she had a narrow escape from both. The application may be a novel one; but the principle is well known and recognised. Taking a retrospect, it proved to be the correct one. Excision would have been hazardous. The *écraseur* and ligature were inapplicable, as, from the extent of its attachment, circumvention could not have been accomplished. For the performance of any operation, dilatation of the vagina was essential; and this was admirably effected by Barnes's dilators, under the influence of chloroform. The necessity for such an operation as this is, no doubt, exceptional. Could a ligature have been applied to that portion of the polypus outside the os uteri, possibly the death of that inside might have followed. Probably, there is little to choose between the dangers of deligation and those of disintegration. The present condition of the patient is hopeful. The os uteri is closed; though a thickened spot can be readily felt. Till this is absorbed—as I trust it may be by the tonic contraction of the uterus on it—it will give rise to some fear that the polypus possibly may be re-produced at some future time. About the re-growth of polypi, I can find no information; and my own experience affords no parallel."

[*To be continued.*]

Progress of Medical Science.

MEDICINE.

PARACENTESIS THORACIS. M. Marrotte, of the Pitié Hospital in Paris, has recently placed before the profession in France a summary of the present state of knowledge in that country, and of the opinions at present there held regarding the operation of paracentesis thoracis. The subject has been repeatedly, since 1836, brought before the medical societies of Paris; it has been discussed five times in the Academy of Medicine since 1849; and in 1854 was the subject of a report by M. Marrotte. In the present day, says M. Marrotte, paracentesis thoracis is universally recognised an operation; but there are two opinions as to the circumstances under which it should be performed. Some regard it as an operation of necessity, admissible in cases only where death is imminent; while others employ it with the view of preventing grave accidents, and even of facilitating the cure of the disease. The points on which M. Marrotte specially comments, are the following :—

1. The accidents attending paracentesis thoracis as an operation.

2. The information which we possess regarding sudden death during an attack of pleurisy, the frequency of its occurrence, its causes, and the means of preventing it.

3. The indications for performing paracentesis in—*a*. Acute and chronic serous effusion; *b*. Sero-sanguinolent effusion; *c*. Purulent effusion.

1. As regards the accidents attendant on paracentesis thoracis as an operation, its partisans have affirmed that it has never in their hands produced mischief; while its opponents have accused it of always having a causal relation to the deaths following it. On this, M. Marrotte admits that, while it is true that death has generally been the result of tubercle, cancer, lobular pneumonia, pericarditis, endocarditis, hæmorrhage into the pleura or bronchi, there are several instances on record, in which the operation cannot have been unconnected with the fatal result. Thus, in two cases, death occurred within twenty-four hours without evident cause; in two others, air entered the pleura; in one, the operation appeared to M. Marrotte to increase the inflammation and promote the transformation of the effused fluid into pus; and, in one related by Claude Bernard, and also in one seen by M. Marrotte, fatal peritonitis was apparently produced by puncture of the diaphragm. M. Woillez has stated that the lung has sometimes been perforated, but that the lesion has escaped notice on account of

the small size of the opening; but M. Marrotte regards this as not having occurred so frequently as is supposed. He admits, however, that, in a case observed by Aran, pneumothorax was really produced by puncture of the lung. There are also on record a case in which the pleura was detached; several where the escape of the fluid through the cannula was obstructed by false membranes; and others where the trocar was plunged into a mass of dense false membrane.

Other alleged consequences of paracentesis thoracis have been syncope, cough, and inordinate flow of blood towards the thoracic organs, producing streaks of blood in the sputa, hæmoptysis and pulmonary apoplexy, the rapid reproduction of the effused fluid, sanguineous effusion into the pleura, or the development of pneumonia or the exacerbation of the preexistent pleurisy. M. Marrotte regards these accidents as being, when of any importance, attributable to the disease rather than to the operation.

But, while paracentesis thoracis is a more harmless operation than is supposed by many, M. Marrotte regards its innocuity rather as an excuse for than as a justification of its performance. Accidents not met with in one series of cases may occur in another series. It is not every practitioner who possesses the tact necessary to prevent the operation from being improperly or unnecessarily performed. Whenever a remedy is applied, there should be reasons for doing it; and the habitual harmlessness of an operation is not one of them.

2. Sudden death has been affirmed by observers of high repute to occur more frequently in pleurisy than in other diseases. The nature of the functional disturbance produced by the effusion is favourable to this result; but, M. Marrotte asks, is sudden death as frequent as some believe it to be? M. Marrotte does not deny that death occurs suddenly in pleurisy; but he has so rarely observed it in his twenty years' hospital experience, he has found the same facts so often adduced in support of the statement made as to its frequency, it is so easy to be misled by simple coincidences, and facts multiply so rapidly when they are sought for, that he suggests a comparative study of the question, with reference to all diseases. Some years ago, seven patients died suddenly, in his practice and that of M. Gendrin, within a few months, during convalescence from typhoid fever; and he asks whether it must be thence inferred, that sudden death frequently occurs in typhoid fever?

In 1854, syncope was regarded as almost the only cause of sudden death in pleurisy. It was considered to be favoured by the impediment offered by the effusion to the respiration and circulation; fatal syncope being determined, in these conditions, by violent movements, too rapid breathing, or mental emotion. But, while syncope is a plausible explanation of death in some cases, where there is no other apparent cause than excessive effusion with or without displacement of the heart, the syncope is often better explained by the coincidence with the pleurisy of disease of the heart, especially of the pericardium.

In other cases, death has really resulted from the presence of coagula in the heart or pulmonary artery; either formed on the spot, or carried thither as emboli. The presence of these clots cannot be attributed to the amount of effusion; for they have been met with where there has been but little. In M. Marrotte's opinion, abundant effusion predisposes to the formation of clots only through the impediment offered to the circulation and respiration. Slow asphyxia, much more insidious than rapid asphyxia, produces in the blood a relatively increased proportion of fibrine, which recent observations have shown to be favourable to the formation of clots.

M. Marrotte, agreeing with M. Goupil, observes that sudden death in pleurisy occurs at so late a period of the disease, that the fear of this event does not warrant the premature performance of paracentesis; and that it is always preceded for a sufficient length of time by premonitory symptoms.

3. M. Marrotte now proceeds to consider the indications for the operation; and first, in cases of serous effusion. In cases of pleurisy attended with excessive effusion, paracentesis is absolutely necessary when asphyxia is imminent, whatever may be the concomitant symptoms. But, when the respiration and circulation are not markedly impeded, the immediate performance of the operation is not necessary, even though the viscera be notably displaced, and the heart even pushed beyond the middle line; by delaying it too long, however, there is danger lest mental emotion or physical effort may produce rapidly fatal syncope or pulmonary congestion.

If there be slow asphyxia, or acute asphyxia, as in cases where the ascent of the effused fluid is rapid; if dyspnœa be evident to the patient, or to the physician alone; if the circulation be impeded; if the pulse be unequal, irregular, intermittent; if syncope be present or be threatened—the operation should be performed, even when there is no displacement of the heart. This precept is strongly insisted on by M. Marrotte; with one limitation. Effusion may take place rapidly, and produce dyspnœa, without compromising life; the lung is surprised for the moment, but soon becomes accustomed to the new condition in which it is placed.

The presence of effusion is almost unanimously considered to be a condition necessary for operation; but some practitioners regard the mere presence of effusion itself as a sufficient indication for paracentesis; while, with others, it must have reached a certain degree and produce certain symptoms.

Acute Serous Effusion. It has been recommended by some practitioners to puncture the pleura at a period varying from the seventh to the eleventh day; while others advise that the operation should be delayed until the fifteenth or even the twentieth day. But, says M. Marrotte, those who thus lay down absolute rules as to time, forget that all cases of pleurisy do not run through their stages in the same period; that their rise and progress are subject to conditions which vary in each case; that the cause of the effusion is not removed by the operation; and that of itself it cannot, beyond its physical effect, fulfil the necessary indications of treatment. This is so true, that M. Béhier, one of the advocates of early operation, after recommending the ninth or eleventh day for its performance, recognises the impossibility of precisely fixing the proper moment. M. Marrotte seeks indications in the state of the disease itself rather than in general arbitrary rules. Except in cases where death is imminent, he holds that it is impossible, at a period varying from the seventh to the eleventh day, to affirm that a serous effusion, the result of latent pleurisy, will not yield to medicinal treatment.

The presence of active inflammation is a contraindication to the operation; if, however, the symptoms be very urgent, puncture of the chest may be resorted to in order to procure temporary relief, but it will not prevent the reproduction of the fluid.

It is generally admitted that paracentesis is neither necessary nor useful in recent cases, where the effusion is moderate in quantity; but some maintain that, where the effusion, although not so great as to produce danger, is yet considerable, the operation may shorten the duration of the medicinal treatment, and prevent the formation of solid adhesions. M. Marrotte, however, cannot regard paracentesis as

presenting great advantages over ordinary treatment in these cases. It may be, that dyspnœa and febrile symptoms have ceased, as if by enchantment, after paracentesis; and evacuation of effused serum has been proposed as an antiphlogistic remedy in inflammation of the tunica vaginalis and of the eye; but, this practice must be justified by more numerous and better studied facts before it can be generally adopted. M. Marrotte acknowledges, however, that he has met with cases where early paracentesis has appeared to shorten the duration of medicinal treatment, and to prevent contraction of the chest.

In the same category with very abundant effusion, as regards the effects produced on the respiration and circulation, may be classed those cases where, in addition to effusion, some impediment to respiration, such as bronchitis or œdema, exists in the opposite lung; and cases of double pleurisy, especially when complicated with pericarditis. In such cases, M. Marrotte agrees with M. Béhier in admitting the utility, and even the necessity, of paracentesis.

M. Béhier recommends the fluid to be evacuated when the patient seems too feeble to be able to bear the long process of absorption of an effusion occupying the whole, or nearly the whole, side of the chest. But, in cases of this kind, M. Marrotte says, the probabilities of non-reproduction of the fluid must be considered; for evacuation of serous cavities tend indirectly to induce exhaustion, and to produce the very result which is sought to be avoided.

M. Marrotte confirms a statement made by M. Béhier, that the presence of pulmonary tubercle is not an absolute contraindication to paracentesis. He has performed the operation in a patient with pulmonary tubercle and ascites, who was in danger of suffocation. The fluid was partly reproduced; but, under the influence of tonics, cod-liver oil, nutritious diet, and the external use of tincture of iodine, the effusion both into the pleura and the peritoneum disappeared. The patient, however, died a year afterwards of tubercular disease of the meninges. In two or three other cases, the pleurisy and the pulmonary tubercle went on to a fatal result. In one other case only, where pulmonary tubercle co-existed with considerable effusion, M. Marrotte obtained a successful result by paracentesis. As far as can be judged, the cases of this description where paracentesis is likely to succeed, are those in which the tubercles are stationary, or undergoing very slow development; and where the pleurisy, whether symptomatic or accidental, is of the latent form. On the other hand, where the phthisis and the pleurisy are acute, puncture is not only useless, but hastens the transformation of the effused fluid into pus.

Sero-Sanguinolent Effusion. The presence of blood in pleural effusion is generally connected with cancer or tubercle of the pleura; hence an unfavourable prognosis must generally be pronounced, not only as to the issue of the malady, but as to the immediate result of the operation. There are, however, cases on record in which, even though the fluid has had a reddish colour, recovery, even rapid, has followed paracentesis; but in these the idea of pleural cancer or tubercle cannot, of course, be entertained. Although these favourable cases are rare, it is important to be able to recognise them. Independently of other circumstances indicating the absence of constitutional disease, they are distinguished, M. Marrotte thinks, from sanguinolent effusions symptomatic of organic lesion, by the small proportion of blood in the fluid. Sanguineous effusions connected with cancer or tubercle are generally more coloured, the presence of blood is more distinctly marked, and the fluid which escapes towards the end of the operation more or less resembles pure blood.

Chronic Serous Effusion. The results of paracentesis appear to have been generally unfavourable in cases of chronic effusion; and hence some reject the operation, without denying that cures are possible. Cases in which recovery has followed have been cited by M. Woillez; but our judgment is at fault, when we inquire when chronicity commences, what cases of chronic effusion are likely to receive benefit from puncture, and how they may be recognised. Chronicity has generally been defined according to the duration of the disease, rather than according to its progress and symptoms. But, M. Marrotte observes, a distinction must be drawn between those cases where the disease is still active, and often ends in the development of tubercle or pus, and those where there is serous effusion, properly so called, the simple remains of the disease. Chronic pleurisy—that is, where the pleuritic process is still active—comes much more under the domain of medicinal treatment than of paracentesis.

Of effusions which are met with as the remains of pleurisy, some have followed more or less active inflammation, accompanied by the formation of plastic products which have become organised and have produced impediment to the expansion of the lung. In these cases, puncture will probably fail, if delayed for two, three, or six months; but, if the history of the case lead to the supposition that there has been acute dropsy of the pleura, or simple latent pleurisy —in both which the plastic products are small in quantity—there is a chance that the lung will expand on the evacuation of the fluid, although the effusion is of long duration.

Purulent Effusion. In regard to cases of this kind, M. Woillez has noticed two circumstances which have also occurred to M. Marrotte; viz., the readiness with which pleurisy passes on to suppuration in children where it becomes chronic; and the frequency with which puncture with the trocar is followed in them by pleuro-cutaneous fistula. When empyema is present, the formation of a subcutaneous fistula, so as to allow the exit of pus, and the ultimate evacuation and contraction of the cavity without allowing the entrance of air, is much preferable to repeated punctures; although these have been followed by successful results in the hands of Legroux and Roger. M. Marrotte's recommendation has reference to children; but whether it will succeed equally well in the adult must, he observes, be determined by future experience. (*Bulletin Général de Thérap.*, 30 Août 1864.)

Chlorate of Potash in Bronchitis. Dr. Laborde, in a paper on this subject, arrives at the following conclusions. Chlorate of potash incontestably exerts a modifying influence on an inflamed bronchial mucous membrane. Simple acute catarrhal bronchitis, and even capillary bronchitis, as well as chronic catarrhal bronchitis (during its exacerbations), are capable of being influenced by the chlorate. The effects produced by the use of the medicine are the following. The expectoration is rapidly modified, becoming at first more fluid and diluted, then diminishing in quantity, and finally disappearing altogether. The morbid sounds are almost immediately diminished; the cough is allayed; and the appetite is peculiarly excited. Dr. Laborde thinks that this action of chlorate of potash tends powerfully to re-establish the patient's strength. In this respect, chlorate of potash appears likely to be useful in all cases where it is necessary to awaken and stimulate the action of the stomach. The average dose for adults is 10 *grammes* (about 150 grains) in twenty-four hours. It should be given in a large quantity of fluid. (*Bull. Génér. de Thér.*, 30 Octobre, 1864.)

Reviews and Notices.

PRACTICAL OBSERVATIONS ON THE HYGIENE OF THE ARMY IN INDIA; including Remarks on the Ventilation and Conservancy of Indian Prisons, with a Chapter on Prison Management. Illustrated with Woodcuts. By STEWART CLARK, M.R.C.S.Eng., Inspector-General of Prisons, North-West Provinces, India. Pp. 162. London: 1864.

THE object of this book is to show how to preserve the health of our soldiers in India, and to diminish the amount of sickness and mortality prevalent among them. The author is a gentleman who holds an important public position in India, as an inspector-general of prisons. He has, moreover, been in medical charge of troops in the same country; and has had, therefore, ample opportunities of observing the conditions under which large bodies of men are there massed together. And, with all the knowledge gained in this way, he happily possesses an amount of mechanical skill, which enables him not merely to say what ought to be done, but also to show how to do it.

The first subject which Mr. CLARK discusses is Air and Ventilation.

Speaking of ventilation, he finds that the supply of air to the soldiers in barracks is, under the ordinary system, very defective, and that to those living in tents still worse. He lays great stress on foul air as a source of disease, and points out the evils arising from overcrowding. In regard to ventilation, he describes certain atmospheric conditions prevalent in India, which affect the mode of furnishing a proper supply of pure air. These conditions are, the general want of movement in the air; and the occurrence of certain daily periodical movements.

The want of movement in the air is described as a special obstacle to ventilation by ordinary means. It is, indeed, sometimes met with in temperate climates; but in India, according to Mr. Clark, it is the rule. This atmospheric inertia, the author says, he has often proved experimentally.

"I have" (says Mr. Clark) "on several occasions conducted experiments in barracks well provided with openings for the ingress and egress of air, with the view of testing the state of ventilation; and, with the lightest substances I could procure, the external atmosphere being calm and above 80°, have failed in discovering any movement in the air inside. Indeed, during this state of the atmosphere, even smoke ascends very slowly in the open air; and the breathing is oppressed, and performed with more or less difficulty." (Pp. 22-23.)

Often, indeed, the temperature of the internal air is lower than that of the external.

The other phenomenon to which we have alluded—the diurnal atmospheric variation—is thus described.

"During the dry hot months and intervals of dry weather in the rainy season of the upper provinces of India, which comprise at least seven months of the year, after a period of eight or nine hours of dead calm, commencing about six or seven o'clock P.M. and continuing to about three or four A.M., the atmosphere begins to show signs of motion, in light puffs from the W. and N.W.; and by five or half-past five A.M., these puffs have become a steady light breeze from the W.N.W. This gradually increases in force till after the sun has some time passed the meridian, and generally gains its maximum strength about two P.M., after which it gradually decreases till six or seven o'clock P.M. A dead calm then again succeeds; and one feels that, in addition to coolies to pull the punkah, a greater luxury still would be two or three to do the work of breathing. During this calm period, natural ventilation will not proceed, let the means be what they may; and it is during this period that foul-air poisoning proceeds too silently and surely..... Between two and three o'clock A.M., a sudden change takes place in the atmosphere, more or less perceptible to the outward senses; and, although it is not always indicated by the thermometer, the sensation is one of a decided fall in temperature of the air. Persons who have passed a restless night on account of excessive heat, will generally fall asleep under this agreeable change; and, as the air begins to move about the same time, individuals so situated, if sleeping outside or with open doors, are very soon under the full influence of a draught." (Pp. 9, 10.)

This fall in temperature, Mr. Clark observes, is coincident with the minimum of atmospheric pressure and electric tension, and apparently also of vital power. He has remarked that it is at this time that the depression, and not unfrequently fatal collapse, takes place in fevers—not only, he says, in India, but also in Europe; and he suggests, in a foot-note, the necessity of watching sick children during this period. He further finds, from his experience, that it is about the time in question that the incubation of cholera and other epidemics occurs.

"I have almost invariably found, that persons suffering from cholera state, if carefully questioned, that they felt restless some time during the night, and had a copious evacuation; after which they felt better, and slept quietly till about six o'clock, when they were suddenly seized with uneasiness, and an earnest desire to go again to stool. On more closely questioning, I have found that the first disturbance occurred about, or a little before, three o'clock. I have often seen the second disturbance, or what is more generally called the first symptoms of cholera, postponed till seven or eight o'clock, and even later, when the disease was not of a very virulent type." (P. 11.)

In the second chapter of his book, Mr. Clark describes how, these conditions existing, the ventilation of barracks and of tents may be most efficiently and safely carried out. He points out the necessity of employing the "plenum" or propulsion method, and describes apparatus which he has contrived for this purpose. His descriptions are copiously illustrated with diagrams, and are, in outline, as follows.

For barracks, extending a considerable distance in line, as they generally do in India, a system of underground masonry main-flues must be constructed, with barrack-flues proceeding from them at proper intervals, and running under the floor of the barracks. From each barrack-flue proceeds a series of diffusion-pipes, which are carried up in the masonry of the walls or in wooden cases, and end in openings covered with perforated zinc plates, convex outwards. Similar pipes, opening in the same manner, are also to be carried from the barrack-flue into cases placed in the floor. The result of this arrangement is, that the air issuing from the diffusion-cases in the middle of the apartment on all sides, on meeting the currents from the openings in the walls, causes nu-

merous movements in the air, and thoroughly ventilates every corner of the barrack. The air should be drawn down through chimneys of thirty or forty feet in height, at a distance of three hundred or more feet from the barracks; and is to be propelled into the main flue at its distal extremity by fans worked by a steam-engine, bullocks, or other power, according to the size of the barracks and the number of inmates.

Means are also described for cooling the air, or warming it, according to the requirements of the case. The foul air of the barracks should be driven out through openings in the roof.

For the ventilation of tents, an apparatus formed on the same principle is described; the tubes, however, being made of canvas. In other cases, also, where ventilation is required as a temporary arrangement, canvas tubes may be used; and Mr. Clark says that some years ago he ventilated part of a house in this way.

The plan of ventilation recommended for barracks is available also for other buildings, such as prisons; and in one of these—the Agra Central Prison—it has been in operation for some time, and, Mr. Clark tells us, "is found to answer admirably."

In the third chapter, the subject of which is Water, Mr. Clark describes the existing defects in the supply of pure water in India. The whole water supply is from the surface; and organic impurities enter from without in an alarming degree, mainly, it would appear, in consequence of the habits of the natives.

"When a native bathes, he does not carry the water to a distance from the well for the purpose; but he sits on the edge of it, and pours the water over his body, allowing it to run back into the well; and he not only washes his body in this way, but also any little clothes he may have about him, which must be saturated with perspiration and other filth. .... Tanks are, if possible, worse; for, if the bathers do not go into them bodily, every drop of water, as it runs off them and is wrung from their wet clothes, returns into the tank. ....

"With regard to rivers, no description can convey an idea of their filthy state, particularly in the lower parts of the country. In addition to all other kinds of filth, the dead are thrown into the rivers, instead of being burnt or interred; and thousands are disposed of in this way annually. I have myself seen upwards of fifty dead human bodies, besides numbers of carcases of lower animals, floating in the River Hooghly, within sight at one time; and these corpses float up and down with the tide until the flesh falls off the bones, and they sink to the bottom, or lie exposed, at low water, on the muddy banks." (Pp. 62-63.)

Speaking of the effects of impure water on health, Mr. Clark does not think that it is nearly so injurious as impure air, or, especially, as overcrowding. Cholera and other epidemics he has observed to be markedly favoured by the congregation together of large bodies of men, especially under circumstances where ventilation is defective; but, while he holds a proper provision of pure water to be of the highest importance, he does not attribute to foul water a direct share in the production of disease. We do not see that he touches on the question whether the germs of cholera, or any other disease, may be conveyed in water, even apparently pure; but he says that the water of the Hooghly (dirty as it has been seen to be) is supplied to ships in an imperfectly filtered condition or not filtered at all; and that there "is no positive proof that it is injurious to health to the extent some authorities would wish us to believe." At the same time, he fully admits that

"Bad water, like other articles of diet of an inferior or bad quality, if continued for any length of time, must lower the tone of the general health, and in this way aid considerably in the propagation of diseases such as bowel-complaints, and, it may be, under certain conditions, cholera and dysentery; and, therefore, as already stated, every possible care should be taken to insure that the water supplied for drinking and culinary purposes is of the best quality." (P. 86.)

To obtain a supply of pure water, the following conditions are insisted on by Mr. Clark.

"In the first place, the supply should be plentiful, and drawn from near the bottom of deep wells; and in the second, all the water used for drinking and culinary purposes, whether in cantonments or on the march, should be properly filtered."

He describes the means of effecting these objects, by means of properly applied pumps and filters; and recommends that water-pipes should be laid in the barracks, and that drinking-fountains should also be provided for the use of the men. He believes—and probably correctly—that a proper supply of pure water would go far to remove the inducement to indulge in ardent spirits.

The fourth chapter is on Food. Mr. Clark agrees with Sir Ranald Martin in considering quantity of very great importance. Observing that "the most abstemious are the most healthy men in India", he recommends a reduction in the quantity of meat allowed to the soldiers. One meal of meat a day he holds to be quite sufficient in a tropical climate; and the supply of fruits and other vegetable food should be increased, so as not to reduce the total amount of ration, but to regulate its constituents according to the season and other circumstances.

After some judicious remarks on the cultivation of vegetables, and on parasitic diseases in meat, the author gives a graphic description of ordinary cooking arrangements in India, which certainly appear to be most defective and dirty.

"The preparation of the food is usually conducted on a dirty mat spread on the floor of the cook-house, the luxury of a clean dresser or table for the purpose being rare. .... The cook-rooms, instead of being well lighted, and properly defended from flies, external dust and dirt, are dirty, smoky places, open to every filth that may be blown their way; generally without proper furniture and tables for dressing the food on; and with no better arrangement for the supply of water than what is afforded by the 'Bhestie's mussak' and a few open earthen jars, seldom or never cleaned out, and generally used until they fall to pieces, which fortunately is very often."

Having thus described the state of barrack cook-rooms, Mr. Clark points out what their proper construction should be. Even ordinary kitchens, although apparently clean when visited, are not unfrequently the "dirtiest places on the whole premises, and a fruitful source of disease in many instances."

In the fifth chapter, Conservancy is treated of; that is to say, the disposal of night-soil. Mr. Clark is altogether in favour of the use of antiseptics—especially carbolic acid; and he describes various forms of latrines and urinals, in which excreta may

become mixed with the disinfectant, and ultimately rendered available for application as manure. He refers to the evidence of Dr. Angus Smith, regarding the effects of carbolic acid; and speaks highly, from personal observation, of the efficacy of the disinfecting powder and liquid of Mr. McDougall. The chapter is concluded with some remarks on the conservancy of prisons and on ablution.

In the sixth chapter, Drainage is briefly noticed.

In the seventh chapter, entitled Supervision, Mr. Clark insists strongly on the importance of employing proper means for carrying out a system of sanitation. He would have supervisors appointed, who should thoroughly understand sanitary science, and have proper means at their disposal for carrying out such measures as they may deem necessary. He very correctly points out, that the employment of the European soldiers in the performance of much of the work described in previous pages would be highly beneficial to them.

"Wherever there are European soldiers, it would not only be an advantage to the state, but a positive boon to the men themselves, independently of the remuneration which they might receive to give them healthful employment." (P. 124.)

In the eighth chapter, the author gives his opinion on the Construction of Barracks. He insists on the necessity of a sufficient superficial area—at least seventy-two square feet—being allotted to each inmate; without this "no amount of air piled above a person's head will render his position either comfortable or healthy." The location of troops or other large bodies of men in small parties in separate apartments, he strongly approves.

The ninth chapter, headed Financial Results, contains an elaborate estimate of the cost of the various apparatus and machinery described in previous pages, and of the saving to the state to be gained by their adoption.

In the tenth chapter, are described Various Apparatus; viz., a Thermantidote, or portable ventilating apparatus; a Portable Blower, made from a common cask to which a fan is fitted; a Portable Filter, consisting of a common bucket or other convenient vessel properly fitted with sand, charcoal, etc.; an Ambulance designed by the author; and an apparatus for testing the purity of air by means of permanganate of potash.

The eleventh chapter is on Prisons and Prison Discipline. In it Mr. Clark points how, in ordinary cases, the prisoner is placed at a great disadvantage in regard to ventilation, as compared with the soldier. The author considers that the prison-workshops should be in separate inclosures, and the system of discipline so arranged as to admit of the daily removal of the prisoners to some little distance from their sleeping quarters during the hours allotted to labour. He gives a ground plan of a prison arranged on the radiating principle, which would, he believes, "allow the introduction of an improved system of prison-discipline, which would further improve the sanitary condition of the prisoners." The work is concluded with some remarks on prison-discipline, in which the author expresses his approbation of the Irish system.

We would commend this book to the study of all who have to deal with the sanitary arrangements of large bodies of men, in India especially. The author has plainly shown what is required; and has carefully described the means by which, in his opinion, the necessary improvements may be effected. We trust that his suggestions will meet with due consideration, and be productive of benefit to our soldiers in India.

On Diphtheria and Diphtheritic Diseases. By J. W. Walker, M.B.Lond. Pp. 88. London: 1864.

The chief contents of this little volume have already been under the notice of the readers of this Journal. Dr. Walker has re-arranged the materials of his work; and now presents it to the profession in the present form.

Dr. Walker treats the question of diphtheria like a practical man; he writes clearly; and his matter is well arranged. Whoever peruses his pages will, we are satisfied, agree with us, that he has produced, in a condensed form, a capital summary of the main facts relating to diphtheria. He has especially pointed out the real value which is to be attached, from a practical point of view, to the local—the throat—lesion.

British Medical Journal.

SATURDAY, NOVEMBER 19th, 1864.

A SPECIAL HOSPITAL.

A so-called hospital has lately sprung up in this metropolis, and illustrates, in a remarkable manner, many of the evils—we mean injuries to the profession—which we have so often pointed out as necessarily connected with institutions of this kind. We refer to a house in Berners Street, which is designated "St. Peter's* Hospital for the Cure of Stone in the Bladder and Urinary Diseases." Now, it may be properly asked, Why is this institution formed? Is it that there are no hospitals in London in which stone can be properly treated? Is it that there are no institutions in London where urinary diseases can be properly attended to? We suppose the answer from its promoters would be, that there certainly are medical institutions where such diseases can be treated; but that in general hospitals and dispensaries they can not be so well attended to as in a hospital specially devoted to their cure. And it may be observed, that this particular institution is not got up (as ordinary medical charities are) to supply any particular district with medical advice. It is raised, in a sort of national way, as a hospital to supplement the general failures and defects of our large established institutions, in the treatment of stone and urinary diseases. At least, if this be not the pretence of its origin, why was it promoted?

Now, it must not be understood that, in singling

* Was this particular saint selected as a joke, on account of the derivation of his name?

out this special institution, we are condemning it in any especial manner. We suppose the very same remarks made in reference to it will fit equally well many other special medical institutions. Indeed, if this last of the specialties had stuck solely to the text of lithotomy and lithotrity, probably something might have been said in favour of it, such as has been said in favour of other certain special institutions. But it has not done so; and, therefore, we take the liberty of inquiring into the uses and purport of institutions of this kind. And we shall show, from the illustration, what we believe to be the evils which the public as well as the profession suffer through the raising up of such places; removing the veil from the face of the mock philanthropy which pretends to preside over their birth and nurture.

The pretence, as we understand it, is, that these charities are formed to relieve the woes and sufferings of humanity—to answer the cries of humanity; but the real truth seems, to indifferent observers, to be that they tend much rather to promote the interests of those who get them up, than of the sick sufferers who resort to them. We are justified in saying this, and the conscience of the profession is with us in saying it—the whole profession, indeed, has already exclaimed against such a particular special hospital as this, as being one not needed and superfluous; so far, at least, as the interests of the suffering are concerned.

The moral we would here draw from the tale is this: To show the injury which is done to the profession generally, and to the public at large, by such injudicious giving away of medical services and disposal of charitable funds.

This hospital is for "stone and urinary diseases". "Stone" cure by cutting or crushing was, we believe, its original pretence; and, on the ground of its being a "stone" cure, the interests of the establishment are still mainly worked. But cutting for stone and crushing stones are necessarily very limited occupations; and, therefore, it is, we suppose, that "urinary diseases" are included in the benefits of the place.

Urinary diseases! well, all the medical world knows what they mean in the eyes of an enlightened public. All the medical world knows that, with that programme, a full house will be secured—a first-rate audience never wanting. And when we add to this, that other happy hit, "no recommendations required", we may be very sure that the so-called Stone Hospital will not fall through for want of applicants for its benefits. A special hospital for stone and urinary diseases, no questions asked, and all applicants admitted on the mere strength of application—these assuredly are inducements which bid fair, *à priori*, to fulfil the most sanguine expectations of the managers of the scheme. It is impossible not to confess that the idea, in one sense—a personal one, is a very happy one. A hospital for the cure of stone is the proposed basis of the undertaking. The treatment of urinary diseases (which comprise diseases, in the opinion of the public, incidental, at some period or other of life, to every living being) is the engagement entered into by the promoters of the hospital.

Let us see how such a scheme will work. The public have an unquestionable faith in specific diseases-curing hospitals. To this hospital, we have no doubt, that "urinary diseases" sufferers will resort from all parts of London, and probably, in due time, from many parts of England, Scotland, and Ireland—of course, under the distinct idea, that nowhere else can they obtain so good a cure for their "urinary disease"—whatever that may mean. Who profits in this business? Who is injured in it? Are its promises—or what we know the public consider to be its promises—true; or are they delusive?

The answer to the first question is simple enough. History and common sense tell us, that the medical promoters of such like schemes, as a rule, profit greatly by them; that thereby they attain fame and large practice. This much is certain. But is it equally certain that the objects of such supposed charities obtain the benefits promised them? Regarding the question from a narrow point of view, we may say, that no doubt individuals may receive benefit, as far as the treatment of their diseases is concerned; but, looking at it from a broad view, we may also say, that *soi-disant* charities of the kind supposed do infinite mischief to the public as well as to the profession. In the first place, they induce the really necessitous, at great pains and often cost, to travel long distances to obtain that very relief for their "urinary diseases", which they might have obtained equally well, and probably much better, at the hospitals standing close to their own dwellings. The programmes of such charities delude the public into the idea that they possess some great and specific panacea for such ailments, which other practitioners of the medical art and other medical charities do not possess. Then, again, by throwing open their doors to all comers—"no applicants refused"—they encourage unfit and improper objects to apply for relief, to the great injury of the profession at large, and to the demoralisation of the individuals so applying. The injury thereby done to the profession at large is wholesale. Patients ready, able, and willing to pay for advice, naturally and reasonably seize upon the offer of having their cure effected gratis; and what is the consequence? The general practitioner is thereby robbed of his patients. The patients who are his legitimate clients are gratuitously treated by these special medical philanthropists—by the great conjurers at these institutions—wizards of the healing art—who, in the meantime, get a world-wide fame of one sort or other; but still a fame which brings them much, and of that gain so much desired by men of our modern civilisation. And this gain,

s we have said, is obtained at the cost of the general practitioner; a fact which is a matter of very secondary importance to them, or to which their eyes re not directed.

And what are we to say as to the promises held out to Plebs suffering from "urinary diseases"? Are they delusive, or a solid fact? Are there, or are there not, hospitals and dispensaries in any quarter and demi-semi-quarter of London, where Plebs may get as effective a cure for his diseases, as he can at any one special "urinary diseases" institution?

Is Plebs, who has been led to believe, above all, in this one particular institute, labouring under a delusion; or will he, indeed, get some masterly stratagem in cure which he could nowhere else obtain? Plebs thinks so, of course; but the profession at large will, we apprehend, rule that he will get nothing of the kind, and, consequently, that he is, in fact, either labouring under self-delusion, or that he has been deluded.

We need hardly say, that special institutions of this kind always bear on their frontispiece the shade of suspicion; for the reason that they have been raised into being, not from any urgent cries of suffering humanity, nor from any public call of benevolence. They are the manufacture of medical men; and without any great stretch of the personal offence of imputation, we think we may safely affirm that, as a rule, there is very little of any real force of charity or benevolence operating in the minds of their promoters.

It would be well if the benevolent who are induced to patronise schemes of this kind, could be brought to ponder over these things, or could be made acquainted with them. We apprehend that if they did, they would quickly satisfy themselves that their alms could be infinitely better bestowed—would go much further, *i.e*, would do greatly more good to the sick—if they were given towards the support of the medical charities already in existence. The establishment of a small house for the cure of stone and urinary diseases under the very shadow of the Middlesex Hospital, is it not, in a charitable sense, playing the farce of charity?

THE PUZZLING CASE.

The Medical School Committee of St. George's Hospital have investigated the history of the case of George King, so far as the hospital was concerned with it; and have come to the conclusion, "that every proper care was taken in the treatment."

"It appears that George King was admitted into St. George's Hospital on Sept. 30th, about 5 P.M., in a state of unconsciousness. He was immediately examined by the house-surgeon, and no trace of any external injury could be discovered. Mr. Freeman, judging the symptoms to be those of intoxication, sent for the assistant-apothecary. Mr. Jones also examined the man for external injury, and found none; but from the odour of the breath and the matter vomited, which smelt strongly of spirits, had no doubt that King was under the influence of liquor. George King remained in the hospital for two hours and a quarter. About an hour from his admission, and after vomiting, George King began to recover consciousness; and, at the expiration of the two hours and a quarter, was so far recovered that permission was given to the policeman to remove the man from the hospital, provided that his residence could be ascertained. Contrary to the expressed condition of this permission, George King was removed to the station by a policeman, without the knowledge of either Mr. Jones or Mr. Freeman. The man walked out of the hospital; and it has been given in evidence before the coroner, that he walked to the police-station in King Street, Westminster."

Our readers will regret to hear that Dr. Chambers has resigned his office of Physician to St. Mary's Hospital. Yielding to the advice of his medical attendants, he has resolved to retire entirely, for some months, from the active duties of his profession. We trust that we may, ere long, be enabled to announce that he has again returned to London practice, and to the School at St. Mary's, where he has long laboured so honestly and so zealously. Dr. Chambers is, we are glad to add, in as good health as could be expected, after having undergone so serious an operation. Indeed, that he is so, may be gathered from the fact, that he now performs his duties of Examiner at Oxford. It is his intention, we believe, to pass some months in Italy. Dr. Chambers retains his Lectureship at St. Mary's Hospital Medical School; and has been recommended by the Weekly Board to be appointed Consulting Physician to the hospital.

The lawyers of the defendant in the case of Gedney *v.* Smith explain as follows the absence of "Dr. Goss" from the witness-box.

"'Dr. Goss', although subpœnaed, did not think fit to appear in court; and, as we had reason to know that he could not have given evidence without exposing himself to the risk of some such charge as 'conspiring to defraud', it was no marvel that he kept away. If the confinement in Park Street had been a real and honest affair, the plaintiff's advocates could, and doubtless would, have called 'Dr. Goss' to prove the simple fact of the delivery; but that they evidently dare not do, but commenced their medical proof by calling Dr. Farre, who only came on the scene four days after the alleged confinement; and, being told by the husband that the event had happened so long before, and finding the lady going on well, his attention was probably not directed to any such minute examination of the case, as, under other circumstances, would have resulted in the discovery that 'a comedy was being played under his eyes.' The landlady proved that on the very day of Dr. Farre's first visit, Mrs. Gedney got up; for she saw her on the sofa."

In reference to the obtaining of the supposititious child from the York Road Lying-in Hospital, they state:

"The young woman's mother came to the hospital, and agreed to the child being taken away as stated.

There seemed no reason for the hospital authorities to interdict or interfere in it; and, in justice to them, we have pleasure in testifying that they have afforded us the fullest opportunities of examining the hospital records, and obtaining information tending to throw light on the affair in question, and for which we beg thus publicly to thank them. We ascertained at that and other hospitals that the occurrence of a child being taken away from them for adoption is very rare; but, doubtless, our great metropolis affords facility enough for procuring a child when one happens to be required."

Doubtless, an occurrence of this kind must be very rare in a London hospital. We should hope it was an unique one. We doubt not for a moment, that the hospital authorities, in the present instance, thought they were doing an act of kindness to the child; but, as the event has shown, they have been unconsciously made a party assisting in the perpetration of a fraud of a very serious character. There is nothing to prevent mothers, in their own dwellings, getting rid of their offspring in the way here shown; but we are sure that the moral sense of the profession is with us when we say, that no proceeding of the kind ought to be permitted in any of our medical or other charities, except under some kind of distinct legal sanction. The authorities ought to know who it is that takes the child away, where it is going to, and the reasons for its being taken; and, more than this, it should take means to prove the identity of the child. As we have already said, nothing more is needed to show the necessity of such precautions being taken, than the history of the case of Gedney *v.* Smith.

At the annual meeting of the Society for the Relief of Widows and Orphans of Medical Men, held on Oct. 26th, Mr. Martin Ware was elected President, in the room of the late Mr. T. A. Stone. Mr. Ware is the oldest living member of the Society; and is the son of one of its most strenuous and indefatigable supporters, Mr. James Ware, its second President. He has been for many years the senior Vice-President of the Society. We would remind our associates within the county of Middlesex and the limits of the London postal district, that, as stated in an advertisement which appears in this day's Journal, a quarterly court of directors will be held on Dec. 7th, at which candidates for admission into this useful society can be proposed. Applications for forms of proposal, which should be sent in a few days before the meeting, may be made to the Secretary, Dr. Merriman, at the office of the Society, 53, Berners Street.

M. Desmarres, the younger, is led by the discussion on iridectomy at the Society of Surgery to make a few clinical remarks on the subject.

"Ten years of experience of glaucoma and iridectomy have led him infallibly to the following conclusions:—1. There are two kinds of glaucoma, acute and chronic. 2. Their symptomatology varies much. The symptoms which characterise *acute glaucoma* and which invariably exist at one period or other the disease, are these: hardness of the eye; subconjunctival venous congestion; insensibility of the cornea; removal of its epithelium; diminution of the anterior chamber; dilatation and immobility of pupil discoloration of iris; pulsation of the central artery iridescent circles; periorbital neuralgia; obscuration of vision. In *chronic glaucoma*, on the contrary, one a few of the preceding symptoms are observed, and generally in a not well marked form. The progress of *acute glaucoma* is very rapid; in seven or ten days sight may be entirely lost. *Chronic glaucoma*, on the other hand, may take months and even years for its development; is often unattended with pain, or any other symptoms than progressive disturbance of vision. Excavation of the optic nerve exists from the first and sight is gradually lost. 4. Iridectomy gives marvellous results in *acute glaucoma*; but is in most cases useless in *chronic glaucoma*. M. Desmarres then inquires into the pathological conditions of these affections. According to him, there is an anterior and a posterior glaucoma, just as there is an anterior and a posterior circulation, of the eye. The anterior affection is acute, the posterior chronic glaucoma; but both sorts, by extension of the affection which they represent, may gradually pass one into the other. Acute glaucoma attacks the anterior, the most sensitive parts of the eye; chronic glaucoma attacks the vascular system of the posterior hemisphere of the eye, pressing and cupping the optic nerve. Iridectomy can only act upon the choroid vessels which are in direct communication with the vessels of the iris. Daily experience shows that the operation succeeds in acute glaucoma, especially during the first fifteen days—*i. e.*, when the disease is localised in the anterior hemisphere; but that, when the glaucoma has passed this limit, and has become chronic, iridectomy is of very little use. Perhaps, in this latter stage, it would be more rational to perform Mr. Hancock's operation—iridectomy, as M. Richet calls it—carrying the incision, or the sclerotic paracentesis, as far backwards as possible, for the better depletion of the choroid vessels."

M. Velpeau, a few days ago, made the following remarks about puncture of the bladder.

"Puncture of the bladder is a rare operation, which surgeons, even in large practice, do not practise more than once or twice in their lives. Puncture by the rectum is bad, because, in performing, a fold of peritoneum is traversed. The hypogastric puncture is, also, always to be dreaded; there are many tissues punctured; and, as the bladder is emptied, the cannula is liable to fall or slip out of it, and so allow the escape of urine into the peritoneum. Even with an elastic catheter, there is no security. M. Roux was much blamed for practising forcible catheterism; but in much too general a way. Retention of urine is due either to stricture of the urethra, or to prostatic disease. Forced catheterism is bad in the former case; but not in the second. If the prostate be torn, no great inconvenience results. The prostate is formed of a tissue which does not readily admit of infiltration. Mr. Ségalas remarked that, of three surgeons who reported on the case, two of them had only performed puncture of the bladder once, and the reporter himself never. M. Velpeau did not wish it to be understood that puncture was never necessary. Success in catheterism depends much on the skill of the operator. The urethra has been compared to an undistended wet linen tube. One surgeon, ten surgeons, may have failed; then comes the eleventh, who succeeds."

M. Diday told the Lyons Medical Congress some-
ng worth noting; viz., how to cure mentagra at a
gle sitting.

First of all, remove the crusts with linseed poul-
e; then cut off the hairs as close as may be; next
merse the part for half an hour in lukewarm water;
stly, apply to the parts diseased, during four hours,
solution containing a thousandth part of bichloride
mercury; then add drop by drop to this solution a
uch stronger one—1 part in 30—and keep on adding
ntil redness and pain are occasioned, after which
ld no more. It is essential that during the first
our the patient feels no pain. It is a pity M. Diday
es not publish his proofs—we mean cases, as de-
onstrative of his statement of rapid cure of what
generally regarded as a somewhat rebellious dis-
se.

HE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

HE last annual report of the Manchester and Salford anitary Association contains some papers likely to rove interesting to the medical profession. The rst to which we desire to direct attention, is one by r. Angus Smith, on the Adulteration of Food. It is ased on the analyses of Messrs. Crace Calvert, 'Niell, Roscoe, Schunck, and Angus Smith, tabu-ated and arranged by Mr. O'Niell. These distin-guished chemists devoted much valuable time to the nalysing of those articles of food on which the poorer ortion of the population more especially depend for heir subsistence. The specimens were purchased by n officer of the Association, in retail shops situated n the less wealthy districts of the town, and chiefly requented by the labouring classes. The result of seventy-five analyses goes to prove that though dan-gerous adulteration is happily practised but rarely, the fraudulent admixture of foreign substances, harm-less indeed in themselves, is of decidedly frequent occurrence. Another valuable paper entitled Fluctu-ations in the Death-rate of Towns, the joint pro-duction of Messrs. Arthur Ransome and William Royston, was published by the Association in the course of the year.

The following are the conclusions at which they arrive:—

1. That the migration of persons from healthy dis-tricts into large towns, alters materially the propor-tions of the inhabitants at the several periods of life, and causes an important variation in the death-rate.

2. That this variation, not being due to causes connected with disease, prevents any determination of the health of towns by a mere comparison of their respective death-rates.

3. That to obtain a typical representation of the mortality occurring amongst the fixed population of large towns, the deaths at those ages most affected by the fluctuation of the population must be sepa-rated from those which take place at an earlier period of life.

4. That the proportion which the number of births bears to the number of deaths, happening in any community, is no test of the healthiness of that place.

5. That the average age at death, in any town, is not a fair test of its salubrity.

6. That preventable deaths are not alone caused by defective sanitary conditions, but frequently, also, by want of knowledge and want of care on the part of the inhabitants.

7. That no conclusion, therefore, can be drawn re-specting the sanitary condition of a town from a mere inspection of its rate of mortality.

8. That the instruction of the public, and especially of the poor in matters relating to health, is as im-portant as the prosecution of sanitary reform by legis-lative and mechanical means.

In one of Dr. Morgan's quarterly reports on the health of Manchester, we find the following remarks on the epidemic of scarlet-fever, which in the year 1863 proved so prevalent in various parts of the king-dom. The statistics of the last quarter (the Decem-ber quarter) tend still further to confirm a remark made in our last report, that the advance of scarlet-fever is in all cases steady and progressive, not sudden or rapid. It does not burst out in different quarters of the town at one and the same time, but appears to travel from district to district, and steadily gathers strength. Thus, the first week in which in the course of the present epidemic it appeared to any unusual extent, was that terminating September 13th, 1862; in that return were recorded 11 new cases, 6 of them in a single district; in the first quarter of the follow-ing year the number amounted to 157. The disease at that time was principally confined to the township of Manchester; in Salford and Hulme the seizures were only 14 and 6. In the next quarter 281 patients applied for relief; in the third 602; and, in the fourth and last, 867. It is important, moreover, to bear in mind that these figures refer only to those persons who presented themselves at our public charitable in-stitutions, and probably did not constitute more than about one-seventh of the cases which actually occurred. On turning to particular districts the same law of gra-dual diffusion becomes still more strikingly apparent. We observe, in fact, at first but a few scattered cases which, as months and quarters roll on, become more and more widely disseminated.

There is another question connected with scarlet-fever on which the statistics of the Sanitary Asso-ciation help to throw some light,—it bears on the opinion held by many zealous though probably too enthusiastic sanitary reformers, which would, if estab-lished, go to prove that both scarlet fever, and indeed all the other zymotic diseases, are primarily and essentially generated by the exhalations emitted from decomposing animal and vegetable matter. Now, though it may be and probably is true that defective drainage tends, in some degree, to intensify many of these disorders, we have no grounds for believing that it ever proved the sole exciting cause of any single attack, either of scarlet-fever or small-pox. Indeed there are many districts in Manchester second to none either as regards the attention bestowed on the drainage or the purity of the water supply; and yet, even in such apparently favoured localities, the dis-order has taken on a highly malignant form, and the proportion of deaths to seizures proved unusually high.

A further interesting fact connected with scarlet-fever is the character of greater malignancy it appears to assume in certain localities than in others, to all appearance at least, similarly situated, and it is here that we find the condition of the Manchester Poor-Law districts generally favourable.

Another point of interest in the present visitation of scarlet-fever concerns the progressively increasing intensity, the proportion of deaths to seizures having steadily risen. Thus, in the second quarter of last year, only 1 case in every 9·3 proved fatal; in the third, 1 in 8·3; and, in the fourth, 1 in 6·3. This in-crease is very considerable, amounting in fact to nearly three deaths instead of two to every twenty seizures.

Association Intelligence.

MEDICAL PROVIDENT FUND.

THE following contributions have been made to the Guarantee Fund.

	£.	s.	d.
Amount already announced	370	18	0
James Paget, Esq., F.R.S. (London)	10	10	0
William Bowman, Esq., F.R.S. (London)	10	10	0
Richard Quain, Esq., F.R.S. (London)	10	10	0
Dr. C. J. B. Williams, F.R.S. (London)	21	0	0
Sir James Clark, Bart., M.D.	10	10	0
Dr. C. Holman (Reigate)	5	5	0
Joseph Ward, Esq. (Epsom)	5	0	0
Joseph Blackstone, Esq. (London)	10	10	0

Further contributions will be announced.

Gentlemen desirous of contributing to the Guarantee Fund, will oblige by forwarding their names and the amount of their donations, either to the Chairman (Dr. Richardson, 12, Hinde Street, Manchester Square, W.); or to the Secretary (Dr. Henry, 15, George Street, Portman Square, W.)

B. W. RICHARDSON, M.D.
ALEXANDER HENRY, M.D.

London, 16th November, 1864.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
SHROPSHIRE ETHICAL. [Annual.]	Lion Hotel, Shrewsbury.	Mon., Nov. 28, 2.30 P.M.
BATH AND BRISTOL. [Ordinary.]	York House, Bath.	Thursday, Dec. 1, 7.15 P.M.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MONTHLY MEETING.

A MEETING of this Branch was held on November 10th, 1864; JAMES RUSSELL, M.D., President-elect, in the Chair. Sixteen members were present.

Resignation of the Secretary. A letter from Mr. Oliver Pemberton, announcing his resignation of the office of Secretary, having been read, a very cordial vote of thanks to him, for the able manner in which he had discharged the duties of that office for nearly ten years, was unanimously passed.

Dr. W. F. Wade was elected Secretary.

The Medical Provident Fund. It was unanimously resolved, that it was undesirable that the benefits of the Provident Fund should by limited by age.

Communications. 1. A paper was read on the Surgical Bearings of the Cellular Pathology. By Furneaux Jordan, Esq.

2. Mr. Solomon exhibited diagrams illustrative of the operation devised by him for the relief of extreme External Strabismus, and explained the steps of his operation.

AFRICAN NEWS. At Brass, on October 5th, the *Investigator* was daily expected from the Niger, with Dr. Baikie, the African traveller, who has been exploring this river for the last seven years. At Accra, on October 12th, small-pox was raging when the mail left. Great dissatisfaction was felt by the inhabitants at the conduct of the Cape Coast Government in neglecting to appoint a colonial surgeon, notwithstanding that this officer's salary is specially provided for out of the Customs' dues. A meeting had been held at Addo's Hotel, and a subscription got up for Staff Assistant-Surgeon Gun, who had consented to carry out the wishes of the commandant for compulsory vaccination. The amount subscribed exceeded £60.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, OCTOBER 20TH, 1864.

WM. ADAMS, Esq., President, in the Chair.

Cases of Abnormal Pulse. Dr. DRYSDALE m tioned two cases of habitually abnormal pulse, la observed by him at the Farringdon Dispensary. first case was that of a man aged 50, who had merly been in hot climates, and was now a l porter. His pulse beat habitually thirty-six time a minute. No abnormal sounds were heard eithe the heart or great vessels. The man complaine debility and cold. The second case he had seen t day. A woman, a book-folder by trade, had for m than a year been patient at the dispensary. pulse during that time had always been nearly in a minute. She was extremely nervous and mel choly. No abnormal sound was heard at the he There was no cough. She complained much of he ache occasionally. He had examined the pulse v frequently at the dispensary, and never found lower than 140. In reply to a question by Dr. Gra Hewitt, Dr. Drysdale said the patient was marri without children; and that she had leucorrhœa. T man had been a great smoker.

Mr. TIMES mentioned that a patient of his had h the pulse reduced to 20 beats in a minute, by f minims of colchicum wine given three times a day.

The PRESIDENT said that a hospital surgeon London had habitually a pulse under 30. He h had fever in the Crimea. He complained of cold, b could not take stimulants.

Mr. SEDGWICK had had a patient whose pu during an attack of sciatica had gone down to 4 normally, being 78. Napoleon I had a pulse of 45.

Mr. J. Z. LAURENCE observed, that such abnorm pulsations were doubtless examples of idiosyncrasi just as pulsations in the retinal veins are met with some.

Mr. CURGENVEN observed, that sometimes gre frequency of pulse occurred when there was pre sure on the pneumogastric nerve. Quick pulse w frequently found in females; *e. g.*, two sisters, p tients of his, had constantly a pulse of 120 and 11 It was of consequence, on first seeing a patient, be aware of such facts.

Dr. GRAILY HEWITT had a young lady patien whose pulse was constantly 120.

THE RESTORATION OF MOTION IN CASES OF PARTIA ANCHYLOSIS, OR STIFF JOINTS, BY FORCIBLE EXTENSION UNDER CHLOROFORM. BY WM. ADAMS, ESQ.

The author commenced by adverting to the his tory of the operation before and since the introduc tion of chloroform, and alluded especially to Langer beck, the late Bonnet of Lyons, P. Frank, Skey Paget, Erichsen, etc., who, amongst English hospita surgeons, had more recently adopted the operation.

Mr. ADAMS's first cases were treated, in conjunctio with the late Mr. Lonsdale, at the Orthopædic Hos pital, in 1854 and 1855, and were described in th author's work *On Subcutaneous Surgery*, published i 1857. Since that time he had adopted the practic in a large number of cases; and one point to whic he had especially directed attention had been t determine the particular class of cases to which th treatment is applicable, and those in which it i either attended with danger, or would probably fai

ts object of restoring motion. These points were, efore, chiefly discussed in the present paper.

he author then made some observations on the stitutional conditions upon which diseases of joints depended, or with which they were gene- y associated; and, with reference to the treat- nt by forcible extension, he arranged all cases of hylosis or stiff joint in three classes—viz., 1, the umous; 2, the rheumatic; and 3, the traumatic.

With regard to the first class—the strumous—the ult of the author's experience had been to prove t they are decidedly the most unfavourable for treatment by forcible extension; and he had de- mined never to repeat the operation in any case onging to this class, unless it should be of a very ceptional character, and present unusually favour- le conditions. Where the cartilages are destroyed, they generally are, to a greater or less extent, in strumous diseases, a stiff joint is the best pos- le result. Forcible extension may produce serious lammation; and, even if some motion be gained the operation, it will be subsequently lost, and ffening return. Several cases, in illustration of ese points, were given by the author; and a few vourable and exceptional cases were also men- ned.

With respect to the second class—the rheumatic— e results of the author's experience had been just favourable as they had been unfavourable in the rumous class. In a large proportion of cases of iff joint, or anchylosis, occurring in young adults ter rheumatic fever, or as the result of gonorrhœal eumatism, free and useful motion may be restored y forcible rupture of the adhesions and thickened gamentous tissue. The author believed that the ticular cartilage always remained healthy in these eumatic cases; and that the great pathological eculiarity of the rheumatic form of inflammation, in hatever organ or tissue it occurs, is a remarkable disposition to suppuration or the ulcerative pro- ess. The author had never seen suppuration occur s the result of rheumatic inflammation; and when does occur, as a rare event, the case is probably ne of a mixed character, and not purely rheumatic. he tendency of rheumatic inflammation is to the dhesive form of inflammation; so that it produces dhesions and thickening of the ligamentous tissues f the joint; but neither suppuration nor ulceration ccurs.

In the third class of cases—viz., the traumatic— he results of forcible extension are also generally ery favourable, although more uncertain, and, on he whole, not quite equal to the results obtained in he rheumatic class.

Several cases illustrating the successful results of orcible extension, permanently restoring useful mo- ion in the rheumatic and traumatic classes, were hen detailed by the author.

Dr. Dick observed, that Sartorius was the first surgeon to break down joints. In 1836, a surgeon in Paris employed this process; then Bonnet brought it into vogue. In former times, the cases were not so well chosen as they now are. Elbow-joints do not bear the operation so well as knee-joints. He (Dr. Dick) had broken down some elbow-joints, which had proved very successful; these were cases of rheumatic joints, some occurring after gonorrhœal rheumatism. Pus, he believed, was found in the joint in some cases.

Dr. Allen had seen a case where there was pus found in the left shoulder-joint; but he believed it was a secondary or pyæmic deposit.

Mr. Laurence said it was probably pyæmia, as pus was not found in cases of rheumatic inflamma- tion.

The President believed that suppuration in a joint had never been found in rheumatic cases. He had heard this point discussed, and asked Mr. Laurence whether he ever observed pus in cases of rheumatic sclerotitis.

Mr. Laurence replied in the negative.

Dr. Camps observed, that pathological laws were rarely without exception. Many cases, for example, which were called rheumatism, were really neuralgia; and Dr. Brown-Séquard had frequently pointed out this error in diagnosis.

Mr. Sedgwick mentioned a case of rheumatic anchylosis occurring in the little finger of a gentle- man aged 50. Was this a case for forcible extension?

The President remarked, that the smaller joints are affected in old persons with chronic rheumatic arthritis; the larger joints in young people. In the case spoken of, he should use a tenotomy-knife, and then place the finger on a straight splint.

EPIDEMIOLOGICAL SOCIETY.

Monday, November 7th, 1864.

Gavin Milroy, M.D., President, in the Chair.

President's Address. By G. Milroy, M.D.

The President commented on some of the leading objects of the Society, and more particularly on the topography and geography of epidemic and certain endemic diseases. While the chief object of the other medical societies of the metropolis is the investiga- tion of the physiological, pathological, and thera- peutic relations of diseases, that of the Epidemio- logical is specially the study of their ætiological or causal relations, and the influence of locality, climate and season, diet and occupation, etc., on their rise, dissemination, and continuance. Diseases are looked at not so much in detail as in the aggregate; not in individual cases, but in groups and successions of cases; and not in one place only, but over wide and varied areas of observaton, so as to embrace all coun- tries and peoples.

The medical topography of our own country has hitherto received very little attention, although a subject obviously of great importance and interest. To take one example, that of the prevalence of ague in different parts of England: in the seventeenth century, intermittent and remittent fevers often raged in the metropolis like a plague. Both James I and Cromwell, not to mention many other men of note, died of the fever. It continued endemic in London until the latter half of last century; the Southwark side of the river always suffered much more than the north side. During the present cen- tury, there has been a striking decrease both in frequency and in severity of the disease throughout England generally, as the drainage of the land has progressed. The localities still chiefly infested are the Isle of Sheppey, parts of Essex, Cambridgeshire, Norfolk, and Lincoln; every year as agricultural im- provements advance, the prevalence of ague dimin- ishes. Scotland, according to Dr. Christison, is now all but exempt; although, up to the beginning of the present century, the malady was anything but un- common in the Southern Counties. In Ireland, too, there is very little ague in the present day.

One of the most remarkable features of the medical topography of Ireland, is the wide-spread prevalence of ophthalmic disease from an early period down to recent years, as appears from the invaluable reports of Sir W. Wilde, on the Status of Disease in 1851 and 1861.

A highly interesting fact connected with the topo- graphy of Scotland is the comparative immunity,

according to Dr. Christison, of the resident labouring population of Mull, Lewis, and other of the Western Isles, from pulmonary consumption. The influence of different climates on the development of phthisis is a subject of the deepest interest, and has not yet been investigated on a sufficiently comprehensive plan. Much might be done to establish and to carry out inquiries illustrative of the medical topography of this country, by such associations as that of the Metropolitan Officers of Health in respect of London and its environs, and by the British Medical Association with its numerous and scattered machinery of action, in respect of England generally. Systematic and continuous observation and record in this field of research would not fail to be productive of much good.

In our colonies, too, a topographical examination of the sites of the principal towns and military stations is urgently needed. Bermuda, recently so disastrously visited by yellow fever, has been the seat of four successive invasions of the pestilence during the last twenty years; and, from what is already known, there seems to be no doubt that local conditions have much to do with its recurrent malignancy.

Hongkong is another instance of the necessity for such inquiries. The terrible unhealthiness of this colony for several years after its occupation is well known. Of recent years, the health condition of the civil population appears, from the late reports of the Governor to the Colonial Office, to have been decidedly improving; but the same cannot be said in respect of our troops. How, and whence, is this difference? Full and accurate examinations on the spot can alone throw light upon the subject.

But of all fields for medical topography, none can vie in point of extent, variety, and importance, with our possessions in India; and when the large number of medical officers scattered over this wide region is remembered, what an amount of more valuable information might be easily obtained!

The geography of disease is but an expansion of topographical medicine. Certain endemic and epidemic diseases exhibit a remarkable diversity in their geographical range, or distributlon over different parts of the globe. The great work of Dr. Hirsch of Dantzic, *Handbuch der Historico-Geographischen Pathologie*, dedicated to the Epidemiological Society, contains a vast amount of most interesting details on this head. Few medical men are aware of the extent to which such a disease as goitre exists over the globe, and that the Valleys of the Himalayas and of the Andes, are as much infested with it as the Alps in Savoy and Switzerland. Neither are they aware that the true leprosy is in the present day so widely spread in very many countries both of the old and new hemispheres as it really is.

Another object aimed at, is the determining the geographical prevalence of an epidemic disease in any given season or year over wide regions, either of one continent or of different continents. Accurate information on this subject, and set forth on diagrams, or on outline charts, would cast much light on the natural history of such a disease, and would, moreover, serve to correct many prevailing notions as to the mode of its diffusion, and the proper means for its prophylaxis or prevention.

Lastly, there is the highly interesting object to ascertain and note the course or career of a moving migratory epidemic, as, for example, influenza and the cholera, step by step, and stage by stage, across different countries and continents, until, as on some occasions, the round world has been girdled by successive advances generally from east to west.

For the prosecution of such inquiries as those now indicated, the active co-operation of medical men not only at home, but in all our colonies and professi abroad, as well as in foreign countries, is, of cou necessary. The medical officers of the army navy enjoy singularly favourable opportunities the study of epidemic diseases in the most varied gions and climates. Our professional brethren the colonies and in India could also afford the m valuable assistance. It is only by widely exten and combined action devoted to one common obj that the many important problems in epidemiol and the science of public hygiene can ever be sa factorily determined.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, OCTOBER 21ST, 1864.

GEORGE D. POLLOCK, Esq., President, in the Chai

ON THE RELATIVE ADVANTAGES OF PUNCTURING T BLADDER BY THE RECTUM, AND PERINÆAL SECTIC FOR THE TREATMENT OF IMPERVIOUS STRICTUI BY G. D. POLLOCK, ESQ.

WITHOUT going into the history of the various op ations for impervious stricture, Mr. POLLOCK said would confine himself to a comparison of the t mentioned in the title of the paper. Neither oug to be had recourse to, except in those cases in whi the catheter cannot be passed; in which the patie cannot evacuate the bladder; in which the urine escap in driblets, or incontinently and continuously; a in which the patient has recurring attacks of rete tion, relieved by constant recourse to opium or t hot bath; and in which disease of the urina passages and kidneys are threatening or develope When the ordinary means of treatment fail—an they should always be first thoroughly tried—the are, for the impervious stricture, three alternative The first he alluded to only to condemn it—the fo cible passage of the catheter into the bladder. It always confusing, and uncertain in effect; and n catheter should be used for this purpose. Many di asters may also, as *post mortem* examinations reveal, a tend this operation. The other alternatives ar perinæal section, and puncturing of the bladder.

The first of these requires much care and corre anatomical knowledge; and, as the membranous po tion of the canal is, usually, in retention, dilated b hind the stricture, it is preferable to cut into it, an pass a catheter into the bladder, and then to unit the posterior pervious with the anterior healthy po tion by cutting through the stricture. Among th difficulties of this operation, the urethra may b missed in cutting down to it; this has been know to happen to the most experienced hands.

In this operation, there is always some, and ofte considerable, hæmorrhage; at times, it is even ex cessive. Another possible evil is, that the woun may never heal, but become fistulous, although a fre proper passage through the urethra may be restored The author differed from Mr. Cock about the import ance of tracing out of the stricture; even in th dead-house, it is at times very difficult to do so; an there is no objection to a part of the urethra being formed out of new tissue.

For one set of cases only did the author consider perinæal section preferable to puncturing the bladder; namely, for inveterate and unyielding strictures in young men, the result of laceration of the urethra from injury, when extravasation of urine takes place, and often a large portion of the urethra is destroyed by slough. There seems no alternative in such cases. There is, moreover, generally, a healthy state of the urinary organs; and the constitution of the patient

not generally impaired. In these cases, the stricre is the result of destroyed tissue from laceration; d no cases are more difficult to relieve by the use catheters without division of the stricture. In ese cases, the retention is not from spasm; but the sult of the slow unyielding contracted cicatrix.

But for the greater number of cases of impervious ricture, the author believes puncture of the bladder be the preferable operation; and, as being the ost simple and effectual, the author recommends ncture by the rectum. In his own hands, the eration had been most satisfactory; both in stricre threatening to induce kidney-disease, and in reention.

The catheter should be fastened in with great care, nd kept in for some time, the patient remaining on is back; nor is it injurious, if kept in for some eeks. And for some weeks, also, it is as well to eep the urethra quiet; and, at the end of that time, he surgeon will rarely fail to pass a catheter through into the bladder. It is then wise to keep it there or a week or ten days; and after that, occasionally, ccording to the tendency to return.

When we compare the difficulties and dangers of he one operation, with the simplicity and safety of he other (puncture by the rectum), it would not be bad rule for practitioners to adopt the latter in very case of retention dependent on stricture, rather han that an inexperienced operator should have reourse to perinæal section. When it is considered hat the one operation is always difficult, sometimes unsuccessful; always attended by bleeding, often by excessive hæmorrhage; always requires the aid of assistants, and must be performed in a good light; is followed by much discharge, and often by abscess or pyæmia; and that the stricture, when thoroughly relieved, has usually a tendency to recur;—when, on the other hand, puncture of the bladder through the rectum is simple, expeditious, relieves thoroughly, occasions no loss of blood, no local mischief, and, equally with perinæal section, relieves the stricture; and that it is adapted to all cases except laceration of the urethra, and its consequent strictures;—we may fairly conclude that, as a general principle for the relief of impervious stricture, or for retention of urine in such cases, puncture of the bladder is the rule and perinæal section the exception.

After the discussion, some coloured photographs of skin-diseases were exhibited by Dr. Balmanno Squire.

An Editor imprisoned for Alleged Calumny. Dr. Wittelshöfer, the editor of the Vienna *Medical Gazette*, has been sentenced to imprisonment for four weeks for having made certain charges against the "Sisters of the Good Shepherd", who have the care of the public gaols and houses of correction. In the opinion of the public, the various witnesses called fully proved that the charges which had been made were well founded; but it would appear that the judges were not of the same opinion. When the Court passed sentence on Dr. Wittelshöfer, it declared that the nuns who had been calumniated were "the organs of Government". The State pays the "Sisters of the Good Shepherd" so much a head for the board of the persons who are under their charge; and it is notorious that the food provided by them is both scanty and bad. The holy women maintain that they save nothing; but it is a positive fact that they acquire real property in Austria, and make large remittances to foreign cities. During Wittelshöfer's trial, a most respectable banker declared on oath that the Superior of the establishment at Neudorf recently had bought of him a bill for 12,000f., which was made payable in Paris.

Correspondence.

TREATMENT OF PARTURIENT WOMEN.

Letter from Henry Candlish, M.D.

Sir,—The kind and quantity of aliment to be allowed to a woman recently delivered has been, from the earliest times to the present, a subject upon which considerable diversity of opinion has existed in the profession.

We do not now, however, regard pregnancy and parturition, *per se*, as diseases, but as vital, natural, and physiological processes; and it is known to be the experience of most mothers, that the happiest and healthiest period of their lives was when they were having and nursing their families.

But although, *per se*, they are natural processes, yet they are very frequently the cause of morbid action in other parts of the system. Moreover, during pregnancy, the system is rendered more plethoric. There is an increase in the fibrine of the blood; the pulse is somewhat quicker; and there is a greater tendency to fever and inflammatory action than at other times. Influences upon distant organs, in the shape of irritation and functional disorder, are excited by reason of the close sympathy and the comunity and reciprocity of feeling which exist between the uterus and other parts—no doubt, through the medium of the sympathetic nervous system. The nervous system also suffers, as evidenced by the change of taste and temper; and there is a peculiar excitable state of the mind. In all cases, there is a deviation, greater or less, from the ordinary condition of health.

In order to decide upon the most suitable diet for childbed, we must note the constitution of the patient; the changes which have occurred during gestation; whether there is any tendency to any particular disease; what has been the nature of the labour; what have been its effects upon the system; and whether the type of disease then prevalent be sthenic or asthenic. Were we to be arbitrary and conclusive, as to the food and drink, before we became acquainted with such determining circumstances, then would we cease in all verity and reality (whatever opinion might be entertained in regard to us) from being scientific and rational practitioners; and licensed empiricism would be a more fertile source of evil than good.

It were as easy to say in a breath what was the proper treatment for fever, so widely different in its forms, symptoms, virulence, and tendencies, as to say what was the exclusive plan to adopt, even as to diet, in the parturient state.

Not only in both will cases frequently arise demanding generous diet, stimulants, cordials, and support, which must be administered with the utmost regularity and exactness; but in both, cases of the very opposite nature will occur in which antiphlogistic treatment, low diet, and even depletion, are indispensably necessary. I have already stated that, amongst the earliest signs and evidences of pregnancy, is the influence exerted upon remote organs. Marked evidence of this is afforded in the want of appetite and morning sickness of the early months of utero-gestation. The stomach is unusually irritable and atonic. This morbid state, depending upon sympathy, commonly ceases before pregnancy has more than half advanced. At this time, however, the effect may be prolonged, or one similar may be produced by the operation of a very different cause;

viz., by the gravid uterus emerging from the pelvis, and gradually enlarging.

But a third event happens, equally deserving of a passing remark; and that is, what is termed the subsidence of the abdomen. With this change in position, there occur griping, tenesmus, frequent micturition, anasarcous swelling of the labia and limbs from tardy venous circulation, etc.

The third stage is usually accomplished without much difficulty; and the relieved mother is all comfort and gratitude, but requires rest and quiet. After delivery, however, all danger may not be at an end; and the utmost care is necessary, lest shock and exhaustion be increased.

It would be very difficult to convince me that the tendency to milk-fever is "in the inverse ratio to the nourishment administered." It might, perhaps, be an easier matter to make me believe that it was in the direct ratio. To my thinking, however, it would be more correct still to allege that the possibility of the occurrence of puerperal ailments generally was all the greater the nearer the approach made to the extremes of depletion or repletion.

The proper treatment will, of course, altogether depend upon the type the fever assumes, and will vary as the one or other character predominates. I will now, in a brief summary, finish my remarks.

1. In cases of natural labour, and the subject a healthy woman, give mild unstimulating nutriment for a few days till the lacteal secretion has become established; after which she is to be allowed to return to her accustomed diet.

2. When the woman has been rendered very weak by tedious labour, hæmorrhage (whether unavoidable or accidental), or other causes, it is necessary to give nourishment, cordials, and stimulants, from the very first, carefully watching their effects, lest our anxiety and kindness thwart our purpose.

3. Where there is high arterial action, with a highly marked febrile state, in a robust, plethoric woman, low diet and antiphlogistic treatment must be adopted; but these must not be carried to an undue extent.

4. Where, in addition to the above, there is local congestion or inflammation, topical depletion must be had recourse to, in addition to constitutional treatment.

5. When there arises local complication in a delicate or phthisical subject, the system must be supported, and the treatment appropriate to the part affected be followed at the same time.

Let extremes ever be avoided. I am, etc.,

HENRY CANDLISH, M.D.

Alnwick, October 26th, 1864.

LETTER FROM EDWARD CROSSMAN, ESQ.

SIR,—At the risk of laying myself open to the reproach of presumption, I venture to address to you some passing thoughts on the correspondence which has lately appeared in the JOURNAL, on the Diet of Lying-in Women.

There seems in the practice of the present day an unfortunate tendency to rush from one extreme to the other; and, in correcting one error, to fall into the arms of its antagonist.

In the present instance, until the publication of the letter of Mr. MacCarthy in the JOURNAL of to-day, there appeared to be only two principles of treatment advocated for the dieting of lying-in women—"the ordinary diet of health", or "gruel and tea".

Now, in order that either of these extreme principles shall be universally applicable, it is necessary that the condition of all women at the termination of abour be similar. But do we find this practically the case? Do we find all our patients, at the te nation of utero-gestation, in a similar conditio regards their vital energy? And do we find that process of parturition is in all cases accompanie an equal degree of exhaustion? Do we not, on contrary, meet with every gradation, from almos bust health to the most extreme prostration? do we not find that pregnancy and parturition e an equally variable influence on the condition of digestive system? Is it rational, then, to lay d a fixed rule to be applied to all cases?

Unquestionably, they are right who affirm the p ciple that parturition is to be regarded as a nat physiological process; and that Nature is therei be interfered with as little as possible. But it mains still to be determined, in each individual c to what extent the altered dynamical condition the abdominal viscera, consequent upon the abst tion of so large a portion of the abdominal conte has modified the organic powers; and how far Nat demands a suitable modification of the diet and re men. And hence the true secret of success rests the use of *common sense* and *discretion*—common se to read Nature aright; and discretion in makin right use of what the dictates of Nature prescribe.

That the system of "gruel and tea", indiscri nately applied, is a most pernicious one, I have doubt; but I am also convinced that we shall comm an equally grave error on the other side, if we bi ourselves down to the "ordinary diet of health" all cases. Our object should be to harmonise c treatment with the dictates of Nature; and, wh recruiting the vital powers, to avoid overtaking t digestive system.

I fully agree with several of your correspondent in thinking that the subject required the ventilati which it is likely to receive through this discussion the JOURNAL; for the majority of us, having be grounded in the belief that a low diet is absolute essential for many days after delivery, have not h the hardihood to doubt or reason upon the subjec and have consequently continued in the beaten trac To such, I believe, the present discussion will pro most valuable, as making the first breach in an est blished custom, which has hitherto passed almost u challenged.

In conclusion, I trust I shall be pardoned for su gesting that science will be best advanced by a di cussion of the question upon its own merits, unen cumbered by the weight of personality; and that th truth will be equally welcome, whether it hav originally dawned from London or from Edinburgh.

I am, etc., EDWARD CROSSMAN.

Hambrook, near Bristol, November 12th, 1864.

LETTER FROM WILLIAM M. WHITMARSH, M.D.

SIR,—Having given great attention to midwifery and been engaged for some years in getting a practi cal insight into all its most important bearings, I ar tempted, after reading so many letters on the subjec in the BRITISH MEDICAL JOURNAL, to trouble yo with a few of the conclusions at which I have arrived thinking they may be of interest to some of you readers; and as brevity is the soul of wit, I have en deavoured to condense what I have to say into th smallest compass compatible with clearness of mean ing.

1. Nature has provided women with a parturien power in the same ratio as she has given a process o defæcation and micturition, all being regular in thei action, except under very special circumstances.

2. Women rarely require help in the hour of child birth, beyond dividing the umbilical cord after the

it is born, malpresentation and retained placenta oted.

If flooding, hour-glass contraction, contraction ie uterus round the neck of the placenta (often ght to be hour-glass contraction), and rupture e uterus is to be avoided, ergot of rye should not iven.

If it be necessary to give ergot of rye, the best aration is found to be ergot tea, made by putting a drachm of the powdered ergot into two ounces of ng water, letting it infuse ten minutes, and then ng a little sugar to make it palatable; this to be n to the patient every ten or twenty minutes ac- ing to its effects.

Ergot of rye should not be given, as it now is, a very large scale (especially in poor class prac- s), in order to save time, but only where Na- has failed to do her part; that is to say, when our-pains cease in the middle of a case, or go com- ely away towards the latter end, from the system ig worn out through its ineffectual attempts to rid of its charge; or in cases where it is found essary to induce premature delivery, etc. In such s as these, ergot is our sheet anchor, for it rouses uterus magically, and, unless the pelvis be too ll for the child's head to pass (which should be le out before ergot is administered), the uterus in e cases out of ten gets rid of its burden; such cases n, as these, not forgetting flooding after expulsion the fœtus, are nearly all that require the use of much abused drug. If Nature really required he would be at fault indeed.

. Ergot, if given in too large doses, generally kills child, besides producing many of the irregularities ve mentioned. Much has been said respecting sickness which arises after a dose of this medi- e has been given, and to which it has been said, efficacy is due. The opinion I have formed on this ticular feature is, that it is mainly due to the ra strain put on the uterus, the stomach acting h it through sympathy, as it does in the early nths of pregnancy; and I have frequently noticed t, when the pains are very great before the os is roughly dilated, sickness is sure to follow, but, as n as the os allows the child's head to pass, the kness abates or entirely ceases. This will appear re feasible when we look at first cases, as most wo- n with their first child are sick. How is this to be plained? Only in the same way as we explain the ion of ergot. The uterus is called upon to fulfil function for the first time, and the parts yield very wly; at last the patient becomes weary of her st, and makes many futile efforts to get rid of the ild; this causes the head to press heavily on the , and sickness sets in; but let the head thoroughly ar itself, and we have no more sickness. That kness has a powerful influence on the uterus, I ve proved; for in a large number of cases I have nd that, prior to this taking place, the os was only lated to the size of a crown, but after sickness the atation had more than doubled itself.

7. We should become disciples of nature, for nature lps those who help themselves, and to interfere th nature when she is doing her best, in order to ve time, or because we have a large number of ses to see, is tempting providence, besides placing r own credit and the life of our patient in jeopardy.

8. As some general disturbance of the system takes ace after childbirth, the patient should be treated cording to her symptoms and stamina, no two pa- nts going through this process alike. It would be unwise to put a fat plethoric woman on a stimulat- g diet immediately after her confinement, as it uld be to order a poor half starved anæmic woman ter gruel and toast and water. I think no general rule can be laid down; but still, taking midwifery cases generally up to the fourth day, a non-stimulating diet is best, as it keeps down milk-fever, milk-abscess, and a train of other diseases.

9. Instead of the dose of castor-oil generally given on the morning of the third day, an aperient saline mixture should be substituted, which, acting on the fibrine of the blood, prevents too great an efflux of milk in the breasts, besides gently clearing out the intestinal canal; moreover, it agrees better with the patient.

10. From inquiry made into the practice of skilled midwives, it is found they are more successful than medical men, having a much smaller percentage of bad cases, which can only be accounted for by their being nature's accoucheurs, as they never use ergot, and have more patience than we have, thus proving that a successful accoucheur must be a non-meddlesome one, but ready when nature fails to do her part, of assisting her in the most scientific manner known.

I am, etc., WILLIAM MICHAEL WHITMARSH,
Fellow of the Obstetrical Society, London; Late Resident Surgeon at the Westminster Lying-in Institution.
Thanet Place, Hounslow, W., November 8th, 1864.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 15th.

Ayres, Philip B. C., Bedford
Bloxam, John A., Russell Square
Bryan, Edward, L.S.A., Frisby-on-the-Wreake, Leicestershire
Bush, Richard H., York Terrace, Regent's Park
Cameron, Archibald H. F., Edinburgh
Clapp, Albert John, M.D.Queen's Univ., Ireland, Cork
Cooke, Alfred S., Gloucester
Davies, Thomas, Abergele, North Wales
Edis, Frederick P., M.B.Lond., Huntingdon
Elliot, John, Stratford, Essex
Green, Thos. W., M.D.Glasg. & L.S.A., Rawtenstall, Lancashire
Groves, Joseph, L.S.A., Newport, Isle of Wight
Hudson, Daniel, Rocester, Staffordshire
Jackson, George, Plymouth
Laidman, William F. M., Exeter
Pearse, George E. L., L.S.A., Regent Street, Westminster
Price, John Lowe, Wrexham
Ryder, Dudley H., L.S.A., Greenwich
Saunders, Charles E., Clapham
Smith, James W., Whitby
Waymouth, Albert, H.M. Dock Yard, Deptford
Wolferstan, Sedley, L.R.C.P., Plymouth
Wright, David, Edinburgh

The following members of the College, having been *elected* Fellows at previous meetings of the Council, were admitted as such on November 10th.

Kimbell, Jonathan H., Knowle, Warwickshire; diploma of membership dated November 11, 1842
Pooley, Charles, Weston-super-Mare; May 2, 1842
Russell, William C., Doncaster; April 22, 1833
Waring, Edwin J., H.M. Indian Army; March 18, 1842

APOTHECARIES' HALL. On November 10th, the following Licentiates were admitted:—

Powell, Frederick, Westminster Hospital
Powell, Llewellyn, St. Bartholomew's Hospital
Scott, Robert John, St. Thomas's Hospital

As an Assistant:—

Joss, Adam Dawson, 57, Cannon Street Road

APPOINTMENTS.

*WILLIAMS, Charles, Esq., elected Honorary Surgeon to the Norwich Dispensary.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

DAVEY, H., Esq., to be Hon. Assistant-Surgeon 1st Cornwall R.V.
FRAIN, J., Esq., to be Assistant-Surgeon 3rd Durham A.V.
HARVEY, A., Esq., to be Hon. Assistant-Surgeon 20th Cornwall R.V.

ROSKRUGE, T. H. A., Esq., to be Assistant-Surgeon 1st Administrative Battalion Cornwall R.V.
WEBB, W. W., M.D., to be Hon. Assistant-Surgeon 14th Suffolk R.V.

DEATHS.

GENT, John S., Esq., Surgeon, at Stony Stratford, aged 69, on October 31.
HEAD. On November 14th, at 44, Harley Street, aged 30, Emma, wife of Edward A. H. Head, M.D.
HEWITT. Lately, at Hereford Square, Old Brompton, Julia, widow of Cornwallis Hewitt, M.D.
PRICE, Peter C., Esq., Surgeon, late of Green Street, Grosvenor Square, at Ventnor, Isle of Wight, aged 30, on November 13.
SEAGRAM, William F., Esq., Surgeon, at Warminster, aged 88, on November 8.
SWAYNE. On November 3rd, at Clifton, aged 42, Georgina Emily, wife of *J. G. Swayne, M.D.

ROYAL COLLEGE OF SURGEONS. The next examination for the Fellowship will take place on November 22nd and two following days.

DR. P. W. LATHAM has been appointed Examiner in Chemistry and Zoology in the Cambridge University Local Examinations, and Assistant-Examiner to the Regius Professor of Physic and the Professor of Mineralogy.

CORONERSHIP OF EAST SUSSEX. Dr. Beard is candidate for the office of coroner for East Sussex. Dr. Beard is a man everywhere worthy of the support of his professional brethren. He is a Cambridge graduate, and assistant-physician to the Sussex County Hospital.

THE BRITISH ASSOCIATION. The first meeting of the Local Committee for the reception of the British Association for the Advancement of Science at Birmingham next year was held in the Town Hall, on Monday last, when £1500 donations were announced. From the tone of the meeting, there can be little doubt that the Association will have a brilliant reception in the midland metropolis.

DR. HENERY AND CO. At the Marylebone Police Court, on Thursday week, William Anderson, *alias* Wilson, was brought up from the House of Detention, and Alfred Field Henery, *alias* Osterfield Wray, surrendered in discharge of his bail, to answer the charge of conspiring to defraud Captain M. A. Clarke. Both parties were committed for trial at the Central Criminal Court. Henery's bail was accepted, himself in £500, and two sureties in £250 each. The same bail would have been taken for Anderson, but none was forthcoming.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN. The annual meeting of the members of this Society was held on October 26th, in pursuance of the Royal Charter of Incorporation recently granted. A letter from the Rev. Arthur Stone was read, acknowledging a letter of condolence addressed to him by the Society on the demise of his father, their late President, Thomas Arthur Stone, Esq. The following officers and directors were elected for the ensuing twelve months. *President*, Martin Ware, Esq. *Vice-Presidents*, E. A. Brande, Esq.; P. M. Latham, M.D.; J. Bacot, Esq.; T. Turner, M.D.; D. H. Walne, Esq.; A. J. Sutherland, M.D.; E. Tegart, Esq.; G. Burrows, M.D., F.R.S.; J. Miles, Esq.; Sir J. W. Fisher; C. H. Hawkins, Esq., F.R.S.; and J. Paget, Esq., F.R.S. *Treasurers*, J. T. Ware, Esq.; G. H. Roe, M.D. (acting); R. S. Eyles, Esq. *Directors*, J. G. Forbes, Esq.; W. Munk, M.D.; B. W. Holt, Esq.; C. Miles, Esq.; W. J. Little, M.D.; W. Cathrow, Esq.; H. Sterry, Esq.; H. Jeaffreson, M.D.; H. S. Illingworth, Esq.; F. Hawkins, M.D.; T. B. Curling, Esq.; J. Hilton, Esq.; J. Love, Esq.; H. A. Pitman, M.D.; J. Adams, Esq.; R. Druitt, M.R.C.P.L.; J. C. Forster, Esq.; E. Tegart, Esq.; J. J. Sawyer, Esq.; H. Lee, Esq.; C. Collambell, Esq.; R. Quain, M.D.; G. Johnson, M.D.; C. F. Du Pasquier, Esq.

BEQUESTS. By the death of the late Ex-P Johnston, a number of munificent legacies fallen to the local charities of Arbroath, to the a of £7050. The funds of the Infirmary have augmented by £1000, to which Mrs. Johnsto adds £300; the Dundee Infirmary, £400; and t dovan Asylum for Imbecile Children, £400.

THE EDINBURGH UNIVERSITY CLUB OF LO A correspondent writes: "I have seldom been pleased with anything I have seen of the exis of Scottish feeling and respect for the Universi Edinburgh among London men, than I was what I saw of these at the recent quarterly din the Edinburgh University Club. The dinner this week attended by from fifty to sixty physic The chair was taken by the illustrious Dr. J Copland, F.R.S., author of the *Dictionary of Med* an admirable scholar, and unrivalled in his knowl of the literature of his profession. He was supp on the right by the venerable Dr. Roget, the N of physicians, who graduated at Edinburgh in The chairman gave the loyal and other toasts great spirit; and, in proposing *Alma Mater*, ent into an interesting sketch of the University of E burgh at the period of his own graduation in He had studied in the literary classes for some y before beginning the professional part of his ed tion; and he paid his homage to the memor Christison and Dunbar, as well as of Robison, fair, Hope, and Jamieson, the last of whom the Do described as a Norseman like himself—he (the ch man) being a Shetlander, as Jamieson was an neian. Dr. Copland then dwelt on the importan keeping up the scholarly and social character of medical profession; and earning by hard work right to indulge in such social festivities as t meetings; the best man being he who did his d equally well, whether at the bedside of the dying the social board. The heartiness of the chairm who is near his seventy-third year, but whose *phys* is as powerful as his intellect, gave a great zest to evening, which passed off to everybody's satisfactio (*Courant.*)

OPERATION DAYS AT THE HOSPITAL

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fi and other Diseases of the Rectum, 1.30 P.M.—R London Ophthalmic, 11 A.M.
TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal Lon Ophthalmic, 11 A.M.
WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—Univer College, 2 P.M.—London, 2 P.M.—Royal London O thalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.
THURSDAY.....St. George's, 1 P.M.—Central London Ophthal 1 P.M.—Great Northern, 2 P.M.—London Surg Home, 2 P.M.—Royal Orthopædic, 2 P.M.—R London Ophthalmic, 11 A.M.
FRIDAY. ..... Westminster Ophthalmic, 1.30 P.M.—Royal Lon Ophthalmic, 11 A.M.
SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M King's College, 1·30 P.M.—Charing Cross, 2 P.M Lock, Clinical Demonstration and Operations, 1 P.M Royal Free, 1.30 P.M.—Royal London Ophthalm 11 A.M.

MEETINGS OF SOCIETIES DURING TH NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. A. Balmanno Squi M.B., "On Diseases of the Skin caused by the Acari Mr. Henry Lee, "On the different ways in which Syphil Poison enters the constitution."
TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Thomas Nunneley (Leeds), "On Vascular Protrusion of Eye-ball"; Dr. Pidduck, "On the Causes and Prevention Infant Mortality"; Mr. J. Morgan, "Ulcer of the Ileum co municating with the Bladder."—Zoological.—Ethnological.
THURSDAY. Royal.—Antiquarian.

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

ON SOME OF THE SYMPTOMS OF EARLY PREGNANCY.

By C. H. F. Routh, M.D., M.R.C.P., F.A.C.L., etc.; Physician to the Samaritan Free Hospital for Women and Children.

The signs of the first period of pregnancy—*i. e.*, from the date of conception to the fourth month—have always been a source of some difficulty. The principal symptoms, which need here only be mentioned, because they assist mostly the diagnosis, are, cessation of the menses; the purple colour of the vagina; the peculiar character of the urine, which contains kyestine; the velvety feel of the uterine cervix; the enlargement of the breasts and womb; with the peculiar character of the areola.

Excepting the presence of kyestine, the collection of which is sometimes not practicable, and an occasional appearance in the breast-areola, where white follicles containing a white secretion, of about the size of the heads of pins, are congregated in large numbers near the nipple, and extend outwards—a state of things which, I believe, is never found out of pregnancy—all the other enumerated symptoms may be due to other causes. The menses, we know, will cease from a variety of diseases. Patients with any uterine tumours, particularly older women and those who have piles and varicose veins on the legs, may have the purple colour of the vagina. The velvety feel of the uterus may be perfectly imitated by an ulcerated os. The breasts may enlarge, and the areola of the breast may look very suspicious, from mere uterine irritation. The womb may become hypertrophied from congestion. Upon the appearance of none of these can we implicitly rely, though in their general coexistence we have more confidence. It is for this reason that I have thought an additional symptom, which can be in most instances detected, might form the subject of an interesting communication; and as such I have ventured to bring it before your notice.

Hitherto much reliance has not been placed on *auscultation* in the first period of pregnancy. The so-called placental souffle, if heard at all, has been heard quite at the end of this period. Dr. E. Kennedy of Dublin, it is true, has given some examples in which he was able to hear it with certainty at the twelfth, eleventh, and even in one instance at the tenth week; but his experience has not been confirmed by others. Nägele states that it is only heard after the fourth month. Rigby admits that it can be detected as early as the fifteenth or sixteenth week. Murphy states that it is not generally heard before the fourth month.

Years ago, Dr. Rigby premised that there was every reason to suppose that it might be heard at a still earlier period, if the uterus were at this time within reach of the stethoscope. The object of this communication is to show the means by which I have attained to this end; and henceforward, I imagine, it will be in the power of all occasionally to foretell pregnancy by this symptom as early as from the seventh week to the ninth, probably even from the sixth, when the placenta is situated near the cervix. At any rate, this is the earliest period at which I have heard the distinct souffle. At this early date, however, the sound differs somewhat from the placental souffle, as heard at a later period. Nor is it very easy to give an accurate description of it in words. It is more like the sudden cessation for a moment of a general splenic murmur. If I may so express it, it is a sudden interruption of an intensely vesicular and muffled murmur, synchronous with the pulse. This it is which makes it very difficult to catch sometimes, and which requires the closest attention and a most practised ear to make it out at all. I have also observed that the souffle, when it does occur at a very early period, and when very distinct, has somewhat a high pitch; so far confirming the opinions enunciated by authors, who have described it as assuming a piping character when the placenta is attached near the cervix. Curiously enough, in those cases where I have heard this high toned pitched murmur *per vaginam*, I have heard it very early also in the iliac region of one side.

It is but right, however, to add that, as with ordinary auscultation-sounds heard over the abdomen, so with these pelvic sounds, they may be absent altogether. Sometimes we may lose them at a sitting, and are not again able to find them. Thus much, however, I think we may safely conclude, that during the first period, and in a doubtful case, no examination is complete without the use of the vaginoscope.

The cases now related amount to nine, in which the pregnancy was detected as early as from the sixth to the thirteenth week. All but one were married, and therefore there was no object in deceiving me; and, as I saw them all purposely, and by special appointment, to make out whether pregnancy existed or not, no difficulties were put in my way in the examinations made.

Of course, these do not include all the cases which I have examined or noted particularly from the sixth to the thirteenth week; but they are fair samples among several others, a few of which I regret I have been obliged to set aside, as I omitted to note at the time the date of their first examination by me. In these also, however, the pregnancy was made out very early. I have named these several instruments which I now show you *vaginoscopes*. Perhaps, were I to adopt the plan followed in the words *stethoscope* and *ophthalmoscope*, it would be better to call them *coleoscopes*, using two Greek words, instead of a compound of Latin and Greek. The examination of the uterus was made with these instruments introduced within the pelvis in other ways. Thus, a flexible tube passed up *per anum*, with an earpiece at the distal end, answered for auscultation. This method, though, as it might be supposed, useful, was sufficiently disgusting to discourage any further attempts. I have also attempted to hear through the sacrum; but the indications here were very uncertain. Stethoscoping *per vaginam* is not new. I am told that the late Dr. Stroud had devised a plan to effect this, and, if I mistake not, some German author; but I have not yet been able to obtain their memoirs. An examination *per vaginam* does not, however, in these days, entail the same reprehension as formerly. Thus my facilities have been greater.

If a woman be placed on her side, with her legs very much flexed upon her abdomen, then auscultation may be readily made with a common stethoscope, provided the distal end be small, by pressing directly with it against the perinæum. This, by the apposition of its internal surface, impinges against the

vagina and uterus, and so we can often hear sounds originating in the latter organ. Where, however, the woman is fat, and the perinæum thick, the sounds are muffled. In this case, it may be passed *per vaginam*, and made directly to impinge upon the uterus. With a glass syringe, in doing this, as the rubbing of the clothes is not heard, no exposure whatever is needed. The same auscultation may be made with the woman on her back, with a curved glass speculum such as I show you.

It would be quite a little history, were I to enumerate the several plans I have adopted in the hope of devising a more perfect instrument for the purpose. I have tried metal stethoscopes, bent at a right angle, sometimes using a thin membrane at the vaginal end, of India rubber. I have used metal tubes, with a membranous sac in the interior, so constructed that I might blow air into it at will, and make the sac more or less tense. I have used wooden vaginoscopes, with a membrane interposed, at the union of the vaginal with the external portion of the stethoscope, which was here enlarged so as to form a cavity of greater dimensions than on any other part of the stethoscope. This cavity I have made exactly elliptical, so that the sounds conveyed would be concentrated at a focus, and be carried thence by a tube to the ear, upon the principle of Mr. John Marshall's ear-trumpet. The object of the membranes and membranous sacs was twofold: to reverberate, and thus intensify in the cavity the sounds, as is the case with the tympanum. Secondly, the small apparatus with which it was connected, and by which it could be tightened or slackened at will, was to alter the pitch, so that sounds might be heard which the uterus might convey, on a membrane as tense as would produce the note conveyed by the womb-sounds. This, however, in practice, was found in no way to act as I expected. Sounds appeared to be equally well transmitted without as with the membrane, while a double membrane seemed rather to muffle the sound than otherwise.

I have even used a metal vaginoscope with fluid compressed within it by a membrane, to try if I could feel thereby any wave of pregnancy or fluctuation conveyed.

In the present stage of my inquiries, I have come to restrict myself to two varieties—the glass stethoscope, and the wooden vaginoscope.

There is nothing new in the first. It has been used for a long time; and glass has a signal advantage. It is a beautiful conductor of sound, and rather, I think, raises the pitch. At any rate, it enables you to hear more distinctly than with the ordinary wooden stethoscope. Add to this, it is very readily kept clean, and does not make any noise when rubbed against the clothes. This, as I before said, is a great advantage, and allows it to be used very modestly; and when manufactured in the shape I now show you—that is, long, and with a curve—is very easy of application. These were made by Mr. Maddox of London.

The second variety includes the single and the double vaginoscope. These were made by Mr. Coxeter. You will see that the vaginoscope, as I use it, is nothing more nor less than either the single or double wooden stethoscope, with elastic tube, *to the distal end of which is affixed a wooden speculum*. Occasionally I use a solid tube in lieu of an elastic one, made either of gutta percha or of wood. I am satisfied, however, that, were this manufactured of glass, it would be preferable.

These, then, are the instruments. One word now about their application in diagnosis.

My first business was to ascertain what were the normal pelvic sounds heard in a non-impregnated woman. There may be none. Occasionally, when there is much uterine congestion or vaginal inflammation, you may hear a regular pulse. This is, however, rare, and is probably the vaginal pulse. Commonly, you hear the gurgling in the intestines, passages of wind like bronchial respiration, and of fluid. These sounds, curiously enough, I have not heard in pregnancy, except occasionally the pulse before referred to. I imagine this to be due to the non-transmission of sounds through fluid, which the uterus contains in the early as well as in the more advanced periods of pregnancy.

The murmur of fibrous tumours presents some resemblance to that of pregnancy. Having, however, so fully developed this subject in my Lettsomian Lectures published in your JOURNAL, and which I therefore trust are known to you, I need not dwell here on this subject. Suffice it to say, that the true *fibroid murmur* is tubular, and usually louder, and often accompanied with a thrill, and a single or double cardiac sound, synchronous with the first of both sounds of the maternal heart. The *placental murmur* is intensely vesicular, without thrill, and usually without the cardiac sounds conveyed from the mother, except under very exceptional circumstances.

CASE I. *Pregnancy: Souffle first heard by Vaginoscope at Thirteen Weeks and a Day.* Mrs. T., aged 26, first consulted me on or about May 29th. She had had one child. She last saw the catamenia on March 4th. She had occasionally morning sickness, without, however, bringing up her food. The *breasts* had not become larger. The areolæ were dark, but not very extended, full of follicles of the same colour as the areolæ, but becoming white on being stretched. The breasts were small and flabby. Auscultation revealed no sounds *per vaginam* or above the pubes. The os uteri was rather hard and patent.

June 10th. This patient had seen nothing since the last visit. She thought she was larger. She had felt very sick in the morning. The nipples were larger, and looked more œdematous; but she had been using glasses to bring them out. No sound were heard over the abdomen. The os was not velvety, but rough and irregular from cicatrices. One blowing souffle was heard distinctly by the vaginoscope.

I saw this patient again on June 25th and August 13th. On neither occasion could I hear anything with the ordinary stethoscope. On the last occasion however, there was no doubt of pregnancy. She had felt the child move for the last three weeks. The appearance of the breasts was marked. The uterus reached to the umbilicus, which began to project. The vaginoscope revealed distinctly the placental souffle. She was confined on December 14th, of a healthy, fully formed girl. Calculating 280 days back, this would fix the period of conception at March 10th. The fœtal souffle was heard, therefore, first at thirteen weeks and one day.

CASE II. *Pregnancy: Thirteen Weeks: Souffle made out by Vaginoscope.* Eliza S., aged 23, single, had had connection with a man once about three months back. She last saw her courses thirteen weeks ago. There was no morning sickness. She stated she was growing stouter.

The *breasts* looked very suspicious. On both sides the areolæ were enlarged. There were a large number of follicles, as well outside as inside the areolæ; several were congregated together, and filled with white secretion, which became very white on tightening. This appearance was more marked on the left side.

There was some dulness on percussion from three to four inches above the pubes, which might be due

o fat. A single cardiac sound was heard in both liac cavities; no souffle. The os appeared soft and elvety; the uterus large. The vaginoscope revealed continuous murmur, indistinct, yet occasionally esembling the placental souffle.

Remarks. The appearance of the breasts in this ase was so characteristic as to leave no doubt on my nind as to the existence of pregnancy. The woman, naving no object in deceiving, was closely questioned as to the period of connexion, etc. My impression vas, that she was less advanced in pregnancy than iere stated.

Case III. *Pregnancy: Thirteen Weeks: Made out by the Vaginoscope: Perhaps Eleven Weeks.* Mrs. C., a young woman, consulted me on February 24th, 1862. She had had one child, which died. Her husband had diseased her some little while previously, when she first came under my care, and was under treatment for syphilis and sore-throat, having taken first mercury, and then iodide of potassism.

She last saw her husband towards the end of November. She was unwell the next week; the show lasting only a few hours, and then passing away. The catamenia recurred next week, and lasted a day or two, and then ceased. She had seen nothing since. There was no morning sickness. There was considerable pain under the neck—a symptom which troubled her also very much in her former pregnancy. She complained also of some sore-throat. The left side of the velum was continuous with the uvula; over it, there was a small ulceration present, of about the size of a sixpence. This was touched with nitrate of silver.

The areolæ of the breasts were dark, chiefly on the right side. The follicles immediately around the nipple especially were large.

The os uteri was not very soft; it was rather hard and knotted, dotted here and there, but not ulcerated. Beyond the cervix, the uterus felt large and heavy, evidently containing some substance. Percussion yielded a clear sound above the pubes. No sounds were to be heard above the pubes with the ordinary stethoscope. Slight fœtal souffle, of a very high note, was heard with the vaginoscope.

I saw this patient on June 30th, when all the signs of pregnancy were well marked. She was confined on September 30th, of a dead child. The practitioner stated the child to have been dead one month.

Remarks. Reckoning this woman to have seen her husband about November 25th, and conceived the same night, this would fix the period at thirteen weeks. Her 280 days of pregnancy would, however, in that case, have ended on September 2nd. We must suppose, then, either that the child was retained beyond the 280 days *in utero*, or that she conceived subsequently to the last appearance of catamenia, a fortnight after seeing her husband. In that case, I must have heard the souffle by the vaginoscope at eleven weeks.

Case IV. *Pregnancy: General Murmur, Eleven Weeks Two Days: Souffle, Thirteen Weeks.* Mrs. W., aged 28, married, had had one child. She was unwell once six weeks after her confinement, and since then had passed two epochs. She last saw the catamenia on August 26th. Connexion took place on the 31st. She never had morning sickness, but was sick at intervals. In the last pregnancy, she was unwell once after conception.

The *breasts* appeared large, darkish; but the areola was not very wide. The follicles were well developed, but of the same colour as the areolæ. Milk exuded from the breasts. The os was velvety; the uterus large.

November 18th. In reference to the last menstrual period, she stated it was brought on by taking very hot baths; it was very copious, much more so than usual. This led me to suppose it must have been a regular period. Two days ago, she had a very severe fall, by sitting down while there was no chair present. This made her sick and uneasy. She took exercise, however, daily; lying down during other parts of the day. The *breasts* looked more puffy and œdematous. The areolæ and follicles were more marked. Auscultation betrayed no uterine dulness above the pubes. But, if deep pressure were made with one hand at the hypogastrium and one finger placed in the vagina, it might be felt to extend about two inches above the pubes. No *ballottement* could be detected. The os was velvety, slightly patent, so as to admit the tip of the finger. No sounds were heard with the ordinary stethoscope. With the vaginoscope, there was heard a *general murmur*, which appeared faintly louder at times, as if an abortive attempt to produce the souffle.

December 1st. The appearance of the breasts was more marked. The uterus reached to two inches above the pubes; it was also low down in the vagina. A placental souffle was heard indistinctly three times with the vaginoscope.

This lady was confined of a full grown child on May 29th, 1864. This would fix the date of conception, if she went the full period, on August 22nd.

Case V. *Pregnancy Twelve Weeks One Day, made out by Vaginoscope.* Mrs. H., aged 31, had been married several years, but had no children. She was always more or less liable to endometritis and vaginitis, which seemed to have been brought on by habits to be condemned. On September 7th, she called upon me. The catamenia, which were always regular, had last appeared on June 14th, 1860. There was no dulness above the pubes. The breasts were well developed; the areolæ dark, well marked, and studded with follicles. The vagina was moist. The os had a velvety feel; the uterus was large. The vulva exhibited the well marked violet hue. No sounds were heard above the pubes; but by the vaginoscope, a faint placental murmur, occasionally interrupted, was distinctly heard.

This patient was again seen, when all the signs of pregnancy were indubitable.

Case VI. *Femoral Murmur, Eighth Week: Vaginal, Tenth Week: Pregnancy: No Breast-signs.* Mrs. Louisa I., aged 38, first consulted me January 8th, 1861. She had been married sixteen years, and had had seven children, six of which were living, the youngest aged two and a half years. She complained of great weakness and sickness, with occasional intense headache and vertigo, which had persisted for the last two months. These symptoms resembled those experienced when she was formerly pregnant, only they were more severe. Previously to this, she had been weak and poorly all the summer. She also suffered much from sickness, which formerly occurred only in the morning, but was now repeated during the day. There was also much white leucorrhœa, and a sensation of sinking at the stomach. The catamenia began at 12, but she was not regular till 13; they recurred every three or four weeks, lasting five days. She was not always regular, but was so for three months prior to their present cessation. She last saw the catamenia about November 6th; they then lasted five days, and had not recurred since.

The appearance of the *breasts* and of the whole woman was that of a withered creature. The areolæ were very indistinctly developed; but she said that, even in her former pregnancies, they were always flabby. About one inch above the pubes, there was dulness. Over the femoral vessels, there was heard a sort of murmur, which might have been mistaken for placental. The os was soft, but not actually vel-

vety. It was very low down. The uterus contained a largish mass, and seemed to be rather pushed towards the left side. The ordinary vaginoscope emitted no sound. She was ordered creasote for the sickness, and a zinc and tannin injection.

January 22nd. To-day it was eleven weeks since she saw the catamenia. On close inquiry, she stated she did not believe that she had connexion with her husband prior to the Sunday or Monday following the cessation of her menses. This would fix the period at the 11th or 12th of November. Assuming that she conceived that very night, her pregnancy would be of ten weeks and one day. In general health, she was improved. To-day, by the vaginoscope, the placental souffle was heard distinctly and unequivocally.

Case vii. *Pregnancy, Nine Weeks and Two Days, detected by Vaginoscope.* Mrs. S., aged 27, consulted me on July 5th, 1862. She had been married eight years, and had had three children, of whom one had died. The last was born December 17th. She was generally regular, even during the whole suckling period. She saw the courses last on May 1st; they were on her for three days. She had seen nothing since. She had slight morning sickness; but this was not usual with her when pregnant, except after taking food. The only reason why she believed herself to be pregnant was, the cessation of the catamenia.

Her *breasts*, she stated, were not larger, but the nipple was darker than usual, and there was milk in them. The follicles, however, were very characteristic of pregnancy, constituting the fifth variety of papulæ described by Dr. Earle; being like small pinpoints closely congregated together, and quite white. At other parts, the papulæ were occasionally of the same colour as the areolæ.

No dulness could be felt over the pubes, nor any sound heard with the ordinary stethoscope. There was a doubtful souffle heard, however, with the vaginoscope.

The subsequent history of this case is not very satisfactory. I saw her again on July 19th and August 1st. I did not hear this souffle again. The only sounds were single and double cardiac sounds, heard in the iliac region and vagina. The os also was soft. The appearance of the breasts remained characteristic of pregnancy. I was, therefore, led still to believe in its existence.

Case viii. *Pregnancy detected by the Vaginoscope Seven Weeks after Cessation of Menses.* Jane H., aged 38, consulted me on February 3rd, 1861. She had been married seven years; and had had five children, and one miscarriage. The last child was born three years ago. She was regular up to about a fortnight before Christmas (say December 11th), when the catamenia stopped suddenly. She saw a slight speck upon the sheet a fortnight ago; she thought it came from the genitals, only as it was "smeary". There was occasional morning sickness, but it was more frequent in the afternoon. She believed herself pregnant. All her present symptoms resembled those experienced in former pregnancies, particularly the size of the breasts, which, before having been withered and flabby, had now become much enlarged. Her left leg swelled also more than the right, which she also observed in former pregnancies.

The areolæ were wide; the follicles well developed, especially superiorly, not inferiorly, around the papillæ. The follicles did not, however, whiten on tightening.

On examination of the abdomen, no sounds were heard above the pelvis by the stethoscope. The double vaginoscope revealed distinctly the placental souffle.

Case ix. *Pregnancy made out by the Vaginoscope at Six Weeks and Two Days.* Mrs. Harriet D., aged 26 consulted me on January 9th, 1862. She had been married for four or five months. Of late she had not been well, suffering from cough. She complained of a good deal of pain over the back and kidneys. For the last day and night, she had had occasional pain in the breast, and sometimes in the back. She never had milk in the former. There was leucorrhœa of a yellow colour present, with pain beneath the left breast. She could not keep food on her stomach. The sickness was worse in the morning. She believed herself to be pregnant. She had the catamenia about seven weeks ago. She believed she last saw them on November 25th.

In the *breasts*, the areolæ were developed on both sides. The follicles in the immediate neighbourhood of the nipple were alone obvious. She stated, from her examination of her person, that the areolæ were larger and darker than usual.

On percussion, there was no dulness to be felt above the pubes. The uterus was found low down; the os rather inclined to the left side; the uterus large, evidently containing some fluid. Over the abdomen, on the left side, the stethoscope emitted no sound. Over the right iliac region, on deep pressure, a *high pitched* murmur was heard indistinctly. This last was heard at first, but also indistinctly, *per vaginam*. There being much sickness, she was put upon an acid (hydrocyanic) mixture and alkalies.

On January 23rd, I saw this patient again. I was unsuccessful in making out any sounds on that occasion. I felt the os only to be velvety. She complained, however, of great cough, for which a mixture was ordered.

I saw this patient again on the 30th. She told me she had been obliged to leave off all medicine. She had, however, felt much better up to yesterday, when, in straining to reach some clothes hanging up, she fell down. She was much shaken and made very sick, and brought up streaks of blood. She still trembled at the thought of her fall. Something like a placental souffle was heard in the left iliac region, close to the bone. On attempting to examine this patient *per vaginam*, I found the os velvety, and the uterus large; but the passage was bloody. She was sent home, but miscarried the same evening.

Remarks. The termination of this case proves that she was pregnant. The position of the uterus rather to the opposed side, where the iliac murmur was heard, will probably explain why it was made out in this position so early. It might be said that the stethoscope, by hard pressure, could be made to impinge upon the surface of the right iliac arteries, whence, on the uterine side, it emanated. This, however, would not explain the sound heard *per vaginam*. It was certainly indistinct, but still sufficiently clear to make the diagnosis of the case pretty clear.

I have never heard anything like a vesicular placental souffle earlier than in this case. I do not say that it might not be heard at an earlier period. However, I do not search for it. My experience would lead me rather to expect to hear the general murmur occasionally interrupted, and to this I have before referred.

Conclusions. In four out of these nine cases, the proof of pregnancy was rendered indubitable by the delivery or miscarriage of the patient. In the remaining five, if we except Case vii, the progress of the case, although the confinement of the patient was not traced, was such as to leave no doubt. In No. 7, the appearance of the breasts was characteristic. The presence of milk might, however, imply its death. The same cause might in some measure

explain the single and double cardiac sounds produced by the ready yielding of the uterus, so as to allow, by the pressure of the stethoscope, the solid fœtus to convey the arterial sounds from below. At least, this appears a plausible explanation. Thus far, I think, we may conclude that the above inquiries justify us in believing that very often we may, in a doubtful case, by means of the vaginoscope, obtain information which cannot be obtained by the stethoscope applied above the pubes. So far, the fact is important.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. Vose Solomon, F.R.C.S.

[*Continued from page* 488.]

Case xii. *Chronic Sclero-choroiditis; Eyeball soft; (Glaucoma?). Vision and Tension restored by Intraocular Myotomy, aided by Medicines.* Mary M., aged 48, was admitted Feb. 26th, 1861. The right sclerotic was covered with minute vessels; the conjunctiva was healthy. The cornea, at its inner and lower fourth, was clear; the remainder was covered by thin patches of opacity. There was no pain. She could not see features; all objects were slate-coloured. She had iridescent vision; no flashes; the globe was soft. The symptoms had existed a month. Medical treatment was employed.

April 2nd. All objects were of a slate colour; the vitreous humour was turbid. Features were not recognisable. The eye was of normal size, but soft. The cornea was more arched than in the opposite eye. Intraocular myotomy was performed to-day; and was followed by a free discharge of watery fluid. In seven days, features were clear.

From April 16th to April 30th, a little grey powder, with conium, was given twice a day; afterwards, cod-liver oil for a month.

On June 4th, two months after the operations, the eyeball had acquired a normal tension. The sclerotic had a yellow shade; no vascularity. With a 16-inch double convex spectacle, the patient read small pica with ease. The optic nerve appeared tumid, blanched, and dull; the retinal vessels on the disc were normal, but their branches were short, and the one which passes towards the yellow spot was very slender.

Past History. She stated that fourteen years previously, the eye became suddenly red and painful; every object appeared as in a cloud. The vision went and came; rainbows surrounded a candle-flame. There were no flashes. After six months' medical treatment, vision was nearly as good as in the healthy eye. Six years ago, she had similar symptoms—recurrent obscurations, rainbows. She could not see the features of her baby.

Case xiii. *Right Eye Amblyopic. Left Choroiditis. Tension not Excessive (?). Intraocular Myotomy. Great Improvement.* Mrs. K., aged 47, had worn 7-inch double convex glasses since the age of 10 (hypermetropia?). The right eye exhibited signs of a past choroido-iritis. The whole of the lens, except the middle third, was covered by black pigment. The sclerotic was white and glassy, from atrophy of the subconjunctival areolar tissue. The field of vision was contracted. The sight was so imperfect that features could not be distinguished. Eight years previously, she consulted an ophthalmic surgeon, who declared the back of the inner eye to be inflamed. Since this, the sight had gradually failed, and the field of vision became contracted.

For the last four months, similar symptoms had affected the left eye, as led to the loss of sight in the right; all objects were enveloped in a mist. Reading was impossible. When the patient attempted to use the eyes, shooting pains affected them; even when at rest, they felt tired, and tight, as if covered by starch. Dark clouds and flashes were present. The pupil was dilated and sluggish; the sclera white and glassy looking (choroiditis).

Aften ten days of medical treatment, intraocular myotomy was performed on April 20th, 1860, for the relief of pain. It was followed by enlargement of the field of vision and clearer sight.

On May 4th, 1860, the left was submitted to a similar operation. Very little aqueous humour escaped. In seven days, vision was clearer. On July 10th, the patient could read two pages of an octavo volume, thread a needle, and sew a little. On Nov. 23rd, the right eye could distinguish features at three yards, and on bright days at five. The left eye bore more work than in July; and the vision was sharper. The pupil was larger than normal, and the expression of the eye was languid. The surgical treatment was supplemented by tonics. The patient stated that previously to the operation, the eyes grew worse daily.

Case xiv. *Choroido-Retinal Irritation. Tension Diminished. Intraocular Myotomy. Great Improvement.* Mrs. E., aged 36, florid and healthy, came under treatment on April 24th, 1860. She had worn 10-inch double convex spectacles since 8 years of age (hypermetropia?). During the last seven years, she said, she had been near-sighted; and for four years —the last twelve months especially—the sight had diminished in vigour (amblyopia and hypermetropia). Bright objects occasioned great distress; light and the movements of the eyeball excited pain. Muscæ volitantes were present. There were no flashes. She could not read or sew with or without spectacles. The sight sometimes left the eyes for a quarter of an hour. The eyes were softer to the touch than natural. The pupils were of medium diameter; the external tissues and iris appeared healthy.

Intraocular myotomy was performed upon the left eye on May 4th; and on the right eye on May 15th. In a month, she could read and use her needle with comfort. On Nov. 30th, 1860, she wore 14-inch convex glasses, and could work her eyes on minute and near objects for long hours without distress. The features of persons were stated to be clear across the street.

These two cases illustrate the effect of my operation upon the general nutrition of the eye. The circulation in the choroid and retina was regulated, and the secretion of the vitreous and aqueous humours improved. Whatever the *rationale* may be, it will be admitted that the grand practical result desiderated in all treatment of disease was attained; namely, the restoration of a disabled and, in these instances, important organ to a state of usefulness and pleasurable enjoyment in the exercise of its function.

Case xv. *Much impaired Vision from Chronic Choroid Disease; no Tension. After Intraocular Myotomy, Pearl Type was read; after Tenotomy of the Inner Rectus for the Relief of a Squint, the furthest Limit of near Accommodation was curtailed.* (From notes by

Mr. A. Bracey, Clinical Assistant, now House-Surgeon.) E. F. aged 17, florid, healthy, and hysterical, although the catamenia had been regular since the age of 13, was admitted an in-patient on May 13th, 1862. Six years ago, her left eye became affected with a spasmodic internal squint and dimness of vision. In the course of two years, she suffered from flashes in the dark (photopsy), and pain in the eye and orbit.

When she squinted, the ocular pain was so great that she had to lie down. She could not face bright light, because it excited so much pain and dimness of vision. These symptoms lasted for a quarter of an hour.

In April 1862, the photopsy yielded to medical treatment.

May 20th. At whatever distance objects were viewed by the left eye, they appeared dim. She could pick out a few words of small pica type (Jäger's No. 8), but they were not clear. The choroid was much congested; it presented a narrow insulated patch of pigment at the outer side of the optic disc. The right eye was healthy. Intraocular myotomy was performed to-day on the left.

On May 30th, pearl type (Jäger's No. 2) was read with distinctness. The limits of distinct vision for small pica (Jäger's No. 8) were respectively four and a half inches and eighteen. In the right, they were four inches and thirty respectively. The squint remained just the same as on admission, which proved the impaired vision was not dependent on its presence. Subconjunctival tenotomy was now performed. In eight days afterwards, brilliant type (Jäger's No. 1) was read at three and a half and seven and a half inches, and No. 8 at three inches and fourteen inches.

Resumé. From a state of practical blindness as regards small type, the left eye was enabled by the operation to read pearl type.

The removal of the squint had the effect of increasing the acuteness of vision in the operated eye, and of diminishing its near and far point of distinct vision for pica type.

Before the squint-operation, the limits of accommodation in the left were, for small pica, four and a half inches and eighteen inches respectively; afterwards, three inches and fourteen inches respectively.

It is remarkable that the removal of the convergent squint should curtail the accommodation, inasmuch as it is generally held by authorities on optical accommodation, that the pressure of the inner rectus, with the coordinate contraction of the ciliary muscle, conduces to an increased refraction of the eye. I may remark, it has been recently asserted that the cure of convergent squint is sometimes a cause of hypermetropia.

[*To be continued.*]

THE FEDERAL ARMY. Dr. Barnes has been appointed Surgeon-General of the United States Armies *vice* Dr. Hammond, dismissed the service. The latter claims that his dismissal was occasioned by conspiracy, false swearing, and a malignant abuse of official power.

DEATH OF DR. BOWLER. Dr. John William Bowler was surgeon-superintendent of Portsmouth Convict Prison. He entered the navy in 1827 as assistant-surgeon. His last appointments were to the Victor, the Hazard, in which ship he took part in the operations on the coast of China, and for which he received the China medal. His last service afloat was in the Alarm, on the North America and West India Station, from which he returned in the summer of 1847. Dr. Bowler was a retired Deputy Inspector of Her Majesty's Naval Hospitals and Fleets.

Transactions of Branches.

HULL BRANCH,

ASCITES CURED BY ELATERIUM AND AQUA REGIA.

By JOHN H. GIBSON, Esq., Hull.

[*Read October 27th*, 1864.]

THE case which I propose bringing before your notice this day is one of some interest, inasmuch as it is one of a class of cases which very seldom indeed are amenable to the power of medicine; yet one which in this instance, was not only relieved, but decidedly cured, until some fresh exciting cause may again induce its reappearance—it is a case of dropsy.

I am fully aware that it has been adduced that dropsy is not a disease, but merely a symptom of disease. Granted, that it must be the result of pre-existing disease in some important organ. I might therefore have classed this case as being one of a complicated disease of the liver and kidneys; and although, as you will see in the sequel, the liver must necessarily have been the main organ involved, yet, when the dropsy gave way, it was when the function of the kidneys began to be restored, and, indeed, when they were stimulated to act to an inordinate degree; and it was then, and not until then, that any hopes were entertained of reducing the dropsical effusion. The case is briefly this.

W. S., aged 36, a ship-master, accustomed for the most part to trade in tropical climes, was used to free living, but not by any means indulging so far as inebriation. He was of sallow complexion, dark hair and eyes, erect, and, up to the period of the attack of which I am about to speak, very stout, weighing sixteen stones, but very active. On May 30th last, he presented himself to me, after having come as quickly as possible from Alexandria, with the following symptoms.

That which to me was the most apparent, was the extreme sallowness of his countenance, and yellow and sunken eye. The abdomen was fearfully distended with fluid; the legs, up to the knees, were œdematous; fluctuation was most easily and distinctly felt. The whole surface of the body was jaundiced. The breathing was quick and difficult; he had a short dry cough; the pulse was small and quick. His surface was dry, not hot; the tongue foul and yellow; bowels confined; motions pale; urine scanty, brown, and albuminous.

The history he gave of himself was, that in January of this year he contracted chancre; but having to go to sea, the treatment was left entirely to himself; and, what with the blue pill he took, and the blue ointment he rubbed in, he became salivated. The chancres, however, entirely healed; but he suffered for a while from sore-throat and a coppery eruption, which might be in part, and indeed no doubt was, mercurial.

This mode of treatment was the cause of, or at all events was followed by, great and rapid emaciation; so that he weighed little over ten stones. This was about the latter part of April. Early in May, his stomach began to reject everything taken; his bowels most obstinately confined. He had great difficulty in walking, was very short of breath, and experienced sharp pains in the lumbar region, and in all the joints. At this time, there was no swelling of the abdomen, but scanty and thick urine.

About the 11th or 12th of May, on his passage home

from Alexandria, he began to perceive the abdomen to increase in size; and up to the 30th of May, when I first saw him, the increase of effusion was very rapid. During the latter part of the time, he had drank wine and gin, as he was ordered to do so by the doctor in Alexandria.

At first I ordered him grain doses of calomel with half-drachm doses of compound jalap powder night and morning, and a mixture of acetate of potash, digitalis, and spirit of nitric ether. This not acting as hoped for, I gave him drachm doses of compound jalap powder, and added taraxacum to his mixture. This failing, I changed the mixture and gave the dilute nitric and muriatic acids. His position still remained the same. The gums after a week becoming a little tender, I omitted the calomel, but the bowels did not act satisfactorily; the stools were yet paler and the urine yet scanty, but clear and lighter in colour. About June 17th, Sir Henry Cooper saw the case, when he recommended podophyllin in grain doses, and iodide of potassium with carbonate of potash. This was tried for eighteen days, when things were getting rapidly worse—the body getting more and more distended, and the bowels so obstinate that he had occasionally administered to him a grain of podophyllin, four of calomel, six of compound rhubarb pill, followed by a strong black draught. On July 4th, we returned to the nitro-muriatic acid mixture and calomel, and extract of colchicum, in two grain doses every night; and on July 11th, we began the use of elaterium in doses of one-eighth of a grain every night, a drachm of compound jalap powder every morning, and the nitro-muriatic acid mixture during the day.

On the 15th, Sir Henry Cooper and myself met for the purpose of tapping our patient, to relieve the distension which had become so great; but to our astonishment, we found less tension in the abdomen, and the symptoms generally less urgent, so that we determined to let him alone for the present, and persevere with the elaterium, compound jalap powder, and acid. From this time our patient gradually improved; and, what appeared to us to be the most prominent symptom effecting the improvement, was the—I may say—excessive action of the kidneys, a large chamber-pot of urine being passed from night to noon, as well as the gradual improvement in the fæcal discharges and flow of bile. Early in September the medicines were relaxed, and early in October they were altogether discontinued.

At the present time our patient is actually robust; all swelling has entirely disappeared. He weighs about twelve stones, can take any amount of exercise, enjoys his food, and all the secretions are healthy and free. About eight weeks ago, I detected, on examining the abdomen, an enlarged condition of the left lobe of the liver; but by gentle mercurial inunction this is very much ameliorated, and is not the cause of any inconvenience.

This, gentlemen, is a case of great interest, and one which clearly shows that dropsy is produced by the direct agency of the blood vessels; by the obstruction afforded to the circulation through the liver and kidneys, and that its removal was as clearly through the direct agency of the blood-vessels as was its production, which is a fact but comparatively recently recognised. The absorbents used to be accredited with the work in removal of dropsies; but this obvious difficulty presents itself, viz., that absorption goes on most actively in dropsical patients, as was seen in my patient, where all the adipose matter disappeared, and he became wretchedly thin.

It must be confessed that our knowledge respecting the mechanism of absorption is neither complete nor certain; but I should be inclined to give to the veins the credit of imbibing the serous fluid exhaled from the surface of the serous membranes, as well as the fluid contained in the areolar tissue in anasarca.

I ought to have mentioned that the anasarca of the lower extremities, which was excessive on my patient's first presenting himself, entirely disappeared in ten or fourteen days after treatment was commenced.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By Frank Workman, Esq.

[*Continued from page* 576.]

Polypoid Tumour of Rectum. The next tumour of which we have record this year appears also to have been of the nature of a polypus, of nearly the size of a small orange, which was developed in the less common site of the rectum. The patient was a lad of about sixteen years of age, who had been under Dr. Wells's care as an out-patient at the hospital, complaining, amongst other symptoms, of pain and uneasiness about the rectum. The short time that it is possible to allow for examining out-patients led to these symptoms being at first regarded as due to simple prolapsus ani; but one day, the lad being worse, Dr. Wells visited him at his own house, and then discovered that he had a tumour in the rectum, which he could nearly extrude. He was accordingly at once admitted into the hospital, where the tumour was removed by Mr. G. May, who transfixed its neck with a needle, strangulated it by a double ligature, and then divided it below. It had a somewhat malignant aspect, and probably belonged to that class of tumours spoken of by Ashton, as being polypi of the rectum which should be early removed, as they have a great tendency to develope into encephaloid cancer. The boy recovered well from the operation, and has since left the hospital, but still presents a very cachectic appearance.

Colloid Cancer of the Abdomen. Dr. Wells contributed a specimen of that rare disease, colloid cancer, with the following history. Richard Brookes, aged 52, was admitted into the Royal Berks Hospital, March 8th, 1864. He was deeply jaundiced, and had been so for six weeks. He made no complaint save of debility, but gradually became weaker and more emaciated, and died from asthenia on March 28th. His intellect, which was not very bright on admission, was little affected up to his death. On examining his abdomen on his admission, it was found to be exceedingly tense and hard over its whole surface; at several points were found hard nodules, varying from the size of a large walnut to that of a small orange. One of them was also found in the right groin—apparently in the spermatic cord. He did not seem aware of their existence, and could not give any account of how long they had been perceptible to the touch. He had no pain over the seat of these tumours nor elsewhere. The *post mortem* examination was unfortunately incomplete. The friends came suddenly for the body, and the house-surgeon had only time to open the abdomen over the liver, and excise a portion of that viscus. Over the excised part was seen the peritoneum loaded with a deposit of colloid cancer. It had the characteristic features of that form of malignant disease. When first examined, the gelatinous portion was well developed; as also the fibrous sheath or envelope in the meshes of which the jelly-like matter was contained.

Although the fact was unfortunately not proved by the *post mortem* examination, there can be no doubt, from the manner in which during life nodules were felt by the hand all over the abdomen, that the dis-

ease extended over the whole of that cavity. This is more extensive than usual; as, when this disease attacks the peritoneum, it is usually limited to the great omentum. The gelatinous portion, when placed under the microscope, was found perfectly transparent; when a section of the fibrous sheath was so placed, nucleated and caudate cells became perceptible.

In Dr. Wells's experience colloid was the most rare form of cancer; he could not recall another case; but in the thirty-first volume of the *Medico-Chirurgical Transactions*, a parallel case was recorded by Dr. Ballard at the St. Pancras Dispensary, remarkable for the lengthened course which it appears to have run. The patient was a married woman, aged fifty-five, who some twenty years before had miscarried, and suffered at the time great pain in the epigastrium, and ever after was subject to flatulent distension of the abdomen after meals. At the age of fifty-one, the catamenia left her; and a medical man then examining her, told her that she had a tumour connected with her liver. For a while her health improved; but, after the abdomen began to enlarge, she suffered from vomiting, and with considerable pain, never of a lancinating nature; and in the beginning of 1848, she came under Dr. Ballard's care. He found, then, that the abdomen was generally enlarged and rounded, and the walls tense, save at the umbilicus, where they yielded readily to pressure. On passing the hand over the abdominal surface, seven or eight tumours could be felt, of the size of nuts; one also was attached to the bladder. There was a little resonance on percussion at the umbilicus and along the margin of the right ribs, but everywhere else dulness was complete and fluctuation perfect. To relieve the dypsnœa, it was resolved to tap her; but two punctures of the trocar only let out a little gelatinous matter. Two days afterwards, she died. At a *post mortem* examination, the abdomen being opened, no less than six quarts of gelatinous matter were removed from its cavity, superficially of a ruby tint, lower down of a pearly hue. The peritoneal surface of the abdominal wall was seen to be infiltrated with colloid in the form of nodules, and intersected with fibro-cellular bands forming loculi. On the right side of the abdomen were two large tumours; the lower of which was solid, the upper nodulated, with gelatinous matter. On the left side were the remains of a large sac, capable of holding three pints. This had contained a jelly more firm and opaline than that free in the cavity of the abdomen; with which, however, it communicated. The liver was of ordinary size; its peritoneal coat was infiltrated with colloid in most parts of the lower half, and in the left lobe had formed the tumour perceptible in life; its parenchyma was healthy. The spleen was enveloped in colloid. The stomach and intestines had their peritoneal coat infiltrated with colloid; but only at one spot near the extremity of the cœcum did it affect the muscular coat. The mucous coat was everywhere healthy. The fundus of the uterus presented some globular elevations of the ordinary fibrous character. The ovaries were replaced by fibrinous sacs, more or less lobulated, and containing gelatinous matter. Under the microscope, the gelatinous matter of the abdomen and the ovarian cysts alike showed the characteristic cells of cancer—simple, compound, and caudate. It is worthy of notice that in this case the disease seems to have presented three varieties in its form: 1. The ordinary locular form; 2. The encysted form, as seen in the ovaries and in the large cyst on the left side, the matter from both of which exhibited under the microscope genuine cancer-cells; 3. The free or unincluded form, of which the large quantity of gelatinous fluid found free in the abdominal cavity is an example. This might possibly have originated in degeneration of that which was originally simple fibrous dropsy; but it seems more probable that it grew directly from the diseased part of the abdominal wall.

Hydrocephalic Fœtus. Mr. YOUNG read a paper on a hydrocephalic fœtus which occurred in his practice. "On Thursday, November 26th, I was called to Mrs. C. in labour with her first child. She was rather short, but otherwise well formed and healthy. Lately she had been much embarrassed in her movements by the great size of the abdomen. Previously to my arrival, the membranes had ruptured, and I was told that the waters had quite deluged the bed. As she had no decided pain, I left her without making an examination. Next day, she still had only slight occasional pains; and I found the os uteri very little dilated, and the presenting part very high up, scarcely to be reached by the finger. Saturday passed with little change in the state of the patient. On Sunday, the fourth day of labour, the os was dilated to the size of a shilling, and the finger came upon a sharp edge of bone, which terminated somewhat abruptly, and beyond this the parts felt soft, but tense, not yielding readily to the finger. The diagnosis was that the edge of bone belonged to the parietal bone, and that the head was hydrocephalic. An injection of warm water was used to open the bowels, and as no signs of exhaustion yet appeared, she was left to the next day, in the hopes that then the os would be more dilated. On Monday, the fifth day, it was apparent that the long protraction of labour and sleepless nights were beginning to tell on her vital powers, and her pulse begun to rise. Pains were now stronger, and the os had dilated to the size of a crown, and the presenting part was lower. I asked Mr. Vines to see her with me that afternoon; and he agreed with me on the nature of the case, and the necessity for speedy relief. So, having emptied the bladder with a catheter, I punctured the child's head with the craniotomy forceps; a gush of offensive fluid followed, and continued running for ten minutes, filling a chamber-utensil of the capacity of three pints. I then proceeded to extract with the blunt hook, in which I experienced some difficulty, the scalp and cranial bones being pressed down on the face. The fœtus must have been dead a week, as its cuticle peeled readily, and smelt offensively. After extraction of the fœtus, the uterus acted efficiently, and expelled the placenta. The woman recovered without a bad symptom. The head of the fœtus, when stuffed with hay and stitched up, measured twenty-two inches from chin to vertex, and twenty inches in circumference."

These cases appear, from the remarks of the members on it, to be very rare; as those whose obstetrical experience was largest, could only cite four or five. In them the value of Barnes' dilators would be much felt, as, when once the diagnosis is made, the os uteri might readily be expanded by them, while left to themselves. The parts, as seen in the present case, dilate very slowly.

Death from Poison and Diseased Kidney (?.) Mr. WALFORD gave the history of a case where death apparently resulted from a combination of poison and diseased kidneys.

A. B., aged thirty, a plumber, of intemperate habits and gouty disposition, bought some drops of a quack, by which he thought he had formerly obtained relief to his gout; twenty of these drops were to be taken three times a day. A little before seven P.M., he took sixteen drops, and left home apparently well, but soon afterwards began to exclaim that he was poisoned, and wished to go to the quack to find out the nature of the drops. On his way, a sense of numbness and faintness with great thirst prevented his proceeding; and after an effervescing draught at a chemist's,

he returned home, still complaining that his mouth and throat were hot, and that he felt numbed all over, as if he were swelling and his very eyes bursting. Mr. Walford was then sent for, and found him, about ten, P.M., with imperceptible pulse and contracted pupils, still speaking of the distressing numbness; his mental faculties were quite clear. On trying to move him, he fainted, and soon afterwards expired.

At a *post mortem* examination, the heart was found to be rather small, but otherwise healthy; its cavities nearly empty, and free from clot. The brain was also healthy. The kidneys, however, were intensely congested, and almost black; and the urine drawn off from the bladder was highly albuminous.

In view of this state of his kidneys, Mr. Walford did not feel justified at the inquest in ascribing the cause of death to the drops entirely, which the Jew vendor swore were composed of compound tincture of guaiacum, and the jury returned a verdict that the deceased died from natural causes. After the inquest, the Jew was so pressing that Mr. Walford should destroy the drops which he had taken from the deceased to examine, that he awakened suspicion; and after some pressure, he confessed that, besides the compound tincture of guaiacum, the drops contained some tincture of aconite, made by himself from an ounce of aconite leaves to a pint of rectified spirit, in the proportion of two pints of the latter to six of the former tincture.

Now, supposing that the Jew at all correctly stated the strength of the aconite in the drops, this case furnishes a most remarkable illustration of the influence disease of the kidneys has in intensifying the action of certain drugs; for not more, according to the proportions stated, than four drops of a weak tincture were taken, and this man—young, and apparently healthy—was dead in three hours, with evident indications of the poison under which he sank; whereas the smallest dose recorded to have produced dangerous symptoms on an adult is twelve minims, and from that recovery took place. It does not appear that the diseased kidney directly contributed to death in this case; for there was no coma, vomiting, or signs of uræmic poisoning. The fatal issue of the impaired condition of the renal organs seems to have been due to their not retaining the requisite capability to seize upon the poison and convey it out of the circulating fluid; so that a very small dose retained in the blood produced a rapidly fatal effect, while three or four times that quantity might have been borne, had the functional capabilities of the kidney been unimpaired. Other drugs besides aconite are much more potent in their action on persons suffering from renal disease—opium and mercury conspicuously so: a very small dose of the former, it is well known, may produce on such persons very alarming, if not fatal, effects.

Large Calculus removed without Operation. Dr. COWAN exhibited some remarkable specimens of stone of great size, and fitting one on another by well marked facets. He stated that they were obtained from a person now living, and without operation. It appeared that a female, who had prolapsus of the uterus, passed some months previously an ounce of gritty matter at one time. For a year after no more passed, and she suffered extreme pain and difficulty in micturating. One day, when in severe pain, she felt something unusual in the vagina, and with her fingers removed the largest stone, and the rest passed spontaneously in the three following days, with great relief to the patient. The prolapsus uteri was of long standing, and the bladder much drawn down. The *Lancet* recently reported a similar case. Mr. Birkett exhibited some calculi removed from the bladder of a woman, who had suffered from prolapsus uteri for seven years. Three months before, she expelled fourteen stones; these were analysed by Dr. Odling, and found to consist of seventy-five parts of phosphate of lime, and twenty parts of carbonate of lime, with a trace of triple phosphates, alkaline salts, and organic matter; it was curious that the proportions of carbonate and phosphate of lime were identical with those entering into the composition of bone. Mr. Birkett said that he had showed them to a medical man from Boulogne, who at once asked if the patient suffered from prolapse of the womb and bladder? Probably, therefore, that condition, by making it difficult for the bladder to completely empty itself, forms a strong predisposing cause to the formation of calculi.

Extensive Subcutaneous Injury of Knee-joint. Mr. G. MAY also exhibited a leg which he had removed, as an illustration of the extensive amount of injury which a joint might sustain without the skin being broken. The patient, a miller, had suffered a large millstone to fall on his knee, and when he was brought into the hospital, the infiltration under the skin was so great as to preclude accurate diagnosis of the extent of injury, save that it was clearly a case for amputation. This was accordingly performed; and, on the joint being laid open, it was seen that the tibia was split nearly its entire length, and one condyle of the femur completely detached, while yet the skin about them was entire.

Cerebral Disease. Dr. WELLS brought forward a case of cerebral disease that presented, in the absence of a history, some obscure features.

John H., aged 20, a painter, was admitted into the hospital June 4th. It was stated that he went to bed apparently well the night before, and was found this morning at six o'clock lying on the floor on his back unconscious, with stertorous breathing. This continued to be his state on admission, without any paralysis of limbs. The pupils were dilated, but acted sluggishly on exposure to light. He had no convulsions. The urine drawn off was copious, and not albuminous. There were no external injuries. His gums were marked with a blue line, and were spongy and fœtid; and he was reported to have suffered from constipation and colic. Pulse 80. He was ordered mustard poultices; to take directly five grains of calomel and two drops of croton oil; to have his head shaved, and a blister applied to the top. June 5th. He lay in a state of stupor all day, with stertorous breathing. June 6th. He was rather more conscious, as he looked about, and appeared to recognise his mother. There was a good deal of congestion of the left lung, as shown by dulness on percussion and minute crepitations. Pulse 100. Urine slightly opalescent on boiling. He was ordered beef-tea and port wine, and mustard poultices. In the evening he became more comatose, and died in the night. June 8th. *Post mortem* examination. There was some effusion of opalescent serum between the convolutions of the brain. The ventricles of the brain contained a large amount of serous effusion. The left lung at its upper and lower portion was much congested; and there was a deposit of granular tubercles extensively occupying the upper portion of the left lung. There was some inflammation of the left pleura, with flakes of soft lymph at its base, and recent adhesions at the upper part; the lowest lobe of the right lung was bound down by old adhesions. The liver was large and fatty.

In this case, it was considered desirable to hold an inquest, as the man was lodging at a public-house, was a comparative stranger in the town, and had been at work the day previous to the commencement of his fatal illness, and, when found, was unable to give any account of himself. He had been complaining of colic and constipation for a few days before, but as he

was a painter, such ailments seemed naturally due to his business. When brought into the hospital, his state resembled that of uræmic coma more than any other; but his urine was at first quite free from albumen, and in all the cases of uræmic coma which I have witnessed, the albumen contained in the urine has always been largely abundant. The comatose condition was fully accounted for by the serous effusion into the ventricles, as well as by the opalescent serum which covered the convolutions of the brain, and in both of which localities it was largely effused; but it is not very clear what occasioned this effusion, though it was probably connected in its causation with the congested condition of the left lung. The upper part of that lung was studded with minute tubercular granulations, and one is therefore led to infer that the effusion in the brain might be due to this tubercular condition of the system. The kidneys were unfortunately not examined; but, in the absence of albumen in the urine, it is hard to assign a part to them in the cause of death.

[*To be continued.*]

Reviews and Notices.

GUY'S HOSPITAL REPORTS. Edited by SAMUEL WILKS, M.D. Third Series. Vol. x. Pp. 400. London: 1864.

THIS volume of *Guy's Hospital Reports*, though only sixty pages larger than its predecessor of last year, contains nearly twice as many papers; the number in 1863 having been ten, while that for the present year is nineteen.

The first contribution, which occupies sixty pages, is the Fourth Decennial Report of the Guy's Hospital Lying-in Charity, drawn up by Dr. BRAXTON HICKS. A document of this kind is scarcely capable of analysis in a review. It must therefore be sufficient to state, that the charity is an out-door one; that the number of women attended during the ten years (October 1854 to end of September 1863), and of whom records have been preserved, was 14,871; that the number of children born was 14,999, of which 14,376, or 95.6 per cent., were born alive; that the death-rate from all causes among mothers was 1 in 340—that of the previous twenty-one years having been 1 in 140.

"This improved rate is much owing to the diminution of 'puerperal fever', particularly of the toxæmic varieties. In the present report we have less than one case in 1,000; while in twenty-one years' report it was one in 234 cases. No doubt much of this result has been obtained by the attention paid to separating the attendant from other cases, whenever these diseases threaten." (P. 3.)

The second article is on the Treatment of Granular Conjunctivitis by Inoculation with Pus, by Mr. C. BADER. This somewhat remarkable proceeding has been tried under Mr. Bader's observation on 240 eyes, presenting granular conjunctivitis with and without pannus. The object is to produce acute suppuration, and thus destroy the granulations. The cases treated have been arranged in various groups; in some of which the treatment is reported to have been beneficial, while in others it has failed, or has even appeared to act prejudicially. Mr. Bader writes temperately on the subject, and, as far as he can, points out when the operation should or should not be performed; and also suggests various points for future inquiry.

Dr. HABERSHON next gives a paper on the Medical Preparations of Arsenic. He reviews the use of arsenic in ague, diseases of the nervous system, and skin-diseases; and lays down a series of rules for its administration.

The fourth paper is also by Dr. HABERSHON, on Two Cases of Disease of the Suprarenal Capsules with Bronzing of the Skin. These cases are brought forward in confirmation of the observations made by Dr. Addison and others. Dr. Habershon observes that, the more fully the disease is known, the more is it traced to the vaso-motor (sympathetic) nerve. Hence

"The sickness, exhaustion, compressible pulse, and failing power of the vital functions, are not peculiar to the disease of the suprarenal capsules; and even discoloration of a very similar kind is found in other maladies. Thus, in the exhaustion from long-continued lactation, there is great weakness, a compressible and irritable pulse, disturbance of the stomach, and very frequently patches of discoloration are seen on the forehead and face, as well as on other parts of the body. Here the vaso-motor nerve and the whole cerebro-spinal system are affected from exhausted uterine function; but the cause is a removable one, and the disease is therefore remedial; but in extensive deposit in the suprarenal capsule the sense of irritation and exhaustion to the vaso-motor nerve is persistent, and consequently the malady is progressive. In some instances of syphilitic cachexia there is general discoloration of the skin, with great exhaustion; but the disease is curable." (Pp. 78-9.)

Branches of nerve have been distinctly traced between the suprarenal capsules and the semilunar ganglion, and also between these bodies and the pneumogastric nerve. Drawings illustrative of this fact are given by Dr. Habershon.

The fifth paper is a Clinical Report, by Mr. BRYANT, on Inflammation and Tumours of the Breast, more particularly in reference to their Diagnosis. The author offers observations, in his usual practical style, on Inflammation and Abscess of the Breast, its nature, causes, seat, rapidity of progress, and treatment; on the Diagnosis of Tumours of the Breast, giving an analysis of cases of Adenocele or Innocent Tumour, and of Carcinoma; and on the Clinical Examination and Diagnosis of Tumours of the Breast. He comments here on the general diagnosis of a mammary tumour; on the diagnosis of one caused by glandular enlargement or infiltration; on the development of cysts in mammary tumours; on the diagnosis of true cystic adenocele; on the opening, ulcerating, and discharging tumour; on the value of the retracted nipple as a symptom; on the diagnostic value of discharge from the nipple; on the importance of enlargement of the absorbent glands, and of tubercular and general infiltration of the integument over the breast. He then speaks of excision, concluding his paper with the narrative of some cases.

The retracted nipple he believes to have been overestimated as a diagnostic symptom of cancer.

"It may coexist with a cancer in the breast, as it may with some simple or innocent affection; but, on the other hand, a cancer of the organ may be present, unconnected with any such morbid condition. For a retracted nipple may be described as an accidental symptom in the development of a tumour. . . . Should

any tumour, simple or malignant—should any abscess, chronic or acute—attack the centre of the mammary gland, a retracted nipple, in all probability, will be produced; for, as the disease so placed will necessarily cause material separation of the gland-ducts, their extremities—terminating in the nipple—must be drawn up, and, as a consequence, a retracted nipple will be the result." (P. 109.)

The sixth paper is one in continuation of a series by Mr. Towne, on the Stereoscope and Stereoscopic Results. The author is of opinion that the perception of form and of colour by the retina are functionally distinct; and that

"The causes which in ordinary vision tend to disturb the identity of the two retinal images are connected *exclusively* with form, since it is obvious that in form there will, from natural causes, constantly exist a slight discrepancy between the retinal pectines; while, so far as relates to colour, there can be no discrepancy, since images transmitted from identical objects must in colour be identical." (P. 140.)

The paper is one of much scientific interest; but must be read in full, in order to be comprehended.

In the seventh paper, Mr. Cooper Forster relates a Case of Intestinal Obstruction, or Modified Obturator Hernia.

A woman, aged 38, was on March 20th seized with sudden pain in the abdomen, principally around the umbilicus. This pain continued at the time of her admission into Guy's Hospital on March 24th. She had also constipation, with vomiting. On admission, she stated that she had had a lump in her left groin ever since she was a child, but that this disappeared whenever she lay down, and never caused pain. No trace of this, however, could be found; but the left external abdominal ring was very large. The symptoms continued, in spite of opium and calomel, opium injections, and opium alone, up to the 29th; when, the vomiting having become decidedly stercoraceous, Mr. Cock advised that the left inguinal ring should be examined. The part was accordingly cut down on; but no evidence of hernia was discovered. She died two hours afterwards.

On *post mortem* examination, there was found to be a constriction of a small loop of the lower portion of the ileum. This loop passed through a constriction of peritoneum opposite the right obturator foramen, but within the abdomen. By this band the bowel was contained in a perfect sac, and strangulated. There was also a small but distinct sac external to the foramen, continuous with the internal one. The external sac was empty.

Mr. Forster regrets that in this case the abdomen was not opened and the source of constriction sought for during life. As to the mode in which the strangulation took place, he thinks that a small obturator hernia had existed for some time; that it was reduced by the action of the obturator externus muscle; but that the piece of intestine, instead of being returned into the abdomen, slipped between the peritoneum and the pelvic fascia, much in the same way as reduction *en bloc* occurs in the inguinal region.

In the eighth paper, Dr. Hilton Fagge relates a Case of Aneurism, seated on an Abnormal Main Artery of the Lower Limb. The artery was a large vessel, on the right side, of about the size of the femoral artery, running parallel to the sciatic nerve. Between the tuber ischii and the great trochanter was an opening by which its interior had evidently communicated with an aneurism: it was impossible, however, to say whether the sac had been complete. There was considerable effusion of blood underneath the gluteus maximus. The patient was a woman aged 46, who was admitted on August 15th, 1863, with pain in the leg, especially about the tuber ischii, with hardness and swelling. Besides internal remedies, morphia was applied endermically. She died on September 23rd. There does not appear to have been any diagnosis made of aneurism during the patient's life; but this will not be remarkable, when it is remembered that, previously to the present case, only three instances of a similar abnormal arterial distribution have been recorded.

Mr. Birkett, in the ninth paper, furnishes a Memoir on a Remarkable Case of Disease (a New Growth) affecting the Shaft of the Tibia.

The patient was a large fat woman, aged 43, who was admitted into Guy's Hospital with fracture of the tibia. There was nothing remarkable in the progress of the case until the end of about a month, when there was found to be a persistent painless swelling over the front of the tibia. The woman now for the first time stated that she had observed a swelling in that locality for about six months; but that it had never given her trouble. Between the seventh and eighth week after the accident, she left the hospital, able to walk; the limb merely being rather weak. In nine months she returned. Soon after leaving, the tumour had become painful; and the pain had at last become intolerable. The tumour was rather larger, and closely resembled, in outline, an ordinary node. There was some elasticity in the centre of the tumour. Mr. Birkett treated the disease as of inflammatory origin; and the patient left the hospital in a month, but slightly relieved. In seven months, she was again admitted. The swelling was a little larger, and perhaps a little softer; but the pain was agonising. Mr. Birkett accordingly cut into the tumour; and, some days later, the patient's sufferings having been increased, and the growth seeming likely to fungate, the limb was removed at the knee-joint. The patient died on the fifth day after the amputation.

The soft parts of the limb surrounding the diseased tibia were healthy; as was also the fibula. The new growth occupied the medullary cavity, and expanded its walls laterally and posteriorly; anteriorly, the compact tissue was destroyed, and there was a nearly circular hole. A microscopic examination of the growth showed a quantity of fibre-tissue, elongated cells, and nuclei. Floating about in the field of the microscope were nucleated cells, some with caudate ends, others without. There was not any milky juice pervading the growth, and to the naked eye it had a somewhat gelatinous texture.

Mr. Birkett thinks the growth belonged to the fibro-plastic group. He relates also a case in which amputation of the thigh was performed seven years ago for what was believed to be carcinoma of the head of the tibia. The patient has since enjoyed good health. He also gives a case of undoubted carcinoma of the femur in which amputation was performed—the patient dying.

In the tenth paper, Dr. A. S. Taylor gives some Cases and Observations in Medical Jurisprudence. These are: 1. Chronic Poisoning by Mercury through the Skin and Lungs: Death after four years. The patient was a furrier, and had been employed in packing skins after they had been washed in a solution of nitrate of mercury and afterwards dried. 2. Absorption and Diffusion of Mercury when taken in Medicinal Doses. 3. Case of Poisoning by Turpeth

Mineral (taken in mistake for æthrops mineral). 4. Case of Poisoning by Corrosive Sublimate: Death in seven days: no Salivation: Suppression of Urine. 5. Poisoning by Aconite. 6. Poisoning by Ammonia in Compound Camphor Liniment. 7. Poisoning by Alcohol: Fatal Effects of Brandy on a Child. 8. Poisoning by Nitrobenzole. 9. Poisoning by Aniline. 10. The Process for Detecting Chloroform in the Blood.

Mr. Cock reports, in the eleventh paper, a series of Select Cases of Aneurism.

"Amongst them are cases where extensive disease of the heart and aorta existed at the time of operation: also cases where pressure had failed: a case in which the common iliac artery was tied, with eventual success, after the suppuration of the sac: another in which the external iliac was tied, and which subsequently proved to be aneurism of the profunda: lastly, a case of lesion of the profunda, the true nature of which was not ascertained until after death." (P. 202.)

Dr. Owen Rees gives, in the twelfth paper, some Clinical Remarks on Calculous Disease. Dr. Rees comments on the common belief that the presence of a calculus in the kidney is always attended with obvious hæmaturia; and he cites cases to show that, in cases where all the other symptoms of renal calculus are present, there may yet be no blood in the urine. He believes that, in consequence of an undue importance being attached to the absence of this sign, cases of renal calculus have sometimes been treated as if the symptoms were those of gouty or hepatic derangement. Again, Dr. Rees observes that frequent micturition, though often observed in cases of renal calculus, is not always to be expected.

"One gentleman of my acquaintance almost suddenly was seized in the street with violent pain in the side and retraction of the testicle; and on hurrying home passed bloody urine and a calculus, which latter must have been in the kidney many months without producing any other symptom than an uneasy sensation about the loins." (P. 218.)

The pain in cases of renal calculus has been said to be more severe on one side than on the other, even when it exists on both sides. But Dr. Rees says that he has frequently met with cases where the passage of renal calculi has been preceded by all the ordinary symptoms, except pain in the lumbar regions—the discomfort being altogether referred to the sacrum. He also points out a peculiarity which attends the presence of a calculus in the right kidney.

"The pain in these cases is referred to the right hypochondrium. It extends downwards towards the umbilicus, but not to the lumbar region. There is a feeling of great distension over the colon, and the bowels are constipated. These are the symptoms so often regarded as significant of biliary calculus—an error easily committed if blood be not perceived in the urine." (P. 219.)

The thirteenth paper is by Dr. A. S. Taylor, and is entitled, Cases of Poisoning by Arsenic from External Application: Transference of the Poison from the Skin to the Stomach. The case was that of a girl aged 9, who died in February last near Halesworth. The poisoning was produced by the application of arsenic to the head for the purpose of destroying lice. *Apropos* of this case, Dr. Taylor refers to and compares several others in which poisoning was produced by the external application of arsenic.

Dr. Braxton Hicks furnishes the fourteenth paper, on the Glandular Structure of Proliferous Disease of the Ovary; with Remarks on Proliferous Cysts. Dr. Hicks endeavours to show that the term "proliferous cyst" is misapplied; and that the disease which he describes is in reality a gland-disease, analogous to adenocele of the breast. The cystic formation in the growths is accidental, not essential; and may be entirely absent. This paper is a valuable contribution to the pathology of "proliferous disease" of the ovary.

The fifteenth paper is by Dr. Taylor. It is on Death from Rupture of the Uterus. In this case communicated to Dr. Taylor by Mr. E. Bedford and Mr. A. Roberts of Sydney, the uterus was inverted and the child was expelled by gaseous putrefaction. (The *post mortem* examination was not made until a week after death; and there was considerable development of gas in the abdomen.)

Mr. Birkett relates, in the sixteenth paper, Cases of Inguinal Hernia depending upon Abnormal Conditions of the Vaginal Process of the Peritoneum. The cases which he relates are classed in the following order.

"1 *a*. Those in which the vaginal process of the peritoneum remained open along its whole extent.

"1 *b*. Those where a constriction of the vaginal process of the peritoneum constituted an impediment to the reduction of the hernia, and was the cause of its strangulation.

"2. Cases of hernia associated with malposition of the testicle.

"3. Those depending upon an open state of the funicular division of the vaginal process of the peritoneum.

"4. The cases in which the canal of the vaginal process of the peritoneum remains unobliterated, while its ventral orifice is closed, and a hernia pushes its sac before it along the open tube." (P. 263.)

Dr. Pavy, in the seventeenth paper, comments on the So-called Amyloid Degeneration. He gives an outline of the history of the subject, and then furnishes an account of some examinations which he has made on specimens of lardaceous degeneration in the Guy's Hospital Museum. He does not think that the iodine-test indicates the presence of starch.

"From the observations I have conducted, it has seemed to me that the coloration of the lardaceous matter effected by iodine has depended upon a simple absorption of the agent. My impression is that the coloration is not the result of a definite coloured product, like the product of union between iodine and starch or between iodine and dextrine, but is due to iodine as such, which is absorbed much more greedily, as it were, and held more firmly by the lardaceous deposit than by ordinary forms of animal matter. . . . Undoubtedly, according to my experience, the colour, in arriving at black, passes through shades of *red and brown and not of blue*. . . . There is another feature of disparity in the colour produced by the action of iodine on starch (dextrine agrees in this respect with starch) and on the lardaceous deposit. In the case of the former, the colour is *immediately* removed by the application of heat, but may be instantly restored by the influence of cold. In the latter, the colour only *gradually* fades, with the evolution of iodine as ebullition is kept up, and cannot afterwards be restored by the influence of cold." (Pp. 328-9.)

Again, in regard to the supposition that the so-called amyloid (lardaceous) matter must be non-nitrogenised, because of its reaction with iodine, Dr.

Pavy enumerates, as giving a blue colour with iodine, narceine and chitine, both of which contain nitrogen. Further, from analyses of lardaceous matter performed by Dr. Odling, it appears to be a nitrogenised material. The paper is concluded with some remarks on the pathology of amyloid or lardaceous disease.

In the eighteenth paper, Mr. James Hinton relates two Cases of Chronic Impairment of Hearing improved after Scarlet Fever and Erysipelatous Sore-throat; and the Dissection of the Ear in a Case of Deafness in a Third Member of the same Family.

Mr. Durham furnishes the nineteenth and last paper, on Certain Abnormal Conditions of the Bones. After relating some interesting cases of Mollities Ossium, Mr. Durham gives a very instructive chapter on the statistics, pathology, etc., of the disease—the result, evidently, of extensive literary research and personal observation. In concluding, he briefly notices the treatment of the disease—observing that "there are already more lime-salts in the body than can be retained, and to give more only throws additional work on the excreting organs." He believes that his examinations point out the direction which treatment should take; but defers his remarks to a future time. His paper is concluded with some pathological observations on Osteoporosis, or Porous Hyperostosis, especially of the Bones of the Skull.

This is the tenth and last volume of the third series of *Guy's Hospital Reports;* and the editor has, therefore, added to it a copious index to the ten volumes. The brief notices we have given of the papers will show that the majority of them are of direct practical value, while some are of high scientific interest. From some reason, the number is nearly double of that contained in the last year's volume. Is this because there has happened to be a greater abundance and variety of material at hand? or because an honourable rivalry has been stimulated by the issue of a similar work by the medical staff of another hospital? Whatever be the cause, we are well pleased at the result; and hope that the example so long and so well set by Guy's will be followed by other similar institutions. Of how great value would be the presentation to the public of the riches of medical and surgical knowledge which must exist in St. Bartholomew's Hospital, but which now lie hidden and—at least nearly—unprofitable.

Hints on the Philosophy of Education. By Humphry Sandwith., Sen., M.D., F.R.C.P. Lond. Pp. 58. London and Hull: 1864.

The *Hints* of which this pamphlet consists were originally delivered by Dr. Sandwith as a lecture last winter before the Hull Literary and Scientific Institution. His aim is to point out how Physiology and Psychology may be made subservient to Education. He lays down the following texts for the several parts of his discourse. 1. An enlightened adherence to the principle of an attention to the foundation of education on physiology and psychology pervades the writings and plans of all the best authorities on education, both ancient and modern. 2. He then points out the advantages of a course of instruction in harmony with the constitution of human nature and with the arrangements of society. 3. He next comments on the evils of misdirected, because unenlightened, education.

Dr. Sandwith has evidently paid much attention to this subject of great public importance; and his little work is well worthy of perusal by those who take an interest in the education of our youth.

British Medical Journal.

SATURDAY, NOVEMBER 26th, 1864.

GOVERNMENT COMMISSION ON VENEREAL DISEASES.

The Government, as represented by the Admiralty Lords and the Secretary of War, has appointed a Commission to inquire into the nature and treatment of venereal disease. Eight members of the profession form it; viz., Mr. Skey (the chairman), Dr. Balfour, Dr. Donnet, Dr. Kirkes, Dr. Wilks, Mr. Cock, Mr. Quain; with Mr. Spencer Smith as secretary. Dr. Balfour and Dr. Donnet represent respectively the Army and Navy Medical Services. The Committee has already commenced operations.

We know not what directions the inquiry may take; but, judging from the late action of the Admiralty, and the source whence the Commission immediately issues, we may perhaps conclude, that the main object of the Commission is to deal with the prophylactic treatment of venereal diseases. It is not very probable that a Commission can add much to our knowledge of the nature of syphilitic affections; nor is it very probable that its reports will in any way influence the present practice usually adopted in their curative treatment. Moreover, every one now knows that, in the case of syphilis, as in the case of all other communicable diseases, the best and most effective cure is one which prevents their communication—the spread of the diseases. Last session, as our readers may remember, an Act of Parliament was obtained through the influence of the Admiralty, which gives to the police, in certain garrison towns of this country, powers of a very extraordinary nature—unprecedented, we will venture to say, since England became a constitutional country. It gives inspectors power to take into custody any prostitute whom they have reason to suspect (from a constable's report) of being infected with syphilis. The absurdity and gross impropriety of such a regulation as this is manifest. To throw upon the shoulders of a police-constable the onus of diagnosing whether or not a prostitute is infected with venereal disease, is outrageous to reason as well as to morality. Probably, the Admiralty has already come to this conclusion; and having, so far, gained its object, is now feeling its way, through a Commission, to the establishment of a regular system of authorised prostitution. It must be clear to every one who has considered the subject that, if the police

is to superintend prostitution, it can only do so properly, and decently, and effectively, under a regular system of supervision; and that the chiefest part of the system is that which is engaged in the prophylactic treatment of venereal diseases; viz., the medical examination of prostitutes. Such a system, of course, involves the registration of prostitutes; and is, in a word, the introduction amongst us of the continental system—the taking of prostitution under its charge by the Government.

And such, we take it, must be the main subject proposed (though indirectly, perhaps) for the consideration of the Commission. The object of the Admiralty and of the War-office, in appointing it, is, undoubtedly, to learn how best to diminish the fearful amount of syphilis which, at present, so seriously destroys the effective condition of the army and navy; and it is absurd to suppose that any mere investigation into the nature of syphilis—any long and learned report concerning the varieties of chancre—whether there be one, two, or three kinds—whether mercury be or be not the great remedy—and so forth—can be of service in reducing the amount of this disease in soldiers and sailors. The question with the Admiralty and the Secretary of War—gathering their views from their recent proceedings in connection with the Communicable Diseases Act—evidently is not to learn how syphilis is to be treated when once it has taken possession of the soldier or sailor; but how to prevent the disease from finding its way into the bodies of the soldier and sailor.

If it be decided that this country is, at last, to adopt the system of "paternal" governments, and is to watch over and regulate prostitution, let it do so on a regular systematised plan; boldly and openly avow its intention; and carry out the scheme in as decent and dignified a fashion as such a proceeding can admit of. But we must enter our protest against such a deplorable regulation as that at present in operation; viz., which throws upon a police-constable the duty of deciding, in the first instance, whether or not a prostitute is affected with syphilis, which makes it the duty of the police to take into custody any prostitute whom he has reason to suspect is affected with venereal disease.

IS HORSE-FLESH EDIBLE FLESH?

A CONFERENCE of Hippophagi, held at the Garden of Acclimatisation, answer this question in the affirmative. M. Delcroix argues it out in this way. The flesh of herbivori is, *par excellence*, the food of man. If every Frenchman had his proper allowance of flesh, nearly four times the present quantity consumed in France would be required for the supply. To fill up in part this deficit, the flesh of healthy horses must be utilised—of horses "unfitted by age and infirmity for other services." The flesh of horses and of oxen is much alike; every day the one is substituted for the other.

"During a whole year," says M. Decroix, "my family, friends, and acquaintances were fed at my table with horse-flesh or beef indifferently, and never knew the difference. That the meat of horse is a healthy meat, there can be no doubt. Many public societies have affirmed that it may be safely eaten as food; and, in fact, for fifteen years horse flesh has been eaten in Germany, Prussia, and Austria, where special slaughter-houses are established. Isidore Saint-Hilaire showed that horse-flesh has been eaten at some time or other, in almost every quarter of the world. For the last two years, horse-flesh has been distributed to the poor at some of the charities in Paris. Of course, only those animals are killed which are useless for other purposes; and thus meat may be supplied at the rate of about a penny a pound. The flesh of the mule, it is said, is superior to that of the horse; and, what will appear still more surprising, the flesh of the donkey better than that of the mule!"

DRUNKARD LUNATICS.

IN America, it appears, that, at the present time, drunkards are liable to be treated legally as lunatics. An asylum, the Binghampton, in the State of New York, was chartered by Congress in 1854. It was intended for dipsomaniacs voluntarily subjecting themselves to treatment. Since that time, further laws bearing on the subject have been passed by the legislature in April 1864.

"Sec. 5. Any Justice of the Supreme Court, or the County Judge of the county in which any inebriate may reside, shall have power to commit such inebriate to the New York State Inebriate Asylum, upon the production and filing of an affidavit or affidavits by two respectable practising physicians, and two respectable citizens, freeholders of such county, to the effect that such inebriate is lost to self-control, unable from such inebriation to attend to business, or dangerous to remain at large. But such commitment shall be only until the examination now provided by law shall have been held, and no case for a longer period than three months.

"Sec. 9. Said institution shall have power to receive and retain all inebriates who enter said asylum, either voluntary, or by the order of the committee of any habitual drunkard.

"Sec. 10. The committee of the person of any habitual drunkard duly appointed under existing laws may, in his or their discretion, commit such habitual drunkard to the custody of the trustees, or other proper officers, of said asylum, there to remain until he shall be discharged therefrom by such committee."

This law has been passed, it will be observed, at a time when men in office reign supreme in America. However much it may interfere with the liberty of the subject, still we must all admit that it is a move in the right direction; and that the proceeding is everyway worthy of our attention.

THE Danes carry their political disappointment somewhat fanatically on to the scientific field. When Langenbeck of Berlin visited Copenhagen last summer, he was rudely shown the door by some prominent doctors, with whom he intended to have con-

versation. Steenstrup, again, in reply to a scientific letter, has returned an answer, declining further correspondence with German *savans*, and concluding with "formerly your Steenstrup." Such a display of feeling is detrimental to the Danes and to science. The Danes will not continue, as formerly, to acquire their education in Germany; and, with narrowed resources, will lose the public before whom they have hitherto laid their performances. Dutch and Danish science is only known through German translation. Now, as Germans do not read Dutch, they are much less likely to read Danish. In 1848, the Danes drove away the distinguished astronomer, Hansen, because he was a German; and the English Admiralty afforded the funds for the completion and publication of the magnificent tables of the moon which had been observed and calculated by that philosopher. The Astronomical Society gave him a medal in recognition of his great services. We hope that these erroneous and suicidal passions will calm down; and that, in medical and scientific intercourse, at all events, the same rules of politeness and conciliation may be observed, which are recognised as the essential safeguards of the diplomatic intercourse of nations.

The following remarks appeared in a leading part of last week's *Lancet*. It is a specimen of the method of attack upon the British Medical Association and its Journal, of late incessantly employed by the *Lancet*.

"If evidence were wanting to show the waning power of the *Journal*, even amongst its *quondam* supporters, it will be found in the report of the first meeting of the directors of the Medical Provident Fund. That Mr. Carter of Stroud (whom the editor's abuse has somehow failed to abash), should succeed in throwing the Fund open to the profession contrary to the fulminations of the *Journal* was bad enough; but that Mr. Daniell of Newport Pagnell should have 'seconded', and that Mr. Paget of Leicester should have 'warmly supported the proposal', must have been bitter words to have to print in the *Journal*. But worse remains behind. The South-Western Branch sent up a resolution 'recommending that a request should be inserted in the *British Medical Journal*, that each member of the Association should communicate to the chairman his feelings in the matter, and that the wishes of the majority should be carried out.' Happily, the editor was spared immolation upon his own altar by the unanimous agreement of the committee to Mr. Carter's proposition."

The statement here made, and necessarily, also, the conclusions based upon it, are completely untrue. What will every honest man who reads that statement think, when we inform him that there did not, before the meeting of Directors was held, appear in this Journal one single word, or hint of an opinion on our part, as to whether the Provident Fund should or should not be limited to the Association? We rebuked Mr. Carter simply and solely for his presumption and his impertinence; for his presumption in calling upon the profession to put pressure on men like Dr. Burrows, Dr. Symonds, Mr. Carden, Mr. Heckstall Smith, etc., in order to force them to do that which to him, Mr. Carter, seemed good; and for his impertinence in telling a number of gentlemen, at all events as honest and honourable as himself, that they welcomed the Provident Fund rather for the sake of the Association, than for the sake of the men who chiefly needed it. We carefully avoided offering any opinion on the subject alluded to. Our words expressly were: "We have nothing whatever to say, as to the merits or demerits of his proposal." "The proper place for the discussion of all matters affecting the interests of the Society is manifestly the board-room of the Direction." (See Journal, Sept. 10th and 17th, pp. 300 and 339.) We leave our readers to fix upon the *Lancet* the fitting term, which belongs to those who thus unblushingly publish statements so utterly and manifestly opposed to the truth; who make an untruthful statement, and then found upon it a series of false and injurious assumptions. Mr. R. B. Carter, we regret to add, appears to be imbibing the spirit of the protection and especial patronage which has been bestowed upon him since he commenced his attacks upon this Journal. He, also, in the *Lancet* of last week, takes the occasion so willingly offered him, of perverting language, and of drawing from the perversion unwarrantable assumptions.

It is probable that some inquiry will take place into the cause of the outbreaks of yellow fever at Bermuda. From reports already afloat, it would appear that here, as usual, red-tape has been at his old, accustomed work. It appears, *à priori*, more than probable that, if the Army Medical Service occupied its true and rightful position, this outbreak would never have occurred at all; or, if it had occurred, would have been greatly mitigated in its effects. The *United Service Gazette* speaks as follows on the subject:

"It is alleged that the newly arrived regiment was landed at the infected port with the full knowledge that the pestilence was raging there, and that no precautions whatever were taken to prevent its spreading amongst the men. They were landed, we are told, and immediately marched off to small and ill-ventilated barracks, built, with the fatality which seems to attend all our barracks, in the most unhealthy part of the town; and, as they fell sick, which they speedily did in dozens, they were removed to an hospital wholly insufficient for their accommodation, and of which the very walls were reeking with the poison of contagion. We are told that the Commandant, Colonel Graydon, was over and over again appealed to by the medical officers to have the patients removed to some place where medical aid would have some chance of success, and that he obstinately refused; until, at last, the crisis had become so alarming as to overcome what may have been either his obstinacy or his indecision. Finally, we are informed that, when wiser counsels prevailed—when the untainted men were placed under canvas, and the sick removed to the quarters recommended

by the medical officers—the terrible disease began to succumb to treatment; and at the last accounts there were gratifying symptoms of improvement in the health of the garrison. There are various reasons given to account for this extraordinary conduct on the part of Colonel Graydon. Some of our correspondents allege that he was obstinate, and refused to be dictated to by the medical officer; whilst others attribute his conduct to timidity, and a reluctance to incur responsibility. Above all things, the hands of the medical officers must be strengthened, and their recommendations given all the force of commands, in circumstances when they, and they alone, can be competent judges of the measures that ought to be taken. It will not do to have questions of authority or etiquette raised when hundreds of valuable lives are at stake. When the ship is among the breakers, the captain hands over the command to the pilot who knows the coast, and who has been appointed for the special duty of steering her under such special circumstances. Another cry of decimated regiments has come home to us from the East; and we are told by the East Indian mail, that the 77th Regiment, stationed at Allahabad, was daily losing ten or a dozen men by cholera."

The question of the contagious nature of syphilis was discussed by several master syphilographs at the Lyons Congress. Experiment and clinical observation have distinctly proved the contagious character of certain of the secondary accidents of syphilis, and of the blood of syphilitic patients. M. Rollet stated his experience. He demonstrated the fact of the transmission of syphilis, by reference to thirty-seven cases. In eleven of these, there was inoculation from chancre; in seven, from infected blood; in fourteen, from mucous tubercle; in three, from papular eruption; in one case, from congenital syphilis; and in one, from chancre of the amygdala. The experiments of M. Roberts show that, by inoculating at one puncture a mixture of the two kinds of chancre-matter, there are developed, first a soft chancre, and then an indurated chancre, followed by general infection. M. Lindwurm's experiments prove that, when the syphilitic virus is inoculated into a simple chancre, the simple is converted into an indurated chancre, and followed by secondary symptoms; and, lastly, as has been often practised at the Hospital Antiquaille, when the pus of a simple chancre is introduced into a syphilitic (indurated) chancre, there results the kind of ulcer called mixed chancre. M. Rollet considers that, in syphilitic vaccination, the blood alone is the agent of the contagion. M. Diday read a paper establishing the contagiousness of syphilis by means of syphilitic affections, by means of the blood, and of the semen. Syphilis, he affirmed, followed the general laws of pathology in this respect. He also suggested other possible sources of contagion, as, for example through the medium of parasitic animals. And on this head he related cases; and one of a young physician, a specialist, a pupil of M. Ricord, who caught the itch through impure connexion with a woman, and, three months afterwards, was attacked with syphilis. In this case, which was a carefully observed one, there was no primitive chancre. The other case was similar in details. M. Diday compared these cases with those of congenital syphilis, supposing that the acarus might have here played the part of the semen which affects the ovule. The moral of both M. Diday's and of M. Rollet's remarks were in one sense alike. M. Rollet insisted on the examination of prostitutes with the speculum; and M. Diday proposed, as prophylactic measures, the absolute interdiction of intercourse to persons who have suffered from syphilis within three previous months, and the interdiction of marriage for at least a year after the disappearance of all syphilitic symptoms. M. Viennois took up the subject of syphilis transmitted by vaccination, and related some new facts on this head. M. Gailleton advised that, to prevent such accidents, the matter should not be taken from children under two years of age—*i. e.* free from congenital syphilis.

We may anticipate from the general signs of the times—from the meetings of Branch Councils, etc.—that the Medical Council will probably assemble during the winter months—in fact, at an early moment. It necessarily must do so, if it intend, as we conclude it does, an operation upon Parliament—an alterative treatment of the Medical Act. The Pharmaceutical Society is, we see, already in the field with a Bill for regulating the qualifications of chemists and druggists. The English Branch of the Medical Council has held warm discussions touching amendments required in the Medical Act. We have already reminded our readers that the Council will gladly hear and discuss the suggestions of the profession on the point in question; and will, if they go to Parliament to carry out amendments, require all the aid and influence of the profession to back them in the proceeding.

The Herefordshire Medical Association has issued its annual report, which tells of the progress generally of the profession.

"Five years since, when there was not even a list of the members of the profession, the Medical Act gave us *legal registration*, and, as a consequence, *legal recognition in the courts of law*. The whole profession was then divided into many independent bodies, granting their several licenses according to their own individual fancy; the same 'well abused' Act gave us *a central Council for the United Kingdom*. It was reserved for the present year to give us *a single Pharmacopœia*. It is true that the *British Pharmacopœia*, so expensively prepared, so studiously elaborated, and so long looked for, has proved also a disappointment, and unequal to the requirements of the profession. It is a grand step in advance, nevertheless; its worst enemies cannot pronounce it a failure; for quite irrespective of its merits or its demerits, we have now for the first time a *national Pharmacopœia*."

Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[*Continued from p.* 555]

The fourth meeting of the Section for Anatomy and Physiology was opened by Dr. Schweigger-Seidel with a communication on the Structure of the Kidney. In expectation of a discussion between the *coryphées* of histology, the room was filled to overflowing. In 1862, Henle published a monograph on the structure of the kidney, in which he described a new kind of tubules, which started from the contorted tubules, proceeded into the medullary substance, and, forming a loop, returned to the contorted tubules. Two or more contorted tubules were united by loop-shaped tubes; thus constituting a network of tubules entirely closed in itself, with no outlet. Now, these loops unquestionably exist; but it was doubted by many whether they actually had the connections described by Henle. Schweigger-Seidel, also, confirmed the existence of the loops; but believed them to be integral parts of the general channel of the tubules. Thus, a contorted tubule begins with a capsule round the glomerulus; it makes its windings in the cortical substance; it passes then continuously into a loop which runs into the medullary substance between the Bellinian tubules, out again towards the fasciculi corticales, and there passes into the tubulus rectus, which, uniting with others, forms the Bellinian tubule. In reply to Schweigger-Seidel, Henle stated that he had not found the communication of the loop-shaped tubes with the beginning of the straight tubes, by means of the undulating connecting-piece described by the former speaker. On cross-section of the hardened kidney, Henle found tubuli recti, or collecting tubules, and narrow tubules having an epithelium which differed in different parts of the pyramid. The light tubules disappeared towards the base of the pyramid; while, according to Schweigger-Seidel's explanation, both kinds of tubules, those with light and those with dark outlines, would have to be present in equal numbers. Henle believes that most blood-vessels enter into glomeruli; but admits, upon the basis of Schweigger-Seidel's preparations, which he examined, that a portion of the fine arteries does not at once enter upon the formation of glomeruli. Professor Gerlach stated that, in the kidneys of frogs and birds, the glomeruli could be easily injected, and with a greater pressure could be ruptured; the injected matter then filled the uriniferous tubules, and ran out at the ureter. My judgment in the matter, so far as a judgment can be formed by hearing all sides, and seeing a few preparations, is, that neither Schweigger-Seidel's nor Henle's theory fully explains the anatomical matter of fact; and I am inclined to consider Luschka's theory as the one at present most satisfactory; according to which the tubuli contorti run into the tubuli recti, but are besides united by the loops. This theory was not discussed at the meeting; which is much to be regretted, as it is already contained in Luschka's Anatomical Treatise, and would, no doubt, have enlisted the sympathies of many, who went away in doubt.

Professor Schaaffhausen then exhibited casts and photograms of the Neanderthal bones; and showed that the opinion which made the skull which was found amongst them the type of a peculiar race, was also supported by the scrutiny of the rest of the bones of the skeleton. The length of the bones of the upper- and fore-arm, the shape of the pelvis and of the head of the femur, all indicated that the man in question had belonged to a race much inferior to the present inhabitants of the Düssel Valley, and closely resembling very low races at present living in other parts of the world. He showed photograms of the last seven natives of Van Diemen's Land, which had been taken there by the English Bishop Nixon. Some show so great a similarity to the monkey, particularly in the structure of their faces, as is not found in any other race of human beings. Nixon found it quite impossible to convert them to the Christian faith. Schaaffhausen then made some remarks on a skull belonging to a later period, which had been found near Nieder-Ingelheim, together with arms made of slate, and fragments of coarse pottery. Professor Welcker exhibited a modern skull, which had been sent for that purpose by Dr. B. Davis; it showed some resemblance to the Neanderthal skull. Professor Vogt said that he divided the oldest skulls into several groups. Some are found in the same places with the inhabitants of caverns and stone implements (period of the cavern-bear). Others come from the time in which a northern fauna extended far into the south, the period of the raindeer. During this latter period, the implements were treated somewhat artistically. To this period belong the Basque skulls found in the caverns of the South of France. The third group comes from the time during which the Swiss lake-dwellings were built and inhabited, or the Danish kitchen-middens formed. The stone implements of this period were ground. Professor Vogt also distinguished another kind of monkey-like skull, which had been found in Swiss graves of the later Roman period. There was a legend that they were the skulls of Irish missionaries of the earliest Christian time. Professor Vogt, therefore, termed this kind of skull apostle-heads. I was much surprised to hear this story repeated by the Professor in an assembly of learned men. For my readers should know that he had told it for the first time to a mixed audience at Neuenburg, to whom he delivered his Lectures on Man; and had then embodied it in the German edition of these lectures. The skulls are, no doubt, monkey-like; but their Hibernian origin is not supported by a tittle of evidence. I hope that this blot on the otherwise good and interesting lectures of Professor Vogt may be removed before the English translation is issued by the Anthropological Society. It was admitted, during the discussion, that the general features of the ancient skulls are all represented in some few specimens of modern skulls, but that their special characters are less marked; an opinion having some analogy with that enunciated by Owen, that in each race a few individuals repeated the characters of other races, while their own peculiarities went to the background. The above opinion, regarding the Basque skulls and their derivation from the raindeer period, finds a remarkable support in the similarity of type which, to the present day, subsists between the Basque and the Laplander. The Laplander has kept the raindeer; the Basque has been deprived of it by the change of climate. Both have kept, not only their anatomical configuration, but also their economy of the dairy—the Basque substituting the cow for the raindeer. Thus, the ethnology of the present supports the conclusions derived from geology and the anthropology of caverns.

Professor Henle described a new element of the external granular layer of the retina; namely, elliptical balls, which were not cells. The long axis of the elliptoid stands at a right angle to the surface of the retina. The elliptoids are arranged in regular

rows; and some are fastened to each other by projections. The structure is specific, and belongs specially to the optical apparatus, as well as the cylinders or rods. If the layer of cylinders and granules be termed the musivic layer, on account of the mechanical disposition of the particles, the other granules may be termed nervous. These latter layers of granules are twice repeated, cells intervening. The circumstance that the musivic layer contains no fibres and no vessels is a physiological problem of the greatest interest. Some have stated to have seen fibres; but have, no doubt, mistaken products of coagulation for such, or otherwise misinterpreted what they have seen. The external granular layer contains, however, in some parts, as on the yellow spot, an indubitable layer of nervous fibres. The Professor, also, stated, that eyes hardened in chromic acid were unfit for demonstrating the point in question. He microscopically showed what he had propounded; but I did not learn how the specimens had been prepared or hardened to be fit for section. Professor Winther of Giessen related some experiments which he had made upon the eyes of animals, in order artificially to induce pterygium and arcus senilis. The former he caused by tying the ciliary vein, or introducing a piece of horse-hair underneath the conjunctiva; the latter he produced by tying one of the muscles and its artery. Dr. Fromman of Weimar described the minute structure of ganglionic cells in the anterior cornu and spinal ganglia. When he examined them in white of egg, he found that they had a fibrous structure, and that fibres ran into the branches of the second order; in the cell itself the fibres separate in the shape of brooms, and a few pass into the nucleus. When the nucleus was ruptured, very fine fibres could be discerned, which were in combination with the nucleoli.

In the Section for Gynækology, Stamm repeated his attack upon puerperal fever, which he had delivered in the Medical Section. He dilated upon the discovery of Semmelwies; and insisted that, besides the cleanliness of things and hands, the purity of the air in the lying-in room was the most important condition of the well-being of puerperæ. In all lying-in places, where there was not a sufficient system of ventilation, the rooms must be changed daily; in places where ventilation was tolerable, it was sufficient to change the rooms twice a week. This principle was applied in the Lying-in Hospital at Vienna with the greatest success. He believes that if it were generally applied in Europe, some thousands of women could annually be saved. Dr. Fulda demonstrated a preparation coming from a woman who, several years ago, had been successfully delivered of a child by means of Cæsarian section. Dr. Birnbaum of Giessen, assistant-physician at the Lying-in Hospital, showed a pelvis with many exostoses. The person from whom it came had acute morbus Brightii and eclampsy. In consequence of these conditions, premature labour was induced by the method of Cohen; but the dead child which was born was one of nine months. The mother died an hour after the birth, of apoplexy between the dura mater and the brain. The exostoses, Dr. Birnbaum considered to be of a rachitic origin. Councillor of State Froben of St. Petersburg read a contribution on Hysteroplasmata; and distributed a monograph by Panik, entitled Discovery of the Organic Connection between Tuba and Ovary. With this, the section was definitively closed.

In the Section for Surgery, Dr. Benno Schmidt gave an account of an urinary calculus, which broke up spontaneously, and showed the fragments. Dr. Horn of Bremen spoke on perforation of the trachea by means of a new instrument, the tracheo-perforator of Dr. Rolfs. Dr. Robert of Wiesbaden thought this instrument somewhat too voluminous for small children. He had operated twenty-four times, mostly for croup; and of twenty-one such patients, had saved thirteen. Dr. Klein of Stuttgart described a new tracheotome by Bruns of Tübingen, consisting of a trocar covered by two blades. He also related a case which was operated with it; but it terminated fatally by hæmorrhage.

In the Section for Physics, there were some interesting experiments by Poggendorff and Buff upon Ruhmkorff's coil. Dr. Prestel described an instrument which will be of use to meteorologists, a new atmometer. The vessel in which evaporation takes place stands in connection with a vessel containing air and water. As soon as the level of the water in the evaporator sinks below a certain point, air enters, and water leaves the reservoir. The latter being graduated and measured, admits of easy determination of the amount of evaporated water. Dr. Greiss communicated the curious fact, that all turning chips of iron are permanently magnetic. The South Pole is where the chisel entered first, and the North Pole where it ended its action. Professor Bohn showed a saccharometer by Wild. Professor Jolly of Heidelberg exhibited a little high-pressure steam-engine, which could be worked by means of a gas-flame. He also showed that it was very useful for many things in a physicist's laboratory.

The Section for Mathematics and Astronomy had, for the first time, an astronomical subject under discussion. Dr. Weiler spoke of a linear transformation, which simplified the differential equations of motion in the theory of the moon. It was the same transformation which Jakobi had used in his essay, *On the Elimination of the Knot in the Problem of the Three Bodies*. Thereupon, the meetings of this section were closed.

The Section for Mineralogy discussed the causes of the appearance offered by so-called changeable or shot carnallite, the natural chloride of potassium, which is raised from the mines of Stassfurt. It was admitted to be due to the dispersion in its substance of fine crystals of an iron oxide, which Bergrath Bisshof, the Director of the mines, had declared to be crystallised oxide of iron (Eisenglanz). But the Geheime-Bergrath Nöggerath declared the minute, chameleon-like, hexagonal plates to be a mineral "Göthite" differing from Eisenglanz by containing water of crystallisation. This appeared to Mohr, well known by his analyses with standard solutions, to be rather paradoxical; and he, therefore, spoke on the dehydration of minerals in concentrated solutions of salt. But he was met by a greater paradox related by Rose. This chemist had observed a specimen of hydrated oxide of iron, which was kept under water, to become anhydrous. Dr. Tschermak of Vienna spoke on the composition of different kinds of felspar, notably adular, albit, and anorthit. There were interesting incidents connected with this paper concerning the doctrine of isomorphism. After much discussion, and a communication by Professor Reusch, on changeable or shot crystals, the meeting closed.

In the Section for Psychiatrics, Remak repeated what he had stated in the Medical Section on the treatment of psychical diseases by means of the constant electrical current. Dr. Snell reported upon a new lunatic asylum at Hildesheim, in which the patients, forty in number, were caused to perform agricultural labours. He said that this experiment was new for Germany.

The Medical Section was, as usual, opened with the distribution of a vast number of pamphlets, which were eagerly accepted by the audience. Dr. Rosenstein then made a communication on the affec-

tion of the kidneys which sometimes follows after intermittent fever. He said that this was a disease to which little attention had been paid, although it was frequently accompanied with dropsy. It was not complicated with hæmaturia; but the specific gravity of the urine was high, and the amount of uric acid was increased. In cases where there had not been many attacks of fever, but those with suppression of the perspiration, the diaphoretic method was a curative measure. In fatal cases, the kidney was not found atrophic; but had the appearance known as bacony. Dr. Thudichum made a communication on chylous urine. He showed a specimen which came from an English teacher resident in Germany. The case had, a year ago, been under the care of Dr. Ackermann of Rostock, and apparently recovered. But, last summer, the gentleman went to England to visit his friends; and, in consequence, as he believed, of the incidental high living, the disease had returned. The speaker then drew attention to the chemical characters of chylous urine; and showed that it was urine which contained a certain amount of serum of the blood, in which serum fatty acids were emulged by means of phosphate of soda. The urine should, therefore, be termed liporrotic urine. Professor Mosler exhibited the heart of a calf, which was full of the bladder-worms of the tænia mediocanellata. It is the one represented on the plates in his *Helmintho-logical Contributions*. He also exhibited the killed and dissected pig which had served for the experiments in the Zoological Institute, which I have before related. The heart of this animal, also, was covered with bladder-worms. Throughout its entire body it was measly. The trichinæ with which it had been infected five months ago were found to be partially calcified. Professor Mosler also presented a man who, ten years ago, had had an apoplectic fit. The right side of his body, from the nipple to the great toe, was perfectly insensible to painful impressions—pinching, the passage of needles, burning tinder, and sudden changes from water of 110° Fahr. to water containing lumps of ice—being quite imperceptible to his feelings (analgesia and paralysis of the sense of temperature). But the sense of locality was so correct that, with tied-up eyes, the patient accurately stated the spot where he was touched slightly, and the sense of pressure so perfect that he could distinguish two from four and six dollars. All these features also existed on a piece of scalp over the left parietal bone; a circumstance of which no anatomical explanation could be given. In the limbs which were not affected by these perturbations of sensibility, motility was interfered with.

In the Botanical Section, Professor Wigand made a communication concerning the disorganisation of cells in plants. The mucus-vessels in cinnamomum and althæa, he considers to be disorganised bast-cells; the gum-resins of umbelliferous plants, he believes to be products of disease of membranes; the warts of *Betula verrucosa* (of which a remarkable specimen stands upon the banks of the Serpentine, near to the bridge), he declares to be metamorphoses of lenticellæ; the glandular masses on the *Robinia viscosa*, he also explained as originating in a metamorphosis of cells. Dr. Dippel followed, with some remarks on the origin of resin in pine-trees.

The Chemical Section opened with a communication by Dr. Remelé, on a new reaction for cobalt. Professor Carius showed the influence which the hydrate of hypochlorous acid exercises upon a large number of organic bodies. As an example of the remarkable results obtained by this chemist, I quote the sweet substance isomeric with glucose, which he obtained in this way from benzole. Dr. Volhard communicated that he had succeeded in artificially producing creatine by heating a mixture of sarcosine and cyanamide. Professor A. W. Hofmann of London then gave a lecture on the Composition and Mode of Formation of Rosaniline, which he illustrated by the exhibition of numerous derivates of aniline. The formation of rosaniline requires the presence of toluidine and aniline, and if no toluidine is present, aniline alone (such as the pure aniline obtained from isatine) gives no aniline-red. He then described products of substitution obtained from rosaniline; and said that they had a certain analogy to indigo, in that they formed sulpho-acids. Next, he described and showed several magnificent blue colours obtained by the interchange of toluidine and rosaniline. He concluded by saying, that it was on that day twenty-five years that in this laboratory he had begun his researches on aniline, and he was, therefore, glad to present such results. In recognition of his merits, the assembly gave the Professor a most enthusiastic salvo of applause. Our readers know that Professor Hofmann is returning to Germany, having accepted the Professorship of Chemistry at the University of Berlin, which was held by the late Professor Mitscherlich.

The Section for Zoology discussed many points in the history of the development of the eggs of insects (Forester Hartig), and of isopodes (Professor von La Valette of Bonn). Conservator Schmeltz of Hamburg requested information on several nice points; the last one being, how it would be possible to preserve the edible sea-worm of the Samoa Islands. This creature appears once a year on the coast of those islands, and is then caught and eaten in great numbers. But the Conservator has not yet succeeded in bringing an unspoiled specimen to Hamburg. He should apprise the Acclimatisation Society of this opportunity for the exercise of their taming capabilities. But one thing is certain, that the habits of the worm must be changed; it must appear at a better season than September or November, or it will be valued no higher than sprat.

On the afternoon of the 22nd, the Association adjourned to the neighbouring town of Marburg, the University of the Electorate of Hesse-Cassel. They were greeted at the railway-station by the Rector of the University with a fine speech, and then entered the town in procession, with music ahead. The streets were nicely decorated, and lined by guards of honour composed of turners. The appearance of the multitude was rather remarkable, by the presence of vast numbers of country people who had flocked to Marburg to see the sight. The peasants, the freeholders of forty acres, the conservative, imperturbable, yet intelligent basis of the population of Germany, were present in great numbers. Everywhere you could see the "blaue kittel" and "lederne schnappsack", and an intelligent, close-shaven, sunburnt face, with prominent cheek-bones and blue eyes, under a fur cap. When the throng had entered the town, some went to see the Church of St. Elizabeth, the purest specimen of Gothic architecture extant, and now, after a lengthened restoration, a perfect building.*

I went to the clinique of Professor Roser, now one of the most eminent teachers and practitioners of

* Those of my readers who do not know the story of the Landgravine Elizabeth, who lived somewhere about six hundred years ago, should quickly get it for their wives and daughters. This lady was very good to the poor; but, to satisfy her piety, she robbed her husband, who was then besieged in his residence. The landgraf finding his stores disappear, and no watch able to guard them, mounted guard himself, and caught his lady-love with an apron full of what he supposed to be sausages and loaves; but when he pulled the apron open in his wrath, it contained only a lot of—roses. The saints had backed out the lie, which the landgravine had in the flutter told to her lord and master. Of course, she was sanctified for the fraud; and hence the church at Marburg.

surgery in Germany. This is a beautiful new building of red sandstone, for the reception of surgical cases only. The great feature of it is, that there are no wards containing more than four beds, and most of them contain only two. Professor Roser said that if he could help it, he would never collect more than two surgical cases in one room. Accordingly, he has a minimum of pyæmia, and great success in surgical operations. There is, at last, a practical condemnation of these dens of wound-poison, the enormous wards of general hospitals. When, at Leipsic, I saw the crowded wards, the spasmodic anxiety to effect ventilation by all manner of openings, and the shed in the yard of the hospital, where, in beds, all badly suppurating cases are kept, as if in the open air—all the horrors of pyæmia as I had seen it in military hospitals, and, in a lesser degree, in civil hospitals, abroad and in this country, came before me. I remember a conversation which I had with Professor Bardeleben of Greifswald, on the repeated use of bandages. This surgeon causes all bandages and dressings which have been once applied to open wounds to be immediately destroyed. Cheap calico serves all his purposes, and assists in preventing pyæmia. I had advocated long ago that bandages should not be used twice in the dressing of wounds or open sores; because I knew that they could not be cleaned, or, in fact, were never cleaned effectually. I came to Leipsic; and in the hospital uttered this opinion to Dr. Neumann. Almost offended, he called for the nurse in charge of the bandages. No. 1, unexceptionable; No. 2, unexceptionable. No. 3, full of yellow and otherwise coloured stains. They were packed up in silence. "We cannot get them out, sir," said the nurse. "Exactly so," said I; "that is just what I said to Dr. Neumann. You ought not, in my opinion, to be charged with the filthy and disgusting service of washing used bandages; it infects your fingers and clothes; it saves pence, and costs lives. The washed bandage is the carrier of infection, which keeps open the old and callous sore upon the leg. But the new wound—woe to him who has it! If your forceps, your lint, your charpie, impregnated with the hospital air, your infected bandage, touch it, it is death." If nurses in lying-in hospitals are obliged to wash infected clothes of any kind, or if such are used, no one need be astonished at the outbreaks of fever amongst lying-in women. They are as certain consequences of this sort of bad management, as pyæmia is of the "clean" bandages and "pure" air of general hospitals. But in Professor Roser's place, there was nothing of the kind to be objected to. True, the walls were not done in "Parian" and "non-absorbing"; but the wounds looked healthy. A boy, with the eighty-fourth tracheotomy of Professor Roser upon him, was recovering so fast that, on the second day after removal of the cannula, he could cough strongly, and show that the hole in his windpipe was permanently closed. From the clinique, we went in a body to the anatomy building. There dislocations of the elbow backwards were made and set. But the greatest lesson was the treatment of wounds of the skull with depression. With a little chisel and hammer, small fragments at the margin of the fracture were removed, and then the fragments of the inner table could be removed with the forceps with ease, and the wound cleared of every obstruction. There was a new demonstration how unnecessary and irrational that operation is which passes under the name of trephining. I have denounced it for fourteen years, with a large and successful experience in the treatment of compound fractures of the skull, particularly from gunshot wounds, by my side. If I live a little longer, I shall see Desault's idea, for he conceived it first, and Stromeyer's teaching, for he gave it a living breath, victorious. In the Museum, we saw the skeleton of the giant, which is thirteen Hessian feet (or ten feet ten inches English) high. It comes from a man who was a "haiduck" of a Duke of Brunswick, and afterwards a guardsman of the "Great Elector" of Prussia. With all that height and proportionate size, the skeleton must be smaller than the man was in his prime. For it shows the evidence of wide-spread rhachitis; and the neck of the thigh-bones, for example, are so far sunk and shortened as to have lost at least half an inch in longitudinal effect.

From the Anatomical Museum, the disciples of surgery and anatomy went to the top of the castle, where, in a pleasure garden, the greater part of the company had been regaling themselves and each other with coffee and beer and music. Some contemplated wistfully the bow-window in the castle, the birth-place of the Protestant reformer, Philip the Magnanimous, and now a convict-prison, where Jordan expiated the conspiracy, for which he, and Eisenmann, the doctor of Würzburg, author of many medical books—among them many a volume of Canstat's Jahresbericht—and many other men, were held in imprisonment.

On the return to Giessen, I inspected a little memorial which the town of Marburg had presented to its guests. It consisted of a double piece of cardboard, handsomely embossed, with the list of the remarkable buildings and institutions on one side, and the most remarkable dates in the history of the University on the other; both insides being ornamented with photograms—the one with a representation of the Church of St. Elizabeth, the other with a portrait of Papin.*

* Of course, every one of my readers is acquainted with Papin's pot. It was invented towards the end of the seventeenth century and has since passed through the world as a curiosity. Physiologists used it to boil bones in; for it will boil bones tender, and cause them to split up into concentric layers. The dentists got one of the latest advantages out of it in the shape of vulcanite, or India-rubber hardened by the prolonged influence of steam under pressure. But the era of the Papinian pot is now only beginning. It has become a household utensil in thousands of German kitchens, where it is used for boiling, stewing, and roasting, all of which it performs at a great saving of labour and fuel. In some families, I noticed two at work in the kitchen—one of copper and another of cast-iron—all large and beautifully made, and provided with as simple and efficacious a safety-valve as one can well conceive. Thus there is another great man, who lived before the time that could appreciate him, vindicated by the praises of kitchenmaids, and the magnificent flavour of boiled and stewed meats and vegetables. I looked with reverence upon the *carte de visite* of Marburg's great professor, and resolved at the earliest opportunity to introduce his pot into my own culinary establishment.

[*To be continued.*]

Health of the Navy. A report on the health of the navy was issued yesterday. The statistics are for the year 1861. The total force was 62,485, of whom there were sick daily 3,710; so that, of every 1,000 men of the force, 59 were sick daily, either on board ship or in hospital. The total number of cases from disease or injury was 91,276, being in the ratio of 1460·7 to the 1,000, or nearly three entries on the sick list to every two men of the force. Each case was, on an average, fourteen days under treatment, which gives a mean of about twenty-one days' sickness to each man of the force. There were daily sick on the several stations, per 1,000 men: Home, 48·1, of whom 9·6 died; Mediterranean, sick 61·8, died 10·4; North America and West Indies, sick 60·4, died 42·1; Brazils, sick 43·4, died 16·1; Pacific, sick 58·9, died 7·9; West Coast of Africa, sick 62, died 34·1; Cape of Good Hope, sick 76·7, died 18·1; East Indies and China, sick 86·7, died 26·1; Australia, sick 40, died 13·7; and the Irregular Force, sick 77·4, died 10·4.

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

EDINBURGH, which for three months had presented no more interesting events of a professional nature than one of our small provincial towns would have done, is now all astir again. Of late there has been no lack of work; for we have been holding meetings, forming an University Club, opening a College Hall, listening to a new professor, seeing Mr. Syme operate, visiting our medical societies, hearing debates in our police-court on the diseased meat question;—in short, matters have so changed, that whereas, a month ago, your Edinburgh correspondent would have felt how difficult it was to get enough news for a very short communication, he now feels that he will have no little difficulty in compressing all that he has to say in the space allotted to him.

The General Council of the University meets twice in the year—in March and October. The last meeting for this year occurred on the 31st of last month, and was attended by a large number of its members. The General Council is a body composed of the graduates and professors of the University, and of those students who, at the time of the passing of the University Act, had completed a four years' curriculum. Its functions are ill defined. Its power is limited to the election of one of its number to represent the Council in the "University Court", which is the court of appeal in all university matters. Its function appears to consist very much in drawing the attention of the Senatus Academicus and of the University Court to changes which appear desirable in the University. But, as advisers who are not powerful are rarely listened to, the representations of the Council appear to be treated by the higher university authorities with a certain amount of contempt. The General Council has been representing to the University Court the propriety of causing the University accounts to be submitted to them; but the Court has thought fit to refuse their sanction to this proposal, without even giving a reason for so doing. The debate at last meeting was marked by a few speeches which proved that some of the leading members of Council felt not a little aggrieved at the summary manner in which they had been treated; and their displeasure was by no means allayed when Professor Christison informed them that the General Council of the University would see the accounts at the time when they would be placed before the public—*i. e.*, early next year; and that he could not see what claims the Council possessed over the public in being informed on such matters. The general feeling on this matter is, that although some members of the Council may have been imprudent in attempting to raise an *animus* between the Senatus and University Court on the one hand, and the General Council on the other, yet the correct policy of the former bodies undoubtedly consists in conciliating the body of graduates, and treating with deference the suggestions of a highly educated section of the community, whose strongest feeling in these matters is an interest in the welfare of Alma Mater.

On the 2nd of November, the classes of the University were opened. On that day, Mr. Spence, the newly elected professor of surgery, delivered before a crowded audience, which comprised a large number of the medical men of Edinburgh, his inaugural address. Mr. Spence chose as the subject of his address a review of the Edinburgh school of surgery; and his treatment of the subject elicited the approval and applause of the audience.

The introductory address of the Principal of the University, which has hitherto been delivered on the first day of the session, was this year postponed until Monday, the 15th ult., with a view of preventing, if possible, a repetition of the very disgraceful conduct which, annually repeated, has rendered the ceremony quite notorious in Edinburgh. Some of the professors, who believed that the chief actors in the disturbances on former occasions had been persons not comprised in the body of students, suggested that no one should this year be admitted to the lecture who could not prove by showing a ticket that he was a matriculated student; and the lecture was therefore postponed, so as to give time for all students to matriculate. The result has, however, been far from satisfactory, as the foolish disturbances have this year been rather worse than usual. The learned Principal chose, as the subject for his address, the better endowment of the Universities of Scotland; and the claims of science, literature, and the arts to national recognition and support, not only as taught in these Universities, but as advanced by the discoveries and inventions of their professors and students. We heartily regret that the great interest of the subject, and the admirable manner in which it was treated, failed in securing a patient hearing for one, whose high reputation as a man of science and of letters should in a special degree command the admiration and respect of all who are *alumni* of the University of which he is so bright an ornament.

The formation of an University Club in Edinburgh is in many respects the most remarkable event which I have to narrate. This institution is to be organised according to the plan of our best clubs, and is instituted "for the association of gentlemen connected with the Universities of the United Kingdom, or with foreign Universities." It is to be composed of 500 members, who are to pay an entrance-fee of twenty guineas, and an annual subscription of five guineas. The number which had already joined when the first list appeared, in October, amounted to 335 members; and since that time many have been elected. The Club has, I believe, already secured two large houses in Princes Street; and building operations are to be set on foot immediately.

I have alluded to the opening of a College Hall in Edinburgh. Some persons have long thought that it would be advisable to offer students the opportunity of living in a collegiate institution, where, besides

being constantly in the company of one another, they would enjoy the opportunities of tuition. Several professors and others have formed a College Hall Company; and, as a preliminary step, they have secured a house, which is to be presided over by a warden, and is, *pro tempore*, to serve the purposes of the intended College Hall. I can tell you nothing of the success of the institution; but, from the fact that I have never heard its name mentioned by a single student, I should very much question whether students fully appreciate the advantages which it is supposed to offer them.

On the 2nd inst., Mr. Syme removed the whole of the lower jaw of a man for a tumour implicating its whole substance. In spite of the admirable manner in which the operation was performed, the patient sank a few hours after its completion.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
SHROPSHIRE ETHICAL. [Annual.]	Lion Hotel, Shrewsbury.	Mon., Nov. 28, 2.30 P.M.
BATH AND BRISTOL. [Ordinary.]	York House, Bath.	Thursday, Dec. 1, 7.15 P.M.

Correspondence.

POOR-LAW MEDICAL RELIEF.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your finding space for the following reply of the Poor-law Board to the letter you did me the favour to insert in your JOURNAL of the 12th instant. You will perceive that the Board are not desirous to afford us any assistance. My medical friends must, therefore, individually see their own members, and endeavour to obtain from them a promise to support a bill founded on justice. In the course of a short time, I will lay a copy of the proposed Bill before the profession, and elicit from them their opinions on it. I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, Nov. 21st, 1864.

The Secretary of the Poor-law Board to Mr. Griffin.

Poor-law Board, Whitehall, Nov. 19th, 1864.

SIR,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 8th inst., enclosing an extract from a newspaper report of the proceedings at a meeting of the Guardians of the Southampton Incorporation relative to the providing of medicines for the Poor.

The Board direct me to express their thanks for your communication. As regards the last paragraph, however, they desire me to state that they will not trouble you to send them a copy of the proposed Bill to which you refer. They will be prepared to consider any Bill upon the subject of the Poor-law Medical Relief which may be introduced into Parliament by any member of the legislature, and to give it due attention. I am, sir, your obedient servant,

C. GILPIN, *Secretary.*

Richard Griffin, Esq.

ASSISTANT-SURGEONS FOR INDIA.

SIR,—In the last number of the JOURNAL, there i an advertisement from the India Office for assistant surgeons in H. M.'s Indian medical service; and was much surprised to find there was no editoria comment upon this strange procedure of his Majest of India. You surely do not forget the late attemp to pass a bill through Parliament at the last momen to enable the autocrat of India to get recruits for th Indian medical service, and how very properly it wa rejected.

Now, sir, here is an attempt to do what Parliamen in its wisdom refused to sanction; but, as you see the great man, who governs India from Westminste would not submit to the dictum of Parliament. It therefore, rests with the press to expose this proceed ing, and point out to young medical men the dange of being entrapped by such advertisements. Sir C Wood has no more power to promise retiring allow ance than I have.

The commission of the last assistant-surgeon ap pointed to Madras under the old competitive syste bears date the 25th January 1860; and since the there has been no act of Parliament enabling th Indian Secretary to nominate for the Indian medica service. Hence his fruitless attempt at the close o last session. I warn medical men not to be seduce to enter a service now worthless, and without an guarantee for the future. The British service, bad a it is, is far preferable in every way. I give my advic after a service of twenty years in India, now enjoyin the handsome pension of ten shillings and sixpenc a day!

So, I say again, beware, young men; tell Sir C Wood you will have none of it. Take my advice stay at home, and thus avoid the snubs of your so called superiors (I say, your inferiors). Bread an cheese here is better than what you will get in India but if you are for the red flag, wear it in a recognise service, which the Indian is not now.

A RETIRED SURGEON-MAJOR, MADRAS ARMY.

November 19th, 1864.

TREATMENT OF PARTURIENT WOMEN.

LETTER FROM WILLIAM LEGGE, ESQ.

SIR,—I fear I have already occupied too muc space in our JOURNAL; but I must beg a corner t reply to Mr. Pope's criticisms.

Mr. Pope joins issue with me on the question, I pregnancy a disease? I reply: No, but a natura physiological process. He says, Yes, and forthwit classes it with *zymotic* diseases! adding, that it i "the primeval disease inflicted by the Almighty o Eve;" and quoting (apparently in support of this as sertion) the words, "I will greatly multiply th sorrow," etc. But a moment's consideration wil show that, just as the elements of decay existe in the human organism before the fall, and the curs consisted in calling them into activity, so the sorrow here spoken of was not a new feature in the process of child-bearing, but the curse lay in *multiplying* that sorrow. Even granting Mr. Pope's view correct, h can scarcely contend that pain and sorrow constitute disease. The question at issue, however, will, I think, be best decided by first attempting to attach a distinct meaning to the term disease; and, although it is not easy to define precisely a general term, it will suffice for our purpose to say that disease embraces every serious and permanent derangement of the system, such as fevers, inflammatory affections and their sequelæ. It differs widely from a simple *disorder*, such as scabies; or a *malady*, such as club-

oot. So far, indeed, as the term malady refers to a state of suffering, it may embrace parturition; but no one will deny that there may be many maladies where there is no disease. If, then, parturition be a disease, so must micturition and defæcation be diseases also.

Let me assure Mr. Pope that he is as mistaken in thinking any innuendoes conveyed by my remarks, as he is in representing me an advocate of stimulant diet. Probably my last letter escaped his notice, or he would have perceived that I recommend the diet to be sufficiently substantial, *without* being stimulant.

I believe the discussion of this subject will be productive of good results; and I am sanguine that Mr. Pope's "phalanx of veterans" will have their ranks thinned under a vigorous charge directed by such leaders as Drs. Oldham, Graily Hewitt, and Skinner.

I am, etc., WILLIAM LEGGE.

Wiveliscombe, November 14th, 1864.

LETTER FROM G. R. D. MACCARTHY, ESQ.

SIR,—It is pleasing to see the treatment of parturient women has been so far discussed by the letters you have lately published, that I should think we might be pretty well agreed as to the propriety of a cautious middle course, adapted to the constitution and circumstances of the case.

There are various conditions of the animal frame which are not disease, but yet are deviations from the normal standard, and yet such as to require medical treatment and an alteration of diet. Constipation, for instance, to a certain degree, and a certain congested state of the vessels, and the occasional headaches which many persons are troubled with, cannot be denominated disease, but yet require purgative and other means for their relief; so, also, an exhausted state of the system, from great exertion, indicates the propriety of rest, and even of stimulus. So that I cannot see that, because parturition is a natural and physiological process, it follows we are to leave the subject of it to herself; especially, as we know what serious deviations from health are often consequent on it, even with the best management. And how much more danger might be apprehended where no care is taken.

One of your correspondents in your last JOURNAL has, if I may so express it, shunted off from the direct line into a branch of the subject, and got on the ergot question. In No. 3 of his conclusions, he says, "If flooding, hour-glass contraction, or contraction of the os uteri, etc., is to be avoided, ergot of rye should not be given"; and then, in the fourth place, he says, "If it be necessary to give ergot, the best preparation is the tea," etc. I do not exactly understand him; for those alarming occurrences, he has stated, are always to be guarded against, and are not easy to be foreseen; so that, if so, ergot should never be given. With respect to flooding, I have always considered its use in labour as preventive of after-hæmorrhage, by causing an earlier contraction of the uterus and expulsion of the placenta.

As I trust we are discussing these matters with the most perfect candour and friendly feeling, I will venture to state what I have observed of the effects of this extraordinary specific.

1. As Dr. Whitmarsh has stated, I have found the best manner of giving it is as tea; boiling it first (a drachm and a half in a teacupful of water) for a few minutes, and then letting it stand and infuse for a quarter of an hour. This to be given in about three doses, once every fifteen or twenty minutes. Often the first is sufficient.

2. That it ought never to be used where there is a narrow pelvis, and where the mechanical impediment is very difficult to overcome, as in case of impaction of the head; or where the os uteri is not quite dilated, or very soft and dilatable; and never in first labours, unless the head is pretty well descended into the pelvis, and the pains have become weak.

3. That its use, therefore, seems to be, as Dr. Whitmarsh has stated, to arouse, and, I may add, assist, the uterine contractions; and here it is, no question, of amazing benefit. For I can see no use in waiting an indefinite time, probably for hours—prolonging the state of anxiety on the part of the patient and her friends—when we know we have in our power a well tested agent which would, in all probability, bring her sufferings to a close in half an hour or less, just merely from a complaisance to nature.

For what is nature but a personification of those laws and modes of action which the Deity has ordained? We should remember, He has constituted us intelligent beings; and what are all the many inventions and combinations of mechanical and chemical powers, but a guiding, directing, and increasing those powers, so as to produce effects which could not be gained but by the use of our intelligence? So that art, which is too often decried, as if it were contrary to, or an interference with, nature, is, in fact, the result of the mental faculties with which God has endowed us; and which are, in truth, nature in its most perfect state of development.

If any one were fallen, and injured and stunned thereby, yet, after a while, such a one might be able to rise by the unassisted efforts of nature; but would it not be both kind and helpful to lend a hand, especially if it were a female?

"*Opiferque per orbem dicor*" is the physician's motto; which would not be applicable if we were only to gaze on nature's operations; and, instead of viewing and dealing with her as an efficient handmaid, exalt her to the dignity of a goddess.

The same gentleman I have already alluded to, mentions the comparatively small percentage of bad cases amongst the patients of skilled midwives. It has not been my good fortune to meet with many of them; and where there is little skill and little humility, there is, I fear, much officiousness, assurance, and obstinacy.

Begging pardon for the length of my observations,

I am, etc., G. D. R. MACCARTHY.

SIR,—I feel deeply interested in the discussion of the treatment of parturient women; and, if you will allow me a small corner in your valuable JOURNAL, I will tell you how I treat; and, I may say, with universal success, as I never see a case of puerperal fever or any other of the dreaded sequelæ of parturition.

I always begin with a light nourishing diet, such as arrow-root, gruel, sago, and the like. On the morning of third day, I never omit giving an aperient of castor-oil. After its action, I order chicken- or mutton-broth; and then, day by day, gradually increase the quality of the food, till we get to the mutton chop, roast beef, etc.

I may say that this treatment is followed by the best results; and as far as actual practice goes, I may add, that I attend in a year quite an average number of labours.

I am, etc.,

"YOUR FAITHFUL ASSOCIATE."

Nov. 16th, 1864.

THE PHILADELPHIA MEDICAL REPORTER contains an account of a case of external iliac aneurism cured by pressure applied in a novel way by Dr. Moffat, at Staten Island.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 16th.

Brideoake, Robert Farrar, Leigh, Lancashire
Corbin, Thomas Wilson, L.S.A., Hornsey
Craigie, John, Hackney
Dawson, Henry, L.S.A., Church Road, Islington
Dwyer, John Cornelius, Woolwich
Haslewood, Albert Octavius, Darlington
Hatherly, Henry Reginald, Derby
Jones, Robert Arthur, Carnarvon
Lynch, Jordan Roche, Notting Hill
McMillan, Samuel Scott, Bolton, Lancashire
Oliphant, John, M.D.Edin. and L.R.C.P.Lond., Edinburgh
Pogson, William, Seacroft, near Leeds
Quin, John Hogan, Dublin
Rigg, Thomas, M.D.Edin., Carlisle
Rigden, George William, Canterbury
Roberts, Edward Coldridge, Exeter
Scott, Robert John, C.M.Aberd. and L.S.A., Omagh
Snow, William Vicary, Barnstaple
Wilford, John George Frederick, Brompton, Yorkshire

Admitted on November 17th—

Compton, Thomas Armetriding, B.A.Cantab., Christchurch
Dalton, Thomas, M.D.Edin., Wigton, Cumberland
Forster, Edward Wood, Newcastle-on-Tyne
Glynn, Thomas Robinson, Liverpool
Grosvenor, Alfred Octavius, Alsager, Cheshire
Harvey, Walter Anstice, South Petherton
Heaven, Charles Thomas, London
Hora, Tudor, Westbourne Terrace
Jones, James, Kingston-on-Thames
Leacock, Charles George, Puckeridge, Herts
Mackey, Edward, Birmingham
Marshall, Francis John, L.S.A., Maulton, Northamptonshire
Massy, George, Dublin
O'Leary, Edmund, Tipperary
Ryder, Henry Thomas, L.S.A., Devonport
Snowdon, John Pringle, Newcastle
Spencer, Lionel Dixon, M.D.St. Andrews, Newcastle
Taylor, Herbert, M.D.Edin., Rutland Street
Willson, Henry, Strand
Woodford, Edward Russell, Ventnor, Isle of Wight

Admitted on November 18th—

Anstey, Arthur Newland, Adelaide, Australia
Cole, Richard Beverly, M.D.Philad., San Francisco
Duke, Olliver Thomas, Kennington
McFarlan, John Moorehead, Muiravonside, Stirlingshire
Manley, John, L.S.A., West Bromwich
Ray, William, West Square, Southwark
Rogers, William Moon, Mauritius

At the same meeting of the Court—

Strickland, Charles, H.M.S. *Supply*, Woolwich, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date December 7th, 1858.

APOTHECARIES' HALL. On November 17th, the following Licentiates were admitted:—

Brewster, Edward, Grantham
Child, Edwin, Richmond, Surrey
Haxworth, Walter, Barnsley, Yorkshire
Müller, Augustus Christian, St. Mary's Terrace
Smith, George, Kentish Town
Smith, Henry Richard, Newark
Tomlinson, D. Webster, St. Mary's Hospital

At the same Court, the following passed the first examination:—

Garman, J. Stephen, Western General Dispensary, Marylebone

APPOINTMENTS.

MOIR, R., M.D., appointed Superintendent of the Central Prison at Agra.

*WINTERBOTHAM, W. L., M.B.Lond., appointed Certifying Surgeon under the Factories' Act, for Bridgwater and neighbourhood.

ARMY.

BALL, Staff-Assistant-Surgeon J. J., M.D., to be Assistant-Surgeon 33rd Foot, *vice* T. Quinlan.

BARKER, Staff-Assistant-Surgeon J. E., M.B., to be Assistant-Surgeon 103rd Foot, *vice* R. Hall, M.D.

CLARK, Assistant-Surgeon T., 33rd Foot, to be Staff-Surgeon, *vice* J. Donald.

DAVYS, Surgeon J., 38th Foot, to be Staff-Surgeon, *vice* W. S. Whylock, M.D.

HALL, Assistant-Surgeon R., M.D., 103rd Foot, to be Assistant-Surgeon 33rd Foot, *vice* T. Clark.

LESLIE, Assistant-Surgeon W. H., M.D., 48th Foot, to be Assistant-Surgeon Royal Artillery, *vice* T. Maunsell.

QUINLAN, Assistant-Surgeon T., 33rd Foot, to be Staff-Assistant-Surgeon, *vice* J. J. Ball, M.D.

WHYLOCK, Staff-Surgeon W. S., M.D., to be Surgeon 38th Foot, *vice* J. Davys.

ROYAL NAVY.

ALLEN, John, Esq., Acting Assistant-Surgeon, to the *Magicienne*.

CARMICHAEL, William, M.D., Assistant-Surgeon (additional), to the *Cumberland*.

DALTON, William R., Esq., Staff-Surgeon, to the *Royal Adelaide*.

DOMVILLE, H. J., M.D., to be Deputy Inspector-General of Hospitals and Fleets.

DUNWOODIE, J., Esq., to be Surgeon in Her Majesty's Fleet.

IRELAND, Arthur J., M.D., Assistant-Surgeon, to the *Royal George*.

JOHNSON, Arthur B., Esq., Assistant-Surgeon, to the *Implacable*.

LAMBERT, John, Esq., Assistant-Surgeon, to the *Espoir*.

LEES, Charles A., Esq., Assistant-Surgeon, to Malta Hospital.

MEIKLEJOHN, J. W. S., M.D., to be Surgeon in Her Majesty's Fleet.

NIHILL, John, M.D., Surgeon (additional), to the *Duncan*, for service at Bermuda Hospital.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

SCARR, R. T., Esq., to be Assistant-Surgeon 1st Hertfordshire Light Horse Volunteers.

WILLIAMS, J., Esq., to be Assistant-Surgeon 1st Administrative Battalion Cornwall R.V.

BIRTH.

DAVIS. On November 1st, at St. George's, Wellington, Salop, the wife of *W. Davis, Esq., of a son.

VACANCY. The office of surgeon-superintendent of Portsmouth Convict Prison has become vacant by the death of Dr. J. W. Bowler.

A YOUNG MOTHER. In Sheffield was lately registered the birth of a child, whose mother was only 11 years and 10 months old.

DR. ARNETH, the author of a treatise on the statistics of *Midwifery and Gynekology in France, Great Britain and Ireland*, has been appointed physician in ordinary to the Grand Duchess Helena of Russia.

BENZINE AS AN INSECTICIDE. A mixture of ten parts benzine, five parts soap, and eighty-five water has been very successfully used by Gille to destroy the parasites which infest dogs.

DR. COHN. Dr. B. Cohn, the author of a treatise on *Embolic Diseases of the Blood-vessels*, for some years a private teacher (privat-docent, or aspirant to a professorship) at the University of Breslau, died a short time ago at Berlin. The loss of this promising author and physician is much regretted in scientific circles.

FRENCH INQUIRY INTO GERMAN MEDICAL MATTERS. Professor Le Fort of Paris has been deputed by the French government to investigate specially and in detail the plans of the Prussian University studies and the arrangements of the kliniks and hospitals in which medicine and surgery are taught.

THE HUFELAND SOCIETY OF BERLIN. The competitive essays demanded by the Hufeland Society of Berlin were to be on "Hypodermic Injections." Two essays were offered, and the author of the best and successful one was Dr. Albert Eulenberg, Assistant Physician of the Klinik at Greifswald.

MEMORIAL OF THE LATE PRESIDENT OF THE COLLEGE OF PHYSICIANS OF IRELAND. We understand that a movement has been inaugurated by a number of the Fellows and Licentiates of the Royal College of Physicians for the execution of a bust of Dr. Corrigan, late president of the college. The execution of the bust has been confided to Mr. Foley of London. The college have also voted a full-sized portrait to be executed by Mr. Catterson Smith and placed in their College Hall. (*Dublin Medical Press.*)

Fecundity. Mr. Jackson, of Wimpole Street, records the following remarkable instance of female fecundity. A lady, 30 years of age, married in 1859, and her first child was born two years afterwards. In May 1862, she had twins, and in July of the following year a triplet. On the 2nd of the present month, she again had twins, making a total of eight children all born alive, and the last seven of which were born within two years and a half.

Fines for a Neglect of Vaccination. At the Wandsworth Police Court on Monday last, two women were fined 5*s.* each and costs for neglecting to have their children vaccinated. In one case the defendant had refused to allow her children to be vaccinated, and had said, "If it is God's will they should have the small-pox, they will have it." The consequences had been most lamentable. Three children had died from small-pox. There were five children in the family unvaccinated.

Horse Guards Grammar. Mr. Thomas Hughes, author of *Tom Brown*, has been appointed "Reviser of Military Regulations," with a thousand *per annum*. No wonder the Duke of Cambridge has such a dislike to competitive examinations and to having in the army men who are capable of writing English. The war authority itself, it appears, is obliged to have a literary gentleman to peruse its documents before they are issued.

Testimonial to Mr. J. Watkins, F.R.C.S. Mr. Watkins was last week entertained at dinner by a large party of gentlemen, most of whom had been his patients, and presented with his own bust in marble. The bust, which has been executed by Mr. W. Davis, and is a most faithful likeness, was uncovered at the end of the chairman's speech. The inscription is, "Johanni Watkins, sanatori, grati sanati;" and, in English, "The Healed to the Healer."

Epidemic Disease at Woolwich. At a meeting of the Woolwich Local Board of Health, Mr. Ruegg said that the Registrar-General's report proved that the mortality at Woolwich now far exeeeded that at the period when cholera raged in 1854. The prevailing epidemic, typhus fever, had struck down the wealthy and the cleanly even more than the poor and those who were compelled to reside in crowded habitations. Woolwich was naturally a healthy town, twice as healthy as London, but now the rate of mortality was considerably greater. After consideration, and obtaining all the information he could, he was convinced that this state of things arose from the discharge of the metropolitan sewage into the Thames at the outfall works near Barking Creek, or from defective trapping of the local sewers. At all events, a searching investigation was required. Mr. Rixon, registrar for the district, said there was no disguising the fact that mortality was greatly increasing in the town. After considerable discussion, Mr. Ruegg's motion was adopted, and a committee appointed.

Illegal Assumption of Title. George Fentiman, a chemist and druggist, was lately charged at the Thames Police Court, with wilfully and falsely taking and using the name and title of surgeon, he not being registered under the Act 21st and 22nd of Victoria, cap. 90, sec. 40. Mr. Moss, a solicitor, conducted the prosecution for Mr. John Wills, a regularly qualified and registered medical practitioner, of Upper East Smithfield. The defendant carries on business in the same street. The case against him was proved several weeks since, and was ordered by the magistrate to stand over. It was now admitted that the defendant had since the formal conviction by the magistrate omitted the word "surgeon" from his bills and advertisements, and also erased the word from the front of his house. Mr. Moss said his client, Mr. Wills, had been put to considerable annoyance and expense by the conduct of the defendant. No one could or would take up these cases except a medical man, although the best interests and well-being of society were concerned in carrying out the law. The complainant did not expect to recover all the expenses he had incurred in the prosecution, but some costs ought to be allowed. Mr. Paget said the law had been properly vindicated, and that was enough. If he found the offence repeated by the defendant, he should inflict the full penalty. At present he should impose a nominal fine of 1*s.*, and 2*s.* costs. [It is certainly hard that the expenses of this prosecution should fall upon Mr. Wills. What is the use of a Medical Council if it does not take care that the Medical Act is carried out. Mr. Wills has *done* something. The Medical Council *talks* and spends money. Editor.]

Dinner to John Lavies, Esq. On Wednesday last, November 23rd, a dinner was given at the Freemasons' Hall to Mr. Lavies, late Treasurer of the Medical Registration Association. The chair was occupied by Mr. Fergusson, F.R.S.; and there were about sixty gentlemen present, among whom were Dr. Copland, Mr. Erichsen, Mr. Hancock, Dr. G. Webster, Mr. Lord, Mr. Ansell, Mr. Tidd Pratt, Mr. Lush, Q.C., etc. Letters expressive of regret at not being able to attend were received from various members of the profession, several of whom at the same time forwarded contributions to the testimonial for Mr. Lavies. The Chairman, in proposing the health of their guest, Mr. Lavies, referred to the progress of the Medical Registration Association, and to the difficulties with which it had had to contend in consequence of the uncertainty of the Medical Act. He hoped that, though the Association was at present in abeyance, it would revive. Mr. Lavies, in acting as Treasurer and for some time as President, had spared no labour, and had not hesitated to spend his own money in behalf of the Association. Mr. Lavies, in reply, expressed his thanks for the kindly recognition shown to him by his professional brethren.

Poisoning by Tobacco Juice. A young man, named Richard Edmondson, a cotton piecer at Messrs. Garnett and Horsfall's, Low Moor, near Clitheroe, died lately somewhat suddenly, with all the symptoms of having been poisoned. His pulse was quick and feeble; his eyes dilated and insensible to light; the heart was perfectly paralysed; his muscles rigid; and he was unable to swallow. This was his condition before death. The coroner ordered a *post mortem* examination of the body to be made by Dr. Scott of Clitheroe. He found the vessels of the brain swollen and filled with black blood, together with extravasation of blood in the ventricles of the brain. "These appearances" (he deposed) "led me to conclude that the deceased had taken some narcotic poison, as we find them in persons having taken opium. I attribute the appearance of the blood-vessels on the brain to narcotic poison. The deceased was very much emaciated. After hearing all the evidence, I attribute the cause of his death to the chewing of Limerick roll tobacco, and his having swallowed the juice. It is a kind of poison that acts on the brain, and is an irritant and compound poison. It is not used in medicine now. I should not like to give a person thirty grains of the unprepared tobacco. Tobacco gains power according to the way in which it is manufactured; and the Limerick roll is exceedingly strong tobacco." The coroner summed up; and the jury returned a verdict, "That the deceased died from the effect of having chewed Limerick roll tobacco and swallowing the juice thereof, which has acted upon the stomach as a narcotic poison."

Samaritan Hospital. Two consulting physicians have been appointed to this hospital—Dr. Jenner and Dr. Greenhalgh. It appears to be a wise arrangement to have selected one physician, at least, for the consulting office, who is not a specialist; while one physician-accoucheur must doubtless prove advantageous to the institution.

The Pharmaceutical Society. A deputation of the Council of the Pharmaceutical Society of Great Britain, consisting of Mr. Sandford (president), Mr. Hills (vice-president), Mr. Hanbury (treasurer), Mr. Squire, Mr. Morson, Mr. Waugh, Mr. Orridge, Dr. Edwards, Mr. Flux (solicitor), and Mr. Bremridge (secretary), have had an interview with the Right Hon. Sir George Grey at the Home Office on the subject of a proposed bill for regulating the qualifications of chemists and druggists.

The Late Mr. W. J. Wickham. During the past week, by permission of the Dean and Chapter, a handsome memorial tablet has been placed within the Cathedral to the memory of the late William John Wickham, Esq., at the cost of many friends, who are unwilling that his eminent services as a medical man, and his many unostentatious acts of kindness should pass away, without some tribute of their love and regard. The following is the inscription:—"In memory of William John Wickham, Esq., F.R.C.S., forty years Surgeon to the Hants County Hospital. He died January 19th, 1864, aged 66 years. Erected by many friends, who deeply lament his loss." In gold letters above the head are the following words. "In a loving and Christian spirit he healed the sick, and comforted the afflicted."

Illegally Keeping Lunatics. At the Central Criminal Court, this week, Sophia Leander surrendered to receive judgment. She was convicted a few sessions back of keeping a house for the reception of lunatics without being duly licensed, but sentence was respited to give the defendant an opportunity of removing the patients from her establishment and complying with the law. Mr. Giffard now informed the court that the defendant still kept on the establishment, and appeared determined to put herself in opposition to the law. She had a number of patients under her charge now. After some discussion, Baron Bramwell said the defendant seemed to have an opinion that she was not infringing the law. He thought that judgment need not be passed, but that having been admonished, she would be allowed to have her recognisances enlarged, to be brought up again for judgment. The defendant was then discharged. Henry Wilkins appeared upon his recognisance to answer a similar charge, and was fined £50.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8 P.M.

Thursday. Harveian Society of London, 8 P.M. Dr. Graily Hewitt, "On the Inflexions of the Uterus and their Treatment."—Linnæan.—Chemical.

Friday. Western Medical and Surgical Society, 8 P.M. Mr. B. E. Brodhurst, "On Bony Anchylosis."

COMMUNICATIONS have been received from:—Mr. J. Vose Solomon; Mr. T. M. Stone; Dr. Thudichum; The Honorary Secretaries of the Western Medical and Surgical Society of London; Dr. Chuckerbutty; Dr. C. H. F. Routh; Mr. John H. Gibson; Mr. Clarke; Mr. G. D. R. MacCarthy; Mr. Richard Griffin; Dr. Fitzpatrick; Dr. J. H. Balfour; Mr. Augustin Prichard; Mr. J. Hogg; Mr. W. L. Winterbotham; Mr. W. Davis; Dr. R. Fowler; Mr. J. B. Curgenven; Dr. William Newman; Dr. Kidgell; and Mr. A. Ransome.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

S. A.—Mr. Carter had no more to do with throwing open the Provident Fund to the whole profession than had any one of the Directors who voted for the proposal.

Acting Assistant-Surgeons.—T. P.—We believe it is quite true that at all events one of this new class of newly-appointed army surgeons has been dismissed the service for drunkenness. We have even heard of one of the "waifs and strays" being found in a beastly and helpless state of intoxication.

Tapping the Bladder.—Sir: Your paragraph, giving M. Velpeau's opinion about tapping the bladder, is not likely to have much weight; as in it, the learned professor assumes that in each operation—viz., in puncturing above the pubis, and in tapping through the rectum—the peritoneal cavity is opened.

We cannot but be surprised that a surgeon with such extended experience should make a mistake of this kind.

It did not appear right to let the error pass without some remark. I am, etc., Augustin Prichard,
Surgeon to the Bristol Royal Infirmary.
Clifton, November 21st, 1864.

The Griffin Testimonial Fund.—Sir: The following subscriptions have been further received on behalf of the above Fund:—J. E. Moreton, Esq. (Great Boughton), 10s. 6d.; Dr. T. P. Parker (Sunderland), 10s. 6d.; Wm. Kimbell, Esq. (Solihull), 5s.

Amount previously announced, £102:1:6. Received at the *Lancet* office, £6:14.

I am, etc., Robert Fowler, M.D.,
Treasurer and Hon. Sec.
145, Bishopsgate Street Without, November 23rd, 1864.

ADVERTISEMENTS.

University of London.—Notice

IS HEREBY GIVEN, That the next Half-yearly Examination for MATRICULATION in this University will commence on MONDAY the 9th of January 1865. In addition to the Metropolitan Examination, a Provincial Examination will be held in the Town Hall of Leeds.

Every Candidate is required to transmit his Certificate of Age to the Registrar (Burlington House, London, W.) at least fourteen days before the commencement of the Examination.

Candidates who pass the Matriculation Examination are entitled to proceed to the Degrees conferred by the University in Arts, Science, and Medicine: and are exempt (1) from the Entrance Examination otherwise imposed on Candidates for admission to the Royal Military College at Sandhurst; (2) from those Examinations which every Medical Student now commencing his professional studies is required to have passed some one; (3) from the Preliminary Examination otherwise imposed by the College of Surgeons on Candidates for its Fellowship; and (4) from those Examinations in which it is necessary for every person entering upon Articles of Clerkship to an Attorney to have passed some one,—such as Matriculate in the First Division being entitled to the additional exemption from one year's Service.

WILLIAM B. CARPENTER, M.D.,
November 17, 1864. Registrar.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASE OF HYSTERIC APHONIA.

Under the care of JAMES RUSSELL, M.D.

THE following case affords me an opportunity of completing, by a characteristic instance, the illustrations of loss of speech from causes seated in the nervous system, which I have laid before the readers of the JOURNAL. In my first paper on this subject, the cause of the speechlessness was of an organic nature, directly affecting the integrity of the cerebral tissues; in a second paper, I described some cases in which the origin of the disorder appeared to be connected with an abnormal condition of certain of the smaller blood-vessels of the brain, induced by the epileptic paroxysm, and lowering the nutrition of the ganglion-cells. In the present instance, the disease was purely functional; it depended entirely upon abnormal suspension of that effort of volition which is the appropriate stimulus to the muscles of articulation, as well as to those of the limbs and trunk.

In the *Medical Times and Gazette*, September 3rd, a very similar case is narrated, and some very judicious remarks upon the case by Dr. Wilks are appended. These remarks tend to enforce the truth of the fundamental principle both in the pathology and in the treatment of all hysterical affections, that they are "mental or moral ailments, requiring moral treatment"; and that "the method of cure was to rouse the will, and thus rid the body of its thousand morbid feelings".

It is not easy to realise fully the extent to which voluntary effort is suspended in cases of hysteria, and especially in such cases as the one to be detailed, in which we see the normal stimulus of volition supplied to all the muscles of the body excepting one single group, from which it is withheld. It needs experience to convince us that an effort which, under normal conditions, is made without our recognising the act, should, under certain unhealthy states, be matter of extreme difficulty; even as formidable as it would be to ourselves, were we aware that some painful or unpleasant consequence must be the immediate result. Yet it is indisputable that this fact is of fundamental importance in conducting the treatment of the disease. Unless the patient be induced to make the needful effort at an early period of her malady, the difficulty of making it increases with the delay; the will becomes more and more enfeebled by indulgence of the disinclination to rouse it into action; and precisely on this account the effort is less and less likely to be made. But at the same time the nutrition of the muscles, and of the nervous centres at the seat of volition, is suffering in exact proportion as the indisposition to functional activity is indulged; and thus, whilst a constantly increasing effort is demanded on the one hand, on the other the physical conditions for movement in the muscles and nervous centres are placed at an ever increasing disadvantage. The awkward movements effected in hysterical paralysis, so like those seen in a mild case of chorea, strikingly prove the absence of perfect relation between the muscles and the governing influence of the will.

Hysterical aphonia certainly presents hysterical affections in a remarkable point of view, when it is remembered how limited is the group of muscles thus left disregarded by the will. A very parallel case, however, occurs in retention of urine, wherein probably there is a still greater limitation in the muscular affection; the sphincter of the bladder being retained by emotional excitement in a state of abnormal contraction. It is further to be observed, with respect to the example just cited, that the retention will often occur in susceptible subjects, quite irrespectively of any other hysterical manifestations—*e.g.*, after labour or miscarriage; and this, be it observed, despite of (perhaps, sometimes, because of) the earnest desire on the part of the patient to avoid the necessity for using the catheter. I witnessed lately a somewhat similar condition in a case of prolonged stupor after epileptiform convulsions. Whilst the insensibility was complete, the urine was passed involuntarily; but, as consciousness returned, the urine was retained.

In many of the cases of this description, some particular sensation of pain or of discomfort affecting the part, the muscles of which are subsequently affected by the hysterical paralysis, constitutes the first step in the morbid process, by fixing the attention upon the particular organ. Thus a cold or a sore throat precedes the attack of hysterical aphonia; dysuria precedes hysterical retention.

A curious illustration of the influence of a painful sensation in determining hysterical disorder of particular muscles, was afforded by a married woman aged 24, who was admitted into the hospital with asserted paralysis of the left arm, which, it was positively stated, had not been moved since the seizure, sixteen weeks previously. At the first moment, the case had the aspect of hemiplegia, with permanent rigidity of the paralysed arm; for the hand was clenched; the elbow was half bent; the arm was firmly fixed to the side; and great resistance was offered to any attempt at straightening the joints, such attempts being manifestly attended with pain. A moment's examination, however, suggested a suspicion of the real nature of the ailment; for the limb was well nourished; the muscles were plump; and it was soon evident that the muscles, in place of being excited to spasmodic contraction by passive extension, were disposed to yield to gentle though continued force. Moreover, the emotional developments, which were not long in appearing, afforded confirmation to the diagnosis. By moral management, of an appropriate kind, the limb was restored to its state of normal activity in the course of a fortnight, though not without much resistance on the part of the patient. On inquiring into the particulars of her history, we found that the reputed paralysis had taken place in the course of a night, and that it began with severe pain in the arm and shoulder after a particularly hard day's washing, which had completely exhausted her; and, further, that through the night she "could not sleep for the thought of it". We also learnt that she had been suckling for sixteen months, and had lately suffered severe grief from the death of her mother.

Nor is it only in muscular movement that the disorder of volition which characterises hysteria is manifested; we note the same disorder indicated by derangement of the faculty of attention—a faculty mainly dependent for its exercise upon an effort of volition. It is the suspension of this voluntary effort to call attention into activity, which is the cause of the so-called hysteric insensibility—a condition strikingly illustrated in the case which will follow.

The mind is completely occupied—perhaps by some intense sensation or severe pain; perhaps by a powerful emotion; or, in extreme cases, it may simply fall into a state of dormancy. In any case, attention no longer takes cognisance of the outer world; and the mind of the patient is entirely turned inwards upon itself. We see this mental phenomenon in its highest development in the mastiff which has fastened upon his antagonist, and is insensible to the most ingenious torments; in the maniac, who endures the most severe sufferings, self-inflicted under the influence of some dominant delusion; in the fakir, under the operation of fanatical superstition. In hysteria, in which the self-absorption is generally, though not always, less complete, the patient may be withdrawn from it by an invitation more powerful than the influence which has enchained the attention. Hence, the danger of trusting to the imagined unconsciousness of the patient; since mere curiosity will sometimes suffice to set the attention free.

One of my patients, of very hysterical temperament, suffered from an unusually protracted attack of gall-stones. The pain seems to have lasted for a week; and she tells me that she was quite insensible during the whole of that period, and knew nothing of what took place, and she inquired, on her recovery, whether the day (Tuesday) on which she should have posted a foreign letter had gone by, it being then Friday.

In conducting the moral treatment of these cases, it must be borne in mind that the nature of the hysterical developments will vary in different subjects, according as they are modified by the character of the individual. Thus, the disorder will not manifest itself in the same manner in the irritable as in the morose. Even the violent emotional development so generally, and so correctly, associated with our idea of hysteria may be wanting; and what, in one patient, would rise into a violent burst of tears or of laughter, in another, who is differently constituted, may settle down into stupid insensibility or dogged obstinacy. The variations of hysterical development with differences of individual character, are paralleled by the like diversities in the phenomena of intoxication which follow peculiarities of mental constitution. Thus, the inebriated may be quiet and despondent, or vehement and joyous; he is quarrelsome, or desires to be on terms of brotherly affection with all the world.

For success in the treatment, the control to be exercised, and the stimulus to be supplied, must be firm and steady, but free from harshness, and, above all, from irritability or passion. Violence or severity may succeed for the moment, by supplying the stimulus of fear or anger to replace that which has caused the disorder; but no permanent effect is produced; no foundation is laid for the establishing of self-control. The passing benefit is brought about simply by the substitution of one stimulant for another; and, like the result of all stimulants, is only temporary. Some short time ago, we had in the hospital two nurses who illustrated the correctness of the preceding remarks, by the difference observed in their respective characters; both were thoroughly sensible, intelligent women; each was quite "up" to hysteric maladies; and each alike desired by her management to bring the patients to make an effort for their own cure; but the one was harsh and petulant, whilst the other was quiet and resolute; and it was soon apparent in which ward the patients were most advantageously placed.

The following case, which has suggested the foregoing remarks, is one of unusual severity and duration. It presents, in prominent relief, the main characteristics of an hysterical affection—in the emotional temperament of the patient, in the obvious want of all self-control, and in the foundation of the attack having been laid in strong emotion. Unfortunately, I could not induce the woman to come into the hospital; and, of course, I could do nothing for her as an out-patient; so that she speedily passed away from my observation.

Case. E. B., aged 33, single. Case taken August 23rd, 1864. The patient has not spoken a single word since last May twelve months, when her brother died. She and her brother had lived together, and were warmly attached to one another; his illness was short, and his death was quite unexpected by her. Immediately after his death, she became violently hysterical, for the first time in her life; she was quite ungovernable; and, in the middle of the second night, left her bed in this town, and was afterwards picked up in the streets of Liverpool. There she was taken first to the workhouse, and then to the lunatic asylum; but, at the end of five weeks, she came to herself, and wrote to her brother, who carried her home. She has never had any recollection of what occurred during this period; affording a striking illustration of hysteric self-absorption. When found at Liverpool, she was speechless, and she has continued so ever since.

On returning among her friends, she continued in a highly excitable condition; falling into paroxysms of violent crying, in which she would cast herself upon the floor, and utter cries which aroused the neighbourhood; but it is remarkable that, even in these paroxysms of uncontrollable passion, she never uttered an articulate sound; the utterance was purely laryngeal; the only occasion on which she approximated to the act of articulation was once, when, having been rebuked by her sister for groundless doubts of her affection for her, she flew to a neighbour in a passion of tears, and cried something which might be interpreted, "Mary, Mary."

For the first month of her illness, her state of excitement seemed to threaten her life. She never returned to the house which had been inhabited by her deceased brother; nor would she even go into the neighbourhood of it.

At the beginning of her illness, she lost her sleeping powers, and she has never slept soundly since; she dreams, but does not see phantoms; she refuses to sleep alone.

From the first, all her communications have been carried on by writing, and she carries tablets about her. She complains of constant fulness and uneasiness in the throat, and is very slow in swallowing her food. She has much disinclination to meat, and requires urging to take proper meals. Her mental and bodily powers, in all other respects, have preserved their normal vigour; memory is clear, apprehension quick, muscular power entire; but her temper has become capricious; she is jealous and exacting, and constantly accuses those about her of decline of affection in their feeling towards her. She left one sister on these grounds; and compelled the sister with whom she at present resides, to throw up her employment for the purpose of taking care of her. Unfortunately, this sister yields to her in everything; and, by her devoted but mistaken kindness, fosters the patient's malady. She is particularly jealous of attentions shown to children in her presence; and at times she is obstinate and ungovernable.

Certain information is obtained that she is perfectly temperate in her habits. She was the youngest of the family, and was always much indulged; she acquired great appetite for being indulged, and for being the object of notice, and showed jealousy of any supposed neglect. She never had any hysteric development before her present ailment began; but she was rather "stupid and obstinate." She never

had fits, nor any other illness; nor is there any indication of nervous disease in her family. She has been losing flesh somewhat. Her menstruation is regular, but rather profuse.

She has the aspect of health, and is fairly nourished; though her face is rather sunken; her pupils are quite natural; and the contents of her chest are healthy. The inertness of her will is strikingly evident; to every question, she returns a feeble grunt; she has not even energy enough to nod or to shake her head sufficiently to be understood, until thoroughly roused to do so. During examination of her chest, she complained of the percussion employed; and it was only by means of alternate scolding and cheering that the examination could be got through without interruption by a hysteric fit. In examining her throat by the laryngoscope, it was long before we could get the mouth opened, and then further time was lost in inducing her to protrude her tongue. The faucial mirror excited much sobbing, but we obtained a complete view of the larynx, every part of which was in perfect order. The arytenoid cartilages moved equally, but during the examination were kept in apposition, probably from the sobbing tendency manifested by the patient.

As stated before, she speedily passed away from my observation.

ST. GEORGE'S HOSPITAL.

OBSERVATIONS ON CEREBRAL HÆMORRHAGE, FROM AN ANALYSIS OF FORTY FATAL CASES.*

By THOMAS JONES, Esq., Assistant Resident Medical Officer at the Hospital.

[*Continued from page 659 of last volume.*]

III.—ETIOLOGY.

A. *Predisposing Causes.* (1.) *Age.* Of the predisposing causes, *age* has a decided influence. We are indebted to Dr. Burrows for correcting a great many errors upon this point. Before this, writers seem to have repeated, as a matter of fact, without further inquiry, an observation of Hippocrates, who affirmed that apoplexies happened between the ages of 40 and 60 years.

Out of the 40 cases, I find the age was noted in 38; of which—

3 occurred between the ages of 30 and 40
13 occurred between the ages of 40 and 50
10 occurred between the ages of 50 and 60
9 occurred between the ages of 60 and 70
3 occurred between the ages of 70 and 80

Primâ facie, this table shows a greater number of cases occurring between the ages of 40 and 50; but to form a correct calculation, we must take into consideration the *relative* number of individuals living in successive decades, as compared with the number of cases of cerebral hæmorrhage occurring in the same period. Now, out of a population, for instance, of 20,000, about one-half will have attained the age of 20 years; and out of the remaining 10,000, the number of persons living in the successive decennial periods, will be about 3,000 between the ages of 20 and 30; 2,500 between 30 and 40; 1,800 between 40 and 50; 1,300 between 50 and 60; 1,000 between 60 and 70; and 500 between 70 and 80. By comparing the number of cases of cerebral hæmorrhage with the respective number of population at similar ages, we can easily calculate the proportion occurring in 1,000 persons in successive 10 years. Thus—

	No.	Population.	Per 1000.
Between the ages of 30 and 40 ..	3	 2,500	.... 1.2
Between the ages of 40 and 50 ..	13	 1,800	.... 7.2
Between the ages of 50 and 60 ..	10	 1,300	.... 7.6
Between the ages of 60 and 70 ..	9	 1,000	.... 9.
Between the ages of 70 and 80 ..	3	 500	.... 6.

This table shows that the period of life at which the disease most frequently occurs is actually between 40 and 50, but relatively between 60 and 70.

(2.) *Sex.* Males are much more liable to the attack than females; for, out of 40 cases, 11 only were women. This shows the proportion of males attacked to be three-fourths, or 75 per cent. Possibly, this is explicable by the fact that they are most frequently exposed to the efficient causes of the disease.

B. *Exciting Causes.* There seems to me to exist a most intimate connection between diseases of the kidneys and of the heart and arteries, and cerebral hæmorrhage.

After excluding those cases in which the brain only had been examined after death, or in which but an imperfect examination of other organs had been made—because, for the present inquiry, a complete examination of all the important organs was necessary—I find myself possessed of notes of 36 fatal cases.

Of these, the kidneys were found extensively diseased in 29; showing the high percentage of 80.5. In 24 of these cases, the disease had arrived at an advanced stage of disorganisation; the organs were described as being small, hard, granular, with their cortical substance diminished; in some instances this was not thicker than a shilling. In 4, the kidneys were described as being large, soft, congested, and cystic, with old cicatrices on the surface. In another case, one kidney was found shrunken, leaving only a very small trace; whilst the other kidney appeared healthy.

Surely such a large proportionate number as 29 out of 36, or nearly 90 per cent, cannot be considered merely as the result of coincidence, but, on the contrary, as indicating a most intimate relation between disease of the kidneys and cerebral hæmorrhage. Besides, if the analysis be still further prosecuted, it will be found that renal disease bears a close relation to cardiac disease in these cases; for, out of the 29 cases in which the kidneys were found disorganised, the heart was hypertrophied to a great extent in 15; and this hypertrophy chiefly affected the left ventricle. In one case the heart was fatty, in three "very weak." Of these 19 cases in which were found alterations in the muscular structure of the heart, atheromatous deposits were found in 18 on the mitral and aortic valves, but probably not to such an extent as to give rise to obstruction, sufficient to produce the hypertrophy; hence we must look for a cause remote from the heart itself.

Of the remaining cases in which the muscular tissue of the heart was described as healthy, atheromatous deposits were found on the mitral valves in 6, in 1 of which there were thickening and opacity of the lining membrane on the right side; in 3 there were atheromatous deposits on the aortic valves, and the same kind of deposit on both the mitral and aortic valves in 5. Thus the heart was found more or less diseased in 29 cases; of these, alterations of the muscular structure occurred in 19, 15 of which were hypertrophied, 3 weak, and 1 fatty. In the remaining 10, atheroma alone existed; therefore these might have been classed with the diseases of the arteries. Thus we find that renal disease was associated with cardiac disease in 29 cases. In five cases both organs

* From papers read before the St. George's Hospital Medical Society during the sessions 1861-62 and 1862-63; and before the Western Medical Society, 1862-63.

were described as healthy. It is an interesting point to note, that in almost all of these there was a history of injury to the head having occurred at some time or another before the attack.

Again, in pursuing the analysis still further, a most marked connection will be found subsisting between cerebral hæmorrhage on the one hand, and disease of the kidneys and of the heart and *cerebral* and *other arteries* on the other. Thus, of the 36 cases, the cerebral vessels were diseased in 25; and the other large vessels of the body in 14. Cardiac and renal diseases were associated with disease of the cerebral vessels in 22. Renal and cardiac diseases, and diseases of the cerebral and other arteries, were associated in 10 cases. Disease of the heart was associated with disease of the cerebral vessels in 24 cases. But, of the cases of cardiac disease, it must be borne in mind that 15 only were hypertrophied; and of these, disease of the cerebral arteries occurred in ten only. In the remaining five cases of hypertrophied heart, the cerebral vessels were pronounced healthy. Disease of the kidneys, on the contrary, was associated with disease of the cerebral vessels in 22 cases.

The above analysis may possibly be better understood by viewing it in a tabular form, thus:—

Cerebral vessels.	Other vessels.	Heart.*	Kidneys.	
Diseased.	Diseased.	Diseased.	Diseased.	10 times.
Ditto.		Ditto.	Ditto.	22 „
		Ditto.	Ditto.	29 „
Diseased.			Ditto.	22 „
Ditto.		Diseased.		24 „
Ditto.		Hypertrophy of heart.		10 „
	Diseased.		Diseased.	13 „
	Ditto.	Diseased.		13 „

By this we find that, in almost two-thirds of the cases, the kidneys, heart, and cerebral vessels were simultaneously affected. And in almost all those cases in which there was absence of disease in one or other of these organs, there was a history of an accident, to which the attack was attributed. This disease of the arteries consisted of thickening and deposit within, or on the surface of the coats.

These deposits were described as being either fatty, atheromatous, or calcareous. I have seen the small vessels, owing to calcareous deposit in their coats, sticking up out of the white matter of the brain after it was sliced, about an eighth of an inch in length.

The foregoing facts clearly point to a decided connection existing between the lesions of the arteries, kidneys, and heart; but in what the relation consists, and the influence which the lesion of each of these parts exerts in the production of the hæmorrhage into the brain, remain yet to be discussed. To do this, I must digress from the mode of investigation hitherto adopted in this inquiry, and soar to the regions of hypothesis. Most probably the kidneys are the organs first affected, and resulting from this the other lesions are developed, in the following order: diseased vessels, hypertrophy of the heart, and extravasation of blood in consequence of rupture of diseased cerebral vessels. Rather than attribute the disease of the vessels to some inexplicable or mystical causes, as we are wont to do, perhaps it would be well to attempt a more direct explanation.

Dr. Kirkes (in an excellent paper on this subject) has maintained that hypertrophied heart may possibly be the cause of such changes in the vessels. According to Dr. Kirkes, it was Dr. Dittrich who first propounded the theory that diseased arteries may be caused by hypertrophied heart, in consequence of that organ keeping up a continual over-distension of the vessels, by the unwonted energy with which it propels the blood along the arteries. The coats of the vessels, being stretched and weakened by this continued pressure, undergo structural changes, somewhat analogous to the softening and degeneration which other strained and excessively exercised tissues often suffer.

The arguments adduced in support of this hypothesis are: 1, the frequency with which hypertrophy of the heart is associated with general arterial disease; and 2, the occurrence of the disease first, and chiefly, at those parts most exposed to the force of the moving blood, namely the commencement of the aorta. Dr. Kirkes adopts the same explanation, but, in addition, believes "that the coats, before degenerating, undergo a kind of protective hypertrophy to enable them to bear up against the increased pressure to which they are subjected, and that degeneration only ensues when this compensating over-growth has attained its utmost limit." Dr. Kirkes supports this theory by the narration of one case only, which, to my mind, does not prove that that condition of the vessels which he describes was due to the existing hypertrophied heart, inasmuch as the patient also suffered from a most extensive disease of the kidneys, quite sufficient to give rise to the lesion observed in the arteries.

Having regard to the result of the analysis of the cases which form the basis of the present inquiry, I object to the theory of considering the heart as being the cause of degeneration of vessels; because, first, how are we to account for the diseased vessels in more than half the cases in which the heart was *not* hypertrophied? Secondly, there is no evidence to show that degeneration of vessels takes place while the blood is in its normal state; for hypertrophied heart and diseased arteries were associated in all the above cases with renal disease, and, consequently, abnormal state of the blood. Lastly, seeing that the hypertrophy of the heart in these cases is but a compensating growth to supply the increased energy required to propel the unhealthy blood, I question very much whether there be *actually* more pressure from this cause upon the walls of the arteries than in health.

I think it is much more probable that the arterial lesion in these cases is caused by the renal disease. It is generally admitted that the small, granular and contracted kidneys—such as existed in almost all the cases under discussion—by their deranged function, alter the quality and quantity of the urine and blood. The blood, in being deprived of its chief staminal principle—the albumen—becomes diminished in density; and by the retention of urea and other solids of the urine it becomes absolutely poisoned, which considerably interferes with proper sanguification, so that this fluid is in turn rendered unfit to carry on the nutrition of the tissues of the body. Accordingly, we find almost always those persons who are the subjects of the renal disease, pale, anæmic, remarkably sallow, and the muscles soft and flabby. Probably the *arteries* suffer in a pre-eminent degree from this defective nutrition, which possibly may be the cause of their degeneration.

But this degeneration of the arteries may be produced from a more direct cause—as from the immediate effect of altered blood upon their walls. On examining the web of a frog's foot under the microscope, whilst the animal was under the influence of chloroform, the blood, which previously moved rapidly, soon became more sluggish in its movements—some of the corpuscles tending to stick to the sides of the vessels, and forming, as it were, a kind of a nucleus for more, until the vessels became completely blocked up with them.

* Of the cases of diseased heart, hypertrophy occurred in 15.

Now, I can quite conceive a similar phenomenon taking place when the blood is poisoned by the retained elements of the urinary excretion. Indeed, it is a matter of not very unfrequent occurrence in hospital practice to observe a deposit or stagnation of the fibrinous part of the blood in the vessels of those individuals whose blood is altered in quality, such as in cases of chlorosis, phthisis, and other diseases leading to cachexia. I have seen not a few cases of chlorosis and phthisis at this hospital, in which the vessels of the lower extremities had become completely blocked up—a state of things possibly originating in that attraction which exists in health between the blood and the vessels being destroyed—thus necessarily leading to stasis of the blood, and collection of morbid materials retained in that fluid along the sides of the vessels.* In disease of the kidneys there exists that condition of the blood necessary to occasion the same phenomena. Possibly, the retained elements of the urine and the fibrine of the blood deposit on the sides of the vessels, which may produce degeneration or atheroma of their coats, either by undergoing certain transformations, or by setting up a kind of chronic inflammation, terminating in the same pathological changes.

It is hardly necessary to insist upon what is now generally admitted as a well established fact by pathologists, namely, that hypertrophied heart is also caused by this degeneration of the kidneys. There are several conditions existing which call upon increased pressure on the part of the heart, and, consequently, involving increased muscular growth of its left ventricle to meet that emergency, some of which are: the abnormal constitution of the blood from the retained urinary excretion and diminished density, both of which cause that fluid to move through the vessels with less facility; the impeded transit of blood through two such vascular organs in consequence of structural changes; and lastly, the altered state of the vessels. That the heart requires much more power to propel blood through the arteries which have lost their elasticity, is self-evident. Hence, I maintain, first, that cerebral hæmorrhage, when associated with renal disease, is almost always found to be dependent upon rupture of one or more of the cerebral arteries, in consequence of certain morbid changes having taken place in their walls; secondly, that these changes in the walls of the vessels are induced by the altered state of the blood, the effect of advanced disease of the kidneys; and lastly, that the enlargement of the heart is the immediate effect of the renal disease, conjointly, perhaps, with the alterations in the coats of the vessels.

* In these cases, I believe no inflammation is set up in the first instance; but subsequently there is reason to suppose that a chronic form of inflammation takes place.

[*To be continued.*]

Non-Combatant Officers. Few, when they heard of the departure of the twelve physicians for Bermuda, ever thought of the dangers they would so soon meet; and yet they are as great as that encountered by assistant-surgeons Manley and Temple in their brave conduct at the recent engagements in New Zealand, and for which their Queen has decorated them with that badge of distinguished bravery the Victoria Cross. We cannot but admire the spirit of true heroism which is exhibited by the man who, at the call of duty, walks to almost certain death, in aid of his fellow-creatures, suffering from a malignant infectious disease; this, in our opinion, is of greater merit, than he who marches to the cannon's mouth, during moments of intense excitement. (*Canada Medical Journal.*)

Original Communications.

PENETRATING WOUNDS OF THE KNEE-JOINT, AND THEIR TREATMENT BY IRRIGATION.

By William Newman, M.D.Lond., St. Martin's, Stamford.

In a paper which was published in the British Medical Journal for June 27th, 1857, I narrated five cases of penetrating wound of the knee-joint, and drew attention to the treatment by irrigation, followed, in each instance, by a speedy and satisfactory recovery.

I have no novelty to bring forward; but I am anxious to supplement the above-named paper by a further contribution, adding the few cases of the same injury which have, within the past seven years, come under my notice; and at the same time I would enter more fully into the merits and employment of continuous irrigation as an agent of extreme value in the every-day requirements of surgical practice.

Case i. In January 1862, I was asked to see a groom (a man over 50 years of age), who had, twelve days previously, fallen from a haystack upon the cutting-knife, and had laid open, by a slanting incision on the outside, his right knee-joint. The man had been kept quiet in bed, and the injury had been treated by poultices, leeches, etc.; but he was suffering considerable pain, had had very bad nights in spite of frequent opiates, while the joint was swollen, the integuments around puffy and infiltrated, and a gaping wound was freely discharging pus and synovia.

Irrigation was recommended, and continued steadily for twenty-four hours; so securing to the patient a good night's sleep, the first since the accident happened. After that time, from disturbing causes, other treatment was determined on, and employed. A week afterwards (nineteen days from the infliction of the injury), irrigation was again resorted to, at the patient's own request; and the progress to recovery was steady and satisfactory. Sedatives were no longer necessary; the nights were good, and the wound healed. Constantly used at first, the water was, after some time, only allowed to drop on the knee when the joint became, even in slight degree, hot and painful.

Case ii. In May 1862, I saw a labourer, who had, two days before, sustained a punctured wound of the knee. The left knee-joint was distended by effusion, and painful in some measure; but the symptoms were not of the same urgency as those usually met with. Possibly, the extreme *nonchalance* and indifference which the man strongly showed existed physically as well as mentally; and his nervous system may have been singularly insusceptible of external impressions.

Irrigation was suggested, and carried out for six or seven days. At the end of that time, all joint-irritation had subsided; the swelling, also, had quite disappeared.

Case iii. The details of this I propose to give at length, since some of the main points are well illustrated.

W. P., aged 40, agricultural labourer, came to my house on August 24th, 1864, having walked a mile from his own house to a side railway-station, and thence travelled by rail; the transit had given him a good deal of pain.

On the preceding day, August 23rd, he had sustained a punctured wound of the right knee-joint from a hay-fork. The point entered on the inner side, half an inch below the level of the mid-line of the patella, and passed upwards and outwards directly into the joint. He had walked a mile or more to his house after the accident. The joint was soon swollen, and became very painful, so as effectually to prevent his having any sleep through the night.

At midday on the 24th, when I saw him, the knee was much swollen, and the joint tense with effusion. Pain was constant, and increased by pressure; and there was a blush of redness on the skin. He was told to return home, to go to bed, and to keep up constant irrigation of cold water.

August 25th. He had had some sleep in the night, and said he had much less pain. The knee was still hot and swollen. The treatment was continued.

August 26th. He was doing well. He had a threatening of shivering in the evening, which was stopped at once by taking some ammonia; no feverishness succeeded. The joint was easy, but still swollen.

The irrigation was continued constantly until the 28th.

August 28th. The knee was less swollen, not painful, not hot. He slept fairly well. He was ordered to discontinue the dropping for an hour or two at a time; resuming it at once if any pain or heat should occur about the joint.

August 30th. The knee was much smaller; the patella a little thrown forward; otherwise, the external conditions differed very slightly from those of the uninjured joint. There was no pain on pressure; and very faint evidence of fluctuation. He was ordered to continue irrigation for three or four hours each day, with longer intervals between the applications.

Sept. 1st. He was going on well. The swelling was even less than when he was seen two days previously. There was no heat, nor pain. He was told that he might cease the water-dropping unless pain or heat should come on; and also that he might sit up a little, supporting the limb in its whole length. (For this he had special and clear directions.)

Sept. 4th. He had a relapse; was not nearly so well. The knee was more swollen, and was distinctly hot to the touch. This was easily explained. He had been up daily, and had not used any irrigation since the 2nd instant; but had been seated (contrary to orders), with the limb extended, and resting by the heel only, on a low stool, so having no support behind the seat of injury. Further, as the limb, from this new position, began to ache, and the knee became hot, he had been applying for the past twelve hours cloths wet with cold water, *propriâ manu;* and to do this had, on his own showing, moved his trunk forwards every five or ten minutes to reach the basin of water. I put a firm splint behind the knee, retaining it in place by a figure-of-8 bandage, sent the man to bed, and requested him to resume continuous irrigation.

Sept. 5th. He was better; was not in so much pain. The knee was still hot.

For the next seven or eight days, rest and continuous irrigation were insisted on; and, so much was the patient in fear that mischief in the joint might return, that he used the water even too thoroughly by voluntarily increasing the number of points from which the water dropped. Hence, he induced a heat of reaction, transitory, however, and not accompanied either by pain or swelling.

Sept. 15th. He was ordered to discontinue the use of water entirely, and to move very cautiously, still wearing the back-splint.

Sept. 26th. The knee was normal in size and appearance. He could bear a little weight on it, and was now beginning to walk a little.

Oct. 12th. He walked well; had nothing to complain of, and would go to work the next day.

I would remark on this case that the first error was one of distinct omission on my own part. I ought to have applied a splint behind the knee in the first instance, and so provided against the possibility of any ill result from thoughtless movement. On this omission, in a measure, followed the relapse of Sept. 4th. More especially, however, was the recurrence of joint-irritation, due to want of care on the part of the patient. He failed to give to the limb, on first rising from bed, the support which he had been requested to ensure; and hence the terminal points, hip and heel, alone having a resting place, the articular surfaces of the femur and tibia were in constant and close apposition at the knee, as the central point; these surfaces having been the seat of subacute inflammation but a few days previously. Again, too, the continual movement of the trunk necessitated by the choice of wet cloths in lieu of irrigation, destroyed the chance of rest to the injured part, and kept the articular surfaces of the bones constantly rubbing one upon the other.

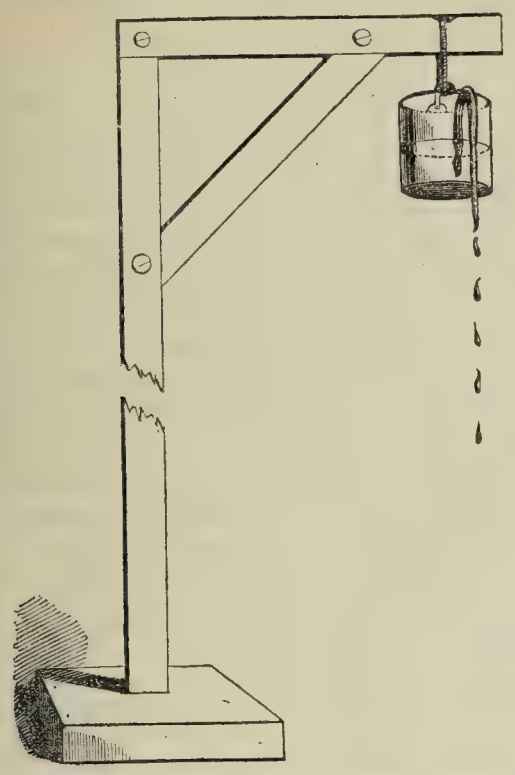
No sooner, however, was complete rest insisted on, and cold thoroughly applied, than the threatening symptoms began to subside, and the progress to recovery was uninterrupted, though slow. There was still, on Oct. 12th, a shade of general thickening around and about the joint; but the movements were not impaired, nor was pain induced by extreme flexion or extension.

If cold be the appropriate remedy for any surgical affection, it is but a bare truism to maintain that it should be applied effectually. If this, then, is to be done in the case of some acute inflammation—of a joint, for example—the constant presence of an attendant will be imperative, who may apply thin coverings moistened with some frigorific or evaporating lotion to the part affected, and change these coverings at very frequent intervals, as they become either warm or dry. But to speak of such procedures as available or possible in everyday surgical practice would be absurd. How is cold, then, applied? Usually, a lotion is prescribed, and some material soaked in this is applied to the seat of injury. More frequently than not, and despite distinct orders, some three or four folds of material are used; thus more lotion is taken up, and the attendant's trouble is proportionally diminished. But the result is precisely the opposite to that desired by the surgeon—the surface of the cloth very speedily steams with moist vapour, while the deeper layers are reservoirs of moist heat; practically, indeed, a poultice is concocted, without the efficiency of that time-honoured compound, and this, too, employed under conditions where warmth and moisture are not desired.

This may be an extreme view; but I, nevertheless, claim for irrigation, or water-dropping, advantages which do not attend on the most careful employment of cold in the more ordinary forms. It is easily arranged; when once put in order, it is self-acting, even for hours; it is cleanly and effective. The absence or stupidity of an attendant will not interfere with the application; and for its employment, no appliances are needed other than may be found even in the poorest cottage.

A reservoir of water (iced, if possible), a jug, or some other convenient vessel, may be hung to some hook in the ceiling; tied to the frame of a bedstead; or, more elegantly still, some such stand as that, the

base and upper part of which are shown in the accompanying engraving, may be employed. It may be quickly constructed by any village carpenter.



The distance, from the injured part, of the water-supply, should not be less than three or four feet. If time be a great object in the treatment, or the symptoms of local injury be severe, a more speedy effect will result on the placing the jug at a greater distance above the bed on which the patient lies.

A few threads of lamp-cotton or Berlin wool, a narrow shred of flannel, or a strip of lint from the pocket-case, may do duty as a syphon. First well-soaked in water, the shred must so be placed that one end lies at the bottom of the jar, while the other one hangs outside at a lower level. A continual dripping will so be kept up until the cistern is exhausted.

The injured part should be kept immoveable; the knee-joint should be fixed by a back splint sufficiently long and well padded, this being kept in place by a figure-of-8 bandage. The turns of the bandage must not be too tight, for, when wetted, the material shrinks very perceptibly; nor is it necessary to cover the joint itself with the folds. From hip to ankle the limb should be thoroughly supported; and, to insure this, the patient should be kept in bed. Waterproof sheeting, or an oil-cloth covering from a table, should be stretched beneath the limb, so as to prevent the wetting of the mattress; and, by adjusting this covering, a channel may readily be made, so as to direct the waste water into some dish placed on the floor.

Next, as to the time during which this mode of treatment may be carried on. I have continued the dropping uninterruptedly for eight or ten days more than once, and without ill result; then, intermitting the flow for an hour or two at a time, I have continued the same plan for a second similar period of time—three weeks in the whole. The time usually employed is about seven or eight days; and this may be extended or shortened, according to the special requirements of each case.

There seems to be little if any advantage from the addition of pharmaceutical compounds to the water in the jar. Possibly, when the rapid exhaustion of heat from the damaged part is a matter of importance, it would be well to add some spirits of wine to the water; or even the hydrochlorate of ammonia or nitrate of potash might be of some benefit. The instances (one or two) in which I have used some such salt, have not impressed me with any decisive idea of increased good.

In the hot weather of summer, I have been glad to resort to the use of ice; adding this to the water in the jar, so as to reduce the temperature much below that of the surrounding atmosphere.

The good effects which follow the persevering use of irrigation have seemed to me to depend far more on the constant evaporation of the thin layer of fluid which spreads itself over the injured part, than on the exact temperature of the water employed, or on any qualities which may have been obtained from its admixture with other substances, frigorific or sedative.

This mode of application of cold should be used more to prevent than to arrest inflammation; to bar the development of increased vascularity, with its subsequent bad results, rather than to procure the removal of this morbid condition, once established. Hence the rule, that irrigation should be used as speedily as possible after the injury has been inflicted. When so applied, the conditions of heat, swelling, and pain will not appear; and this good result is probably to be attributed both to the sedative influence of the cold on the cutaneous nerves, and to the diminution, from the same cause, of the absolute amount of blood circulating in the capillary vessels in and around the joint. Not, however, that the occurrence of actual inflammation in an injured joint should prevent the surgeon from resorting to this most effective means of reducing the abnormal temperature. The first case noted in this paper sufficiently proves its usefulness under such conditions. Still, if irrigation be used for the first time in the second stage, the good effects will be less speedy, more slowly evident; and certain subsequent changes in the affected textures must be expected to occur—thickening, stiffness in movement, etc.

Even under these less favourable secondary conditions, I incline to believe that irrigation has a material advantage, in comparison with the more ordinary plans of treatment. Cases may well happen in which the immediate local abstraction of blood will appear to be indicated, if only with the intent of relieving the pain of intense local congestion; but, after this, the use of cold would again be available.

Dr. Esmarch's valuable paper, issued in one of the volumes of the New Sydenham Society for 1861, will have brought before the readers of this JOURNAL the uses of cold in surgery. There may be a shade of presumption in venturing to maintain the possible superiority of irrigation over the use of ice-bags, or of thin iron vessels filled with cold water; yet I would still think this agent in the first form more thoroughly efficacious in the treatment of a punctured joint; whilst it is certainly not open to some of the objections which seem to attend, occasionally at all events, the use of ice-bags.

I am glad to be able to adduce the testimony of high professional authority in favour of the plan I suggest. Mr. Hilton, in his *Lectures on Rest and Pain*, p. 439, cites a case of incised wound of the knee-joint treated by irrigation of iced water, continued day and night for twenty-three or twenty-four days. Experimental removal of the cold irrigation was followed almost immediately by pain, heat, and swelling of the joint. The final recovery was perfect.

It may seem—and there is truth in the objection—that this paper is but a weary and tedious reiteration of the advantages of cold as an external application—so small a matter, and so universally acknowledged,

that a tithe of the space occupied would have sufficed to enumerate the material points. At the same time, the minor points of surgical practice are just those which need most frequent enforcing; and on their observance will often turn the issue of a serious injury. I would venture to claim for my paper honesty of purpose, while I believe that its dicta have truth as their foundation.

Transactions of Branches.

READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By Frank Workman, Esq.

[*Concluded from page* 602.]

Amputation at the Knee-joint. Mr. G. May described a recently introduced method of amputating at the knee-joint, which had been practised two or three times at the hospital. A long anterior flap was made by reflecting the skin from the knee and head of the tibia, the knee-joint was then opened and disarticulated, and the knife passed nearly straight through the tissues behind. The anterior flap was thus made to furnish nearly entirely the covering to the stump, and the thickened skin of the knee came just where the stump would afterwards have to bear pressure. The patella might be removed or left without disadvantage. In the latter case, the quadriceps extensor drew it out of the plane of pressure. The case on which he had recently operated was that of a child, who had been under Mr. Harrinson's care with acute necrosis of the tibia; a large amount of matter formed, to which free exit was given, but pyæmia followed, and very nearly carried the child off: under careful treatment it rallied, however, and was then sent into the hospital, where the above operation was performed, and the child has since been doing well.

I believe I have now given you a *résumé* of all the pathological specimens and papers that have been brought before us during this past year; and you will, I hope, agree with me, that though no doubt much more might have been done, yet the retrospect shows that a very varied and instructive set of cases have been discussed in the course of the season—not, it is to be hoped, without some advantage.

I now proceed to miscellaneous subjects, not directly connected with morbid specimens or disease, which have occupied our attention.

Feeding of Children. Mr. G. May introduced a subject of great importance to those to whom destiny has assigned the cares of a family—and proportionately more so to medical men, whose advice is sought for guidance under difficulties—that of feeding infants who are deprived of the natural fount; and in few things more strikingly is seen the curse of ignorance than in the agonies inflicted on a wretched helpless infant by being stuffed with thick pap or some indigestible food by its ignorant attendants, and the consequent disturbance day and night of the household by its pitiable shrieks. It was agreed that cow's milk, diluted with water and sweetened with sugar, was a satisfactory diet for most children; and it was suggested that sugar of milk possesses advantages over common sugar in that it is less apt to undergo fermentation, and so to give rise to acidity in the stomach. Care should be taken that the milk should be the unmixed produce of one cow, and that cow not far advanced in lactation. Two causes in particular prevent this diet from always meeting with success: one is the increased amount of caseine met with in cow's milk, nearly one-third more than in human, which, instead of being digested, often forms hard lumps and strings in the child's stomach and bowels, producing the utmost distress until they are ejected. This source of trouble may be avoided by using whey with the addition of a little cream and sugar. The second cause prevails mostly in towns where the cows, fed and housed in a most artificial and unwholesome manner, revenge their wrongs on the superior race which so maltreats them, by supplying them with a depraved fluid in the place of wholesome milk, which speedily becomes acid, and consequently is totally unfit for a child's stomach. When, however, the cow's milk, from whatever cause, does not agree, it is well to make trial of the milk of the donkey or goat; either of these assimilates more nearly to the composition of human milk than does the cow's, and the animals themselves, being more hardy than the cow, and seldom so badly off for food, air, and exercise, are more likely to supply a healthy fluid. A strong testimony to the value of goat's milk is borne by the results of the Dublin Foundling Hospital, which almost alone of the Foundling hospitals of Europe does not show an excessive mortality amongst its infants; and their escape seems due to the fact that, instead of being retained in one crowded building, they are sent up to the Wicklow mountains, where a goat is allotted to each child, and is brought at certain hours for it to suck; on this diet they seldom fail to thrive. Habitual constipation in young children is to be regarded as proof of an unsuitable diet, and all active aperients are with them specially to be avoided, where a carefully regulated diet does not induce regular action of the bowels. The use of salad oil, frictions over the abdomen, and palpation in the course of the colon, will often suffice.

Resuscitation of Drowned Persons. Lastly, I come to a subject which excited some considerable interest at the time, which arose out of a request from the Royal National Life Boat Committee for our opinion on the relative merits of the Plans of Dr. Marshall Hall and Dr. Silvester for restoring persons apparently drowned. Though probably Reading is not much behind most other towns in the opportunity it affords to its medical *savans* for studying the question, I fear we should have found some difficulty, if left to ourselves, in forming and supporting a reasonable judgment; the truth being that the few cases that occur to individual members, often presenting different features and degrees of suspended animation, are of little use in leading to the discrimination between two methods based on the same principle, and each useful, though it may be in a different degree. Fortunately, Dr. B. W. Richardson of London was present at the meeting, and was kind enough to give us the results of the experiments and researches he had made on the subject. He told us that he had tried respectively the plan of Dr. M. Hall, Dr. Silvester, and the bellows-method; the latter originating with J. Hunter, and having a double action for throwing in and exhausting the air. If these plans are to be judged by the amount of air they introduce into the chest, then the bellows carries off the palm of superiority. Fifteen cubic inches of air seems the best amount of air to inject; and this the bellows will accomplish, and extract it as well. By Marshall Hall's method, eleven inches are drawn into the chest; and by Dr. Silvester's, twelve. So the latter seems to have an advantage over the former, and is, in addition, the most convenient, as it could be practised by a single individual, whereas Dr. Hall's method requires the cooperation of at least two or three. Dr. Richardson, however, went on to say that, in the course of his experiments, his ideas underwent a complete change; the result being, that he came to the conclusion that all artificial means of restoring respiration were not only useless, but inju-

rious. He thought the first object to be obtained was the restoration of the circulation, and that then the respiration would follow of itself; as in new-born children the circulation is in action at birth, and respiration naturally follows. He took six animals, and subjected them to the influence of chloroform until their respirations were brought down to 1½ a minute. He then laid them in a row, and tried different methods of artificial respiration on some. These invariably died, while those which were left alone recovered. A similar illustration was afforded by the fate of Captain Harrison of the *Great Eastern*, who, having been capsized in a boat, was brought out of the water to his ship alive and capable of speaking and drinking, yet, under the influence of Dr. Hall's plan of restoration, he succumbed after twenty minutes; while a sailor, in a similar state of suspended animation, being placed in the engine-room and left alone, recovered. A young lady, on whom chloroform had produced a very alarming effect, was, by Dr. Richardson's advice, placed in the fresh air and left alone, and she came round; but Dr. Snow, using in a similar case galvanism, lost his patient. In Dr. Richardson's opinion, the cause of death is not entirely due to the presence in the lungs of water and carbonic acid, but in part to a mechanical cause. The circulation through the lungs partook somewhat of the character of a syphon. While ever so small a stream was circulating, there were hopes of its increasing strength; but, if it had once been entirely broken off, the power of the heart would be insufficient to re-establish it. The somewhat violent action used in artificial breathing might be the means of checking this small current, and so produce fatal results. He recommended that those whose animation was suspended should be left alone in a warm room, of the temperature of 130° Fahr., if possible. Friction of the limbs might be of service, though he did not place any great confidence in it. The congestion of the lung sometimes noticed depended on the circumstances. If an animal were plunged head foremost into water, and there held till dead, no congestion would be found; but, if it were allowed to come occasionally to the surface and obtain a little air, intense congestion would be produced.

In accordance with these views, an answer was sent to the National Life Boat Committee, that, in the opinion of the Reading Pathological Society, Dr. Silvester's method was preferable to Dr. M. Hall's; but at the same time we felt that the subject required further investigation, as the results of Dr. B. W. Richardson's experiments seem to cast great doubt as to the benefit said to be derived from the promotion of artificial respiration. It seems, however, from the directions recently issued by the National Life Boat Committee, that Dr. Richardson's views have not at present obtained general consent, as their directions are in entire variance with them. They recommend Dr. M. Hall's plan to be first tried for about ten minutes, and, if success is not then obtained, to make trial of Dr. Silvester's; and they say: "The points to be aimed at are: first, and immediately, the restoration of breathing; and secondly, after breathing is restored, the promotion of warmth and circulation. Efforts to promote warmth and circulation of blood, beyond removing wet clothes, must not be made until the first appearance of natural breathing; for, if circulation of the blood be induced before breathing has recommenced, the restoration to life will be endangered." Nothing could well be more opposed to the results of Dr. Richardson's researches; and as he, I think, quite carried his hearers at our meeting with him, it would be interesting to know on what grounds these instructions were drawn up, and the experiments of Dr. Richardson so totally set aside.

Gentlemen, I bring my task to a conclusion; and for that, at any rate, I have no doubt you will thank me. I told you in the first place, that, unwilling to provoke a comparison between myself and Mr. Marsh, to whose eloquent comments the last address owed so much of its value, I should leave the transactions of the Society to tell their own unadorned tale; and I am very sensible that, in my hands, they have lost much of the salt which originally flavoured them when they came new to our ears, and we listened with poised judgment, preparing to question or criticise when the case was completed. The more reason have I to thank you for the kindness and patience with which you have heard me.

Reviews and Notices.

STIMULANTS AND NARCOTICS, THEIR MUTUAL RELATIONS; with Special Researches on the Action of Alcohol, Æther, and Chloroform, on the Vital Organism. By FRANCIS E. ANSTIE, M.D., M.R.C.P., Assistant-Physician to Westminster Hospital, etc. Pp. 489. London: 1864.

THIS book aims at no less than a reconstruction of our therapeutics, which at present, according to the author, repose on the metaphysical basis of old vitalistic notions.

Whether this be a true representation or not, we fail to see that in his reconstruction he has found a safe basis for himself or others to build upon. His theories are for the most part verbal, with definitions and limitations to suit. He distrusts analytical methods of investigation, whether chemical or physiological, preferring "the teaching of experience at the bedside, and of the daily practice of large classes of men, whose dietetic habits the physician necessarily becomes familiar with, to the dicta of a science, like physiological chemistry, which, notwithstanding its rapid progress of late years, is still in a merely rudimentary condition."

He evidently does not agree with Mill, that synthesis cannot be greater than the corresponding analysis.

The book is pleasantly written, and is easily read; but the method of it is faulty, by reason of its synthetic character being unsupported by any adequate analytical elements; and unphilosophical, through want of precision of expression, from a certain vagueness of language and definitions, its more ready perception of resemblances than of differences, and a disdain of proof.

As to the ground of his work, Dr. ANSTIE tells us:

"The elements of the problem to be solved are, simply, the existence of *two classes* of physiological *agents*, respectively known as stimulants and narcotics (or sedatives), and of an intermediate class known as narcotic-stimulants (or, in looser phraseology, as narcotics); all three classes acting on the nervous system: the stimulants having the power of exciting its action; the sedatives, of depressing the same; and the narcotics or narcotic-stimulants, of producing both kinds of effect. It is to this latter class, as forming the meeting-point of the two kinds of physiological action, that our closest attention will be required; and it is to this class that the three sub-

stances which have been chosen for detailed investigation belong; as do also tea, coffee, tobacco, and the whole genus of soothing care-breaking luxuries so freely used in every-day life." (P. 4.)

It would have been useful, not only to his readers, but to the author himself, had he more clearly illustrated by examples what he means by the two classes of agents said to act solely as stimulants or as narcotics. Ammonia and oxygen form the nearest approach to such a definition among stimulants.

"Substances like ammonia, which are universally allowed to act as *pure* stimulants, are in no case chargeable with the production of any such phenomena as are supposed to indicate mental excitement, though they may restore consciousness, when temporarily lost." (P. 81.)

Here we hoped that we had at last found a *pure* stimulant, but further on we found our error.

"The ordinary medicinal use of ammonia is as a stimulant; and we have the best reason to suppose that its action in this way is a legitimate one, as it does not produce after-depression. Yet there can be little doubt that we gain important benefits from its excessive and narcotic action. For ammonia in full doses *is a narcotic,* and may even produce fatal narcotic effects (convulsion, palsy of the heart, etc.") (P. 225.)

Of oxygen he says:

"No one will deny that it is a stimulant of the first rank. .... If we were to condense into the shortest space the various therapeutic actions of oxygen, we could hardly express its efficiency better than by saying that it prevents or relieves pain; averts the disposition to muscular convulsion, tremor, and spasm; reduces excessive secretion; calms an unduly frequent circulation; removes general debility and special fatigue of particular organs; quiets the disturbed brain; compensates in great measure the absence of ordinary food; promotes local nutrition; in short, that it produces with tenfold greater efficiency all the results which we seek for by the use of medicinal stimuli such as those to which I have already alluded." (P. 153.)

"If anything deserves the name of a *food,* oxygen does." (P. 155.)

This marvellous account of the dietetic and therapeutic value of oxygen made us distrust our memory, and led us to consult our books, where we found, as we expected, that animals breathing an atmosphere of pure oxygen become narcotised (even by our author's definition), and die of coma.

But though it might be thought, from the extracts which we have given, that it was of oxygen that our author was speaking, it turns out to be the common air that he means. He establishes a contrast between that of a "London alley", an "agricultural village", and a "breezy sea-side hamlet"; and, further, between "a child bred in a London cellar", and "a Cornish fisherboy, such as Hook loves to paint". We should like the author to have shown how these differences were related simply to differences of oxygen. To our minds, the differences are chiefly referable to differences in the amount of light and pure air.

This may be taken as an illustration of the laxity of thought and language, which our author too often permits to himself.

We call the author's attention to his opening statement of the "elements" of the case, and ask him to enumerate his agents of the two first classes. We shall be much surprised by his success in the attempt. We believe that, in all cases, it is the variable *quantum* of the agent which produces the *quale* of the action. Thus we may have light to see, or effulgence to blind; heat to warm and quicken, or to destroy vitality; cold to invigorate, or to produce narcosis and fatal coma; and so on of all.

In the chapter on the Doctrine of Stimulus, the author brings under this head two very different subjects—the various theories concerning the innate vital spirits or forces; and the views of some moderns on stimulant remedies. "Stimulant" and "stimulus" are used quite indifferently by our author, as equivalents, in many instances, In the table of contents (p. xii), we meet with:

"Modern writers on therapeutics, and their definition of stimulus: *e. g.,* Pereira; Wood; Neligan; Headland."

On turning to these references, we find:

"Dr. Pereira classes stimulants"—

"Dr. G. B. Wood describes stimulants"—

"Dr. Neligan defines stimulants"—

"Dr. Headland does not explain how stimuli"—

"One of the greatest difficulties which the ordinary theories of stimulus have to encounter is the explanation of the action of the so-called antispasmodics. These substances form a subclass of *stimulants.* .... But if nerve-force be the source of muscular contraction (of which spasm is only a variety), how can we explain the fact of *stimuli* acting in this way?" (P. 73.)

"It is impossible for us to advance a single step towards a satisfactory explanation of the true office of material stimuli." (P. 105.)

We next shall put together our author's various explanations and definitions of stimulants and stimulation.

"*Stimulants* have the power of exciting the nervous system." (P. 4.)

Stimulants are "agents which *by their direct action* tend to *rectify some deficient or too redundant natural action or tendency.*" (P. 161.)

This is the first of his three reconstructive proposals. The italics are his own.

"Therapeutical stimulation not improbably includes not merely the impulse to act, but a supply of the materials which are necessary for action." (P. 105.)

"True stimulation is the supply of some missing influence requisite to that balance of the powers and materials of existence which we call life." (P. 252.)

We leave these definitions to the consideration of our readers, as specimens of our author's reconstruction. Vague and metaphysical, they are surely without instruction; and, with the exception of the first, are mere verbal syntheses, reposing on no analytical elements.

Let us next see what are *not* stimulants. He proposes:

"That agents which produce excessive and morbid action of any kind in the organism be refused the name of stimulants, even though small doses of them may act in a truly stimulant manner." (P. 161.)

This sentence, which is the second of the three reconstructive proposals, would, if effect could be given to it, abolish stimulants altogether. Brandy, ammonia, and every stimulant agent, may and does produce excessive and morbid action, when taken in quantities adequate to produce the effect. The agent is the same; but, as we have already said, the *quantum* varies, and the resultant action varies with it.

Here we have the old confusion between *agent* and *action*. The author seems to mean:

"*When* agents produce excessive and morbid action of any kind in the organism, such action should be refused the name of stimulant, even though smaller doses of the agents may act in a truly stimulant manner."

Even thus stated, it amounts merely to a nominal definition.

We will next give the definition of *narcosis proper*. (Why proper?)

"Narcosis proper may be described as a physiological process, in which the nervous system is deprived, by the agency of a poisoned blood-supply, of its vital characteristics, with greater or less rapidity, and which directly tends to produce general death of the organism by means of such deprivation"—a "devitalising power." (P. 173.)

We are glad to find that our author allows narcosis to be a physiological process, though we should hardly have used the word where he does. But it enables us to ask him what are the physiological narcoses of the nervous system; as, if we knew, we might succeed in linking in a continuous catena the phenomena of stimulation and of narcotism.

The description given above is applicable only to extreme cases of fatal coma, which may, and most probably do, form part of the reciprocating play of the different parts of the nervous system. Can our author deny that narcosis of the sympathetic system has a share in producing the phenomenal effects of stimulants? Is sleep not a natural narcosis of the cerebral part of the nervous system? Our author dogmatically says, No! "Hypnotism is no part of the *rôle* of narcotics. Coma is."

"True sleep is a part of the cycle of daily natural processes, and can only be induced, if it be morbidly absent at a time when the system has need of it, by remedies which reinduce a normal state of the physical organism—by stimulants in the sense in which I understand that word. Hypnotic or soporific influences will therefore not be reckoned by me among the phenomena of narcosis." (P. 172.)

Here again the distinctions are verbal only, and in extremes. There is no attempt at an explanation of the *modus operandi* of either stimulants or narcotics. The point of discrimination between the phenomena of the one and those of the other is not marked.

Our author does not seem adequately to have appreciated the complexity of the problem which he has set himself to solve. He chooses to view the sum of life—vitality—as an unity—an internal copula—an individuation—an equilibrium of forces in a fixed organism; or, to quote his own words,

"The standard of life is a certain exact balance of various forces, developed with a certain *constant relation* to material tissue arranged *in a definite manner*." (P. 112.)

(The italics are his own.)

We may mistake our author's meaning here; but it seems to us a much closer description of the essentially static condition of mineral existence (apart from the word tissue), than of the ever-varying dynamics of organic and animal life.

Having got his unit—vitality—his argument constantly is: Do we increase this by destroying the balance? But life is rather a free libration of many forces mutually disturbing each other, and calling forth phenomena of reciprocal exaltation and depression.

We next proceed to show our author's appreciation of *differences*.

Having laid down the view, that the type of the stimulant class of remedies is found in foods, after discussing phosphorus, sulphur, the volatile oils, cod-liver oil, common salt, iron, etc., he says:

"It may be preferable to preserve the *name* of stimulants for the more rapidly acting remedies; but this is the only distinction we would desire to see made between foods and such stimulants as we have now mentioned in a therapeutic point of view..... The one important difference which really does exist between stimulant drugs and the substances ordinarily called foods is, that the former make no considerable positive increment to the bulk of the tissues." (P. 160.)

What is the value of these adjectives? Is any positive increase proved scientifically? Our author shall reply.

"Finally, there are a number of substances, of which we are not able to prove that they are either used for the repair of the tissues, or transformed in the body so as to generate heat; in this class we place alcohol, chloroform, the æthers, various alkaloids, strychnia, morphia, and the vegetables which contain them."

Yet to doubt the histories of people subsisting entirely and for months on dilute alcohol, without any analyses of their excreta or ingesta, is, in the opinion of our author, "dishonest".

"After all, every possible allowance being made for exaggeration on the part of the witnesses, from whom Dr. Inman, his medical friends, and myself, have derived the above histories, it must in common justice be allowed that there remains a substratum which cannot be explained away, and which it would simply be dishonest to ignore." (P. 455.)

A scientific author cannot rightly use such language, so long as he himself is obliged to own that he is unable to prove his thesis. Few have such facility of belief as to say, with Tertullian, "Credo, quia impossibile est." All have a right to demand as rigorous proof as the matter is susceptible of, before giving credit to highly improbable facts. At page 279, to render these more probable, our author hints that the missing nitrogenous element may, in some pathological conditions, be derived from the atmosphere; and says that "this is a fundamental point to establish in deciding as to the possibility of maintaining the balance of material nutrition in certain circumstances, without the aid of ordinary foods, or with an insufficient supply of them."

There is nothing in this volume which in the least advances this point of the matter at issue, in the way of *proof*. So long as this is the case, we hold it, to use a politer French derivative, *malhonnête* to impute dishonesty to doubt.

We have felt it our duty to point out the defects of method, thought, and language, which we have found in this treatise. The philosopher cannot hope to reach truth through verbal theories.

What above everything is wanted to us at this moment, are rigorously deduced facts touching the effects of remedies. We rise from the perusal of this work gratified with the skill and cleverness of its author. But what has he taught us as physicians engaged in the business of treating diseases? or what sort of basis has he laid on which future inquirers can hope to safely build up an advance?

PHOTOGRAPHS (COLOURED FROM LIFE) OF THE DISEASES OF THE SKIN. By ALEX. BALMANNO SQUIRE, M.B.Lond.; Surgeon to the West London Dispensary for Diseases of the Skin; etc. Nos. I, II, III. London: 1864.

WE have long considered photography to be capable of very useful application in the illustration of anatomical structures and pathological appearances. Several attempts in this direction have already been made with much success. Mr. BALMANNO SQUIRE has lately undertaken to bring out a series of typical representations of the various groups of skin-diseases; and, if the numbers which are to follow shall be as good as those which have already appeared, he will have done a work of great use to the practitioner. Photography, of course, can do little but represent form and position; but this it does accurately; while the necessary colouring is effected by an after-process, from the living subject.

The three numbers which we have received for review represent severally, 1, Psoriasis Diffusa (Squamæ); 2, Impetigo Figurata (Pustulæ); and 3, Lichen Inveteratus (Papulæ). Each figure is accompanied with a sheet of letter-press, containing a concise account of the characteristics of the disease represented, and a brief history of the case from which the photograph was taken.

We hope that Mr. Squire's attempt to place before the profession faithful representations of skin-disease will be appreciated as it deserves.

LECTURES: CHIEFLY CLINICAL. By T. K. CHAMBERS, M.D., Honorary Physician to H.R.H. the Prince of Wales; Physician to St. Mary's Hospital; etc. Pp. 599. London: 1864.

THIS volume is a third edition of the Lectures previously published by Dr. CHAMBERS under the title of *The Renewal of Life*. Dr. Chambers has wisely changed the title, in deference to the opinions of his critics, and because he feared that it laid him open to serious misconception.

The volume is much enlarged. It contains twenty-three new Lectures, comprising three given at the College of Physicians. We have nothing to say of it but what is very warm praise. The author is an excellent writer. He most thoroughly and conscientiously studies his subject; and then, in a true philosophic spirit, places it before his auditors. His lessons are not mere sketchy outlines of the matters upon which he discourses, but well-considered deductions drawn from his own observation of disease, enlightened by modern physiology and pathology. They are models of what clinical teaching should be. The lecturer has complete faith in his art, and at every page keeps alive that impression in his auditory. He has advanced with all the scientific knowledge of his day; and, whenever practice can get a gleam or a little warmth from that source, he brings forth from his store the help and the guide of scientific knowledge. His lectures, too, are essentially clinical; his students may themselves try what he tells at the bedside of the patient. These lectures, in a word, do great credit to their author, and to the school where they were delivered.

Such is the general impression which a perusal of these lectures has left upon us. To enter into any details of them is, of course, out of our power here, and, we believe, quite unnecessary. The fact that they have already reached a third edition indicates well the favour which they have found in the eyes of the profession, and renders our recommendation of them to the perusal of the practitioner as well as the student unnecessary. To say that there are very many things—points of practice, and arguments, and conclusions—from which we differ, is only to say that we practise medicine. If there were any fault in this way which we should charge to our author, it would be the most pardonable of all faults—viz., a too full trust in the power of his remedies over diseases, and a too ready acceptance of the scientific explanation of their *modus agendi*. Not but that it is most desirable—indeed, the duty of the teacher—to impress upon the mind of the student confidence in the power of his art to cure diseases. What we desire is, that both sides of the question should be fairly presented to the student; that he should be taught a just, and, as far as may be, an accurate, estimate of the efficacy of pharmaceutical agents over diseases. If there be any fault more than another that we feel inclined to bring against some of the *patres conscripti* of our art, it is this: that they are apt to judge too severely those who profess a reasonable scepticism touching what may be called this or that orthodox method of treating diseases. How little fear there is of people in these modern days taking too few drugs, may be readily gathered from the flourishing condition of our druggists' shops. We do not accuse our author of anything of this kind, but only suggest that he too readily, as we think, gives faith to the curative powers of certain drugs.

TREATMENT OF DISEASES OF THE SKIN. By Dr. WILLIAM FRAZER, Lecturer on Materia Medica in the Carmichael Medical School. Pp. 174. Dublin: 1864.

THE construction of this book is somewhat peculiar. The problem sought to be solved in it is not: Given, a disease and its description, to find a remedy; but; Given, a medicine or class of medicines, to find to what disease or diseases it is applicable. Dr. FRAZER heads the fourteen chapters of the book in the following manner: 1. Alteratives No. I: Mercurials; 2. Alteratives No. II: Fowler's Solution, etc.; 3. Alkaline Preparations; 4. Chalybeates; 5. Quinine and Tonics; 6. Cod-liver Oil; 7. Sulphur and its Compounds; 8. Terebinthinates; 9. Anodynes; 10. Emollients; 11. Desiccants; 12. Baths and Mineral Waters; 13. Poultices; 14. Caustics and Irritants. And, in speaking of each of these classes, he points out in what cases of skin-disease the remedies belonging to the class are appropriate.

The book appears to give a fair representation of what Dr. Frazer has found to be useful in his practice, in the treatment of diseases of the skin; and is thoroughly practical in its detail.

BARON LIEBIG. The *Moniteur Belge* contains the following extract from the *Journal de Francfort*:—"A friend writes from Munich that the celebrated chemist, Baron Liebig, is about to resign his professorship and laboratories at the University of Munich, with the intention of settling in London to occupy an important position which has been offered to him *par la grande compagnie du balayage et des vidanges de Londres*," whoever they may be. (*Chemical News.*)

British Medical Journal.

SATURDAY, DECEMBER 3RD, 1864.

THE NEW INDIAN MEDICAL SERVICE WARRANT.

WE trust that, in publishing the latest dispatch of Sir C. Wood, or, as we may call it, the NEW WARRANT FOR THE INDIAN MEDICAL SERVICE, we shall be giving sincere gratification to all who are interested in that long waiting but meritorious class of our fellow-subjects. It is evident that the Indian Secretary has been impelled to make some concessions through the pressure of public opinion, acting through Parliament and the press; such concessions being tardily offered. Late advices from India show that they have already been anticipated to a certain extent by the Viceroy, who has declined to put in force the provisions of previous orders promulgated by the Indian Secretary, being so evidently injurious and unjust to certain portions of the Department.

In the preamble to this very long dispatch of the 7th ult., Sir C. Wood recapitulates the various steps which have been taken by the present Government to adapt the service to the altered state of things, brought about by the dissolution of the East India Company. It appears that, in accordance with a recommendation of the Indian Government of 1862, Sir C. Wood submitted a scheme of *amalgamation* of the British and Indian Medical Services for the opinion of Earl De Grey, the Secretary of State for War. This officer objected to the plan proposed, chiefly on the ground that any temporary removal of regimental medical officers, for civil or staff employ in India, would tend to render them unfit for the strict performance of the arduous duties which would again devolve upon them, and now more than ever, in consequence of the system of continuous military training and deportment enforced under the present stipulations of the Army Medical Department. In these objections Sir C. Wood did not concur, but nevertheless gave up the scheme of amalgamation. He next endeavoured to procure the formation of *medical staff corps* for each Presidency, by offering inducements to members of the British Medical Service to volunteer for Indian local duty; thus hoping to provide for India the very same class of men who would be serving in the British Army. In this design he intimated that he was thwarted by an adverse decision of Parliament. Our readers, however, will remember that the condemnation of the Indian Secretary's plan of obtaining recruits for the Indian service, and the commendation of the adverse vote of the House of Commons in the last session, were all but universal. Hence it has been found necessary to revert to the system of an entirely *separate service for India, as heretofore;* and Sir C. Wood's Department have for some time been engaged in working out the details of the measure now before us, and forwarded to India, to be carried out without delay.

We cannot but think that the Indian Secretary must mean well to the Indian Medical Service. He can have no object in lowering the status of our profession, or in introducing an inferior class of men to serve under him, and to help to maintain the gigantic but somewhat unwieldly structure committed to his care. He intimates that the measures to be now carried out will entail considerable expense; and we trust that a further examination of this scheme will confirm the impression which a perusal of this dispatch is calculated to convey to the minds of our readers, that they will "tend greatly to improve the condition and prospects of the Medical Service in India." The duties of the superior officers, the inspectors-general and deputy inspectors-general, of the two services, are to be, for the future, kept wholly distinct. The Indian medical officers will be ineligible for the greater number, if not all, of the charges of European troops, as at present. This will render it unnecessary to keep up so large an establishment, and measures will be taken for its reduction. Assistant-surgeons are to be promoted to the rank of surgeon after a service of twelve years—a period, in our opinion, twice as long as is desirable. All officers hitherto receiving staff salaries are to suffer no diminution of their pay. Prospectively, pay and staff allowances are to be received in a "consolidated" form. A great part of the dispatch is taken up with orders relating to the amounts and modes of pay and allowances to be hereafter drawn by the several grades of the Department. Without at present doing much more than refer to the details in the dispatch, we may say that officers of all grades will have always as much and sometimes more pay than the corresponding grades in the British Medical Service. The pay for assistant-surgeons, as for the higher grades, will be ample, as far as we can at present judge. There is increase made to the pay of all grades while *unemployed;* that is, while they are on sick or private leave. This is calculated to remove a hardship which has long pressed upon all grades of the service. Hitherto, when a medical officer became, from wounds, from illness contracted on service, or from any other cause, incapacitated for the performance of his duties, he was put upon starvation allowances; his pay simple was totally inadequate for his support in India or in Europe. The retiring-pensions seem to be fixed at a fair and reasonable amount—certainly not more than sufficient to compensate for continuous residence in a tropical climate.

The mode of tenure of the higher administrative grades is to be assimilated to that in force in the

British army. Some concessions are at length made, in the repeal of antiquated restrictions, with the view of remedying what Sir C. Wood considers as very decided grievances hitherto endured by certain branches of the Department. The medical officers are to receive royal commissions conferring rank in all parts of the world; but service will not be required of them out of India. *The Royal Government guarantees all the advantages accruing to the present subscribers to the Medical Retiring and other Funds.* For the future, men appointed will not be called upon to subscribe to any funds; and this must be considered, we fear, as anything but a boon; for, hitherto, the mode of collection of the subscriptions, and the assistance rendered by Government, have rendered the Indian Military and Medical Funds one powerful source of attraction for the medical aspirant. Provision, to a certain extent, will be made, however, for the widows and orphans of those members of the service who will enter hereafter.

We suspect that the Indian Government could not well afford to do more in the way of pay; but we do not see why their medical and other officers should not be allowed to keep up, with some support (as hitherto) from Government, their Retiring Widows and Orphans Funds. We may feel some confidence on one point that, in place of an over-ruling Horse Guards influence, the Indian Medical Service will, in all probability, be superintended by an enlightened Viceroy and subordinate ruling authorities.

This document, or warrant, is, in fact, a reconstruction of the late Warrant of May 1864. Sir C. Wood could not face the storm which that warrant had excited, and he has wisely succumbed. He has listened to reason, or to universal discontent, and has now done something like justice. His present measure, after his late one, will be received with surprise and satisfaction by those most interested in its contents.

We may fairly surmise that the clauses of this order will throw a completely new face over the Indian Medical Service in the eyes of the profession. We hail the change, not only from its own intrinsic merits, but as a proof that justice to the medical officers of the royal army and navy cannot be far off or long delayed. It is impossible that so large a share of it should be dealt out to one branch of the service and held back from the other. Sir C. Wood admits that he has been beaten from his own views by the opinions of Earl de Grey. We may, therefore, fairly conjecture that the action taken by the British Medical Association has, through the influence exercised by it on Earl de Grey, done not a little towards bringing about this desirable conclusion; and may most reasonably hope that it will have also paved the way for good things to come to the medical department of the royal army and navy.

A "SILENT FRIEND" SILENCED.

Novel-writers of the new sensation school have not been very scrupulous in their resort to the catalogue of crimes; but they have found or invented no more odious character than that of a man who, possessing some fatal secret of another's life, uses it to extort money or gain other sinister ends. Not only is it robbery commonly pushed to a ruinous extent, but the wretched victim is reduced to a condition of complete moral slavery, and subjected to increasing mental torture, which no corporeal infliction can adequately represent. When this fatal secret has been revealed in confidence, universally regarded as sacred—when the confidence has been invited by promises of relief—and when the guilt and shame are imaginary, and the consequences of exposure studiously exaggerated—the crime surely has received all the aggravations of which it is capable; yet villains in the constant practice of this crime in its most repulsive form, and with all its aggravations, walk our streets daily; their haunts are known; their *modus operandi* is thoroughly understood; their practices have been repeatedly exposed; still not only do they escape justice, but, to a certain extent, they escape censure. The public press—our newspapers, the boasted guardians of public interests and public morals—with a few honourable exceptions, instead of denouncing the crime, consent to share in its proceeds, aid and abet it, and become the accomplices and accessories, active and passive, of the perpetrators. We refer, of course, to the advertising quacks—the "silent friends"—the "restorers of manly vigour"—who prey on the public with impunity. Now and then, however, one of them falls within the grasp of the law; and this has just happened to Dr. Henery, *alias* Wray, of 52, Dorset Street, Portman Square, and a confederate named Anderson, *alias* Wilson, who have just met with their deserts, or with something approaching thereto. At the Central Criminal Court, on the 24th ult., John Osterfield Ray, or Wray, and William Anderson, "respectably dressed men", were indicted with having sent a letter to Captain M. A. Clarke, demanding £150 from him, with menaces. Our readers are already familiar with the facts of the case.

"Mr. Baron Bramwell, in summing up, called the attention of the jury to the letter written by Anderson to Captain Clarke on the 5th of October, from Warburton's Hotel, Newport, and which he described to be clearly an attempt to extort money by threats of exposure. Now, the question was, in what way did the prosecution connect the other prisoner, Wray or Henery, with this threat made by Anderson, so as to constitute the offence of conspiracy? There was the letter of the 26th of September from Henery to Captain Clarke, in which he referred to Anderson's having called upon the prosecutor and demanded £150 as being due to him (Henery); and then in the same letter he informed the prosecutor that his claim on him was for £150. Then came the letter of the

30th of September, addressed to Henery by the solicitor of Captain Clarke, and the receipt of which was acknowledged, not by Henery, but by Anderson, in his letter of the 5th of October; thus showing that there must have been some communication between the two on the subject of the demand made upon Captain Clarke. If the jury were satisfied that there was an intent to extort money by means of threats, and that that intent existed not only in the mind of one of the prisoners, but in the minds of both, that they were engaged in league together in that common intent, that would amount to a conspiracy, and the prosecutor had made out his case. If they were not so satisfied, they would acquit them; but it would certainly be a very singular thing if two people could be found acting in the way in which the prisoners had been acting without some common purpose.—The jury, after a few minutes' deliberation, returned a verdict of *Guilty* against both prisoners.—Mr. Baron Bramwell, in passing sentence, said the offence of which they had been convicted was one of the most abominable that could be conceived, because, in a case of this description, it was not one robbery that was practised upon the individual who was the subject of it, but that was followed up by a succession of demands, until his life was made positively hateful to him. The offence of which they had been found guilty being one of misdemeanour, he could not sentence them to more than two years' imprisonment; and he sentenced each of them to be imprisoned for that term accordingly, with hard labour."

We cannot but rejoice that any of these mischievous individuals should meet with the reward due to their crimes; but we much fear the present culprits are by no means the cleverest, or most successful, or most dangerous of their class. At any rate, they are only two out of many; and, much as the medical profession is concerned in purging itself of these disreputable parasites which cling around it, the general public is infinitely more interested in their extirpation. For one exposure, how many victims are there? For one victim actually snared, how many minds are poisoned, how many young imaginations tainted, by their vile publications? The profession has spoken loudly on this subject before; it is time that the public, in its own interest, should take it up; and, above all, time that the press, which denounces these villanies in such pungent language, should show to the world that its preaching is not deceit or humbug, by ceasing to participate in the profits of the villains. It is the newspapers which spread the fame or infame of these people all over the world, by the insertion in them of their beastly advertisements. The very day on which the *Daily Telegraph* dealt out double-distilled sensational morality in this very case, a number of the aforesaid advertisements were to be read in its columns.

St. Thomas's Hospital appears to be, at length, fairly out of Chancery. The decision arrived at in that court last week leaves the Governors at liberty at once to obtain possession of, and commence building operations on, the Stangate site.

It must not be supposed, because no new warrant has yet been issued, or any Horse Guards order, in favour of the army medical officer, that the movement lately initiated by the British Medical Association in behalf of the army medical officers has been without effect. The new manner of conducting the "marking" of prisoners, and, above all, the new Indian Medical Warrant, are a sure indication of the way the wind at present blows, of the benefits of that movement. The Horse Guards has its momentary triumph, there can be no doubt, in the number of candidates who have lately presented themselves for examination for the army service. The Duke, indeed, a few weeks ago, congratulated the gentlemen at Netley on the moral courage they had shown in facing the examination after all that had been said and published against the medical service of the army. The Duke, however, knows perfectly well that the gentlemen in question were, as regards professional knowledge, not of a class which could enter the first class of examination. And he also knows that, although he may be contented with third class men, there is a Parliament over his head which may hold a different opinion. On the same occasion, the Duke again repeated what he has so often said before, and what contains within it one of the most essential grievances of the army medical officer. Let the doctor, he says, only make himself agreeable, and behave well in his regiment, and he is sure to be respected and treated properly. Herein lies one great part of the evil. The medical officer has no distinct rank and social position in his regiment, as every other officer has. He is always at the mercy of his commanding officer. What would the colonel or the captain say, if they were told by the Duke: "Only you behave properly, and conduct yourself well, and you will be esteemed in your regiment, and shall enjoy all the privileges of your rank." Quite different is the position of the combatant officer; he has a regular defined position and regular defined rank in the regiment. The non-combatant's—the medical officer's—position and rank are not defined. He has to fight for his rank and position. His social standing is in the hands of his commanding officer. His rank is nominal only. He has not that support from rank which other army officers have. The late munificence of his Royal Highness towards our medical (non-combatant) brethren in the army, however, we regard as a manifest proof of benefits gained, and gained through the action initiated by the British Medical Association in favour of the army medical officer. But the Duke must open his hand still wider than he has done. We will venture to say, that it is not even in his power to resist effectually the just, the manifestly most just, demands of the army medical officer. One of two things. Either the army medical officer must cease to be a soldier—must, in fact, be reduced to the

position of the Director-General's corps of "acting assistants"; or, they must have, in reality and not in name, the rights and privileges due to their relative rank in their regiment.

Dr. Nicholls, medical officer of the Longford Poor-law Union, in his medical report, makes the following statement.

"I beg further to state that this hospital is conducted on vegetarian and temperance principles; not one pound of flesh meat, pint of whisky, or bottle of wine, having been used in it for the last fifteen years, long experience having satisfied me that animal food, wine, brandy, etc., require to be given with great caution; indeed, I have seen sad results from their use."

Thereupon, Dr. Kennedy of Dublin very naturally asks for more specific details as to Dr. Nicholls's method of treating fever.

"Independent" (he writes) "of the medical aspect of the question, it is a most important one in another point of view—that of economy. The maintenance of a fever hospital is known to be very expensive; and if Dr. Nicholls has succeeded in treating typhus fever successfully by vegetables, to the exclusion of wine and the products of animal food, he will indeed have conferred a great boon on the community; at least, when he makes his plan known, and it has been tested and not found wanting by other physicians."

Assuredly, in the hospital of the Longford Union, there has been carried on for the last fifteen years, according to Dr. Nicholls's report, an experiment of the most important character. Our Irish brethren should take the occasion thus afforded them of solving a most difficult problem—the proper use of meat and stimulants in fevers, etc. If the records of the Longford Hospital have been carefully correct, and Dr. Nicholls's report is to be taken *au pied de la lettre*, they contain as valuable an amount of information as could be found in the records of any hospital in this country on the subject of the treatment of diseases. Our Poor-law authorities, on behalf of the pockets of the ratepayers, should send a commission to investigate the aforesaid records. Somerset House might well erect a statue to Dr. Nicholls, if he can only persuade the profession that the paupers, etc., of the country are better treated without meat and wine than with meat and wine when suffering from fever, etc.

The *Times* has made an urgent appeal to the press of the country *à propos* of the case of Henery and Co. It calls upon them to give up admitting into their pages the advertisements of such filthy scoundrels. It tells them, in distinct language, that they encourage the scoundrelism, and participate in its profits, by publishing their lying statements; and hints, in the strongest way, that, if it were not for the press, such species of rascality could not flourish.

"We appeal to the press to consider whether it is not disgraceful to promote the ends of these wretches by publishing their advertisements. It is impossible to plead that these advertisements are inserted in ignorance of their meaning. In the best conducted and most costly papers, as well as in the least respectable, may be seen these vile baits. These advertisements are the very instruments by which this infamous business is carried on. It is solely through the allurements held out in them, that persons are induced to avoid a regular practitioner in the vain hope of a speedy and secret treatment. If our contemporaries would resolutely exclude from their columns any advertisements of this nature, they would strike at the very root of this infamous trade, and prevent an incalculable amount of moral corruption. But there are other ways of advertising, which are equally, if not more, pernicious. There are institutions in the metropolis which, under different names, are filled with the most disgusting representations. These places are advertised in every thoroughfare of London by the gratuitous distribution of papers. It is hard to believe that powers do not already exist to put down such exhibitions. The police have large powers under Lord Campbell's Act; and it might be considered whether the term 'pictures, drawings, or other *representations*,' would not include the models exhibited in these places. But, at all events, if no existing Act is ample enough to meet the case, there never was more urgent need of some extension of the law. It is idle to prohibit indecent pictures and prints, as was done by Lord Campbell's Act, if representations infinitely more offensive to public morality are to be passed over. We are satisfied that we shall be supported by the whole medical profession in saying that no useful end whatever is answered by the institutions we are denouncing. In fact, the medical journals have for years endeavoured to put them down. Probably, none but medical men are fully aware of the magnitude of the evil; but we believe it is serious enough to demand the most prompt and vigorous measures."

The editor of the *Vienna Medical Journal*, Dr. Wittelshöfer, having exposed the bad management of a prison hospital, which was under the charge of a religious sisterhood, trod upon the toes of the government, and has been (in the opinion of almost every one) unjustly condemned to a month's imprisonment and a small pecuniary fine. He says, in his journal:

"Dr. Wittelshöfer cannot resist the impulse of thanking, from his heart, both his professional and journalistic brethren, as well as friends in all classes of society, far and near, for the many proofs which they have given him of their warmest sympathy. To all he begs to offer his best and deepest thanks."

The Minister of Public Instruction in France assisted this year at the opening of the Medical Faculty. In Spain, the Minister Galiano presided at the meeting of the University of Madrid on October 1st. At Lisbon, the King himself assisted at the annual inauguration, and distributed prizes to the students.

"The students" (he said, in his address to them) "of the Lisbon Medico-Chirurgical School will assuredly always be devoted and industrious labourers in this crusade of civilisation; at once rendering their own names honoured, and extending the reputation of their *alma mater*."

THE INDIAN MEDICAL SERVICE.

Sir C. Wood has forwarded to the Governor-General of India a despatch of the highest importance to the Indian medical service. It runs as follows:—

India Office, London, November 7th, 1864.

To His Excellency the Right Honourable the Governor-General of India in Council.

Sir,—Para. 1. In continuation of my despatch, No. 152, dated May 16th, 1864, and with reference to your reply thereto, No. 242, of June 29th, 1864, I have now the honour to communicate to your Excellency the decision at which her Majesty's Government has arrived regarding the future establishment of medical officers for service in India.

2. In a despatch, No. 82, dated March 12th, 1862, the late Governor-General in Council recommended the formation of an amalgamated medical service for the united army of Great Britain and India, and expressed his concurrence generally in a scheme for carrying out such a measure, embodied in a memorandum by Colonel Norman which accompanied that despatch.

3. A very important feature in the working of that scheme was the unavoidable removal of medical officers from employment in India after a limited number of years' service in that country, whatever their employment might be.

4. I was apprehensive that this might be attended with serious inconvenience; but, after much and careful consideration of the subject, I resolved to submit the proposal, with some slight modifications, for the concurrence of the Secretary of State for War.

5. I forward for your information the correspondence which has taken place upon the subject, by which your Excellency will perceive that Earl de Grey objects to the scheme mainly on the following grounds:—

1st. That the employment of British medical officers for limited periods in civil situations in India would put a stop to the continuous military training secured under the present system of the army medical department, and considered by him to be essential to the efficiency of the service; that officers so employed might acquire habits of independence inconsistent with a due performance of regimental duties, and would have to return to a regiment at an age when men in general do not easily bend themselves to the practice of subordination required from a regimental officer of inferior rank.

2nd. His time, it is stated, would have been spent in treating diseases different to a great extent from those of soldiers, and he would have acquired no experience, and have had no occasion to practise that most important part of his duty as an army medical officer, the prevention of disease. He would, in short, not be the officer whom the existing organisation of the medical department of the British army contemplated, and whom it is the object of the costly and elaborate system recently established to provide for the army.

3rd. Earl de Grey further objects, that "regimental duties with native troops are at present of a very different nature from those required in British regiments, and would not afford medical officers the training and experience which the new organisation has rendered essential;" and lastly, his Lordship observes, that if the amalgamation were once carried out on these principles, it would be extremely difficult, if not impossible, to abandon them hereafter, whatever might be the result.

6. In my reply, I explained to Earl de Grey and Ripon my reasons for not being able to concur in the objections offered by his Lordship; but as I felt satisfied that those objections had not been lightly entertained, I felt that it would be useless to press a reconsideration of the subject.

7. It was further obvious from the correspondence that any plan involving the withdrawal for a time from their regular duty of the officers of the army medical department, would be liable to objection on similar grounds, and her Majesty's Government directed their attention therefore to the possibility of providing for the future demands of the Government of India by the formation of medical staff corps for each Presidency.

8. In order to obtain for the medical service in India the advantage of having its officers drawn from the same source, and having passed the same examination as those of the British army, and with a view of placing them on a footing of perfect equality, by obliterating as much as possible all distinction between the bodies of officers so employed and those of the British army, it was proposed to form the several staff corps by means of medical officers of her Majesty's service volunteering to join them.

9. With this view, however, it became necessary to obtain the sanction of Parliament to the repeal of that part of the Act of the 16 and 17 of Victoria, cap. clv., sec. 37, which prescribes the manner in which medical officers shall be provided for employment under the Government of India.

10. Her Majesty's Government having failed to obtain the consent of Parliament to a measure proposed with this view, it became necessary to give up the scheme of a medical staff corps, as proposed, and to revert again to the system of an entirely separate service as heretofore.

11. The changes which have been recently made in the amount and composition of the military force in India, the transfer of the whole of the European troops to the British army, and the reduction of the native force, render necessary a corresponding reduction in the establishment of medical officers serving under the local governments, as well as some change in the nature of their employment.

12. One of the objects aimed at in the contemplated union of the British and Indian medical service was the abolition of the double administrative staff in India. This advantage would have been unattainable on the formation of medical staff corps, and is equally so in the continuance of a separate service as now proposed.

13. It is obvious that a single medical staff for all India is only compatible with one amalgamated medical service, and that the objections advanced by the Secretary of State for War, and which have proved fatal to the scheme of amalgamation, must apply with even greater force to any plan that would involve the indiscriminate employment of officers from either service in the supervision of both.

14. The evils that have resulted up to the present time from the employment of a double staff will, it is believed, disappear when the duties of the officers of the two services shall have been entirely separated. The sole objection to such double staff will then consist in its expense. This, I apprehend, will, on a readjustment of the local department of inspection, with a view of meeting the altered condition of the service, be found susceptible of considerable reduction.

15. Her Majesty's Government have therefore determined that the duties of the medical officers of the British army serving in India shall in future be kept wholly distinct from those of the medical officers of the Indian establishment, and that there shall be a separate administrative establishment for each.

16. Under these circumstances, it will be necessary that the administrative establishments in the several Presidencies should be revised, and the duties of the several medical officers of the higher grades redistributed, and I request that you will take the subject into early consideration, with a view of determining the number of inspectors-general and deputy-inspectors-general of each service that will be required to conduct the administrative duties of the respective services in each Presidency.

17. In my despatch, No. 152, I authorised your augmenting the number of officers above the rank of assistant-surgeon in Bengal to 152, Madras to 86, Bombay to 69, leaving the aggregate establishment of medical officers in each Presidency the same as before.

18. That establishment is at present as follows:—Bengal, 425; Madras, 243; Bombay, 193.

19. You were informed, in my despstch, No. 291, dated August 8th, 1863, that the War Office would take measures for relieving, as soon as possible, the assistant-surgeons of the Indian army from the brigades of artillery and new line regiments, and the same course will hereafter be adopted as a necessary consequence of the transfer of those regiments to the British army, in regard to the surgeons. A reduction in the establishment of medical officers required for service in India will necessarily follow, and I request that the subject of the number likely to be required henceforward in the several Presidencies may receive your early consideration.

20. In making this calculation, you will, of course, take into account the several situations which may be properly filled up by uncovenanted members of the medical profession.

21. It is believed that, in consequence of all appointments to the local service having ceased during the last three years, the aggregate number of medical officers at present borne on the strength of the several Presidencies will be, if anything, below the prospective wants of the service, but I shall make arrangements without delay for filling up vacancies as they may occur on your revised establishment.

22. The promotion of assistant-surgeons who may hereafter enter the Indian army will be regulated by length of service, and not, as heretofore, by succession to vacancies in a fixed establishment of officers of the higher grades.

23. Assistant-surgeons of twelve years' service from the date of first commission (of which two years shall have been passed in charge of a native regiment), who shall have passed the prescribed examination in professional subjects, will be promoted to the rank of surgeon.

24. The benefit of this rule is to be extended to all assistant-surgeons now in the Indian service, but officers now in the service who may be so promoted will be considered supernumeraries to the establishment of surgeons as recently laid down, so that no promotion by seniority will take place until such supernumeraries are absorbed.

25. You will make the promotions consequent upon this concession from the date of receipt of this despatch.

26. In the despatch above referred to, I informed you that you were authorised to introduce certain changes in the mode of payment of officers of the medical department serving in India, and you were informed that, pending a further communication upon the subject, officers of the British or Indian medical service, holding staff appointments, the salaries of which are consolidated, will continue to draw their salaries as at present; and all officers of the Indian medical department in the receipt of staff salaries, including such as are in medical charge of native regiments, will continue to draw the aggregate amount of pay and staff allowances they now receive, provided it be not less than the rate of pay laid down in the above table for officers of their rank and standing in the service.

27. I have now to inform you that it has been determined that in future all employment on the part of medical officers of the Indian service involving the receipt of special staff salary shall be considered as staff employment, the salaries being in all cases consolidated; and that all appointments, whether civil or military, held in future by officers of the present Indian medical service below the rank of deputy inspector-general, will be alike tenable by surgeon-majors, surgeons, and assistant-surgeons.

28. The salaries of the principal administrative and military appointments are fixed at the following consolidated sums:—Inspector-general, 2500 rs., deputy inspector-general, 1800 rs., whether of the British or Indian medical service; surgeon-major in charge of native regiments, 1000 rs., with 90 rs. for horse allowance in cavalry regiments; surgeon in charge of ditto, 800 rs., with 90 rs. ditto; assistant-surgeon about five years' full pay service ditto, 600 rs., with 60 rs.; assistant-surgeon under five years' ditto, 450 rs., with 70 rs. ditto. But officers now in the Indian service will receive the pay due to their rank as laid down in para. 10 of my despatch, No. 152, of May 16th, 1864, when such pay is in excess of the consolidated salaries above mentioned.

29. Officers who may hereafter be appointed to the Indian medical service will receive pay when unemployed in India according to the following scale:—

Rank.	Years' Service.	Unemployed Pay. R.	A.	P.
Surgeon-major	25	888	12	0
Ditto	20	852	3	7
Surgeon	15	677	6	11
Ditto	12	640	14	6
Assistant-surgeon	10	410	9	5
Ditto	6	392	5	2
Ditto	5	304	14	2
Ditto	under 5	286	10	0

30. The salaries of other medical appointments in the civil and military departments will be revised with reference to the above, and fixed at a consolidated sum; and I request that a report may be made to me upon the subject with as little delay as possible. In the meantime, the aggregate sums at present received in each case will continue to be drawn.

31. With a view of promoting the efficiency of the service, it has been further determined that the tenure of office by a deputy inspector-general of the Indian service shall, as in the case of inspectors-general, be limited to five years; officers being, however, if not disqualified by age, eligible either for employment in a second tour of duty in the same grade, or for employment in the higher grade of inspector-general by promotion thereto.

32. You will follow, in the cases of officers now holding the office of deputy inspector-general, the same course which your Government adopted in 1861, in regard to combatant officers holding certain staff appointments, and permit all such to hold their offices for two years longer, irrespective of the periods they may severally have served in them. Should any officer have served up to the present time less than five years, he will be allowed to complete a full period of seven years.

33. The rank of inspector-general and deputy inspector-general conferred upon officers of the Indian medical service under the Royal Warrant of the 13th January, 1860, is to be considered as substantive rank. These officers, on vacating office at the expir-

ation of the five years' tour of duty, will be permitted in future to draw respectively an unemployed salary of 1200 rupees *per mensem* in the former, and 900 rupees in the latter case, for a period of six months from the date of their vacating office; after which they will be placed, while unemployed, on the rate of pay laid down in my despatch of the 16th May, 1864, for officers of corresponding rank in Europe. These sums, deducted from the consolidated salary, will regulate the moiety of staff salary to be drawn by officers of those grades during absence on sick certificate. The decision reported in the third paragraph of your letter No. 242 of 1864 will cease to operate from the date of publication of the present despatch.

34. With a view to improving the position and prospects of officers of the Indian medical service, it has been resolved to introduce prospectively the following revised pension rules.

35. Officers of the Indian medical service will be allowed to retire on the following scale of pension, on completion of the required periods of service.

After 30 years'	service	in India	£550
„ 27	„	„	456
„ 24	„	„	365
„ 21	„	„	292
„ 17	„	„	220

36. An inspector-general, after five years' active employment in India in that grade, will be entitled to retire upon a pension of £350 *per annum*, in addition to that to which he may be entitled under the above scale.

37. A deputy inspector-general will, after five years' active employment in India in that grade, be entitled to retire upon a pension of £250 *per annum*, in addition to the pension to which he may be entitled under the above scale.

38. In each of the above cases, six months' absence on medical certificate will be allowed to count towards actual service in those grades.

39. Officers now in the Indian medical service will, on retirement, have the option of pension according to the above rules, or according to those now in force.

40. My attention has been directed on this occasion to the rule regarding the qualification of an assistant-surgeon for promotion to the rank of surgeon required under Clause 3 of the Royal Warrant dated 13th January, 1860. There can be no doubt that this rule, which has been again brought to notice by a recent despatch from your government, requiring a service of two years in or with a regiment, bears very hardly on many officers, the nature of whose employment precludes their showing the required qualification, and who, on entering the service, had no reason to suppose that such a regulation would be adopted.

41. These considerations have induced me to consent to exempt from the operation of the clause of the Royal Warrant all the assistant-surgeons who entered the service prior to its date. It is to be understood, however, that the rule is to be strictly enforced in the case of all medical officers who entered the service after January 1860.

42. In my despatch, No. 152, of 16th May, 1864, par. 7, I informed you that her Majesty's Government had determined to modify the instructions given in my despatches of the 31st October, 1860, and 30th September, 1861, and to permit the period of service qualifying surgeons for the rank of surgeon-major, under that Warrant, to be calculated from date of first commission, including all leave of absence of whatever kind.

43. I have now to inform you that the same principle is to be observed with respect to the grant of honorary rank on retirement, under Clause 14 of the Royal Warrant, and that the twenty-five years' service qualifying for a step of honorary rank, the requirements of the clause in other respects being fulfilled, shall be inclusive of all leave of absence.

44. I have further to inform you, that it has been determined, as in the case of combatant officers of the Indian army, to confer upon the medical officers of that service royal commissions, in substitution for those which they now hold, conferring rank in her Majesty's service in any part of the world. The medical officers of her Majesty's Indian service will not, however, be required to serve out of India, except with their own consent.

45. I have, lastly, to inform your excellency, that assistant-surgeons appointed to her Majesty's Indian service in future will not be called upon to become subscribers to any military or medical funds; and that her Majesty's Government have determined to guarantee to present incumbents on and subscribers to the several medical funds, the annuities and pensions to which they are, or to which they, their widows and children, may become, entitled from those funds, according to the regulations now in force, and at the present rates of subscription. But this guarantee must be regarded as conditional on the absolute transfer of the assets of the fund to the Government, and must not be construed as conveying to any fund, or to any member of it, benefits which are not actually provided for in the regulations as at present in force.

46. The widows and children of medical officers hereafter appointed to her Majesty's Indian service will be granted pensions not less than those to which they would be entitled under the provisions of the Royal Warrant of June 15th, 1855.

47. The above measures, which obviously tend greatly to improve the condition and prospects of the medical service in India, cannot be carried out, as your government will at once perceive, without a heavy expense to the state. It is hoped, however, that the result will be at once to diffuse a spirit of satisfaction and contentment among the officers now in the service, and to secure for the future a certain supply of medical officers of good social position, liberal education, and professional ability, for her Majesty's service in India.

I have the honour to be, sir,
Your most obedient, humble servant,
(Signed) CHARLES WOOD.

THE INDIAN ARMY MEDICAL SERVICE. The highest honours are liberally promised in the Royal Warrant, but they have been woefully forgotten in times past. The following table shows how the military medical service has fared at the hands of the authorities in this respect:—

Military Honours and Distinction.

Combatant Officers.		British Service.	Indian Service.
The Garter	7	None	None.
The Thistle	1	None	None.
St. Patrick	3	None	None.
Star of India.	5	None	None.
Grand Cross	22	None	None.
K.C.B.	91	None	None.
C.B.	387	11	6.

These six companions of the bath are distributed among 788 Indian medical officers; of these, two belong to each of the three presidencies. When we call to mind the many surgeons who passed through the Cabul, the Scinde, the Gwalior, the first and second Seikh campaigns, the Persian campaign, the mutinies, two China campaigns, the last year's "little war" on the heights of Umbeyla, besides a host of minor engagements on the frontiers of India, we cannot but think that the number of honorary distinctions has been miserably few. (*Friend of India.*)

Association Intelligence.

SOUTH-WESTERN BRANCH.

Medical Provident Fund. At a recent meeting of the Council of this Branch, Dr. C. RADCLYFFE HALL (Torquay) and Dr. THOMAS LITTLETON (Saltash) were elected Directors of the Medical Provident Fund, in the room of Dr. Cookworthy and P. C. De la Garde, Esq.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

A MEETING was held at the Fountain Hotel, Canterbury, on November 17th, at 3 P.M. The following papers were read.

1. The Relative Frequency and Duration of Epidemics of Different Diseases during the last Twenty-seven Years, as observed in Canterbury. By G. Rigden, Esq.
2. Double Vagina obstructing Delivery: Operation. By R. Tassell, M.D.
3. Case of Heart-Disease. By W. Sankey, Esq.
4. Diet after Delivery. By W. Sankey, Esq.
5. Induction of Premature Labour. A Forceps Case. By R. L. Bowles, Esq.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 8TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON THE NERVOUS STRUCTURES AND THE ACTION OF THE HEART. BY ROBERT LEE, M.D., F.R.S.

GALEN affirmed that the heart has no nerves, and that it is not a muscular organ. Vesalius, Realdus Columbus, and Cæsalpinus adopted these opinions. The cause of the motion of the heart, or the source of its sensitive and contractile power, has engaged the attention of the most profound anatomists and physiologists ever since the discovery of the circulation of the blood. Harvey considered the motion of the heart to be muscular. Three years after the death of Harvey the Royal Society was constituted by Charles II a corporate body, "for the promoting of the knowledge of natural things and useful arts by experiments, to the glory of God and the good of mankind." Anatomy and physiology were then considered two of the most important branches of knowledge to which the fellows could direct their attention, and at no period since have they ceased to be viewed in the same light. The doctrine of the circulation of the blood was then almost universally admitted, but the cause of the action of the heart had not been discovered by Harvey; and during the last two centuries the most eminent medical philosophers have been engaged in the investigation of the subject, and the *Transactions* of the Royal Society of London have contained the results of their most important researches.

In 1670, a paper by the Hon. Robert Boyle, entitled, "On the Motion of the Separated Heart of a Cold Animal in the Exhausted Receiver," was published in vols. iv and v.

An analysis of Dr. Lower's treatise, *De Corde: item de Motu et Colore Sanguinis*, etc., was published in 1669. A Discourse by Dr. Drake concerning some Influence of Respiration on the Motion of the Heart was published in vol. xxiii. A Discourse on the Power of the Heart, addressed to Dr. Meade by Dr. Jurine, was published in vol. xxx, and a letter in defence of the Doctrine of the Power of the Heart against the objections of Dr. Keil. Vol. xli contains a short account of Dr. A. Stewart's paper concerning the Muscular Structure of the Heart. Dr. Mortimer Borelli computed the motive power of the heart to be equal to 3,000 pounds.

It is impossible, said the author, to tell how many Croonian Lectures have been read before the Royal Society on muscular motion and the heart's action. Mr. J. Hunter read six between 1776 and 1782. In 1790 one was read by Sir Gilbert Blane, and twelve by Sir Everard Home between 1795 and 1828, and two by Sir A. Carlisle in 1806 and 1808. In 1808 one was read by Dr. Thomas Young; in 1811 one by Mr. B. C. Brodie. Le Gallois' work was published in 1815, and the same year a paper was published in the *Philosophical Transactions* by Dr. Wilson Philip, entitled, "Experiments made with a view to ascertain the Principle upon which the Action of the Heart depends, and the Relations which subsist between that Organ and the Nervous System." In 1815 a paper was published by Mr. Clift, entitled, "Experiments to ascertain the Influence of the Spinal Cord on the Action of the Heart in Fishes."

After all these elaborate researches had been made, the cause of the heart's action, one of the most difficult problems in physiology, remained unsolved. It did not appear that any of these anatomists and physiologists made an attempt to discover to what an extent the heart is endowed with nervous structures, and whether the action of the heart could not be referred to the influence of these structures, independent of the brain and spinal cord. Haller, Wurberg, Sömmering, and other anatomists who lived about the middle and towards the close of the last century, affirmed that the action of the heart did not depend upon nervous influence, but an unknown hypothetical principle which they called irritability. This, they said, was the cause of muscular action in all parts of the body.

In 1791 or 1792, B. J. Behrends, a pupil of Professor Sömmering, published a treatise, entitled, *Dissertatio Inauguralis quâ demonstratur Cor Nervis carere.*

In 1794 Scarpa's work, *Tabulæ Neuralogicæ ad Illustrandum Historiam Anatomicam Cardiacorum*, was published. It contains four engravings of the human heart; and if these be examined it will be seen that branches of nerves have been represented accompanying the coronary arteries, as in the engraving of Behrends, but few, if any, passing into the muscular substance of the heart.

In Mr. Swan's magnificent work, published in 1830, only a few small branches of nerves have been represented, which accompany the coronary arteries, and the muscular substance of the heart is represented as almost completely destitute of nerves.

In 1839 M. Remak stated that he had discovered in the human heart small ganglia on the filaments of the cardiac nerves, as they ramify on the substance of the heart. In the engraving which accompanies M. Remak's paper, the heart is represented as almost totally destitute both of ganglia and nerves.

It is impossible to deny that at this time and in 1844 the nervous system of the heart remained undiscovered, and the cause of the heart's action unexplained. The discovery of the ganglia and nerves of the uterus on April 8th, 1838, led by an extraordinary and unexpected route to the discovery of the ganglia and nerves of the heart in September 1846, by which the problem of the heart's action was finally solved.

The author then stated the four conclusions which he was enabled to deduce from his dissections, and stated that, in compliance with the request of a member of the Council, the preparations which warranted these conclusions had been placed upon the table of the Society.

GROWTH, SPRINGING FROM THE EPIGLOTTIS, SUCCESSFULLY REMOVED WITH THE AID OF THE LARYNGOSCOPE. BY G. D. GIBB, M.D.

Although the pathology of the epiglottis has been much enriched since the revival of the laryngoscope, tumours of the cartilage were very uncommon. This was proved by inspection of the museums of London and elsewhere, together with the author's own experience. Such instances as had existed, involved the laryngeal surface of the cartilage, and were chiefly warty vegetations; and the same surface was affected by the mucous cyst in Mr. Durham's recent case. The author now contributed an instance wherein a large growth sprang from the lingual surface of the cartilage, with the object of adding to our knowledge of its pathology, aiding diagnosis, and showing what might be done under the most urgent circumstances.

The patient was a lady, aged 60, the wife of a clergyman. She had suffered from a throat-affection for two years, the symptoms simulating malignant stricture of the œsophagus, with more or less constant dysphagia and expectoration of blood and mucus, associated with severe pain. Matters had been getting worse for the last twelve months. On examination in July last, she was pale and wan, emaciated, spoke in a low, thick, guttural tone, had complete dysphagia with fluids, and could swallow a little farinaceous food or an egg. Fluids always passed through the nostrils. She had no dyspnœa unless when lying on her back at night, but never in the daytime; coughed and expectorated mucus, at times frothy or thick and stringy, and sometimes mixed with blood. With the laryngoscope, a roundish, prominent, and projecting tumour, of the size of a small walnut, was seen occupying the position of a pendent epiglottis, which, during the act of swallowing, became elevated, and could be seen by the unaided eye at the back of the mouth pressing against the pharynx. The epiglottis itself was not seen, nor the interior of the larynx; but the posterior margins of the arytenoid cartilages could be observed. It seemed as if the tumour, partly divided by an antero-posterior sulcus, grew from the lingual surface of the epiglottis. It was red and vascular in some parts, white in others, eroded, and giving rise to free expectoration of mucus and oozing of blood. Believing that the entire cartilage was involved in the disease, Dr. Gibb's intention was to remove the whole mass, including all the free portion of the epiglottis, and trust afterwards to nature to so contract the laryngeal orifice as to permit swallowing without inconvenience, as had happened to him in other cases where the free portion of the cartilage had been destroyed by ulceration. On July 7th, the thick loop of wire of an improvised *écraseur* was passed around the base of the tumour, and, on the second introduction, it was drawn home, and quickly detached the growth; and at the same instant, it was seized by Mr. Ure at the back of the mouth with vulsellum-forceps, and extracted. Chloroform was not administered, the lady having sat on a chair in front of the author, the tongue being held outwards by Dr. Logan. There was little bleeding, and it was found that the lingual surface of the epiglottis had been separated from the growth as cleanly as if dissected with a scalpel. The subsequent progress was most satisfactory; the character of the voice improved, and swallowing now became quite easy, and has continued so to the present time, although occasionally there is a little sanguineous expectoration from the throat. The tumour was soft and spongy, and, on microscopic examination by Dr. Andrew Clark, was pronounced to be unquestionably benign, in its present condition a connective tissue, and would have become most probably a fibro-cartilaginous growth. In a general commentary upon the case, the author believed that the growth had become moveable, with a sulcus running transversely behind, which permitted of its fortunate removal without injury to the epiglottis itself.

Correspondence.

PERINÆAL SECTION AND PUNCTURE OF THE BLADDER.

LETTER FROM THOMAS PAGET, ESQ.

SIR,—Dr. Morris has now given us, in your number of October 23rd, the result of his two cases of perinæal section; and I have to congratulate him and his patients upon the attainment of the satisfactory state which, in his first report of them, he was only presuming upon.

I also grant that they compare advantageously with my own, by having no tube to wear. Those now wearing the tube, however, say that it gives them no discomfort. "Mr. N., aged 82," assured me, not a month ago, that walking three or four miles is not followed by any uneasiness; and that he believes he could extend his walk to any distance with impunity. The only disadvantage, then, of the tube, is the trouble of attending to it at micturition-times, and of changing it, if of elastic gum, or washing it, if silver, sufficiently often to prevent incrustation; and against this have to be set, as advantages, the impossibility of future harassment by reproduced stricture, and the avoidance of a more or less frequent passing of instruments as a preventive.

Dr. Morris designates perinæal section as "a plain-sailing, straightforward operation, from beginning to end"; and it is thus declared to us that his cases were of the simplest kind; the stricture neither deep in the perinæum, nor occupying any considerable portion of the urethra's length; nor the perinæum affected by chronic swelling,—cases, in short, rather of urethral incision than perinæal section. Would they not have been dealt with better by the lancetted stilette? As he has described the operations, their cures are surely not to be stared at as marvels.

But others are impressed with graver ideas of perinæal section. They see in it an operation that has baffled, in the performance of it, the best surgical skill and anatomical knowledge; that has resulted in urinary fistula, or in death by pelvic infiltration, pyæmia, or constitutional shock. And, indeed, little do such lamentable results surprise those who are conversant with the circumstances to which the operation is more commonly confined; the stricture occupying a posterior and lengthy portion of the urethra, therefore deeply seated in the perinæum; the scrotum and perinæum swollen, perhaps, the whole way to the anus; this swelling, too, of rocky hardness, and perforated by one or more confusing fistulæ. To perinæal section, then, I apply, and must continue, the term "groping dissection"; and against it, as an operation in general, have to uphold puncture above the pubes, for the safety, certainty, and efficiency of which a guarantee is furnished by the experience recorded in your numbers of July 2nd, 1859, and August 20th, 1864. But surely we are satisfied as to its

safety, in spite of the prejudice against it, when we are fully impressed with the facts, that the operation is never done except when a distended bladder lifts up the peritoneum, and that the trocar is directed to be passed into the bladder by a *simple* puncture at a point not more than an inch above the pubes. Of course, too, the trocar should be retracted within its cannula when half-way across the bladder. By *simple* is meant, not hampered by previous dissection. With a three-inch incision and dissection down to the peritoneum, as directed by surgical authorities, the operation may well be deemed a dangerous course to take.

The question of emasculation can only be decided by future observation. It is not known in what proportion of cases inveterate stricture interferes with the virile function; nor how often perinæal section, properly so called, leaves it intact; but it is certain that a purblind dissection deep in the perinæum must be apt to involve the verumentanum vasa deferentia et vesiculæ. Perhaps their mutilation and disconnection accounts for the fact named by Mr. Pollock in his paper published by you last week; namely, that "the wound may never heal, but become fistulous, although a free and proper passage through the urethra may be restored." I claim, then, for puncture above the pubes, that, by excusing the urethra its duty in micturition for any length of time, it offers to dilatation the best opportunity of working a cure, and to stricture its best chance of being satisfactorily cured.

I have so far confined myself to matters essential to the philosophical consideration of puncture *v.* section in impracticable stricture. I have now to remind Dr. Morris of his misapprehension as to the catheter which I pointed out in his first note, and which he must have seen while reperusing my paper of 1859, yet has not acknowledged. I would also indicate to him that, in his last, he imputes to me that I have written what I know to be not correct. "No, no, Mr. Paget; you must know this 'groping dissection' is not correct." I would now suggest to him, that personal imputations are not either customary or valuable as aids in an argument.

I am, etc., THOMAS PAGET.

Leicester, November 25th, 1864.

TREATMENT OF PARTURIENT WOMEN.

SIR,—It appears to me that the discussion upon the treatment of parturient women is assuming a different form from that which it presented at first. We do not want to know whether ergot be admissible, or when; neither would a polemical discussion as to whether or not Dame Eve's sorrows have been multiplied be quite in place in a medical journal. Parturient women of the present day are not quite so *au naturel* as our first mother was. That being admitted, then the parturient state may to a certain extent be looked upon as a disease; or rather, the condition of the patient may be regarded as one in which various diseases may readily be induced by a deviation from proper treatment. All this being granted, then let gentlemen, should any be found who may think it worth their while to prolong the discussion (for I do not) answer this. Take twenty parturient women who may have gone through their labours in every way naturally: Would it be necessary to keep such women for one week on gruel, tea and toast, and mutton-broth? or would it be, on the other hand, the more proper to see such women on the morrow after their trouble, order a mild aperient the following morning, and, after its action, gently propose a mutton-chop, with sherry and water or glass of mild beer, as an introduction to that liberal diet peremptorily demanded by all suckling mothers? Let us have no "shunting off from the direct line", as Mr. MacCarthy hath it, but steadily observe the question in point, and answer who can.

My midwifery practice has extended to many hundreds; so I can speak practically of the above treatment as being right. I am, etc., W. A. J.

Medical News.

UNIVERSITY OF LONDON. The following is a list of candidates who passed the late Second M.B. Examination.—Pass Examination.

First Division.

Best, Palemon, University College
Carter, William, Charing Cross and St. Thomas's
Casey, Edward, King's College
Coombs, Carey Pearce, St. Mary's Hospital
Day, Edwin Edmund, King's College
Edwards, Thomas Marsden, Andersonian Institution
Fairbank, Thomas, St. Bartholomew's Hospital
Fox, Edward Lloyd Harries, University College
Hingston, Charles Albert, St. Bartholomew's Hospital
Hooper, John Harward, St. Thomas's Hospital
Kempthorne, Henry Law, King's College
Ludlow, Ebenezer, St. Bartholomew's Hospital
Miller, Richard May (B.A.), University College
Morton, John, St. Thomas's Hospital
Nunneley, John Albert, Leeds and Guy's Hospital
Phillips, John Jones, Guy's Hospital
Rickards, Walter, University College
Simms, Frederick, King's College
Smith, William Frank, Guy's Hospital
Wesley, John Sebastian, King's College

Second Division.

Edis, Frederick Pooley, Westminster Hospital
Hinds, James, Queen's College, Birmingham
King, George, London Hospital
Taylor, Shephard Thomas, King's College
Willey, Henry, King's College
Woodhouse, Thomas James, St. Thomas's Hospital

APOTHECARIES' HALL. On November 24th, the following Licentiates were admitted:—

Clark, William Falconer, Cunningham Place
Lattey, Walter, Manor Street, Clapham
May, Augustus Square, Plymouth
Steele, Henry Octavius, Gomersal, Yorkshire
Swindale, John, Appledore, Devon

At the same Court, the following passed the first examination:—

Hornie, Edward, Charing Cross Hospital
Searle, George Clements, St. George's Hospital
Stuart, Robert, Guy's Hospital
Underhill, Francis William, St. George's Hospital

APPOINTMENTS.

ARMY.

ALSTON, Staff-Assistant-Surgeon W. E., M.D., to be Assistant-Surgeon Royal Artillery, *vice* R. Storey.
CULLEN, Assistant-Surgeon D., M.D., 17th Lancers, to be Assistant-Surgeon 3rd Dragoon Guards, *vice* S. A. Lithgow.
GRANT, Staff-Assistant-Surgeon R. A. P., to be Assistant-Surgeon 43rd Foot, *vice* J. J. Henry.
GUINNESS, Staff-Assistant-Surgeon H. C., to be Assistant-Surgeon Royal Artillery, *vice* W. Y. Jeeves.
HENRY, Assistant-Surgeon J. J., 43rd Foot, to be Staff-Assistant-Surgeon, *vice* R. A. P. Grant.
JEEVES, Assistant-Surgeon W. Y., Royal Artillery, to be Staff-Surgeon, *vice* A. D. Taylor, M.D.
LITHGOW, Assistant-Surgeon S. A., 3rd Dragoon Guards, to be Assistant-Surgeon 17th Lancers, *vice* D. Cullen, M.D.
MOFFIT, Assistant-Surgeon A., Supernumerary in 67th Foot, to be Staff-Assistant-Surgeon, *vice* J. Youell.
MILLER, Staff-Surgeon O. B., to be Surgeon Military Train, *vice* J. A. Woolfreyes, M.D.
STOREY, Assistant-Surgeon R., Royal Artillery, to be Staff-Assistant-Surgeon, *vice* W. E. Alston, M.D.
WOOLFREYES, Surgeon J. A., M.D., Military Train, to be Staff-Surgeon, *vice* O. B. Miller.

ROYAL NAVY.

BELLAMY, George, Esq., Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

Bennett, William R., M.D., Assistant-Surgeon, to the *Duke of Wellington*.
Gilmore, Robert, Esq., Assistant-Surgeon (additional), to the *Rattlesnake*.
Grigg, Joseph C., Esq., Assistant-Surgeon, to the *Victory*.
Irwin, Ahmuty, Esq., Surgeon, to the *Aurora*.
Maclaurin, Henry N., M.D., Assistant-Surgeon, to Greenwich Hospital.
Milne, Thomas, M.D., Assistant-Surgeon, to the *Jackal*.
Rohilly, Michael J., Esq., Assistant-Surgeon, to the *Asia*.
Williams, Charles F., Esq., Assistant-Surgeon, to the *Impregnable*.

Brend, Alfred, Esq.
Cowen, Philip, Esq.
Duckworth, Dyce, M.D.
} Acting Assistant-Surgeons, to the *Royal Adelaide*, for service at Plymouth Hospital.

Doyle, Edward W.
Robertson, A. G., Esq.
Wimberley, Conrad C., Esq.
} Acting Assistant-Surgeons, to the *Victory*, for service at Haslar Hospital.

Volunteers, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—
Fraser, A., M.D., to be Assistant-Surgeon 1st Aberdeenshire R.V.
Fryer, J., Esq., to be Hon. Assistant-Surgeon 12th Yorkshire R.V.
Jones, F. C., Esq., to be Surgeon 7th Surrey R.V.

DEATHS.

Arnott, John L., M.D., at Cheltenham, aged 23, on November 18.
Crane. On November 21, at 29, Sussex Street, Warwick Square, Mary Ann, wife of F. C. Crane, M.D.
Dryland. On November 23, at Kettering, aged 25, Sarah Lydia, wife of *J. W. Dryland, Esq.
Hawkins, Frederick, M.D., at Hitchen, aged 68, on November 27.
Kent, Benjamin A., M.D., of Ryde, in Dover Street, Piccadilly, on November 25.
Lang, Jeffery, M.D., at Ipplepen, Devon, aged 65, on November 12.
*Parry, Richard L., M.D., of Amlwch, Anglesea, on November 19.
Riding, Roger, M.D., of 79, Kensington Gardens Square, on Nov. 19.
Rugg. On November 19, aged 7, Patience, daughter of G. P. Rugg, M.D., of Kennington.
Seward, Charles, Esq., Surgeon, at Littlehampton, aged 31, on November 28.
Shearman, Charles J., M.D., at Ingatestone, Essex, aged 37, on November 16.
Taylor, John, M.D., at 222, Old Kent Road, aged 64, on Nov. 29.
Wood, Charles B., Esq., Surgeon, H.M.S. *Orlando*, drowned off Tunis, on November 3.

Royal College of Surgeons. A preliminary examination in general knowledge will take place at the College of Surgeons on the 20th inst. and following days.

University of Edinburgh. The number of students matriculated this year is 1,359, among whom 426 are in the medical faculty. In 1863, at the corresponding period (November 23), the number of students was 1,376, of whom 446 were medical.

Lectureship on Mental Diseases. Sir Alexander Morison, late physician to Bethlehem Hospital, has founded and endowed a lectureship on Mental Diseases in connection with the Edinburgh College of Physicians. Dr. W. Seller has been appointed the first lecturer.

The Royal Society. The annual meeting of the Royal Society was held on Wednesday at Burlington House, Piccadilly. The chair was taken by the President, General Sabine, who delivered an address, in which he adverted to the leading scientific and geographical discoveries of the past year, paying in passing a graceful compliment to the memory of the late Captain Speke. Dr. W. A. Miller was elected treasurer for the ensuing year, and Dr. W. Sharpey and Mr. G. Stokes, M.A., secretaries. A council was elected, comprising the Earl Stanhope, Dr. T. Watson, Professor Wheatstone, D.C.L., Colonel Sir G. Everest, C.B., Dr. J. Alderson, Professor J. C. Maxwell, M.A., Professor W. Pole, C.E., the Rev. Professor R. Willis, M.A., Mr. G. Busk, Dr. J. D. Hooker, Professor H. J. S. Smith, M.A., Dr. H. Bence Jones, Professor Sylvester, M.A., and other gentlemen. The Royal and Copley medals were presented by the President to the gentlemen to whom they had been adjudged. The anniversary dinner was held at Willis's Rooms in the evening.

Bequests. By will, Mr. S. Wilson of Norwich leaves £100 to the Whitehaven Infirmary.—The sum of £187:10 has been received by the Hospital for Diseases of the Chest, Victoria Park, from her Majesty's treasury, being part of a bequest by the late Madame de Lilly to her Majesty the Queen, for the poor of London: and the Metropolitan and Royal Free Hospitals have each received £375 from the same fund.—Mr. Hudson Gurney has left £1000 to the Norfolk and Norwich Hospital.

Naval Medical Officers in Japan. The following notices have appeared in the late admiralty dispatches from Japan:—"The medical staff of the Royal Marines, under Dr. C. K. Ord, were most active and prompt in their attendance to the wounded."—"The medical officers, Messrs. E. A. Birch, Samuel M'Bean, and J. T. Comerford, assistant-surgeons, were exceedingly prompt and constant in their attention to the wounded."—"Mr. R. L. B. Head, assistant-surgeon, has been promoted to be surgeon."

Royal Medical Benevolent College. The public distribution of prizes to the pupils of this establishment took place on Wednesday, November 16th, in the presence of Sir Thomas Phillips, John Propert, Esq., and other friends. Owing to an outbreak of scarlatina in the school last July, the customary anniversary of "the Founder's Day" was not observed—the youths having been sent to their homes rather precipitately, and the prizes for scholarships and good conduct then won were necessarily not presented.

Scottish Registrar-General's Quarterly Report. The Registrar-General for Scotland for the third quarter of 1864, has to record the highest birth-rate he has ever registered in this quarter—namely, 347 (*per annum*) in every 10,000 of the estimated population—377 in the town districts and 313 in the rural; also the highest marriage-rate, 64 in every 10,000—85 in the town districts and 39 in the rural; and a death-rate of 296, which is higher than in this quarter of any of the previous years, except 1863—251 in the towns and 156 in the rural districts. The health of the population was below the average during the quarter. The increase of sickness and death seems to have been most marked in the towns. It has been noticeable in every month of the present year, and cannot be traced to any particular epidemic; there is a general increase of deaths from all diseases. The mortality has been on the increase for two or three years, and the Registrar-General considers that its probable causes merit a searching inquiry.

Dr. Henery and Co. At the Marylebone Police Court, on Saturday last, a respectably-dressed man applied to Mr. Mansfield for advice. He said: "Some time ago, I saw an advertisement emanating from Dr. Henery, of Dorset Street. By it, I was induced to go to his place. Amongst other things, he said I should require a galvanic battery, for which I would have to pay two guineas. He said, when I no longer required the battery, he would return me the two guineas. I went on with this for about four months, up till May last, and finding I was deriving no benefit from the treatment, I asked for my money back. I now wish to know if I cannot recover the money." Mr. Mansfield: I see by the papers that the scoundrel is in prison, just commencing a term of two years' hard labour. When that has expired, you can sue him for the amount. Applicant: Cannot I go upon the goods at his place? Mr. Mansfield: I think not. Applicant: He has a good deal of property in Dorset Street. Sergeant White, 16 D, said that the goods were being removed out of the district of this court.

Army Medical Service. The next competitive examination for medical commissions in the army is announced to be held at Chelsea Hospital, on Monday, the 20th of February. Candidates are required to be between the ages of 21 and 30.

The Sewage Question begins to be agitated in Paris. There is an outcry against contaminating the Seine like the Thames. To distribute the sewage over the country is the remedy proposed; but since Paris has yet to be drained, the country must wait.

Scientific Apparatus of Celebrated Men. At a late *soirée* at the Conservatoire, amongst objects of interest exhibited, was the apparatus used by Lavoisier in effecting the synthesis of water. This has been presented to the Conservatoire by the Academy of Sciences. Is Cavendish's eudiometer still in existence, and where is it to be seen? M. Tresca thinks it a good idea to make a collection of such objects. The simple apparatus of some of the leading discoverers would look strange beside the magnificent display of apparatus which the public professors have at their disposal—paid for, however, out of the public purse. George Stephenson's "Rocket" is at South Kensington; why should they not have Cavendish's eudiometer, if they can get it; and Davy's battery, if the Royal Institution will part with it? How interesting, too, would be a sight of Wollaston's small and simple stock of apparatus. (*Chem. News.*)

Poisoning by Lead. The following details were educed at a recent inquest in Ratcliffe, on one Elizabeth Wood, aged 55, who had died in violent convulsions. The deceased, about four months ago, obtained work at a white-lead factory. She was then in good bodily health. She laboured there from six o'clock in the morning till six o'clock in the evening, and her wages for these twelve hours was 1s. 6d. Sometimes the work went on till nine o'clock, or even till eleven o'clock at night. There were about twenty women at this factory thus employed. The unfortunate woman soon fell ill, poisoned by the occupation. Her joints became weak, her body wasted, her teeth became black, and she got palsied. With the first effects she went to a doctor, who told her she must inevitably die from the lead-poisoning, unless she left the work. But, she said, she had no choice but to go on or starve. She did so; and first was unable to work on all days in the week, then could struggle only on some, and, finally, could not get to the place at all; then she was seized with convulsions, and died. The medical evidence was to the effect, that her death resulted from lead-poisoning, accelerated by want of food. The jury gave a special verdict, embodying with the medical reasons given in evidence, an opinion that, "considering the deadly nature of the occupation, the hours of employment in white-lead factories are too long; and also that it would be desirable that there should be a systematic inspection of such establishments by a Government officer."

Odontological Society. At a meeting of this Society, on November 7th, Edwin Saunders, Esq., President, in the chair, Mr. Charles J. Fox read a paper on the Preparation of the Mouth for the Reception of Artificial Teeth. The paper ended with the following conclusions. 1. Every tooth, properly so called, should be retained as long as possible. 2. If any rule is to be laid down at all, it should be, that *roots* must be extracted prior to the adaptation of artificial teeth; but that circumstances so often occur to render departure from any such rule necessary, and this is a question involving in so eminent a degree the judgment of the dentist, that it is not advisable to publish any rules which may hamper him in the exercise of his practice. 3. The use of temporary pieces is advisable, where possible; and the practice of a certain class of dentists, of inserting teeth soon after the extraction of roots, etc., without having explained the results of absorption to the patient, cannot be too severely reprehended. It seemed to be the general feeling of the Society, that even roots should be retained as much as possible; but that cases must be judged on their individual merits. At the next meeting, on Dec. 5th, Mr. N. M. Kingsley, an American dentist, will read a paper on the Treatment of Cleft Palate and Artificial Velum. Mr. Kingsley will describe the construction and application of a very ingenious artificial velum of his invention. We believe that some of the London surgeons, as well as dentists—Mr. Sercombe, etc.—who have worked in this field, will be present on the occasion.

Indian Medical Officers. The announcement of the probability of Sir Charles Wood being made a peer has been received by a large body of men in this country with feelings of great pleasure, but I fear the joy expressed is more on account of his leaving office than at his exaltation to the House of Lords. The Indian officers and the army surgeons have been lately joined in their attacks on Sir Charles Wood's mismanagement by his own Staff Corps. The hardest case seems to occur among the assistant-surgeons and the surgeons of the native infantry regiments. At full-batta stations an assistant-surgeon draws 317 *rupees* per month, while a young doing-duty officer draws 325 *rupees*. After six years' service the assistant-surgeon is entitled to be on a par with the captains; but what is the fact? While a junior wing officer gets 604 *rupees* the doctor only draws 433 *rupees*. There can be no doubt that for the first five years the medical officer is the worst paid officer in his regiment, and is not adequately repaid for the study and practice of his profession, when we compare his pay with that of native infantry regimental officers who have not half his work or responsibility. The medical service in India propose three things to remedy the defects: a staff salary when in medical charge, improved pensions, and abolition of enforced subscriptions to the Medical Retiring Fund.

The School of Medicine at Paris was opened on the 3rd inst. M. Tardieu, the dean, delivered the introductory lecture—a *resumé* of the discoveries of the past year, praises and regrets for the dead, compliments for the living who retire from the Faculty, and plenty of good advice to the students. M. Duruy added some of the latter on his own account. He was sorry to hear that the students did not attend their lectures regularly; that was wrong. Moreover, he added, wicked people asserted that some men obtained their doctor's cap who had never bled a patient, or even put on a bandage; that was very wrong. M. Tardieu, in his address, mentioned some facts which do not look well for the Parisian medical student. It seems that 2,677 presented themselves for examination last year. Out of the number who passed, only one-third obtained a second class, and only 13 out of 1400 obtained a first-class certificate. That, said M. Tardieu, cannot be the normal state of the Faculty of Paris. Bestir yourselves, young gentlemen! Work; study; an ignorant medical practitioner is a public scourge; an ignorant practitioner is a dishonest man! M. Tardieu is evidently of the same opinion as Calonne, Minister of Finance under Louis XVI. Calonne, it is said, died of a pleurisy and "an ignorant practitioner;" and when he was too far gone to be able to speak, he made signs for a pencil and paper, and wrote to his medical attendant as follows:—"You have murdered me! and

you are an honest man you will never practise medicine any more." I wonder whether Cavour wrote anything like that to his doctors! (*Chemical News.*)

ADDRESSES TO THE LORD-LIEUTENANT. His Excellency the Lord-Lieutenant of Ireland has received addresses of congratulation from the medical corporations in Dublin. That from the Apothecaries' Company was as follows:—"We gratefully recognise, in the selection of a nobleman of your Lordship's approved wisdom and abilities to this high and responsible position, a renewed manifestation of Her Most Gracious Majesty's solicitude for the welfare of Ireland. We are filled with hope that Lord Carlisle's mantle, which he wore with such benignancy and influence, and wherein he sought with such assiduity to enwrap a nation's love, may descend upon your Lordship. We further congratulate your Lordship upon the auspicious period at which you assume the government of Ireland, when God, in His mercy, has crowned the year with an abundant harvest, and when the beneficent effects of education and Christianity overspread the country. As one of the national educational bodies whose province it is to watch over the health of Her Majesty's subjects, the Apothecaries' Company beg most humbly to tender their loyal services to your Excellency's Government." The deputation from the King and Queen's College of Physicians said:—"Founded by Royal charter in the ninth year of the reign of King Charles II, and intrusted with the medical education of the youth of this country, the College has endeavoured so to raise the standard of medical attainments as to secure to the people of Ireland an uninterrupted supply of highly qualified physicians. Removed, as we are, by our pursuits from the arena of political strife, we take no cognisance of matters extraneous to our more immediate duties, but upon questions of great sanitary importance which have from time to time occupied the attention of the public and the Government, the cordial co-operation of this College has been frequently displayed; and we beg to assure your Excellency that we shall be always ready to assist in forwarding such precautionary or remedial measures as may be thought conducive to the preservation of the public health." To this Lord Wodehouse replied:—'The best proof that you have fulfilled your duty as a college of medical education is to be found in the many eminent names that have adorned your profession in this country; and I have no doubt that you will continue to maintain your high reputation. In our days happily the importance of sanitary questions is generally recognised; but gentlemen so well acquainted as yourselves with the study of sanitary sciences know well how much remains to be done, both in collecting accurate facts from which the natural laws regulating the public health may be ascertained, and in reducing sound principles to practice. In carrying into effect sanitary improvements, the Government and the public must look for advice and assistance to those who have made such questions their special study; and I rejoice, therefore, to receive the promise of your co-operation and support." The College of Surgeons of Ireland presented the following address:—"We, the President, Vice-President, Council, and Fellows of the Royal College of Surgeons, have assembled to welcome your Excellency on your arrival in Ireland as the representative of her Most Gracious Majesty the Queen, and to express our determination to afford your Lordship's government all the aid we can offer in the department to which we belong, to promote the welfare of the educational institutions of this country. The College we represent has been created by Her Majesty, and her royal predecessors, as the charters declare, 'to establish a liberal and extensive system of surgical education in this kingdom,' and 'to enforce a due course of regular education for students in surgery,' to effect which objects its members rely with confidence on that support and encouragement which your Excellency is sure to extend to all institutions so founded and authorised." His Excellency read the following reply:—"As representative of the Queen, I return you my thanks for your loyal address. It is highly satisfactory to me to receive your cordial assurance that the distinguished College to which you belong will continue to afford to the Government its valuable aid in the important work of surgical education."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock. Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. Dr. Habershon. "On the Constitutional Character and Modifications of Skin-Diseases"—Epidemiological Society, 8 P.M. Mr. Radcliffe. "On the Prevalence, Distribution, and Limitation of Scarlet Fever in England."—Royal Geological—Entomological.

TUESDAY. Pathological Society of London, 8 P.M.—Anthropological, 8 P.M.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Dr. Wade (Birmingham). "On Puerperal Embolism": Mr. I. Baker Brown, "Complete Extirpation of Uterus and Ovaries, with Large Fibrous Tumour": Dr. Braxton Hicks. "On Delivery of the Head after Perforation."—Medical Society of London, 8 P.M. Dr. Thudichum, "Lettsomian Lectures."—Geological.

THURSDAY. Royal.

FRIDAY. Astronomical.

REGISTRATION OF DISEASE.

MONTHLY RETURN of new cases of disease coming under treatment at Pauper and Public Institutions. (A.) In Manchester and Salford (Sanitary Association). (B.) At Preston (R. C. Brown, Esq.). (C.) At St. Marylebone, London.

	5 weeks ending Oct. 1. 1864.			4 weeks ending Oct. 29. 1864.		
	A.	B.	C.	A.	B.	C.
Small-Pox	85	—	4 ..	48	—	5
Chicken Pox	5	3	28 ..	8	5	11
Measles	85	1	64 ..	64	12	74
Scarlatina	100	57	42 ..	78	94	50
Diphtheria	2	1	2 ..	—	—	1
Hooping-Cough	8	—	56 ..	13	2	58
Croup	2	—	2 ..	—	1	3
Diarrhœa	330	184	1062 ..	167	71	408
Dysentery	16	24	8 ..	12	10	5
Erysipelas	34	14	54 ..	37	5	18
Insanity	37	2	18 ..	52	3	10
Bronchitis and Catarrh	653	96	761 ..	708	187	741
Pleurisy and Pneumonia	70	17	14 ..	75	18	10
Carbuncle	—	—	4 ..	—	—	1
Accidents and other diseases	5172	489	4495 ..	4195	518	3807
Totals	6580	885	6478 ..	5477	924	5904

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE INDIAN MEDICAL SERVICE.—In February next, according to announcement, there will be an examination of candidates for the assistant-surgeoncies of the Indian Medical Service. We have no doubt that the terms of the Warrant just issued by Sir C. Wood will bring forward plenty of candidates on the occasion.

THE CASE OF ABDUCTION OF A NUN.—It was stated in the papers that Mr. Millar of Bethnal House Asylum signed the certificate of lunacy of the nun who was forcibly removed from this country, as all our readers may remember. Mr. Millar, we are informed, neither signed a certificate, nor had anything to do with her removal.

THE ARMY MEDICAL SERVICE.—SIR: I think of entering the army as assistant-surgeon, but should not do so if I could not live upon the pay of assistant-surgeon. Could I live equal to the other officers upon the pay without other private moneys? How are the expenses incurred? are they avoidable? Apologising for the trouble I give you. I am, etc., STONEWALL.

[We will answer our correspondent in the words of an army surgeon of considerable experience. "Ten shillings a day, or £180 a year, is very fair pay for a young surgeon to start on. With very strict economy, he can avoid, but only just avoid, debt. A change of uniform—a thing of common occurrence—would swamp him at once. But 13s. or 15s., after ten to twelve years' service, is not enough." EDITOR.]

THE DENTAL REVIEW has reached its fourth number, and well sustains its original promises. The last—the October—number contains original communications by Mr. Fuller, Mr. A. Tribe, Mr. Hulme, and Mr. Hockley.

AN ARMY MEDICAL OFFICER writes:—"The treatment accorded to medical officers cannot often be fairly called 'ungentlemanly'; it is merely the systematic refusal to recognise relative rank; and therefore it is that medical officers are, as a rule, treated as 'outsiders', without a recognised place *as such*, unless it be that assigned in the *Army List;* viz., last of all; and this, although scarcely 'ungentlemanly', is certainly derogatory to the profession. It must be borne in mind, that in the army, a fixed, definite position, carrying respect with it, is essential; and clearly it is absurd to place any man in a dubious position, and tell him, as the Duke of Cambridge said, 'You behave well, and you will be treated well'; for in such a case the majority of mankind are disposed at first to treat such a man badly, and he must of necessity have hard work to work himself into that position which he ought to occupy in virtue of his education, rank, and profession."

THE INDIAN MEDICAL SERVICE.—A high authority, late of the Indian Medical Service, writes as follows:—"The recently published despatch of Sir Charles Wood seems fully to remove all cause of complaint. After careful examination of that document, I must acknowledge that the Indian Government has at last dealt fairly, and, in many respects, liberally, to its medical officers; and the fulness of these concessions is the best proof of the reality and the justness of the complaints which have been so long and so ably urged upon the attention of the authorities by the medical press. I trust that the recent triumph is the forerunner of an equal measure of justice to the medical officers of the Royal Service. You will observe that Sir Charles Wood has not alluded to the vexed question of relative rank, as respects the claim to the Presidency of mixed Boards. Doubtless, he does not feel competent to deal with this matter, which must be fought out with the Horse Guards."

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. F. Fitch (Kidderminster), 5s.; Dr. Gibbs (Westbury), per G. Shorland, Esq., 5s.; Isaac Tucker, Esq. (Westbury), per G. Shorland, Esq., 5s.; Dr. Seale (Westbury), per G. Shorland, Esq., 5s.; G. Shorland, Esq. (Westbury), 5s.; Dr. Hooper (Camberwell), 10s.

Amount previously announced, £103:7:6. Received at the *Lancet* office, £6:14.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 30th, 1864.

ANOTHER NOT BAD SUGGESTION.—"I wish," writes a correspond "to make an observation on a suggestion, which was made in last number of the JOURNAL, respecting those gentlemen who dissatisfied with the JOURNAL. Instead of attempting to sow sensions in our ranks, or makihg any alteration in our laws to their views, I would simply point out to them, that there society already formed, called the Medical Protection Soc which has no journal, and the annual subscription is the same the British Medical Association. If they are so satisfied that JOURNAL is a clog to the Association, here is a society wh embraces what they wish; and as it has not been attacked by *Lancet*, I must presume that the funds are appropriated to wha professes; namely, in protecting the medical profession; and does not succeed, the inference to be drawn is, that it might h done so had there been a journal, and an argument in favou one is required) of our JOURNAL. A medical friend wrote to m few days ago, and wished to join the Association for the *sake o* JOURNAL. So far as my own opinion is concerned, I look upon JOURNAL as inseparable from the Association, although there several points in which I differ from you."

ECZEMA.—SIR: Mr. E. Wilson, in his admirable paper on Eczem in the JOURNAL of November 19th, speaks of a solution of cau potash being very useful in some cases. Will you allow me to him—1. Of what strength it should be? 2. How often repeat 3. Does it, as a rule, cause much pain? I am, etc.,
November 25th, 1864. ENQUIRER.

COMMUNICATIONS have been received from:—Mr. J. V. SOLOMON; Dr. C. H. F. ROUTH; Dr. THUDICHUM; Dr. JAM RUSSELL; Mr. T. JONES; Mr. T. M. STONE; THE REGISTRAR THE MEDICAL SOCIETY OF LONDON; Mr. PICK; THE HONOR SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY; W. A. J.; T HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF L DON; Mr. HIGGINBOTTOM; Mr. W. PARKER; ENQUIRER; T SECRETARY OF THE ODONTOLOGICAL SOCIETY; Dr. R. FOWLE Dr. G. M. HUMPHRY; Mr. S. H. STEEL; and Mr. LE GROS CLAR

BOOKS RECEIVED.

1. A Clean Skin: how to get it and how to keep it. By Jo W. Williams. London: 1864.
2. Transactions of the Pathological Society of London. Vol. London: 1864.
3. Lectures on the Diseases of the Stomach. By W. Brinton, M. F.R.S. Second edition. London: 1864.

ADVERTISEMENTS.

Surgical Instruments.—Arnol & SONS continue to supply Instruments of the best workm ship at moderate prices, manufactured on the premises under th own superintendence.
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From the favour with which this invention has been received the Profession, preparations of the same name have been introduc by other makers, and much disappointment has been experience The inventor begs, therefore, most earnestly to request Prescribe and Chemists in all cases to order Liquor Bismuthi (*Schacht.*), pr pared by G. F. SCHACHT, Chemist, Clifton. London Agents: DRE BARRON, & Co., Bush Lane, & SAVORY & MOORE, New Bond Stre

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Hygro-Barometer, showing a any moment the Pressure and Temperature of, and moistu in, the Atmosphere. Invaluable for the Hospital Ward or Sic Chamber. Price £2 10s. Full details of its construction and us free per post. Prize Medal, 1851, for Meteorological Instruments the only one awarded. 1862: Two Prize Medals for many Importa Inventions, Accuracy, and Excellence. 1855: Paris Honourab Mention.
NEGRETTI & ZAMBRA, Opticians, &c., to the Queen, 1, Hatto garden; 59, Cornhill; 122, Regent Street; & 153, Fleet Street, Londo

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

THREE CASES OF SYPHILITIC DISEASE OF THE LARYNX: IMPENDING SUFFOCATION: LARYNGOTOMY: RECOVERY.

By THOMAS P. PICK, Esq., Surgical Registrar; late House-Surgeon.

AMONG the organs which come under the cognisance of the surgeon, as not unfrequently affected with syphilitic disease, we find the mucous and submucous tissues of the larynx. This may arise simply from an extension backwards of the more primary affection of the throat; but most frequently it appears independently of this affection, and at a considerably later period of the disease. Thus, in an analysis of fifty-six syphilitic patients recorded in the *British and Foreign Medico-Chirurgical Review* for July 1861, eighteen were found to be affected by disease of the larynx. And, according to Ricord, "the proportion of cases of laryngeal disease is greater among those who have tertiary than those who have secondary syphilis."

In many of these cases, it becomes necessary to open the windpipe, in order to prevent impending suffocation; and this was found to be necessary in the two cases detailed below, which occurred while I was house-surgeon to St. George's Hospital, and in which I performed that operation.

CASE I. Hannah G., aged 23, general servant, was admitted November 2nd, 1863, into Queen's Ward, under Dr. Pitman. She stated that she had always enjoyed good health till within this last three years, since which time she had suffered from "winter cough" and sore-throat. Twelve months ago, an eruption broke out on the arms and body, coincident with a very bad sore-throat and loss of voice. She was under treatment for the eruption; but it remained out four or six months, when it disappeared. She stoutly denied all primary sore. Eight days before admission, she went to bed feeling quite well, but was seized about seven in the morning with what she called "croup"—viz., wheezing inspiration. She had been attending as an out-patient; but, as she became worse, she was admitted.

On admission, she was a stout, healthy-looking woman. There were some patches of old partially faded psoriasis on the arms and chest, and a well marked chain of characteristic enlarged glands in the groin and down the posterior triangle of the neck. The breathing was extremely difficult, and accompanied by a wheezing inspiration; it was almost impossible in the supine posture. There was pain on pressure over the larynx, and mucous *râles* over both lungs posteriorly. The face was flushed; the skin hot and moist; the tongue furred; pulse 96; bowels open. A blister was applied to the sternum. A grain of calomel and a quarter of a grain of tartar emetic were ordered every three hours; beef-tea for diet.

November 4th. She continued much the same; had great difficulty in breathing, and considerable cough. She had not slept, and had been sick. There was swelling of the throat externally. Pulse 96; bowels not open. The pills were ordered to be given every six hours; and ten grains of iodide of potassium in nitre draught every six hours.

November 6th. The breathing had become very considerably worse, and had assumed more of a spasmodic character. She had not slept at all. Pulse 112. She was ordered to take at night a quarter of a grain of extract of stramonium, and three grains of extract of hyoscyamus.

November 7th, 1 A.M. Breathing much worse; spasms more frequent, and much more severe in character; lips livid; face bedewed with perspiration; eyes bloodshot; nostrils dilated, and constant gasping efforts for breath; pulse very feeble. Laryngotomy having been determined upon, I performed the operation. There was some little difficulty, on account of the quantity of fat which had to be cut through, and the free hæmorrhage from the congested vessels; and, before the larynx could be opened, she had ceased to breathe, and the pulse had ceased to beat. As soon, however, as the cannula was introduced, artificial respiration was set up, and in a few minutes she began to breathe quietly through the tube, and soon fell into a placid sleep.

11 A.M. She had passed a quiet night, and had had no difficulty in breathing; expressed herself to be immensely relieved. Skin hot; pulse 130, full; respirations 35 in a minute; tongue white; bowels freely open. A cradle, covered with flannels wrung out in boiling water, was kept constantly over her neck; and the inner tube was frequently taken out and washed.

She went on well till the 10th, when her gums became sore. The breathing was perfectly easy; pulse 96. The pills were omitted; and she was ordered to take ten grains of chlorate of potash in nitre draught every six hours.

On the 17, she still continued comfortable, and was ordered a mutton-chop.

December 16th. A cork was placed in the tube; but she was unable to breathe with it for long. The throat was examined with the laryngoscope. There was found to be increased redness of the mucous membrane, with injection of the superficial vessels. There was great swelling of the superior vocal cords; so much so, that they approximated and met in the median line, entirely obstructing a view of the rima glottidis and true chordæ vocales.

December 22nd. She still had great difficulty in breathing, if any attempt was made to close the mouth of the tube. There was very little discharge, and no dysphagia. She could articulate freely by placing a finger on the tube; but the voice was hoarse, and often degenerated into a whisper. She was ordered a drachm of solution of bichloride of mercury and five grains of iodide of potassium in cinchona draught three times a day.

January 13, 1864. She had been going on well till this day, though there was still very little, if any, air taken in by the mouth. Laryngoscopic examination revealed much the same state of things as before, except that there was not quite so much congestion.

She was made an out-patient at her own request. She continued to attend for some time, and was then lost sight of till Oct. 31st, 1864, when she came to the hospital to show herself. She stated that, since she went out, she had enjoyed good health; and that she was as strong and well as ever she was; in fact, that she had married; but that she breathed entirely through the tube, "no air passing the natural way".

On examination by the laryngoscope, very extensive nodulated thickening was found filling up the whole of the larynx above the true vocal cords; it appeared to implicate the superior vocal cords. The

swelling was greatest on the right side; and the two sides did not quite approximate, but a narrow chink was left; so narrow, however, that nothing could be seen through it. A twenty-grain solution of nitrate of silver in an ounce of water was applied to the thickening, and has been repeated three times a week ever since. She was also ordered ten grains of iodide of potassium three times a day. There has been, however, no material improvement.

Case II. John T., aged 28, labourer, was admitted January 27th, 1864, into Hope Ward, under Dr. Fuller. He stated that he had had a chancre twelve months previously, followed by secondary sore-throat and eruptions. Three months ago, he became very hoarse; but this symptom subsided after a time. For the last six weeks, he had suffered from loss of voice, pain in the larynx, and difficulty in swallowing. He had been under medical treatment, and improving till January 26th, when he was seized with a most urgent attack of dyspnœa and very severe pain in the throat.

On admission, there was an extremely anxious expression of countenance; pulse 80; burning hot skin; noisy respiration, and a peculiar barking cough. He was ordered salines and antimony.

Feb. 2nd. He continued much the same till this date. The breathing was extremely difficult and laboured. He had not slept for two or three nights.

About 11 P.M., the resident medical officer and myself were called to him, and found him evidently in a state of impending suffocation; the face was blue, and he was making violent efforts at forced respiration. I immediately performed laryngotomy; and so great was the relief that, before the tube could be tied in, he was in a sound sleep, in which he continued for five hours; he woke up easy and comfortable, with a full, frequent pulse and warm skin, and all anxiety of countenance gone.

He went on well after the operation. On January 15th, he began to breathe through the mouth; but could not be induced to allow the tube to be left out, as, when it was, he became nervous, and then had an attack of dyspnœa. He, however, went about with a cork in it.

The laryngoscope showed very considerable thickening of both true and false vocal cords, though there was still a large interspace left between the right and left cords, apparently quite sufficient for all ordinary purposes of breathing.

He was discharged April 20th, since which time he has been lost sight of. During the period he was in the hospital, he took the biniodide of mercury.

Syphilis appears to affect the larynx in three distinct ways. First, in the form of condyloma; and this is described by some authors as the commonest affection in the earlier stages. (Virchow's *Archiv f. Path., Anat., und Phys.*, vol. xxi, part i.) This form was well exemplified in a man recently under treatment as an out-patient at St. George's Hospital. He had had a chancre some nine months previously, of which some induration still remained, followed by secondary eruption and sore-throat; and he applied at the hospital for rupial ulcer, nocturnal pains in the shins, and considerable aphonia. On examining the larynx, several small, irregular, uneven growths, were found lying along both vocal cords, but principally the right, forming, as it were, a serrated margin along the free border of the cord. Under the use of large doses of iodide of potassium, he got considerably better, and recovered his voice somewhat; but was unfortunately lost sight of before he had entirely recovered, or before it had been ascertained whether the growths would disappear without local treatment.

Another form of syphilitic disease of the larynx is the form usually described in books under the name of "syphilitic ulceration of the larynx." This form, however, of simple ulceration, without thickening, probably only exists as an extension backwards of ulceration of the palate. It is characterised by cough, difficulty in deglutition, huskiness of the voice, and expectoration of bloody, purulent matter, frequently very offensive. On examining the ulcers, which are situated, for the most part, about the rima glottidis, they will be found to present a peculiar character, their edges being puckered, and drawn into white, tense folds, radiating, as it were from the ulcer as a common centre, and resembling very much the cicatrix left by a common burn. This form of disease is commonly associated with extensive ulceration of the uvula, soft palate, and adjacent structures.

But by far the most common form of syphilitic disease for the larynx to assume, is that to which the two cases recorded above belong; viz., where there is a deposit of a fibro-plastic material in the submucous areolar tissue, causing thickening as a primary affection; but, no doubt, sometimes terminating eventually in ulceration of the adjacent parts, probably from mal-nutrition, or from the local irritation of a foreign body. A good example of this form of disease, progressing to its final stage, and which terminated in death, occurred in St. George's Hospital about the same time as the above two cases.

Case III. J. W., aged 46, discharged soldier, was admitted October 7th, 1863, under Mr. Pollock. (For a full report of this case, as well as a similar one, see *Trans. Path. Soc.*, vol. xv, page 36.)

He stated that he had had syphilis, followed by secondary syphilis, many years ago; but that he had been quite free from all disease, till twelve months ago, when he was an in-patient, with difficulty of breathing and hoarseness. He went out relieved; but the symptoms had returned a few weeks ago.

On admission, there was considerable difficulty in breathing, and he was unable to lie down; his voice was scarcely to be heard; and his face was dusky and anxious. There was no expectoration; no difficulty, but pain, in deglutition.

The evening after his admission, he suddenly jumped out of bed and rushed out of the ward, declaring he was suffocating. My colleague Mr. Maude, and myself, were immediately summoned; and we found him gasping and struggling for breath; the face having become blue and respiration being extremely rapid, inspiration being accompanied by a whistling noise, though very little air could be heard entering the lungs. Mr. Maude directly opened the larynx, with immediate relief. This relief continued; and, after about three weeks, he was able to breathe through the natural orifice. The cannula was removed, and the wound allowed to heal up. At this time, an examination was made with the laryngoscope; the epiglottis was found to be thickened, especially on the left side. There was considerabls thickening and bulging about the false vocal cords and rima glottidis on both sides, so as partially to obscure the view of the true vocal cords; but on making him take a deep inspiration, they, to a certain extent, came into view, and appeared to be much thickened.

He was discharged November 14th.

He was seen again by myself on December 31st, about 10 P.M. He complained of pain in the epigastrium. His breathing was not difficult, nor his countenance dusky. Under these circumstances he was handed over to the resident medical officer, who ordered him some salines and antimony. According to the nurse's report, he slept comfortably all night and conversed with her about six, but upon her going to look at him about eight, he was found to be dead in his bed—having died without a sound sufficient to

arouse the attention of the nurse or the patient who lay in the next bed.

Post Mortem Examination. When the glottis was inspected from above before the larynx was opened, it appeared that such was the tumidity of the parts above the cords that no orifice was apparent. This was due to a general condition of œdema, which reached from the inferior vocal cords to the base of the epiglottis; the swelling was greater in the latter than in the former situation. There was thickening of the epiglottis, especially towards its base, and one of its edges was irregularly twisted. The body of the cricoid cartilages was in a great part detached from the tissues in which it is imbedded. The upper and inner part was replaced by bone, and this bone retained its unions with the soft parts, though partially separated from the adjoining cartilage. The cartilaginous part of the structure which composed by far the greatest part of its bulk, was only detached laterally. In a vertical section a channel could be traced completely round it, dividing it posteriorly from the soft parts, anteriorly from the soft parts and its own osseous portion. In a horizontal direction the separation extended irregularly for rather more than an inch. It was incomplete, except opposite to the central part of the body.

The channel contained a small quantity of pus, which was most abundant at the upper part of the cartilage, and thence led, burrowing upwards, into a sort of sinus, which extended to a level with the superior vocal cords. The separated cartilage had a natural appearance on section. The submucous cellular tissue was thickened by deposit of lymph, especially that covering the superior vocal cords, so that these structures were much rounded and enlarged. The lungs were much congested, and there were old cicatrices at both apices. The kidneys were granular.

This case is recorded somewhat fully, since it exemplifies a later stage of the disease than the two preceding ones, and a stage to which, for the most part, all these cases come, unless the disease be arrested by appropriate remedies, namely, necrosis of the laryngeal cartilages. In fact, observation seems to prove that many cases of disease of the cartilages of the larynx, attributed to so-called laryngeal phthisis, would, if accurately investigated, prove to be cases of fibro-plastic deposit due to the syphilitic virus.

Of the various cartilages the cricoid appears to be much the most frequently diseased, and of this the posterior segment, either in part or the whole. If the patient's life be prolonged, the cartilage, once necrosed, sets up irritation, followed by inflammation and suppuration; the matter formed may either point and burst internally and form a fistulous opening through which necrosed portions of cartilage may be coughed up, or it may undermine the tissues of the neck, pointing externally. When these two conditions occur conjointly, they give rise to aërial fistulæ—bubbles of air escaping during respiration.

Russian Students. The Russian government makes great efforts to obtain well trained medical men for civil and military appointments, and with this view sends many young Russians to study in foreign universities at the expense of the Empire. At Giessen there were last summer six such students studying zoology under Leuckart. There are so many now distributed over the German universities, that they require a special inspector, and with this office M. Pirogoff, the well known surgeon and author of the *Anatomy in Sections*, has been burdened. M. Pirogoff visited Berlin last summer to pass his special clients in review.

Original Communications.

THREE CASES OF OVARIAN DISEASE TREATED BY OVARIOTOMY.

By William Liddon, M.B., F.R.C.S., Surgeon to the Taunton and Somerset Hospital.

The pathological specimens of two of the following cases, with others from the hospital museum, formed the groundwork of a paper read before the West Somerset Branch of the Association in the early part of the present year. I now submit the details of those cases, with the particulars of another which has since fallen under treatment.

Case I. *Multilocular Ovarian Tumour, Nine Years' Duration: Ovariotomy: Death Sixty-six Hours afterwards: Tumour Twenty-three Pounds in Weight.* Mary M., aged 37, married, was admitted into the Taunton and Somerset Hospital, under the care of Dr. Kelly and Mr. W. Liddon. She had twins fourteen years previously, but had not since been pregnant. The catamenia were regular. The tumour was first noticed nine years ago.

On admission (November 29th, 1862), her complexion was pale, her hair red. She had little flesh. The abdomen was much distended, especially below the umbilicus; the circumference at the latter point was 40½ inches. A liberal diet and iron and quinine were ordered.

The diagnosis was, a multilocular ovarian cyst, with solid and fluid contents; the former much in excess; without adhesions, and accompanied with ascites.

Early in January 1863, the general health had much improved; and the patient was very desirous that an operation should be performed. After a consultation of the medical staff, ovariotomy was decided upon; and on January 29th, 1863, she was placed under chloroform by Dr. Kelly. The bladder having been emptied, an incision extending downwards from the umbilicus was made, and the surface of the tumour exposed; a large quantity of ascitic fluid escaping. Spencer Wells's trocar was introduced three or four times, but with little effect. The wound was therefore lengthened to four inches above the umbilicus, and the tumour easily tilted out. One large adhesion existed between the omentum and upper part of the tumour. The pedicle was rather short, and connected with the right ovary. After being transfixed with a double ligature, and tied, it was secured externally by Spencer Wells's clamp. The omental adhesion contained such large vessels, that it was secured in two portions, and retained externally at the upper end of the wound, as the pedicle was at the lower. The wound was closed by hare-lip pins and strapping.

The operation was well borne. On her recovery from the chloroform, forty drops of Battley's sedative solution were given.

January 30th. The bladder was relieved by the catheter. Pulse 108. There had been considerable oozing from the wound, apparently of ascitic fluid.

January 31st. The patient had a violent rigor. Pulse 150.

In spite of brandy and beef-tea injections, etc., she died on February 1st, sixty-six hours after the operation.

Post Mortem Examination, thirty hours after death. The abdomen was much distended with gas. The wound was healed, save where the omentum and

pedicle were situated. There was no peritonitis. The clamp was still *in situ*, and was found to be placed close on the uterus. The left ovary was healthy. The head and chest were not examined.

Case II. *Multilocular Ovarian Tumour: Extensive Adhesions: Removal of Uterus and both Ovaries: Recovery: Subsequent Formation of Pelvic Abscess, and Death.* E. H., aged 24, single, was admitted February 21st, 1863, under the care of Dr. Edward Liddon and Mr. W. Liddon, with a tumour of large size connected with the right ovary.

Menstruation had been scanty and irregular since November 1862, the date of the commencement of the disease. From time to time she had felt a dragging in the abdomen, but no severe pain. She had one child eight years previously, but had not since been pregnant.

On her admission, extending from the lower part of the abdomen upwards as far as two inches above the umbilicus, was a solid pyriform mass. There was no ascites. The tumour was apparently free from adhesions. The circumference of the umbilicus was 33¼ inches. Her general health was good. There was no albumen in the urine, but she had a constant desire to empty the bladder.

During the early part of her stay in the hospital, the tumour increased slowly, but subsequently with considerable rapidity. She suffered from occasional attacks of local peritonitis and diarrhœa; the legs swelled; and ascitic fluid made its appearance. Two or three secondary cysts became prominent; one near the umbilicus was tapped, and a small quantity of fluid withdrawn. Her general health also suffered; and it became evident that operative interference could no longer be delayed.

Accordingly, on July 31st, chloroform was administered by Dr. Liddon. The solid nature of the tumour necessitated an incision extending from a point half an inch above the umbilicus downwards nearly to the pubes. A large firm band, two inches broad, extending from the right iliac fossa across the tumour to its upper and left side, was tied in two places, and divided intermediately; this afterwards proved to be the lengthened pedicle. Several cysts were tapped, without materially lessening the bulk. Adhesions existed between the whole posterior surface of the tumour and intestines; and, in endeavouring to separate these by the hand, the diseased mass broke up, and was removed piecemeal. Another cyst, apparently growing from the whole posterior surface of the uterus, and occupying the pelvic cavity, was then discovered. The connexion with the womb being of so intimate a character, it was deemed inexpedient to attempt separation. Accordingly, a stout ligature was applied to the neck of the uterus, as well as the clamp; the latter thus retaining the body of the uterus and its appendages outside the wound. The pedicle of the large tumour was connected with the right ovary, and quite a foot long. The left ovary was healthy. The wound was closed with wire sutures, deep and superficial. The patient suffered greatly from the shock of the operation.

The clamp was removed on August 8th; the included uterus having sloughed away. Adhesions had formed between the stump and edges of the wound. The former gradually retracted, carrying the integument with it, and forming ultimately a sort of second umbilicus, from which for many days a black acrid discharge freely escaped. The upper part of the wound healed by primary adhesion. The catheter was not once required. She progressed remarkably well, and was discharged cured on October 18th.

On her presenting herself at the hospital in the second week of November, the following note was made. Her general health was re-established. The vagina was considerably elongated and drawn upwards; no os uteri could be felt. She had perfect control over the bladder.

From October 18th, 1863, to January 22nd, 1864, she performed the ordinary duties of a dairy-maid; and on several occasions walked from her home into the town and back, a distance of between seven and eight miles.

On January 22nd, 1864, she was readmitted, with supposed retention of urine. For three weeks previously, she had occasional pains in the lower part of the belly; but for three days only had difficulty in passing urine. She was fat and muscular, but suffered acute pain in the hypogastrium; her legs were drawn up, and she experienced great difficulty in micturition. She had shivered much, and was sick and feverish. A firm and irregular swelling, slightly elastic and very tender, occupied the right side of the hypogastric and iliac regions. The urine was very scanty and highly albuminous. The bowels were not moved for eight days, but afterwards diarrhœa set in. During this period, the tumour reached the umbilicus, distending the lower part of the cicatrix, where it ultimately pointed and burst, giving exit to a most offensive blackened slough, sero-purulent discharge, and finally fæculent matter. She became emaciated, and died on May 6th.

Post Mortem Examination. On opening the abdomen (a portion of the walls being left around the artificial anus), the small intestines lay completely matted together, occupying the pelvis. The interior of this mass was a large cavity, communicating with the external wound, and running upwards into the substance of the right psoas muscle, and outwards into that of the iliacus. It was, in fact, a large abscess, bounded much as follows: in front, by the abdominal walls and bladder; laterally and above, by the matted intestines; below and behind, by the top of the vagina and rectum. On opening this, three or four communications were found to exist between it and different points of the intestines; whilst in other parts the serous coat of the bowel was its boundary. The vagina terminated in a puckered cicatrix. The liver was pale and enlarged.

For notes of the above cases, I am indebted to Mr. F. W. Gibson, the house-surgeon of the hospital.

Case III. *Unilocular Ovarian Cyst, Twenty-six Pounds in Weight: Ovariotomy: Recovery.* Miss ——, aged 18, single, consulted my father, Mr. Henry Liddon, in the autumn of 1863. She was suffering from a large unilocular ovarian cyst, of two years' duration. As the tumour was increasing rapidly, and fluctuation very distinct, with the sanction of the late Dr. Burridge, a trocar was introduced, and about a pint of thick viscid fluid, like white of egg (becoming solid on boiling) escaped with great difficulty.

Messrs. Alford and Cornish also saw this patient in consultation. Extirpation was recommended; and on February 4th, 1864, chloroform having been given by Dr. E. Liddon, and with the assistance of Drs. Kelly, Penny, and H. J. Alford, in addition to the above named, ovariotomy was performed. The tumour was a single cyst; and, from the tenacity of its contents, not lessened by the trocar; it therefore required an incision extending above the umbilicus, and was removed as a solid tumour. There were no adhesions. The pedicle was broad and short (connected with the left ovary); it was transfixed, and secured by double ligature and clamp. The right ovary was quite healthy.

The clamp was removed on February 7th; and, excepting at the point where this had been placed, the wound had joined by first intention, and was quite

healed by the end of six weeks. The recovery was greatly retarded by an irritable state of the intestinal canal, associated with diarrhœa and flatulence; the latter to such an extent, that one or two of the deep wire sutures snapped, and opening up of the wound threatened.

For their valuable and numerous suggestions in the after-treatment of this case, I am greatly indebted to Dr. Liddon and my father.

November 1864. This patient is quite well.

Remarks. Ascites and œdema of the lower extremities existed in the first two cases, being due to pressure, and indicating in the second case the rapid growth of the disease. Though ascites is not a desirable complication, yet its presence in each of these cases afforded valuable evidence in concluding that the anterior surface of the tumour was unattached to the abdominal wall; this being made manifest by placing the patient in different positions, and watching the wave of fluid beneath the attenuated parietes.

In the first case, only one adhesion existed; and the chief characteristic of this was not so much its extent as the size of its vessels. For the latter reason, it was viewed in the light of a second pedicle, and retained outside the wound; the upper part being chosen, to avoid any dragging that might have subsequently taken place, had it been included in the clamp with the true pedicle. The unfortunate issue of this case prevented any true estimate from being formed, of this mode of dealing with adhesions of a formidable character.

In the second case, at the outset, the lengthened pedicle crossing the tumour was a source of difficulty, as its true nature was by no means clear. To account for its unusual length, the tumour originally, no doubt, was freely moveable, and afterwards rolled over on itself, its upper surface forming attachments below. The posterior adhesions, fortunately, though extensive, were recent; therefore easily separable, and non-vascular. The breaking down of the mass during the operation for some minutes complicated matters, it being far from clear whether or not hæmorrhage was taking place. Luckily, such was not the case; the bloody fluid within the abdomen being that of the broken-down tumour.

In dealing with the uterine adhesions, two proceedings were open for adoption—the one above described, or the clipping away of the cyst-wall excepting where adherent. The latter was not chosen, for the following reasons. 1. It would have been a matter of nicety, and taken some considerable time, which was of great moment, from the exhausted condition of the patient. 2. A number of small cysts were also attached to and growing from its free surface, some of which might have been possibly left behind, and formed the germs of a recurring disease. 3. From the successful result of a case recorded by Dr. Clay, who purposely removed the uterus, with a large tumour (uterine) attached.

The final result of Case II must be looked upon in a great measure as accidental, and as an example of what frequently happens in overtaxing the strength of tissues recently concerned in the process of reparation.

One remark in conclusion. The use of the catheter was not called for after the operation in the second and third cases—a circumstance to be wished for on future occasions, and probably attributable to not carrying the incision too near the pubes.

Food for Pigs. In France they are feeding pigs on rice with great success. Porkers gain 25 *kilogrammes* in weight for every 100 *kilogrammes* of rice consumed. They are allowed to eat the rice as we are bread at the *restaurants—à discretion.*

Transactions of Branches.

BENGAL BRANCH.

CASES OF TYPHUS FEVER IN CALCUTTA.

By S. Goodeve Chuckerbutty, M.D.

[*Read October 11th*, 1864.]

As typhus fever has been hitherto supposed to be unknown in Bengal, the following cases are submitted, in the hope that their details may prove of interest to professional inquirers on this subject.

Case I. Joseph Harlgrove, aged 25, a Portuguese seaman, of good constitution, was admitted into my European male ward on July 5th, 1864, with a fever of eleven days' standing. When taken ill, he was living in the "Irish Flag," a low boarding-house, situated in one of the filthiest parts of the town, and generally crowded by men of his class.

On admission, he was ordered to have an ounce of the liquor ammoniæ acetatis mixture of the hospital every four hours, milk and sago for diet, and congee water to drink.

On the 6th, his pulse was 100, moderately full and weak. There were numerous mulberry patches all over the body; some gurgling in the left iliac fossa; considerable headache; skin congested and hot; tongue dry, covered with fur about the centre, but clean and red at the edges; eyes ferrety; one large stool passed without griping or straining; some cough; pain in both knee-joints, more in the left; face flushed; no enlargement of the liver or spleen; no exacerbation, remission, or intermission. He was ordered

℞ Quinæ sulphat. gr. v; pulv. Jacob. ver. gr. ij; sodæ carbon. gr. v. M. Fiat pulvis ter die sumendus.

The head to be shaved, and cold applied to it.

July 7th. He was in much the same state as on the previous day. The skin of the body was still generally congested; and patches on the abdomen appeared to be vesicating partly. There was great prostration of strength. The medicines were changed to quinine and Dover's powder, five grains of each every four hours. The acetate of ammonia mixture was continued. A blister was applied to the left iliac region; and the cold to the head continued. Diet: milk, sago, and beef-tea.

July 8th. Pulse 112, exceedingly feeble; respiration 28; appetite bad; cough less; passed urine, but no stool; skin hot and dry; tongue very dry, glazed, and red at tip; face flushed still; slept; headache less. The Dover's powder was omitted; and beef-tea and port wine were ordered for diet.

July 9th. He had one scanty motion; no gurgling; tympanitis less; took his nourishment, though little at a time; was at times delirious; skin hot and dry; pulse 120.

July 10th. Two stools since last report; was restless and delirious during the night; skin moist, but still hot; face flushed; headache, cough, and cutaneous rash less; tongue dry, and covered with a thick yellowish-brown fur in the centre, dull red at the apex; lips dry and parched; gums and teeth covered with sordes; wandering in his mind. He was ordered to omit the acetate of ammonia mixture; to continue the quinine; and to have one ounce of stimulant mixture every hour.

July 11th. Pulse 100, excessively small and faltering; respiration 40; delirium about the same; skin dry and of a purplish colour; epidermis on the arms desquamating; lips and teeth covered with sordes;

tongue still brown, but moister; congestion of the eyes as before; no stool; urine, two pints, specific gravity 1025, offensive, light brown, acid, and free from deposit; percussion-note of the left side of the chest posteriorly, dull; respiratory murmurs exceedingly feeble; hypogastrium clear; urgent thirst.

July 12th. Urine, one pint and a half, specific gravity 1020, yellowish, acid, no albumen or deposit. A copious stool in the bed-clothes; took nourishment; was less delirious, though still drowsy, and muttering something to himself; skin cooler, paler, and covered with less of the petechial spots; tongue furred, deep brown, and dry; lips and teeth covered with sordes; dyspnœa less; did not answer rationally; respiration 32; pulse 96, exceedingly feeble, but a little better than yesterday. Stimulant mixture every half-hour; two eggs, with oil of turpentine; other medicines, etc., as before.

In the evening, he had had three stools; otherwise, was much the same.

July 13th. Three stools in the bed-clothes during the night; pulse 88, firmer and fuller; respiration 52, with weak murmurs, attended with some sonorous rhonchus in the right mammary region; expectoration composed of thick mucous sputa; eyes less congested; countenance more intelligent than hitherto; heat of skin less; redness and mulberry patches very little diminished.

July 14th. Two dark, brownish, fæculent stools; speech not very intelligible; countenance more intelligent; skin cooler; eyes better; slept in the night; respiration hurried; pulse 92; tongue moist, and clean at tip and edges; fur breaking up, several pieces of it having already come off.

July 15th. No stool; he could not speak. A cathartic enema to be given at once. Other medicines, etc., as before.

July 16th. He was quite rational, though not able to speak properly; face still somewhat flushed; eyes drooping; tongue moist, and nearly clean, with very little remnant of fur; teeth and lips covered with a viscid sordes; skin supple and less hot; pulse 92; respiration 28; eruption considerably less; two stools in the bed-clothes; headache better.

July 17th. He spoke with difficulty; otherwise was improved; pulse 92.

July 19th. One stool from a turpentine enema; pulse 96 to 100; he slept a good deal; tremor of the body and hands; cuticle desquamating; a great many sudamina on the abdomen; tongue cleaner, but glazed; urine deep brown, acid; specific gravity 1020, no albumen, no sugar.

July 21st. Found sleeping; no subsultus; no muscular tremor; spoke a little; tongue clean and moist; pulse 80; he slept all night.

August 23rd. From the last date, the patient slowly but steadily improved, and was discharged cured this day, at his own request.

Case II. Henry Stampford, aged 30, an English sailor (ship *Hippolyta*), was admitted into my European male ward on July 7th, 1864, with a fever, said to be intermittent, of two days' standing. He was given some quinine mixture and milk diet.

July 8th. He complained of pain in the loins and hepatic region; skin of natural temperature; tongue moist, but furred in the centre; appetite bad; one stool in the twenty-one hours. Six drachms of castor oil immediately.

July 9th. Five stools from the oil; face flushed, and covered with purplish patches, disappearing on pressure, but returning on its removal; ditto on the neck; trunk redder than yesterday, and covered with scattered mulberry patches; tongue tremulous, of good colour, with a rusty-coloured fur on its surface; pulse 84, small and weak; respiration 20; headache and pain in the loins said to be better, but more pain over the liver; dimness of sight, and inappetency. Quinine and beef-tea were ordered.

After this, he soon got over his fever; but continued to suffer for some time with dysentery, from which he recovered slowly, not being discharged till August 5th.

Case III. Hajim, aged 25, a Mohamedan, was admitted into my native male ward on July 9th, 1864, with a fever of ten days' standing. He was in a state of coma, greatly prostrated, with a feeble, indistinct pulse; occasionally delirious, with a vacant expression of countenance; skin dry and harsh; bowels open; urine passing into the bed-clothes. He was ordered quinine every four hours, and a mustard plaster to the neck.

At 9 P.M., his coma had lessened, but delirium had increased.

July 10th. No stool; slightly conscious; not so delirious as before; countenance sunken. He was ordered to continue the quinine; the head to be shaved, and a blister applied to it. Diet: sago, milk, kid-broth, and port wine.

July 11th. He had been very delirious since the last visit, tearing off his clothes, talking incoherently, and catching at imaginary objects; no stool since the night before last; clothes saturated with urine; percussion-note of the hypogastrium clear, of the epigastrium and right hypochondrium dull and painful, hepatic dulness extending below to the umbilicus, above to the right nipple, transversely to about an inch external to the left nipple, posteriorly to the spine; respiration 20; pulse 88, small, weak, but regular and steady; body generally cool and supple; lips and teeth covered with sordes; tongue dry, and covered with brown fur. The medicine to be continued; a blister to be applied to the hepatic region; the port wine to be increased; and an enema of turpentine and castor-oil in congee water to be given at once.

July 12th. Still delirious; was reported to have passed urine and stool after the enema, the latter containing four round worms; body cool; tongue moist and clean; pulse feeble. The medicine and food were continued. At 4 P.M., he was sleeping.

July 13th. Delirium much less; and general condition improved; took some nourishment; slept pretty well. Medicines and food continued.

July 14th. He felt better; was rational; no return of fever; pulse stronger; body cool; tongue clean and moist; took his food; slept well.

July 26th. He steadily improved since the last date, and was now discharged quite well.

Case IV. John Baptist, aged 44, an East Indian stevedore, of slender make, was admitted into my European male ward with a fever of nine days' standing, on July 16, 1864. The fever had never remitted or intermitted since the first onset. On admission, he was given some fever mixture every three hours, and milk and sago for diet.

July 17th. Skin hot; pulse frequent; conjunctivæ pale; eight or nine stools in the twenty-four hours, thin and yellow; no headache; no enlargement of the spleen or liver; great prostration; muscular tremors; appetite bad; abdomen hard.

July 18th. He was given a cathartic enema yesterday evening, from which he passed some fæcal matter; still hot and clammy; pulse more frequent; tongue moist and red at the edges and tip, dryish in the centre; appetite bad; slept well; much agitated; spleen projecting into the abdominal cavity about two inches. A powder of quinine and James's powder to be taken every four hours. Head to be shaved, and cold lotion applied. Turpentine fomentation to

abdomen. Diet: two pints of milk, ditto of chicken broth, and four ounces of port wine.

July 19th. Found sleeping on his back; skin warm, harsh, covered here and there with reddish patches; general surface redder than natural—the redness disappearing on pressure and returning on its removal; passed urine involuntarily in the bed-clothes; conjunctivæ muddy and congested; pupils moderately dilated, but rather fixed; lips dry; tongue moist, warm, and slightly furred; pulse 120, small and weak; respiration about 30; delirium still continued; four or five stools.

July 21st. Wished to leave the hospital, as his wife was just dead of the same fever, but was too weak; had four stools; free from fever; tongue clean at tip and edges, covered with a white fur in the centre; appetite bad; slept well. To have chicken grilled.

July 24th. Discharged, having steadily improved since the last report.

Case v. Isabella Baptist, aged 32, an East Indian woman, wife of the last patient, was admitted into my European female ward at 6 p.m. on July 16th, 1864, with a fever of twelve days' standing, which had commenced with diarrhœa. She was passing then five or six loose stools a day; was greatly prostrated; had a very feeble pulse; dry and brown tongue; sordes on the teeth; eyes congested; skin not very hot; mind conscious. Quinine mixture was ordered every four hours; milk and sago, and port wine.

July 17th. She was getting lower; pulse feebler; body colder. Dover's powder immediately; stimulant mixture every hour; milk and sago, and port wine and beef-tea.

July 18th. Was delirious last night; skin hotter than natural; countenance a little lighter; much subsultus tendinum; pulse 100, small and weak; lips and teeth covered with sordes; tongue dry, rough, coated with a dark fur; respiration 56; percussion-note of the chest anteriorly pretty good, except in the situation of the liver and spleen; respiratory murmurs harsh and puerile; percussion-note of the back throughout dull; mucous rhonchus with very little vesicular murmur; some vibices on the skin of the back. Quinine and James's powder every four hours; port wine, chicken-broth, and milk.

July 19th. Was found lying on the right side, but afterwards turned on her back; raving incoherently; eyes congested and muddy; both pupils contracted to mere points; lips and teeth thickly covered with black sordes; tongue parched, covered with a dense brown fur; face flushed, and covered with indistinct reddish patches; body generally hot and dry; scattered petechial patches, here and there on the trunk; abdomen soft, but tender; pulse 100, small, weak; respiration 60; percussion-note of the anterior part of the chest as before; respiratory murmurs, above harsh, below weak, with some submucous rhonchus; vibices on the back more numerous; percussion-note duller than in front; respiratory murmurs feeble, and greatly masked by mucous clicks; motions passed in the bed-pan said to be thin; urine soiled the bed-clothes; no cough. Medicines continued; port wine, milk, and beef-tea.

July 20th. She died at eleven o'clock a.m. The body was not allowed to be examined.

Case vi. James Brown, aged 25, a well made English sailor, living in the "Irish Flag", was admitted into my European male ward on July 30th, 1864, with dysentery of a fortnight's standing, with much straining, passing scanty, slimy, and bloody stools. He was ordered a powder of ipecacuanha, carbonate of soda, and acacia, every four hours; and milk diet.

July 31st. Much better; had had about a dozen soft fæculent stools; skin very harsh, almost scurfy, and warm; abdomen soft, not sore; occasional griping; pulse 88, moderately full and strong and regular; tongue covered with a grey fur, dryish, dull red at tip; much thirst; did not sleep well; medicines did not make him sick. Treatment continued.

August 2nd. He was still improving, and was ordered to take dilute sulphuric acid and infusion of calumba.

August 4th. Five fæculent stools in the twenty-four hours; he complained of a pain in the back and griping; skin less warm, and covered with perspiration; pulse full; tongue dry at the apex, covered with a yellowish fur on the surface behind; appetite bad; some induration and pain in the right hypochondrium; percussion-note there dull. Blister to the right hypochondrium. Diet as before, with chicken-broth and port wine.

August 5th. Quinine was added to the mixture.

August 6th. Two fæculent stools, not very copious; flushed, especially in the face, neck, and upper part of the chest; cuticle desquamating on the legs, arms, and trunk; minute spots of a mulberry colour on the trunk, no larger generally than the marks of mosquito-bites; skin harsh, dry, and warm; pulse 104, small, weak, and regular; respiration 36; lips black and glazed; a spot of about the size of a split pea on the inner surface of the lower lip, covered with a creamy looking deposit; mucous membrane deep red; tongue dry, brown, rough, furred, except at the edges, where it was moister; sclerotic conjunctivæ slightly yellow; abdomen soft; some gurgling in the right iliac fossa; pain on pressure over the colon. Medicine every four hours. Milk diet, chicken-broth, milk and sago, and port wine.

August 7th. Body cool, and damp with perspiration; pulse 92, small, weak; respiration 32; three scanty, thin, clayey stools; tongue moist, clean, and of natural colour at tip and edges, with a few red points in the upper surface covered with a soft fur.

August 8th. Feverish again; skin hot, but damp; pulse 100, rather small and weak; respiration 36.

11.30 p.m. Pulse very feeble and quick; skin hot; great pain in the right hypochondrium. Fomentation to the painful part; and anodyne enema.

August 11th. Six scanty fæcal stools; skin of ordinary temperature; pulse 76, small, weak; abdomen soft, painless; no borborygmi; no headache; a good deal of thirst; tongue moist, of natural appearance, but a little furred. Treatment continued. Diet, as before; grilled chicken to be added.

He continued to improve slowly from this date up to August 18th.

August 19th. Skin hot and dry; pulse 120; epigastrium very tender. Blister to the epigastrium. Acetate of ammonia mixture every four hours.

August 20th. Much better again; skin moist, and of ordinary temperature.

From this time he improved slowly; and was discharged quite well, at his own request, on Sept. 1st.

Case vii. J. W. Macmahon, aged 37, a fair country-born European, unemployed, living at Tiretta Bazaar, was admitted into my European male ward on Aug. 2nd, 1864, with a fever of six days' standing, which had come on after a prolonged debauch. On admission, he received an effervescing draught immediately; acetate of ammonia mixture every three hours; ice and milk and sago for diet.

August 3rd. Skin hot and dry; pulse 120, rather small and weak; respiration 36; face flushed; complexion jaundiced; pain on pressure in the right hypochondrium; area of the liver-dulness increased; had a yellow coloured motion in the morning; was sick all day yesterday, and vomited yellowish fluid;

complained of a dreadful pain in the lumbar spine; trunk covered with patches of a mulberry rash; tongue dry at apex, and smooth, but white, behind this, covered with a slight yellow granular fur, and moister; very severe headache; much thirst; no appetite; and ulcer on the left leg, with a good deal of inflammation of the skin about it, and several abrasions in other parts of the extremity from scratching; percussion-note of the chest in front duller on the left side than the right; respiratory murmurs weaker in the former. The former medicine was omitted. An ounce of castor oil immediately; and quinine, James's powder, and carbonate of soda, every four hours. Blister to the liver. Diet: milk and sago, ice, port wine, and beef-tea.

August 5th. He had been very restless through the night; very despondent; considerable headache; eruption on the front part of the trunk faded, but still present on the back; pulse very feeble, almost thready, 120; respiration difficult, 44; urine of the colour of turmeric.

August 6th. Was restless, and in a state of muttering delirium the whole night; subsultus tendinum of the arm; no muscular tremors; pulse 76, very small; tongue quite parched, pitted longitudinally; cutaneous eruption very much less on the back; head hot; pupils rather contracted. A mixture of quinine and dilute sulphuric and hydrochloric acid was ordered, in place of the former medicine.

August 7th. The delirium increased; skin of the body congested; the redness, in some places in patches, disappeared under pressure, and returned on its removal; sixteen or seventeen stools in the last twenty-four hours, liquid, and of a dark colour. Five minims of laudanum to be added to each dose of the mixture, head to be shaved, and ice applied; sugar of lead injections twice a day; diet and wine continued.

August 8th. He was quieter in the night, but complained now of a stiffness in the left side; skin of the body still mottled, of a mulberry colour; subsultus tendinum, muttering delirium, and general agitation, increased; the abdomen became very tender, even to his drawing up the legs when touched; and he died about a quarter after twelve noon on Aug. 9.

Post Mortem Examination, eighteen hours after death. Legs rigid; arms less so; skin of the trunk and extremities covered with livid patches, varying in size, being larger and of deeper colour at the hands and feet; vertical section of the skin, and of the muscles, from this to the ribs, dry; so also incisions of the scalp, and even the surface of the cerebral membranes on opening the cranium. On removing these membranes, a small quantity of fluid mixed with blood flowed from the sinuses. On removing the brain, it appeared as if macerated in water; surface pale; dura mater and parietal arachnoid agglutinated, and adherent to the inner border of the cerebral lobes; a spiculum of bone was found in the anterior part of the fissure between the cerebral hemispheres; it did not seem to be in the falx cerebri, but was quite independent of it. On slicing the cerebral substance from the upper surface, the medullary portion seemed to be duller and redder than usual; little or no fluid in the ventricles; choroid plexuses pale; no softening of the optic thalami or corpora striata. On opening the large intestines, the cæcum was found to be generally quite healthy, but near its base congested; the ileo-colic valve was also congested; the ascending colon almost blackened in parts, in parts lighter, the blood-vessels here and there being in a state of racemose congestion; on the mucous membrane here were found little light coloured bodies of the size of mustard-seeds; the mucous membrane of the transverse colon was less congested, and the congestion was arborescent in form; the rest of the large intestine was quite healthy. On opening the small intestines, nothing particular was observed in the ileum, except at one place some punctiform injection, and one or two places racemose injection; about two feet above the junction of the ileum with the jejunum, there was found a Peyer's patch of an oval shape, about one inch and a quarter in length, somewhat thickened, but the mucous membrane over it not differing from that on the valvulæ conniventes; about a foot higher up, another patch of a smaller size; another about two feet from the latter; another about one foot and a quarter from the last. Spleen slightly enlarged, soft, highly congested; kidneys enlarged and congested; liver and lungs congested; on section, there oozed from the latter a great quantity of reddish serum.

[*To be continued.*]

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

PLACENTA PRÆVIA IN TWIN BIRTH.

By F. W. Pittock, Esq., Sellinge.

[*Read September 22nd*, 1864.]

Although I shall bring before you no novel or original ideas, still the case I shall read to you will be one, I trust, not altogether devoid of interest. As my communication is headed Placenta Prævia, I will at once tell you that I am not about to open that wide and interesting subject, and to invite you to the discussion of one of the vexed questions of obstetrics, but simply to relate a case of placenta prævia as it occurred in my practice, and one which, I believe, is rarely met with.

E. M., aged 34, the mother of six children, having, at the seventh and eighth months of her pregnancy, sudden and violent gushes of hæmorrhage, I requested the midwife who was to attend her to send for me on the first ordinary symptoms of labour coming on. When I arrived, the patient was faint and blanched; the pains weak and irregular, followed by gushes and a constant draining. On examination, after removing the clots, the body of the uterus being low down in the pelvis, the os was dilated to the size of a half-crown, flaccid, and dilatable. From it bulged, as it were, or protruded, a portion of placenta. I ascertained that this was adherent to the internal ring, with a small section free on its inner side. Having given the patient a full dose of ergot and some brandy, with instructions to the nurse to administer the latter freely in teaspoonful doses, I at once, starting from the free portion of the placenta, commenced separating the adhesions with the forefinger. This occupied but a few minutes; and, a slight pain following, the placenta was expelled, and I was enabled to rupture the membranes. The head presented; and in ten minutes the child was born, of fair average size, but breathing feebly.

Placing my hand on the abdomen before applying a bandage, I was somewhat surprised to find that the uterus had every appearance of containing another fœtus; and in half an hour, the pains following quickly, another child was born, vigorous and lively. To this succeeded a tolerable sized placenta, free from adhesions, and expelled entire.

Thus were there not only two distinct placentæ, but the first one preceded the birth of a child, while the second followed the other as in ordinary labours. On mentioning the case to some of my friends, as I had never met with one before in my own practice, I found that such had never happened to them. I was, therefore, induced to make further inquiries; and,

from the replies of several of the leading obstetricians of the day, I learn that the case is of very rare occurrence. Unwilling to take up too much of your time by entering into the details of my correspondence (of which these letters, I think, will be abundant evidence, and which it may interest you to look over), it will be sufficient to enumerate some of my friends and correspondents who have been kind enough to interest themselves on the subject, and through whom I have been enabled to make some additional remarks to my own case. Having ascertained from such authorities as Drs. R. Lee, A. Farre, Murphy, and West, that they had never personally met with the like, I naturally wished to know if there were like cases on record. With the assistance of Dr. Hilton Fagge and Dr. Pittock of Margate, I was enabled to find some few authenticated cases on record; and here I might observe, in passing, that all foreign and home text-books, journals, retrospects, and reports, that were likely to bear on the subject, were searched.

The first case we discovered is related fully in the *Medical Times*, August 1854. Then follows a similar case in Dr. Barnes's Lettsomian Lectures for 1858. To these succeed four cases collected by Schuchardt, and published by him in one of the German medical journals in 1861, and afterwards translated and published in the *Edinburgh Medical Journal* for 1862. Next are four cases fully detailed in the early numbers of the *Lancet* for 1863. These are all the known published cases. Dr. Priestley, however, I ought to mention, says that he has seen a case similar; but, as it is not reported, I have not included it in my list. In 1862, Spaeth of Vienna published a detailed report of 1,850 cases of twin birth, which, on a moderate calculation, represent 148,000 single births. Now, as we know that statistics give us about one twin birth in eighty, and placenta prævia occurs once in 400 ordinary cases, it would follow that we might expect one case of placenta prævia in 36,000 twin cases. Not one of Spaeth's cases was the complication of placenta prævia. I have been favoured with some provincial statistics, to the number of 8,000; not one of them contains a similar case. One of my friends, who is a great enthusiast for statistics, furnishes me with the report of seventy cases of twins, and seems almost vexed that his list does not contain one similar to mine. On putting the question to some of the authorities of the day—Why does not placenta prævia occur oftener in twins?—the invariable reply is, that it does not frequently occur, but that it ought, considering the increased volume of the uterus in twin cases, and the large size of its single or double placentæ, requiring so much larger a surface or area for their nutrition.

Without further trespassing on your time or patience, I bring my remarks to a close with alluding to one subject which is closely connected with twin births. Some of my correspondents almost deny separate placentæ; others record many and frequent cases of separate placentæ; and some are enthusiastic enough even to say that there are no double placentæ, but all are distinct. For myself, I can only say that, in the great majority of twins, the placenta is undoubtedly single, or so intimately connected as to be thought so; but that there may be two placentæ, one being expelled after each child, I have myself met with twice this year, excluding the case above related.

Revived Corks. The attention of the French public has been called by M. Stanislas Martin to the employment of refuse corks collected by Paris scavengers, as dangerous to public health. Such corks used only to be employed by the ink and blacking makers, but their low price has of late induced retailers of bottled beverages to purchase them.

Reviews and Notices.

A Manual of Practical Hygiene, prepared especially for use in the Medical Service of the Army. By Edmund A. Parkes, M.D., F.R.S., Professor of Military Hygiene in the Army Medical School, etc. Pp. 612. London: 1864.

Treatises on military medicine and surgery have abounded for years past; the diseases and injuries to which the British soldier is subject have been amply and ably described; and our knowledge of the treatment of them has gone on increasing. But, although men like Pringle and Lind had long ago forced on public attention the importance of preserving the soldier's health, and although some benefit has certainly arisen from their instructions, still any systematic attempt at preventing disease in the army and keeping the men in a healthy, and therefore efficient condition, was a thing unheard of a few years ago. The late Russian war, as our readers are probably aware, was the cause of a change. After that war was ended, a Royal Commission was appointed in 1857 to inquire into the Sanitary Condition of the Army in England; and to certain of the proceedings of that Commission this work owes its origin.

The new "Queen's Hospital Regulations", prepared by the Commission, and published by authority in 1859, gave the army medical officer a new position.

"Previously the army surgeon had been entrusted officially merely with the care of the sick, though he had naturally been frequently consulted on the preservation of health and the prevention of disease. But the Regulations of 1859 gave him an official position in this direction; as he is ordered 'to advise commanding officers in all matters affecting the health of troops, whether as regards garrisons, stations, camps, and barracks, or diet, clothing, drill, duties, or exercises.'

"The Commission also recommended that, to enable the army surgeon to do this efficiently, an Army Medical School should be established, in which the 'specialties of military medicine, surgery, hygiene, and sanitary science,' might be taught to the young medical officers entering the army."

The Army Medical School having accordingly been instituted, Dr. Parkes was appointed professor of hygiene; and, having ably performed his duties in that capacity for several years, he now attempts further to carry out the wishes of the Commissioners, by providing a text-book of hygiene for the use of the pupils of the school.

The work, though written specially with a view to military matters, is to some extent necessarily a treatise on general hygiene; being limited in this direction only by the circumstance that the author has had "to deal only with one sex, a certain age, and a particular trade". It is divided into two books; the first being devoted, for the most part, to general subjects, while in the second the service of the soldier is more particularly discussed.

The first book consists of twenty chapters; and the second of five.

In the first book, the first chapter is on Water. It commences with an abstract of the Army Regulations as to the duties of the medical officer in regard

to the water-supply of barracks, camps, hospitals, etc. Dr. Parkes then notices the quantity required for healthy men, and for the sick. He then gives directions for estimating the quantity of water yielded by rainfall, springs, rivers, and wells; and for determining, in a general way, the permanency of supply. On this point, in the absence of positive evidence, it is very difficult to arrive at a safe conclusion; but some information may be derived from the physiological and geological formation of the country.

"If there be an extensive background of hills, the springs towards the foot of the hills will probably be permanent. In a flat country, the permanency is doubtful; unless there be some evidence, from the temperature of the spring, that the water comes from some depth. In limestone regions.....springs are often permanent. In the chalk districts, there are few springs or streams..... The same may be said of the sandstone formations, both old and new; but deep wells in the sandstone often yield largely, as the permeable rocks form a vast reservoir. In the granitic and trap districts, small streams are liable to great variations, unless fed from lakes; springs are more permanent when they exist, being perhaps fed from large collections or lochs." (P. 7.)

The nature of water, according to the sources of supply, is next described; the various gaseous, organic, and inorganic matters likely to be met with are enumerated; and the properties of the water of springs and wells, according to the geological nature of the soil in which they are situated, are given briefly, but plainly. The author further notices the properties of rain water and of distilled water, the usual sources of contamination, and the characters of good drinking water; also, the physical, microscopical, and chemical examination of water. Dr. Parkes amply describes both qualitative and quantitative examination, showing not only the means of making accurate analyses, but also the proceedings by which the surgeon may obtain a sufficiently accurate result when his facilities for examination are comparatively small.

Next comes a section on the purification, storage, and distribution of water; its action on lead-pipes; the rules to be followed in searching for water; and special considerations on the supply of water to soldiers, among which are described simple means for filtering.

In the next section, Dr. Parkes describes the consequences of an insufficient or impure supply of water. Under the head of impure supply, he hints that bad water may, by more extended investigation, be found to be a more frequent source of disease than is at present recognised; indeed, in proportion to the care of inquiry and the accuracy of examination, the number of diseases connected with impure water is continually increasing.

The principal noxious ingredients in water are "animal matter, especially when of fæcal origin; vegetable organic matter, when derived from marshes; and some salts."

"Of the various mineral ingredients, the least hurtful appear to be carbonate of soda and chloride of sodium, when not present in too great quantity. Carbonate of lime, when not exceeding twelve or sixteen grains per gallon, is not usually considered unwholesome; though it remains to be seen whether a more careful inquiry will not indicate some effect on digestion or assimilation to be produced by the constant use of such a water. The salts usually considered hurtful, except when in very small quantities, are sulphates of lime and magnesia, chlorides of calcium and magnesium, nitrates and nitrites, and butyrate of lime." (P. 48.)

The author then enumerates some of the affections of the alimentary mucous membrane which have been traced to the use of impure water. Dyspeptic symptoms are caused by water containing sulphate of lime, chloride of calcium, and magnesian salts; iron, when sufficient to give a slight chalybeate taste, often produces slight dyspepsia, headache, and *malaise*. Diarrhœa has been described as being produced by water containing suspended mineral substances, animal, especially fæcal, matters, and vegetable substances; dissolved animal organic matter; fœtid gases; dissolved mineral matters; and metallic impregnation. Instances in support are given; and also of the production of dysentery by impure water. As to the production of affections of other mucous membranes by foul water, little is known; but Dr. Parkes thinks the point worthy of investigation.

The important etiological fact, of the propagation of some of the specific diseases by means of water, next receives due notice from Dr. Parkes. He first mentions malarious fevers, and quotes authorities from Hippocrates down to the present time to show the noxious effects of marsh-water. He refers to several remarkable instances in modern times. Mr. Bettington, of the Madras Civil Service (*Indian Annals*, 1856),

"Refers to villages placed under the same conditions as to marsh air, but in some of which fevers are prevalent, in others not; the only difference is, that the latter are supplied with pure, the former with marsh or nullah water, full of vegetable *débris*. In one village there are two sources of supply—a tank fed by surface and marsh water, and a spring. Those only who drink the tank water get fever. In a village (Tulliwaree) no one used to escape the fever; Mr. Bettington dug a well, the fever disappeared, and in the last fourteen years has not returned." (P. 53.)

Dr. Parkes considers that, from this and similar instances, the conclusion is correct, that in malarious districts "the health of the people is far more affected by the water they drink than by the air they breathe." He refers to some statements made many years ago by Mr. Blower of Bedford, that ague in a village had been remarkably lessened by digging wells, and that, in one instance, almost the only family who escaped ague on one occasion was one which used well-water, while the others drank ditch-water. At Sheerness, also, the use of ditch-water has been believed to be conducive to insalubrity; and Dr. Parkes hints, that the great decline of ague in England may possibly be due to the use of purer drinking water. In reference to this point, it would be interesting to know whether, and how far, such a cause may be assigned to the disappearance of ague in Scotland.

The next disease noticed is typhoid fever; and Dr. Parkes brings forward instances in which the propagation of this disease has been traced with more or less accuracy to the use of water contaminated with the fæcal matters of patients suffering from it. One interesting point to which Dr. Parkes directs attention, is the shortness of the period (two or three days) before marked symptoms appear, in cases where

water has been the source of infection, as compared with the much longer incubation (eight to sixteen days) required to produce the early *malaise* when the poison has been conveyed through the air. Dr. W. Budd informs the author that he believes infection to be much more certain when conveyed by water, and that the period of incubation is materially shortened.

Regarding the propagation of cholera by drinking water, Dr. Parkes considers that at first the evidence was very defective; but that subsequent experience has shown it to be very probable that the disease is sometimes communicated in this way. The facts in favour of this theory are, hitherto, the occurrence of local outbreaks in which contamination of the water was proved or very probable; the prevalence of the disease in districts among persons using an impure water, while those who drank water from another source escaped; and the immunity from the disease of towns which could have not had contaminated water, as well as the escape, in later epidemics, of places which had formerly been visited severely—the only appreciable cause being an improvement in the water-supply. The theory, Dr. Parkes thinks, will explain some of the older reported cases of sudden cessation of cholera; as at Breslau in 1832, where the disease declined rapidly after the shutting up of a pump: and he believes that the prevalence of cholera in Russia during extreme cold may be explained by the fact, pointed out by Dr. Routh, that the poorer classes in that country throw out the excreta around their dwellings; and use, for drinking purposes, the snow collected from the same locality. But, while Dr. Parkes accepts the theory of the propagation of cholera by water, he can by no means admit this to be the only means of communication. "At present, the communication through the air appears to be most common: this may, however, be merely from deficient observation."

Some facts render it probable that the poison of yellow fever may be communicated by water; but there is no precise evidence; nor is there any proof of the communication of other zymotic diseases in this way.

After some remarks on diseases of the skin (an epidemic of boils at Frankfort in 1848), diseases of the bones, calculi, goitre, entozoa, and mineral poisoning, caused, or said to be caused, by water, Dr. Parkes sums up in the following conclusions.

"1. An endemic of diarrhœa, *in a community*, is almost always owing either to impure air, impure water, or bad food. If it affects a number of persons suddenly, it is probably owing to one of the last two causes, and, if it extends over many families, almost certainly to water. But, as the cause of impurity may be transient, it is not always easy to find experimental proof.

"2. Diarrhœa or dysentery, constantly affecting a community, or returning periodically at certain times of the year, is far more likely to be produced by bad water than by any other cause.

"3. A very sudden and localised outbreak, of either typhoid fever or cholera, is almost certainly owing to introduction of the poison by water.

"4. The same fact holds good in cases of malarious fever; and, especially if the cases are very grave, a possible introduction by water should be carefully inquired into.

"5. The prevalence of Lumbrici, Guinea-worm, or *Bothriocephalus latus*, should always excite suspicions of the bathing and drinking water." (P. 63.)

The second chapter is commenced with an abstract of the Army Regulations on the subject of Air and Ventilation; and Dr. Parkes then proceeds to speak of the quantity of air required for healthy adult men, for sick men, and for lighted rooms; the composition of the air; the various impurities contained in it, both ordinarily and under special circumstances; of fermentative or septic conditions of the atmosphere; of methods of purifying the air; and of diseases produced by impurities in air.

Under the last head, Dr. Parkes gives a brief analysis of the effects produced by the different impurities on health. At the same time, he observes that our knowledge on this point is as yet imperfect; and that, when impure air does not produce any striking disease, its influence is liable to be overlooked.

"We now know that, unless the specific cause be present, no mere foulness of air will produce a specific disease. The evidences of impairment of health are a larger proportion of ill health—*i.e.*, of days lost from sickness in the year—than under other circumstances; an increase in the severity of many diseases, which though not caused, are influenced by impure air; and a higher rate of mortality especially among children, whose delicate frames always give us the best test of the effect both of food and air. In many cases, accurate statistical inquiries on a large scale can alone prove what may be in reality a serious depreciation of general health." (P. 84.)

In the analysis referred to, Dr. Parkes first enumerates *suspended matters*. First among these come mineral substances: in speaking of which, the author refers to the diseases produced from this source in potters, steel-grinders, button-makers, pin-makers, and other artisans. Next come the germs of infusoria, fungi, etc.; and, in regard to this point, the author refers to the reseaches of Schrœder, Pasteur, and Davaine—especially the observations of the latter on the propagation of spleen-disease in sheep by the multiplication of *bacteria* that have been diffused through the air—as possibly calculated to throw light on the propagation of disease. But, at present, "it can scarcely be said that this subject has passed out of the realms of conjecture." In the next class, that of organic matters, Dr. Parkes places first the *materies morbi* of the specific diseases. What is the exact form of this, and whether it is always contained (as in small-pox) in the matters thrown off from the body, or is produced by putrefactive changes in such matters, is unknown; but Dr. Parkes believes that it is often combined with or condensed in the water of the atmosphere.

"The specific poisons manifestly differ in the ease with which they are oxidised and destroyed. The poison of typhus exanthematicus is very readily got rid of by free ventilation, by means of which it must be at once diluted and oxidised, so that a few feet give, under such circumstances, sufficient protection. This is the case also with the poison of oriental plague; while, on the other hand, the poisons of small-pox and scarlet-fever will spread in spite of very free ventilation, and retain their power of causing the same disease for a long time; even, it may be, for weeks, or, in the case of scarlet-fever, for months..... In the case of malaria, the process of oxidation must be slow, since the poison can certainly be carried for many hundred yards..... The poison of cholera also, it is supposed, can be blown by the

winds for some distance; but the most recent observations on its mode of spread render it probable that the portability of the poison in this way has been overrated." (P. 87.)

But it is not only the specific poisons that are conveyed in this way. There can be no doubt, Dr. Parkes observes, that purulent and granular ophthalmia, erysipelas, and hospital gangrene, are very frequently communicated through the direct transference of pus, etc., by means of towels, sponges, and dressings; but

"Another mode of transference is by the passage into the atmosphere of disintegrating pus-cells and putrefying organic particles; and hence the great effect of free ventilation in military ophthalmia (Stromeyer) and in erysipelas or hospital gangrene. In both these diseases, great evaporation from the wall or floor seems to aid the diffusion, either by giving a great degree of humidity, or in some other way." (P. 87.)

The author next speaks of the effects of *gaseous matters;* enumerating under this head carbonic acid, carbonic oxide, sulphuretted hydrogen, carburetted hydrogen, ammoniacal vapours, sulphurous acid gas, hydrochloric acid vapour, and bisulphide of carbon.

Under the next subsection—the effect of air impure from substances always coexisting—Dr. Parkes notices air rendered impure by respiration, by exhalation from the sick, by combustion, and by sewage gas; the effect of sewer air on the general population; emanations from fæcal matter thrown on the ground, and from streams polluted by fæcal matter; the effect of manure manufactories; the air of graveyards; the effluvia from decomposing animals; the air of brick-fields, cement-works, etc.; the air of marshes; and unknown conditions of the atmosphere producing disease.

The effect of sewage gas is discussed both in regard to men working in sewers, and to the general population. Men who work in non-infected sewers were said by Thackrah to be not subject to disease; and this statement was confirmed by Parent-Duchâtelet. But Dr. Parkes, analysing and criticising the facts adduced by Parent-Duchâtelet, arrives at an opposite conclusion—a large proportion of the men having suffered from ophthalmia, bilious and cerebral disorders, diarrhœa, colic, jaundice, etc. As to the effect of sewer-air on the general population, Dr. Parkes has no doubt that its inhalation is productive of much mischief; and he believes "that the class of affections arising from this cause will be found to be essentially connected with derangement of the digestive rather than of the pulmonary system." As to the important and much debated question, Whether typhoid fever is produced by the emanations arising from fæcal decomposition, Dr. Parkes does not offer a decided opinion. He gives in outline some of the data on which the arguments on both sides have been founded; and says:

"The view which best meets all the facts is that sewage air, *per se*, does not produce the specific lesion of Peyer's patches, which is the anatomical sign of typhoid fever, but that sewers afford the channels of propagation when the specific poison of typhoid, derived from the stools, finds its way into them. At the same time, it must be confessed that this conclusion is not based on such complete evidence as should alone content us; and that the spontaneous origin of true typhoid fever from simple sewage matter is neither completely disproved, nor is evidence wanting which seems to indicate such an origin. That the effluvia from the typhoid stools will produce typhoid fever seems to be certain; and a good case is given by Riecke. The evacuations of a typhoid patient were placed in an out-house, the upper room of which had an unceiled floor. Two men who had no intercourse whatever with the patient, and never entered the house, but who slept in the upper room, were attacked, and at the same time." (Pp. 97-8.)

The probable effects of sewer-air on the general population, Dr. Parkes enumerates as being

"Diarrhœa, bilious disorders, often with febrile symptoms; dyspepsia, general *malaise*, and anæmia; all these being affections of digestion or sanguinification; typhoid fever is also intimately connected with sewage emanations, either being their direct result, or, more probably, being caused by specific products mixed with the sewage. In addition, sewer-air aggravates most decidedly the severity of all the exanthemata, hospital gangrene, and puerperal fever (Rigby), and probably has an injurious effect on all other cases." (P. 98.)

Under the head of Unknown Conditions of the Atmosphere, Dr. Parkes refers to a remarkable case related by Dr. Mayer. The greater part of the inmates of a school at Ulm, consisting of sixty or seventy boys, were seized on a warm day in May with giddiness, headache, nausea, shivering, trembling of the limbs, and sometimes fainting. The attack recurred the next day. The room was enclosed by walls, which were covered with fungous vegetation and salts from the mortar; the sudden warm weather had produced fermentation, and the substances generated accumulated in the confined space, and affected the inmates. Removal to pure air cured the disease.

In the third chapter, Dr. Parkes describes the various means that have been proposed for effecting Ventilation by natural and by artificial means; and concludes with a section on the relative value of the two systems. Neither, he says, can be selected in preference to all others. In temperate climates, generally, natural ventilation is the best. But, in the tropics, with a stagnant and warm air, and in temperate climates under certain circumstances—as where there are many small rooms, or where sudden assemblages of people take place, mechanical means must be employed. Whether, in such case, extraction of the air or propulsion be the best, is a question on which opposite opinions have been expressed by equally competent authorities. Dr. Parkes says that the special conditions of the case must determine the choice, and that the amount and method of distribution must be considered rather than the source of the moving power.

"On the whole, the plans of ventilating and warming by hot water pipes, and Van Hecke's plan, are cheaper than the method by propulsion by means of a large fan; but the latter gives us a method which is more under engineering control, and is better adapted for hot climates when it is desired to cool the air." (P. 123.)

In the fourth chapter, on Examination of the Air and of the Sufficiency of Ventilation, Dr. Parkes describes the method of measuring cubic space, of estimating the direction and rate of movement of air in rooms, and the processes to be followed in the microscopic and chemical examination of air. As an example of the varied knowledge which the author

considers that an army medical officer should possess, we may notice that in this chapter, *inter alia*, Dr. Parkes gives brief rules for determining the areas of the circle, ellipse, rectangle, parallelogram, trapezium, trapezoid, triangle, and segment of a circle; the circumference of a circle and of an ellipse; the diameter of a circle; and the cubic capacity of the cube, cone, cylinder, parallelopiped, dome, sphere, as well as of the bell-tent and hospital *marquee*.

[*To be continued.*]

British Medical Journal.

SATURDAY, DECEMBER 10TH, 1864.

THE NEW INDIAN MEDICAL WARRANT.

A NEW Warrant having been promulgated by the Secretary of State for India, with many protestations, on his part, of the immense benefits which will accrue to the Indian Medical Service therefrom, it becomes necessary for those interested in that service to examine carefully its provisions.

The historical notice, at the commencement, shows us that, while Sir C. Wood has been for many years fully aware that some fresh arrangements had been rendered urgently necessary by the abolition of the East India Company's Government, he has been disabled from carrying out his designs, through differences of opinion, at one time between himself and the Secretary for War, at another time between himself and the House of Commons.

It is impossible to say what might have been the effect of the "amalgamation" of the Indian with the British Medical Service; but not so with his second scheme, that of providing India with a Medical Department chosen simply at his own discretion; or, as he terms it, a "medical staff corps for each Presidency." The construction put by the community upon this proposal, that it involved the abandonment of the system of competition, led to a wide-spread conviction that it would be unsafe to leave the selection of medical officers, who might or might not possess qualifications of the highest order, to the caprice of the Secretary of State. Therefore, it appears that this third scheme, that of the "system of an entirely separate service, as heretofore", has been forced upon him. The universal dissatisfaction with which the previous essay of the same high functionary, ushered into the world with high sound only a few months ago (May 16, 1864), was received throughout India, may indicate to us, that it has been only the influence of a public opinion very decidedly pronounced that has prevented the final consummation of measures tending still further to depress the Indian Medical Service.

The *primâ facie* intention of the present despatch is to give assurance to all who may be now in, or who may hereafter enter, the Department, that, while their duties will be much the same as heretofore, the pecuniary advantages and position accruing to them will in no case be on a lower, and in many points will be on a higher, scale than before.

The principal points adverted to are three—Pay, Pension, and Position. As far as we can at present judge, there are many advantages proffered as regards *Pay*. For all grades, the pay proper will be no less than the aggregate of pay and other allowances which were formerly granted. Those entering the service, as well as those whom a few years' subordinate duty will entitle to an independent charge, will have enough to support them. On all occasions of such charges, or of distinct staff appointments, the different items of pay and allowances will be given in a consolidated form; but the present incumbents will, in no case, be allowed to suffer. With regard to future incumbents, the specification is not so distinct; but if the local authorities carry out fairly the provisions of this Warrant, we may reasonably conclude that those medical officers who now enter the service will receive pay adequate for their comfortable support; and such as will enable them, if they are married, to provide, to a certain extent, for their families. The pay for the unemployed—*i.e.*, for those who are on leave—is raised to an amount far above the former allowance; which, indeed, was cruelly insufficient. In some cases, it will have become doubled. In this particular, justice has been very tardily accorded.

The *Retiring Pensions* are fixed at rates moderate indeed, but probably as high as can be expected, for those who retire after their first period of service is over. For others, the rate rises proportionably; and it has been, apparently, the object of Government to secure, by means of prospectively high pensions as well as present pay, the services of those who have been many years in India, and whose experience and matured judgment may be supposed to render their continued action in executive and administrative employments more valuable year by year; while the temporary tenure of even the highest posts will prevent the Department from being encumbered by those whom age and protracted Indian residence may have rendered unfit for even superintending functions. For the future, there will be *no augmentation of income to the retired from any medical retiring funds;* and, although provision to a certain extent will be made by Government for widows and orphans, it is evident that the married men must incur much greater sacrifices from their own incomes than before, in order that their families may be supported in a manner adequate to their own position.

Looking to all these circumstances, it seems to us, that the pecuniary advantages held out to the medical aspirant are not by any means of an extravagant character. We trust that they may prove sufficient

to reimburse him for his previous expensive outlay, and for his arduous career in a burning climate.

As regards the *Position* of the medical officer, we think that there can be no ground for complaint. In fact, in some respects, it appears to contrast advantageously with that of the British Medical Service. But whether we look to pay, pension, or position, the British medical officer can have no ground of complaint or of envy; for we apprehend that it will be always in the power of the most meritorious graduates of the schools, whether they have passed through the system of preparation at Netley or not, to elect the Indian appointments. It remains to be seen whether young men of the highest qualifications will be tempted to forego the advantage of seeing service all over the world, of frequent change of scene, of society, etc., in order to embrace the more restricted and monotonous, but certainly more lucrative, career of the Indian surgeon. In either case, we fear that, at any rate, as regards relative rank, the medical officer may be in an uncomfortable minority, compared with the favourites of the Horse Guards.

We trust that Sir C. Wood means well; but we cannot place implicit confidence in the professions and promises of any of the present generation of Home Ministers. We remember how vast and well-founded were the expectations of the profession, consequent upon the issue of the Royal Warrant of 1858, and how sadly but surely we were doomed to lasting disappointment. It will need all the firmness of the Viceroy and other controlling authorities in India to insure the carrying out all these provisions of the new Warrant in their integrity. For the present, we will content ourselves with the self-evident proposition that, in such a case as this, in which the lives and interests of our European and Indian fellow-subjects are at stake, nothing can be more wasteful than a grinding economy, nothing more economical than a just liberality. It may be doubted whether a system of amalgamation of the two services might not have proved advantageous. At any rate, we cannot concede any weight to the arguments said by Sir C. Wood to have been offered by the War Secretary, in opposition to the plan proposed by the former.

Supposing a highly educated and disciplined British medical officer chose, after some years of regimental duty, to take up for a time the duties of surgeon to a native regiment, or a civil station, or a jail, or those of a professor at a medical college, or of member of a sanitary commission, we cannot think that he will become in any way disqualified from the performance of medico-military duty. On the contrary, we think that the variety of employment will have enlarged his mind so much that, should the exigencies of the service demand his presence with the army, he will practise military medicine and surgery less as a specialty. He will be enabled to bring to bear upon the welfare of the soldier, the hygienic plans and improvements he has been carrying into operation, in his native hospitals, his jails, his towns. His mingled experience in treating military and civil populations, native and European, will have fitted him the better for the somewhat more restricted charge of the diseases, identical in their nature, but the most specially fatal to the Europeans of a regiment. A surgeon who has supplemented his regimental experience by studying for some years the various aspects of fevers, dysenteries, cholera, etc., among native troops and European immigrants, will be all the better able to treat the fevers, dysenteries, etc., which may prevail, perhaps epidemically, in any portion of the European army with which he may be called upon to do duty. His operative experience will probably have been tenfold. The statement that he would have had "no experience in the prevention of disease", is directly contrary to the fact. His experience, if it have lain in one of the large towns, will probably have been an hundredfold. As for the War-Office suggestion, that a surgeon, during his temporary absence from the European portion of the army, might lose the habits of military subordination, drilled into him by his "continuous military training secured under the present system of the Army Medical Department," the only meaning we can gather from it is, that the War-Office intends, in conjunction with the Horse Guards, to keep the British medical officers completely under their thumbs, so that they shall, at all times, to use the words in the fifth paragraph of Sir C. Wood's despatch, "easily bend themselves to the practice of subordination required from a regimental officer of inferior rank."

OUR OWN BRETHREN.

An action in the Court of Exchequer was last week brought against Mr. Davies, a gentleman practising in Surrey, for unskilfully treating a case of purulent ophthalmia, by which a child lost the sight of its left eye. The judge, when the plaintiff's case was stated, naïvely asked "what the case was"; and the jury quickly answered the question by giving a verdict for Mr. Davies, without calling upon any of his witnesses. In the opinion, therefore, of judge and jury, there was no evidence whatever of any negligence or unskilful treatment on the part of Mr. Davies. How then came it, that Mr. Davies was brought into a court of justice? We fear we must answer the question, as we have had so often to answer it before, by saying that he has to thank some one or other of what are called his professional brothers for the injury done him. What a lamentable commentary cases of this kind are upon that theory of brotherly love, high professional sentiment and cour-

tesy, and of the probity and dignity, of our calling, of which we hear so much in the abstract, and in the annual addresses of our medical schools! Any impartial medical man, who reads the account of the case here alluded to, and who knows the difficulties, etc., which encircle a medical man's daily practice, will at once admit that to impute blame to Mr. Davies for the results of this case is unwarrantable. Whilst Mr. Davies is attending the case (as the mother of the child tells us),

"A medical man named Maybury called on business. I asked him if he would come upstairs and see the child. He wished to go away without saying anything; but I begged of him in charity and mercy to tell me if the defendant was doing right. He said, if Mr. Davies was in the room, he should say what he said now, that the child had been shamefully used, and what the child wanted was a lotion. I sent over the next day to Mr. Maybury, and obtained the lotion. I used it all day and night of the following day. The defendant's assistant called on the day I had the lotion, and used the ointment again. On the following day, the defendant came; but I would not let him use the ointment. I made no complaint to the defendant of his treatment until Mr. Maybury said that the child had been most scandalously treated. I did not consider Mr. Maybury was in attendance, but treated his attendance as a favour to me.

"Mr. Maybury stated, he first saw the child at the earnest solicitation of Mrs. Wright. He refused to interfere; but, at the mother's request, he sent two scruples of sulphate of alum and potash in six ounces of distilled water, and directed to be injected into the eyes, syringing out the matter every half-hour until the eyes were thoroughly cleansed of the matter. When cross-examined, he said that the treatment he found fault with was in leaving the eye with matter within it, which would in a short time be destructive to its vision. He did say that the treatment was scandalous; but he did not mean by that the defendant was a scandalous man."

No one can read this evidence without noting that Mr. Maybury transgressed the laws of etiquette, in the first place, in giving his opinion and supplying medicines in a case which he knew was under the charge of another medical man. And, in the second place, no one can doubt that his observation to the mother, that the treatment of Mr. Davies was "scandalous", was the cause of this unjustifiable action being brought against Mr. Davies. Nothing can justify Mr. Maybury's remark to the mother; it is completely without excuse, and justly brings Mr. Maybury under the severe censure of his professional brethren. What Mr. Maybury has done is this: he has put Mr. Davies to great pain, great trouble, and, we doubt not, great expense. He may possibly even have seriously injured him in practice. And he has done all this contrary to the sense of the judge and jury, and of the medical profession.

At another page of the JOURNAL will be found a letter from Dr. Hartshorne, which requires a few comments under this head. This letter, we regret to say, tells of another instance in which a medical man is injured through the interference of his professional brother. Judging from the facts as there related, we must say that Mr. Thursfield would have only acted in accordance with the ordinary rules of professional etiquette, if he had refused to take the case out of Dr. Hartshorne's hands. Taking charge of the case under the circumstances, was his first error. His next was, to say the least of it, an exhibition of very great want of delicacy. He should have been the very last person to appear in the witness-box for the purpose of criticising Dr. Hartshorne's charges. It is, indeed, most lamentable to find a medical brother and neighbour practitioner so ready to give his influence and aid in the reduction of a manifestly most equitable charge. Does a barrister return his fees because the case is withdrawn? Does a London surgeon reduce his fee for an operation because the patient dies soon afterwards? Sad, most sad, is it to find our profession thus paraded in a court of justice. Here is a county-court judge who appreciates the value of a professional man's services, and is ready to do him full justice; but is actually prevented (as it would appear) so doing through the interference of a professional man's professional brother. The injury, in such a case as this, done to the individual is not slight; but infinitely greater is the injury done to the whole professional body. How can we expect the public to set a due value on our services, when some one of ourselves is ready to come forward and publicly declare that a most moderate charge made by his professional brother is a charge which ought not to be allowed? Whoever plays a part in such a proceeding manifestly assists in the lowering of his profession in the estimation of the world, and at the same time does an act of great unkindness and injustice to his professional neighbour. We often accuse the public of injustice and ingratitude. Let us reflect how much of this injustice and ingratitude is due to our own conduct—to conduct of the kind here described.

A NEW medical periodical, entitled the *Nederlandsch Archief voor Genees- en Natuurkunde* (*Dutch Archives of Medical and Natural Science*) has just appeared, under the editorship of Drs. Donders and Koster. The first number contains papers on the Diffuse New Formation of Connective Tissue, with Reference also to Elephantiasis, by Dr. Koster; on Diseases of the Heart and Arteries, and the Use of the Sphygmograph, by Dr. Brondgeest; on Muscular Action and the Development of Heat, in Relation to Food, and also on the Operation of Mydriatics and Myotics, by Dr. Donders; as well as some minor communications and selections from Dutch professional literature. The *Nederlandsch Archief* is announced to form a yearly volume of from thirty to thirty-six sheets (8vo), with plates and woodcuts; and will appear in four or more parts.

The Medical Association of France is mainly, we might say wholly, a species of "Provident Fund". Its very title shows its character: "Association Générale de Prévoyance et de Sécours Mutuel des Médecins de France." A very large portion of its funds consists of donations and legacies which have been made to it, and not by members of the profession only. The Emperor, for example, gives to it annually 1,000 *francs*. Then, again, the *préfets* of different departments make annual donations to the local branches. We would, moreover, call the especial attention of our wealthy brethren in this country to the large sums of money which have been given by French medical celebrities to this Provident Fund, called the Medical Association of France. Surely such an example might well be followed; and we doubt not that it will be so by the medical celebrities of our own country in reference to our own Provident Fund. Many of our brethren have already warmly answered the appeal made to their generosity. For the French Benevolent Fund—the Medical Association of France—we find donations of the following size: from Dr. Aronssohn, 2,000 *francs;* Dr. Desmarres, 1,500; M. and Mme. Andral, 2,000; Mme. Tonnellé, widow, 2,000; Dr. Bertin, 500; MM. Brun, Rayer, Civiale, De Boismont, each 1,000 *francs;* and a very large number of smaller legacies. We find even amongst the donors the name of Sir C. Locock. The success of this French Provident Fund, called the French Medical Association of Mutual Help and Providence, augurs well in favour of the success of our own Provident Fund.

Our readers will be pleased to hear that a new Branch of the British Medical Association has been established at Newcastle. A full report of the proceedings will be found at another page.

Homœopathy, according to a paper by Dr. H. King in the last number of the *Dublin Quarterly Journal of Medical Science*, occupies a position in New York which we trust it will never attain in this country. Its followers have a College—the "New York Homœopathic Medical College"; and the State has granted to this institution the right to confer the title of M.D. The students of this College are by a special Act admitted to the practice of the Bellevue Hospital—there, of course, to cull from legitimate medicine so much as will suit the globulistic art, and to deride the rest. The number of graduates at the last "commencement" was twenty-six. Not content with thus obtaining a legal position, the New York homœopaths have forced themselves, resistance notwithstanding, by the aid of a legal decision, on the county medical societies. As a result of this favoured state of homœopathy, Dr. King believes that

"A larger proportion of regular physicians would be found willing to meet these irregulars in consultation in New York than in our large cities. And such is, we believe, the fact. For example, a Woman's Hospital on a large scale, on Hahnemannic principles, is in contemplation; and the printed circulars announce that Dr. Carnochan has accepted the position of consulting surgeon to the projected institution."

Truly, there is much room for improvement in New York, both among the public who so liberally patronise globulism, and among those members of the medical profession who ought to know, and to act better than so to countenance the follies of the homœopaths, as inevitably to strengthen their position.

We deeply regret to have to announce the death of Dr. Kirkes, the accomplished physician of St. Bartholomew's Hospital. He was carried off by pneumonia, after only a few days' illness.

M. Küchenmeister has, he says, communicated small-pox to a sheep through the respiratory organs. He made a sheep breathe, during one hour, through the shirt worn by a small-pox patient, who had vesicles around the umbilicus, for twelve hours. Five days afterwards, the animal showed signs of fever; and three days later, a variolous eruption appeared, and was well marked on the inner side of the thighs. He concludes, from this experiment, that there exists a free volatile contagious miasm, which is formed in the body, and is separated even before the suppuration of the pustules occurs; and that this miasm may be dried and converted into a fixed contagious body, capable of attachment to linen, etc.

A Bordeaux *pharmacien*—M. Guyot-Dennecy—makes a pharmacological suggestion worthy of attention and trial.

He remarked, that the antiasthmatic nitre-fumigations used in asthma, as ordinarily prepared with paper, burn imperfectly and slowly, and produce much irritation of the mucous membranes. He therefore proposes to substitute for the paper the fresh leaves of belladonna, tobacco, digitalis, and all such species of leaves, provided they are large and thick. The stalk is placed in a solution of nitrate of potash (10 per 100); and, in the course of twenty-four hours, the leaf is found saturated with the nitrate. When thoroughly dried, they burn as well as the paper, and produce none of its irritating effects; so, at least, says the *pharmacien*.

"Animal Magnetism", which appears to have died out in this country, has cropped up in Vienna. A first-rate *artiste* in this line is thus announced.

"*An Ecstatic Somnambulist.* Fräulein Filomena Gavazzi is a pretty, saucy, blooming Italian, the very opposite of the ordinary official, pale, thin, bloodless somnambulists. The fräulein exceeds all her predecessors in dexterity and art. Her absolute or apparent want of feeling when her arm was traversed by a needle, when strong ammonia was brought to her nose, etc., were master-strokes of art."

Association Intelligence.

FORMATION OF A NORTHERN BRANCH.

A MEETING of medical practitioners resident in Northumberland and Durham was held in the Library of the Infirmary, Newcastle-on-Tyne, on December 1st, for the purpose of establishing a Branch for the two counties of the British Medical Association. Dr. WHITE was called on to preside; and there was a numerous attendance of medical gentlemen, including the following: Drs. Charlton, Humble, Gibb, and Philipson, and Mr. R. Clarke, of Newcastle-upon-Tyne; Dr. Gibson, of Birtley; Dr. Cossar, of Hurworth; Dr. Mackintosh, of Dinsdale Park; Dr. Pyle, of Sunderland; Messrs. Bennett, of Gateshead; Jobson and Thwaites, of Bishop Auckland; Lynch, of Blyth; Blackett, of Durham; Curry, of East Rainton; Smith, of Houghton-le-Spring; and Heffernan, of Whitworth.

The CHAIRMAN said he felt very proud of the position in which they had placed him that day at the initiatory meeting for forming a Branch of an Association, which he thought would be of the most extensive benefit to the profession generally. He should have said very little more upon the subject, knowing that all those around him were well acquainted with the principles of the British Medical Association; but as he saw around him some friends from the country, he thought he could not advance the cause they all had in view more than by saying a few words on the subject, which might be diffused and circulated by those gentlemen amongst others who were not so intimately acquainted with the subject. It might be mentioned that this institution consisted of over 2400 members, and that the Association was now in a most flourishing condition. [*Hear, hear.*] When they considered what an enormous influence such an Association must exercise if they all co-operated together, it must be apparent to any man that it was his interest to join it. At the last meeting of the Association, in Cambridge, a Provident Society was originated in connection with it, for the benefit of the more unfortunate and unlucky members of the profession. [*Hear, hear.*] He was quite sure that, if such a project could be successfully carried out, it would constitute one of the most beneficial schemes ever contemplated. After alluding to the enormous and often badly remunerated labours of medical men, especially in the northern counties, the chairman pointed out the advantages that would accrue to the country members that had not access to such a library as that in which they were then met, by becoming members of the Association, as they would receive a copy of its valuable JOURNAL, which was published every week. [*Hear.*] Now, that JOURNAL of itself was an enormous advantage; for, if they took the value of it at 6*d.*, which of course it would be worth, it would represent 26*s.* in the year: thus giving them 26*s.* for their guinea subscription at once. [*Hear, hear.*] He believed they had commenced in a very auspicious manner; and he could not close those few observations without stating that but for the untiring energy and perseverance, the skill and business talent of their friend, Dr. Philipson, they would not have arrived at the present satisfactory stage of their proceedings. [*Loud cheers.*]

Dr. CHARLTON proposed the first resolution; and he did it with great pleasure, as he now saw a possibility of the realisation of that which had been the earnest desire of his heart, and that was that a Branch of the Medical Association of Great Britain should be founded here. [*Applause.*] He was, perhaps, the oldest member in that room of the British Medical Association; having, more than twenty years ago, attended its meetings, and having given the anniversary address in Sheffield in 1845. Since that time, circumstances had prevented him from joining the Association, and co-operating with it. Those circumstances were those which he now saw were about to be removed by that meeting; namely, that then there was no Branch of the Association here, and that he was an almost isolated member in the North. Now, however, that Newcastle was becoming a centre itself, he hailed this movement with great joy, and he saw every prospect of its fulfilment. At one period, he thought that the establishment of such a Branch might interfere with their Pathological Society; but he was now satisfied that this would not be the case in any respect. By having a Branch in the north, Northumberland and Durham would have the power of being represented on the Council of the Association, and by that means they could bring their influence to bear upon many important subjects, which had hitherto been neglected by medical men. [*Hear, hear.*] The want of union amongst them had been the great cause of the want of influence of medical men. He moved the following resolution—

"That a Branch of the British Medical Association be formed, to be called the Northern Branch of the British Medical Association."

Dr. GIBSON (Birtley) seconded the motion, and expressed an opinion that such a Branch would cause the jealousies which existed amongst medical men to disappear, when they would be better able to resist the enemies they had outside.

The motion was carried unanimously.

Mr. JOHN JOBSON (Bishop Auckland), in a few brief observations expressive of his views in favour of the establishment of such a Branch, moved the following resolution:—

"1. The Northern Branch of the British Medical Association includes the members residing in the counties of Northumberland and Durham and adjacent districts.

"2. The objects of the Branch are the drawing together, at stated intervals, the enrolled members of the British Medical Association residing in the locality, the reading of papers, the discussion of strictly professional topics, and the promotion of cordiality by a social dinner, at which meetings, discussions and dinner, every qualified medical man is a welcome visitor.

"3. That in order to carry out the objects of the Branch, there be appointed annually a president, a president-elect, an honorary secretary, who shall also act as treasurer, four other members, who shall constitute a committee of management, two of whom shall be resident in Northumberland and two in Durham; one representative to the General Council for every twenty members of the Branch, and —— representatives to the Board of Directors of the Provident Fund for every —— members of the Branch.

"4. That a single meeting be held in each year, in the month of June, alternately at Newcastle and Durham, or some other town fixed upon by the committee. That the notice of such meeting contain a list of the papers and subjects to be brought forward; that information of all intended communications be forwarded to the secretary three weeks before the meeting, and that the committee of management have the power to call a special meeting upon emergency.

"5. That any member of the profession wishing to

become a member of the Association and Branch be required to communicate his wish, with the name of his proposers, three in number, to the secretary three weeks previous to the meeting.

"6. That each member of the Branch contribute two shillings and sixpence annually for the expenses of the Branch."

Mr. Francis Bennett (Gateshead) seconded the motion, which was unanimously adopted.

Dr. Humble said that after the comprehensive remarks already made as to the propriety of establishing a Branch of the British Medical Association in the northern counties, it would be unnecessary to detain the meeting at any length. He would merely observe that, having heard doubts expressed that the promotion of this Branch might clash with the operations of the Medical Society, he had felt it his duty, as chairman of that institution, to make some inquiries; and, finding that the two societies would meet at different periods of the year, and moreover that the Branch would, after next year, not hold its meetings in this town for several years, he at once gave his support to the movement, feeling well assured that, the greater the facilities for intercourse amongst the members of the profession, the greater would be the benefits, not only to the members themselves, but to the community at large. He moved:—

"That the officers of the Branch be Dr. White, president; Sir John Fife, president-elect; Dr. Philipson, secretary and treasurer; and that Dr. Charlton and Dr. Embleton, of Newcastle; Dr. Parker, of Sunderland; and Mr. Hardy, of Byers Green, be the committee."

Dr. Cossar (Hurworth) seconded the motion, which was carried.

Dr. Mackintosh (Dinsdale Park) moved:—

"That the first meeting take place in Newcastle in June, 1865, the date to be fixed by the committee."

Dr. Gibb (Newcastle) and Mr. Thwaites (Bishop Auckland) simultaneously seconded the motion, which was adopted.

Dr. Humble moved a vote of thanks to Dr. Philipson for the exertions he had used in the formation of the Branch.

Dr. Mackintosh seconded the motion, which was carried amidst hearty applause.

Dr. Philipson tendered his hearty thanks to those present for the manner in which they had passed the vote to him. He said he felt he could have done very little of himself, if he had not had the countenance and assistance of others in the undertaking. When he became a member of the British Medical Association, he had no idea of a branch being formed here or even in the district, but Mr. Williams (the general secretary) had often expressed to him a desire that there should be more members of the Association in this district. The counties of Northumberland and Durham were very little represented upon the list of members of the British Medical Association. He (Dr. Philipson) communicated this to Dr. White, and steps were taken to bring the matter before the medical profession of the two counties, and various meetings were held from time to time, the result of which was that they decided to call the meeting of that day. He thought that by such a Branch as that they would be much better able to carry out measures for the advantage of the profession than any single individual could be expected to do. He accepted with much pleasure the office of honorary secretary and treasurer of the Branch which had now been formed, and it would always be his endeavour to make the Branch as successful as possible.

Mr. Clarke (Newcastle) moved a vote of thanks to the chairman for the able manner in which he had discharged the duties of the chair.

Dr. Pyle (Sunderland) seconded the motion, which was carried unanimously.

The Chairman having briefly replied to the compliment, the proceedings terminated.

The members were afterwards entertained at luncheon by Dr. Charlton, at his residence.

SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

The annual general meeting of the Shropshire Ethical Branch of the Association was held on November 28th, at the Lion Hotel, Shrewsbury; the President, S. B. Gwynn, Esq., in the Chair.

Resolutions. The following resolutions were carried unanimously.

1. That the cordial thanks of the meeting be given to the President, Vice-Presidents, Council, Honorary Secretary, and Treasurer, for their valuable services during the past year.

2. That J. R. Humphreys, Esq., be elected President; W. W. Thomas, Esq., and W. M. Beddoes, M.D., Vice-Presidents; and the following gentlemen members of the Council for the ensuing year: H. Fenton, Esq.; J. W. Roe, M.D.; T. Groom, Esq.; S. B. Gwynn, Esq.; and E. Harrison, Esq.

3. That J. R. Humphreys, Esq., W. W. Thomas, Esq., and W. M. Beddoes, M.D., and the Honorary Secretary, be the representatives of the Branch in the General Council for the ensuing year.

4. That P. Cartwright, Esq., be elected to represent this Branch in the Directorate of the Medical Provident Fund.

5. That the best thanks of the meeting be given to the President, S. B. Gwynn, Esq., for the courtesy and ability with which he has conducted the business of the meeting, and for his uniform efforts to promote the honour and interests of the profession.

The members afterwards dined together.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The second ordinary meeting of the season was held at the York House, Bath, on Thursday, December 1st, at half-past seven o'clock; R. W. Falconer, M.D., President, in the Chair. There were also present thirty-four members.

The minutes of the last meeting were read and confirmed.

New Members. The following gentlemen were proposed and duly elected members of the Association and this Branch:—John Cooke, M.D., Mineral Water Hospital, Bath; and Eubulus Williams, M.D., Clifton.

Medical Provident Fund. Dr. Falconer announced that he had attended the meetings of the Directors of the Medical Provident Fund, and promised to lay before the members, on an early occasion, the scheme which is in course of preparation.

Papers. The following papers were read and discussed.

1. Clinical Facts bearing on Broca's Views of the Organ of Articulate Speech. By E. L. Fox, M.D.

2. Case of Hernia. By A. Prichard, Esq.

3. Spasmodic Contraction of Hand: Recovery: following an Epileptic Attack. By R. W. Falconer, M.D.

4. Comminuted Fracture of Orbital Plate of Frontal Bone. By J. W. Teale, Esq. Mr. Teale also exhibited the patient, who was the subject of entire avulsion of the scalp.

5. Enucleation of Eyes. By F. Mason, Esq.

Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[*Concluded from p.* 612.]

When the last day of the meeting arrived, the ranks were already much thinned. Surgery met early; and, after a paper by Dr. Rosenthal on Meningitis, Dr. Heine showed a number of valuable preparations from the last Danish war, illustrating the various effects of gunshot wounds. He dwelt more particularly on fractures by small arms, and perforating wounds of joints; and related the history of a number of cases which had been under his care. It appeared again, what has appeared so often, as the result of the study of gunshot wounds, that they are very ugly and dangerous lesions whenever they involve a bone. The Section then voted all the usual thanks to its officers; and the president, Professor Roser of Marburg, closed the fifth and last meeting of the chirurgeons who participated in the Giessen Congress.

In the Mineralogical Section, Professor Klipstein of Giessen made a communication, on a new occurrence of carbonate of iron in the brown Jurassic formation of Oldendorf in Prussia. He also alluded to the mineral Wavellite, or crystallised phosphate of alumina; and showed that it might be derived from the decomposition of organic matters. Bergrath Dr. Jenzsch made a report on the geological results which has been attained by an expedition made into South Brazil by Lieutenant W. Schultz and Baron O'Byrn, on behalf of the Emperor of Brazil. The travellers described many kinds of rocks; then some deposits of coals; and, lastly, the quartz-fields of South Brazil, with their nuts of crystallised quartz and chalcedony. After a communication, on the Gneiss formations of Saxony, the meetings of the Section were closed.

In the Section for Zoology, the commission for determining the subject for the next prize essay of the Imperial Leopoldino-Caroline Academy, which, at the request of the Academy, had been appointed in a former meeting, reported that they had proposed the following subject: Explanation of the relation between sexual and asexual propagation of insects, by investigation of the various modes of generation of the phytophthires (aphis, coccus, chermes).* The Section next discussed fossil insects and belemnites, supposed to be full of embryos. Professor Leuckart then made a communication on hermaphrodites amongst the bees. They occur to the number of hundreds in some hives. The eyes and mouth resemble more or less those of drones; the antennæ remain similar to those of the workers; the hind legs frequently lose the peculiarities of the workers, and the stinging apparatus is gradually lost; when the lateral half of the stinging apparatus is lost, a penis appears by the side of the remaining half. The power to produce androgynous bees is inheritable by the successors of queens; but, in subsequent generations, becomes diminished. The generation of these hermaphrodites is explained by Professor Leuckart by the probable assumption that the glandular apparatus communicating with the spermatic receptacle of the queen is imperfectly developed, and that, therefore, the spermatic fluid does not become fully capable of impregnating, and that this causes a partial development only leading to androgynous malformation. The Zoological Section, amidst great applause, passed a vote of thanks to Professor Leuckart, for his excellent and interesting paper on Ambisexual Bees; and, further, for his great and successful services as "second leader of business" to the Congress. The meetings of this Section thereupon also terminated.

In the Botanical Section, Forester Hartig made some remarks upon the effect of frost upon the roots of plants. He showed that it is necessary to compress the earth upon the roots of newly planted trees very strongly, as when it is loose the frost penetrates to great depth. He also mentioned that, in some trees, the central, or grain-wood, participated in conducting the sap; in others, such as the oak, it did not. Professor Hoffmann made an attempt to prop up the doctrine of panspermia, by showing, under the microscope, a little chain of the shape of torula, probably belonging to penicillium glaucum, and a large stemphylium, which had been obtained from the nose of a person who had before been in a room for one hour. The meeting was unable to listen to all the other announced valuable lectures; and having passed the resolutions dictated by gratitude, was formally closed.

In the Section for Physics, Professor Plücker communicated researches on the spectra of gases; Dr. Greiss, on the fluorescence of vegetable extracts; to which Professor Plücker added, that he had also found extracts of animal matters fluorescent. The meeting was then closed.

In the Section for Chemistry, Dr. Braun demonstrated a new reaction for cobalt, by means of cyanogen and nitrous acid compounds. The reaction could also, in turns, be used for proving the presence of cyanogen or of nitrous acid by means of cobalt. Professor Fresenius reported upon the utility of different hygroscopic substances for the drying of gases. Professor de Vry showed a white crystalline resin from *Podocarpus cupressinus* in Java, which was acid, and which he termed podocarpic acid. He reported that the juice of some palm-trees in Java contained cane-sugar, and promised to become a source for the manufacture of this article. Professor C. Schmidt of Dorpat spoke on the constitution and analysis of meteorites. Professor Erlenmeyer gave the result of his researches on the connection between the glycerine-propyl and allyl series. Professor A. W. Hofmann exhibited glass plates, with magnificent dendritic figures, obtained by slow crystallisation of solutions of salts, such as sulphates of magnesia, zinc, and iron. They had been produced by M. Kuhlmann of Lille; and this most enterprising manufacturer and well known man of science was going to utilise the figures for various purposes, by taking impressions on soft metal, and producing galvano-plastic imitations of the original crystallisations. The Chemical Section was then closed.

The Section of Medicine listened to a discourse by Dr. Friedmann of Munich, on the sources of insalubrity of atmospheric air. It was shown that they could be gases only, and that these entered the blood by the lungs. Dr. Horn of Bremen communicated

* It is to be hoped that the Academy will be more lucky than in former years, when no answers to its prize questions were sent in. On the whole, it appears that the Academy and its prizes are little popular in Germany; arising, no doubt, from the antiquated mode in which the Academy is governed. The President virtually grasps the power of the Academy. He is elected by the Adjuncts, or Members of Council, which Council replenishes itself by elections from the Fellows, the Fellows having no votes. This is the same constitution as that which nearly ruined the fortunes of the College of Physicians of London. When the Academy shall follow the example of this now flourishing College, and the "Adjuncts" shall have gone the way of the "Elects", we may hope for the venerable body and its prizes. The subject of its next prize should be the question after its own propagation.

the experience which he had collected during an extensive outbreak of scarlet-fever which had occurred at Bremen. It contained no new features excepting the complication with diphtheritis. The discussion then mainly treated of the supervention of diphtheritis upon scarlatina, or the substitution of the latter diseases by the former. After much diffuse conversation regarding the treatment of scarlet-fever, in which anointing with lard, the application of cold wet blankets, or cold dry blankets, or sheets, washing with vinegar under the bed-clothes (to avoid the draught and possible cold), and many other well known procedures, were recommended, or condemned, or admitted with modifications, the meeting passed the usual votes of thanks, and was closed by the president.

Physiology also had another meeting. Dr. Hüter spoke on the cartilage-tissue at the lower margin of the patella of embryos. Dr. Thudichum gave an account of his researches on urochrome, and showed their bearing upon the treatment of uræmia. From the analyses of the entire blood of persons who had died of uræmia, and which never contained more than thirteen grains of urea, he showed that the theory of uræmia which stated it to be caused by retention and decomposition of urea (Frerichs), was untenable. He advocated treatment with alkalies in all cases where the retention of colouring matter could be diagnosed or was probable. He was supported in his views by Professor von Willich of Königsberg. Professor Helmholtz of Munich then delivered a lecture on the Noises and Tones of Contracted Muscles. The muscular murmur has been first studied by Wollaston. Latterly, Haughton has confirmed Wollaston. It is easily heard when the ears are stopped up with both index-fingers; or when the ears are closed with sealing-wax, and the jaws are then moved; or when the whole body is immersed in water. The pitch of the muscular noise corresponds to from twenty-eight to thirty-six vibrations per second of the lower parts of the musical scale. Weaker muscles give lower sounds. Helmholtz determined the capability of the muscles and nerves to transmit the electric current; and, as compared to its capability of transmitting the commands of the will, found it enormous. The will, as stated, causes between twenty-eight and thirty-six contractions, or vibrations; while the electric current could be made to cause 480 contractions per second. The vibrations of the muscle were determined by those of a musical fork inserted into the electrical chain. As the muscle contracts at each opening and closing of the current, and as the musical fork vibrated—*i.e.*, opened and closed—240 times, the muscle contracted 480 times, and the nerve conducted 480 impressions, per second.* Professor Eckhardt made a communication on the excitation of the salivary secretion by electrical irritation of the peripheric end of the lingual nerve before it enters the lingual ganglion. It was the essence of a dissertation of one of his pupils, and well rendered. Subsequently, the Professor performed the experiment in the Physiological Institute; as, also, another which he had described, concerning the mechanism of the erection of the penis in the dog. The Physiological Section then concluded its meetings, voting thanks to its several officers and benefactors.

Thus closed, at ten o'clock, on Friday, September 23rd, the scientific meetings and discussions of the sections of one of the most memorable congresses of German *savans*. From the sections, all hastened to the central hall, to be present at the last general meeting, which began at half-past ten A.M. It was announced amidst cheers, that the Director of the town of Hanover, J. Rasch, had sent the following telegraphic message: "The Fortieth Congress of German Naturalists and Physicians will be very welcome in Hanover, in September 1865." It was then repeated, what had already been announced, that Professor Krause had accepted the office of president of the next meeting; and had telegraphed the message, "that the King of Hanover would be glad if the meeting took place in his capital." Therefore, naturalists and physicians of Germany, or of any other country, in September 1865, some, we hope many of us, shall meet at Hanover. As far as I am concerned, unless it rain millstones, or I am otherwise incapacitated—say by an untoward and unreasonable lady-patient, who insists upon being laid up between September 17th and 25th, 1865, or by some other equally professional disappointment, I shall go to Hanover. This being settled, there were four more lectures to go through. How the first one came to be delivered before a mixed assembly, it would baffle the imagination of others to make out unassisted, as much as it has baffled my own. It was a commonplace description of a new mode of making an extract of meat which contains the albumen in solution and can be boiled. The subject properly belonged to the Medical or Pharmaceutical and Chemical Section. As the new extract was subsequently advertised with the names of Dr. Horn of Bremen, inventor, and Mr. J. Toel, apothecary, manufacturer, I found that the lecture had a philanthropic object, which could be attained by everybody at the rate of eighteenpence an ounce. The second lecture was excellent in scope and manner. It was by Dr. Stamm of Berlin, the indefatigable ichneumon of miasmatic snakes; and showed clearly the manner in which epidemics might be annihilated.* Dr. Stamm evidently produced a great impression, although he had, of course, to speak *sub rosâ*. He was succeeded by Dr. Birnbaum of Giessen, a teacher of the science of agriculture, with a lecture on Liebig's doctrine regarding the robbery of the soil by the process termed agriculture. Ultimately, there was a kind of lecture by Professor Hoffmann, on the dependence of vegetation upon the condition of the soil; in which old propositions contained in his handbook from fifteen years ago were repeated, in a manner which made them even less interesting than they had been when they wore the garb of novelty. About twelve o'clock,

* I used this fact for some considerations on the capabilities of our physical nature and the shortcomings of our metaphysical performances. No doubt, I said to myself, persons who perform extraordinary feats of body transmit impressions of the will with great velocity. Blondin, for example, must be thus gifted. A billiard player, a good shot, a ready reckoner, must each have great capabilities of quick transmission. I came at last back to an old exercise of mine: that of appreciating a great number of things in the shortest possible time, by simply rotating the eyes. I enunciated the educational principle, that we should teach our children to conceive impressions of the will, and transmit impressions of their own or of other people's will with the utmost celerity. It is an immensely useful and practical exercise; and, from my experience, I am sure that it will save many lives, and make many proceedings of life more precise than they are at present.

* As I have fought through the same topics as Dr. Stamm, I am entitled to say that all his positions were unassailable, and that even should his ideas be before their time, as much as Papin's pot was, they must ultimately be carried out throughout the world. It is necessary that the miasmata caused by filth and ordure should be removed; they can only be constantly removed by being carried to the land; and that this cannot be done in the shape of sewage, common-sense would show, even without the blue-book, "Sewage (Metropolis)", which was issued by a Parliamentary Committee. That the spread of water-closets has to be stayed, the pollution of the rivers of five hundred English towns fully teaches. And that those water-closets which exist in great towns have to be abolished, can be shown to be amongst the necessities of the future. The water-closet is a flagrant violation of the common law of England and every other country; the infection of sewers and the pollution of rivers is the same; and I quite agree with Dr. Stamm, that it cannot anywhere be tolerated.

the programme of lectures was exhausted. The "first leader of business," Professor Wernher, now delivered a short valedictory address; and concluded with proffering the best thanks of the town and university of Giessen for the honour done to them by the Congress. The Geheime-Bergrath Nöggerath of Bonn, who is one of the oldest *habitués* of the Congress meetings, took upon himself the task of summarily thanking the shadow of Oken, the founder, the state of Hesse-Darmstadt, the town of Giessen, the university of Giessen, the leaders of business; and concluded his comprehensive speech with proposing three cheers to his Royal Highness the Grand Duke of Hesse-Darmstadt. Professor Wernher then formally closed the Thirty-ninth Congress of the Naturalists and Physicians of Germany. As the citizens of Giessen and the leaders of business had done all that could be done to ensure success, the unqualified success of this great meeting was to them an especial subject of congratulation. And this and hearty thanks they received in abundance from the hundreds of strangers and friends who dispersed, on the afternoon of that 23rd of September, towards all parts of the German fatherland and other countries of Europe. For the cosmopolitan character of science had been vindicated by visitors from France, England, Belgium, Holland, Sweden, Russia, Hungary, Italy, and even the far East, had sent its representatives to that cheapest of all markets, where you buy treasure for what you value it at, the market of ideas.

Reports of Societies.

CAMBRIDGE PHILOSOPHICAL SOCIETY.

NOVEMBER 28TH, 1864.

PROFESSOR THOMPSON in the Chair.

IS THE VERTEBRAL THEORY OF THE SKULL TO BE ABANDONED? BY G. M. HUMPHRY, M.D., F.R.S.

THIS communication was intended, partly, as a reply to the opinion expressed by Professor Huxley, in his lectures on comparative anatomy, that the vertebral hypothesis of the skull has been abolished by the recent discoveries in development. Dr. HUMPHRY commenced by calling attention to the Laws of Uniformity of Plan, and Variety in Detail, which prevail throughout the animal kingdom, and, indeed, throughout the material system, and which the recent discoveries by the microscope have shown to rule over the ultimate structure and formation of all the tissues of the body. The discovery of the illustration of these laws in the plan of cell-formation of the tissues, and in the development of all animal and vegetable structure from the simple cell-form, he regarded as the grandest discovery in physical science that has taken place in our time. Of late years, the attention of anatomists has been much directed to the exemplification of these laws in the vertebrate classes, to tracing the uniformity of plan, especially in the skeleton, through the variety in detail which the members of these classes exhibit. This constitutes the branch of anatomy called "Homology." The general features of the plan upon which vertebrate animals are constructed are clear enough in all of them. Osseous segments, or vertebræ, with neural and visceral processes, enclosing respectively the neural and visceral centres, constitute the trunk, including neck, chest, loins, etc, Probability is in favour of the view propounded by Goethe and Oken, and worked out by Oken and Owen, that the skull falls in with the Law of Uniformity, and corresponds with the rest of the frame in having a vertebral composition. It is by all anatomists admitted to be segmentally constructed. Most anatomists are agreed as to the number of segments. Ought not, therefore, these segments to be described by the same name as those of which they form a continuation, especially as they bear the same relations to the neural and visceral centres, and the same or nearly similar relations to the nerves and bloodvessels? In their mode of development, too, the segments of the skull show a marked general correspondence with those of the trunk. The *chorda dorsalis*, around which the vertebral centres are formed, extends, at any rate, half way along the base of the skull; and the bodies and arches of the cranial segments are evolved from a continuation of the same embryonic structure—the "vertebral plates"—as the trunk segments. The chief difference being that in the trunk segmentation takes place at an earlier period than in the head. In the trunk, it is observed in the vertebral plates; and these primitive segments are called "protovertebræ." They appear not to exist in the head. The segmentation, however, takes place in the cranium, as soon as ossification begins, even if it does not do so before; and the significance of the protovertebræ as distinctive features between the skull and the trunk is diminished; first, by their being related to the formation of the nerves as much or more than to that of the vertebræ; and, secondly, by their not really corresponding with the vertebræ, each permanent vertebra being formed by a half of two protovertebræ. Dr. Humphry expatiated on this and other points in the development of the skull, and expressed his decided opinion that the differences between the development of it and of the trunk vertebræ were by no means sufficient to controvert the view—which coincides with the Law of Uniformity, and which is confirmed by the segmental construction of the skull, by the relation of its components to surrounding parts, and by so many fundamental resemblances in development—that the same name may be applied to the segments of the skull and of the trunk, and that the one, as well as the other, consists of vertebræ modified to meet the requirements of the parts in which they are found. He concluded by stating that the greater number of those anatomists to whose observations we are indebted for most of our knowledge of the development of the skull and of the trunk are agreed that the differences between the mode of formation of the segments in the two form no real argument against the vertebral character of either; and he thought stronger reasons must be adduced than had yet been shown before the anatomists could be called upon to abandon the vertebral theory of the skull.

ROYAL SOCIETY. At the annual meeting of this Society on November 30th, the following officers were elected:—*President*, Major-General Sabine, R.A., D.C.L., LL.D. *Treasurer*, W. A. Miller, M.D., LL.D. *Secretaries*, W. Sharpey, M.D., LL.D.; G. G. Stokes, M.A., D.C.L. *Foreign Secretary*, W. H. Miller, M.A. *Other Members of the Council:* J. C. Adams, M.A.; J. Alderson, M.D.; G. Busk, Esq., Sec. L.S.; Col. Sir G. Everest, C.B.; H. Falconer, M.A., M.D.; J. P. Gassiot, Esq.; J. E. Gray, PhD.; T. A. Hirst, Ph.D.; Sir H. Holland, Bart, M.D., D.C.L.; H. B. Jones, M.A., M.D; Sir R. I. Murchison, K.C.B; W. Odling, M.B.; W. Pole, C.E.; Rev. B. Price, M.A.; Sir J. Rennie, Knt.; Lord Stanley. The medals were awarded as follows:—The Copley medal to Mr. Charles Darwin, F.R.S.; a Royal medal to Mr. Jacob Lockhart Clarke, F.R.S.; a Royal medal to Mr. Warren De La Rue, F.R.S.; and the Rumford medal to Professor John Tyndall, F.R.S.

Correspondence.

ASSISTANT-SURGEONS FOR INDIA.

SIR,—I had intended making a few remarks on the despatch of Sir C. Wood, published in the last number of the JOURNAL, but I am so taken aback by your editorial in its favour, that I fear to do more than ask you to publish the present and former rates of retiring pension together, so that people may judge of "the change" which you so "hail" "from its own intrinsic merits."

I do doubt the "sincere gratification" you expect to be evinced by all interested; and I do fear the influence such an article may have on young men ignorant of these matters; nor can I agree with a high authority late of the Indian medical service, "that the despatch of Sir C. Wood seems fully to remove all cause of complaint."

That there has been a slight increase of pay and pension I will admit; but relative rank, the great stumbling-block, remains as it was, with the exception of the two grades of Inspector and Deputy-Inspector Generals. Their rank, Sir C. Wood writes, under the Royal Warrant, is to be considered as substantive rank; but we know from sad experience that, when it suits the views of combatant officers, they will *consider* our rank as nothing. It is not to be expected they will pay more respect to a despatch from Sir C. Wood than they paid to Her Majesty's Warrant, which they set at nought; so that the Indian medical service is, in that respect, no whit improved.

Promotion to the rank of surgeon in twelve years is undoubtedly a boon, in bringing with it increased pay; but there is against this the great drawback, that in future the Indian medical officer will only have natives to treat (with the exception of a few Europeans attached to native regiments and civil stations); as all European soldiers have been transferred to the British service, and were as quickly as possible taken from our charge.

As to the Royal commissions (and you should be aware that we of the old Company's service held them distinct from the local government commission), I do not see their value. As I said above, they can be set at nought as well as her Majesty's warrant; and until our rank is recognised on all committees, courts of inquiry, and at the mess-table, we are still outsiders, and liable to treatment, which "An Army Medical Officer" styles "derogatory to the profession"; but, to my mind, the treatment is ungentlemanly. No matter what the conduct is at mess, where all are supposed to know how to conduct themselves as gentlemen, without the instruction of the drill sergeant, unless a combatant officer takes notice of it, the medical officer, no matter what his rank, must not interfere; or, if he do, either no notice is taken of him, or he is told he has no authority. On this point of rank, I consider the different deputations to the Duke of Cambridge and Lord de Grey erred in not having an old army officer with them to explain and answer all the objections raised by the Duke and Lord de Grey, with regard to finance and military subordination.

There is not to be a medical fund, as in former days, for the new service; and, when I tell you that the Madras Medical Fund gives its members, on retiring, annuities of £400 a year, independent of the Government pension, I think you will agree with me that the slight increase of pension under the new rules will not compensate for the loss of the medical fund, which also gives our widows pensions of £228:11:5 a year, and our children (according to age) from £20 to £70 a year, to boys till 21, and to girls till death or marriage, with reversionary benefit in the event of widowhood; and when we came home on sick leave, this Fund gave surgeons £108:7:6, and assistant-surgeons £81:7:6, a year. Compare these advantages under the old Company with what is now offered, and say honestly if you believe the terms to be liberal.

In this despatch, there is not a word about furlough pay to Europe. At present, a surgeon gets ten shillings and sixpence a day; and I observe the studied omission of the words so peculiar to our old service, "of privileged furlough and leave of absence as counting for the retiring pension." Not a word of it in this. Every day set down against each pension must be served out in India, as I well know; for, the last time I came home on sick leave, I wanted seven months to complete the period for my pension, and I had to return to India, at my own expense, to serve out these few months, though I offered the Indian Secretary to serve double the time in England. Hence, leave will not count for the retiring pension; though, strange to say, in the British service, sick or private leave counts for pension, and these officers have passage found them to or from India on sick leave. When the new pensions are compared with those of the British service, I still say to aspirants for the red jacket: Choose the British service, until the Indian is not only on an equality in every respect, but superior to the British in pay and pension. Then, and not till then, I say, go to India.

Retiring Pensions under Old Rules.

Yrs.	Mos.		£	s.	d.
15	4	service in India.....	191	12	6
19	0	Ditto	250	0	0
22	0	Ditto	300	0	0
26	0	Ditto	365	0	0
28	0	Ditto	500	0	0
31	0	Ditto	700	0	0

Retiring Pensions under New Rules.

17	0	service in India.....	220	0	0
21	0	Ditto	292	0	0
24	0	Ditto	365	0	0
27	0	Ditto	456	0	0
30	0	Ditto	550	0	0

Look on this and that; and honestly advise. Should you require further information, I shall be happy to give it. I am, etc.,

A RETIRED SURGEON-MAJOR, MADRAS ARMY.

December 1864.

MEDICAL EVIDENCE IN LAW-COURTS.

LETTER FROM F. H. HARTSHORNE, L.R.C.P.ED.

SIR,—Throughout the kingdom, your editorial censure has suppressed the practice of medical men, upon insufficient data, giving evidence in courts of law against their brethren. I offer, for insertion in our JOURNAL, the particulars of the following case, hoping that you will give such an editorial judgment in the matter that will serve as a pole-star for our guidance in future cases.

Last September a child, six years of age, fell into a thrashing-machine by which the father got his livelihood, and at the shoulder had its arm completely severed from its body. I was called to the case. Having obtained the assistance of another surgeon, Mr. Bartlam, it was decided not to remove the humerus at the shoulder-joint, which I had thought would be necessary; but, dissecting back the lacerated muscles, I sawed the bone off at the surgical neck. After some time spent in search of the axil-

lary artery among a mass of bruised and torn muscle, it was safely ligatured, having first in an instant spirted into both our faces, as well as on the wall of the room. The torn nerves and muscles were then removed with the knife; two narrow tongues of skin were made to unite by a suture across nearly the centre of the wound; a rent below the axilla was closed by means of another suture, and the whole covered with wet lint. Either my pupil or myself were with the child a considerable time after the operation, fearing hæmorrhage. Having been asked by the mother what I should charge for the operation, I said that my charge would be five pounds; and that I would attend the child until it was well for that sum. No objection was raised to this charge at that time. Next day I was told, before several persons, that a lady in Brosely had promised to pay my fee of five pounds, and all future charges, upon condition that the child was transferred to Mr. Richard Thursfield's care; otherwise, that the lady would not pay either surgeon. No imputation of want of skill or of neglect was made. Finding that it was clearly understood that, without further attendance, I was to be paid five pounds, I consented to withdraw. Mr. Thursfield visited the child immediately afterwards. At the expiration of the week, I had not received the fee, and therefore sent in the following bill.

	£.	s.	d.
"To amount of bill delivered for the years 1860, 1862, 1863 . . .	2	7	0
"1864. To medical attendance and medicine for child in January . .	0	11	6
"To removing parts of lacerated nerves and muscles, applying ligature to the axillary artery, sawing off part of the humerus, applying sutures, dressing wound, with attendance and visits, for son, in September .	5	0	0
	7	18	6"

After this, it was intimated to me that the amount charged would be disputed. I therefore put the case into the Madeley County Court. Mr. Walker of Wolverhampton defended the case; and, before it was called on, privately told me that Mr. Thursfield was to appear as a witness against my claim. The sum charged for the operation was the only item disputed. The judge at once recognised the fact that £5 was allowed by the Poor-law Board for an amputation; and remarked, that the arm having been completely severed by the machine did not lessen the amount of skill required, but very likely aggravated the severity of the case; putting to me the question, "If they had been rich, you would have charged more?" Mr. Walker stated that the defence was, that the charge was excessive; and now called Mr. Thursfield as a witness, who stated that he was sent for three or four times before he visited the child, because he did not like to interfere with a brother medical man's practice. The judge then asked him if he did not find that I had rendered similar services to those that are ordinarily required in cases of amputation. Mr. Thursfield answered: "*That is an invidious question* about a brother medical man." The judge remarked: "Oh, I see, you did not like having to interfere with a brother medical man's practice; but you saw that the wound had been properly done up, so to speak." "Only by hearsay," was Mr. Thursfield's reply. Having read my bill, the judge asked again if he did not see that what was stated there had been done for the child. Pointing to my bill, Mr. Thursfield said: "I did not know what is there stated had been done for the child, until I saw it written upon that paper. It was so inflamed and swollen, I could not tell what had been done." The judge now asked what, in Mr. Thursfield's opinion, would be a right charge for the case. "In consideration of Cleeton's circumstances, £3 was a sufficient payment," was the reply. To this the judge remarked, that I had already considered their circumstances in making a charge as for a pauper. Mr. Thursfield is the senior surgeon, and has the best practice in this neighbourhood; he is also a magistrate for the borough of Wenlock and high bailiff of the Madeley County Court; therefore the judge could not entirely ignore the opinions of a man in his position, and gave judgment for £4 for the operation, telling me that the deduction was made because I did not subsequently attend the case.

I think your opinion in this matter may be of future use to some of our associates. What is the value of human life to an individual, a family, or socially? What is the fee paid to deliver a felon from a painless and sudden death upon the gallows? and what fee is thought to be right to preserve a tender parent, a loving child, or an honest labourer, from terrible anguish, sudden or perhaps lingering death? We wish to avoid doing injustice, and would like to know what should be the recognised minimum fee for amputation. Is Mr. Thursfield's standard to be accepted? If the public are taught to believe that such services as are given in such serious cases are of little importance and of little worth, where will men be found willing to fit themselves for acting in such emergencies?

Probably the world will never be rid of people with mean principles and ignoble minds; but some remarks, sounding abroad from the high ground you occupy, may produce good results by acting as a barrier to mischievous designs, and confer upon many a lasting boon.

I am, etc.,

FREDERIC H. HARTSHORNE.

Broseley, December 1st, 1864.

ON RETAINING THE STAFF IN THE BLADDER IN CASES OF LITHOTOMY.

LETTER FROM F. LE GROS CLARK, ESQ.

SIR,—My attention has been directed by a former pupil and valued friend of mine, who is well acquainted with my practice in lithotomy, to a paper by Dr. Morris of Spalding, which was published in your JOURNAL of October 29th.

Dr. Morris quotes an operation of mine in favour of his recommendation to retain the staff in the bladder until the stone is removed. I well remember the case referred to, from the fact of its being exceptional. Indeed, it is the only instance which I can recall where I so far deviated from my usual practice as to retain the staff until after I had introduced my forceps and seized the stone. The explanation of my so doing in this case is, that the perinæum was of such unusual depth that I could not reach the stone with the forefinger of my left hand; and I therefore left the staff *in situ* until I had secured a hold of the stone or struck it with the forceps; I forget which.

Dr. Morris is quite right in the principle he advocates; viz., that of retaining the staff until no doubt remains of the prostate being sufficiently opened, and the presence and position of the stone ascertained. But this is effectually secured by the introduction of the forefinger, and feeling the stone. Until then the staff should on no account be removed, unless the perinæum be too deep for the finger to reach the interior of the bladder. After these points have been ascertained, the presence of the staff becomes an encumbrance to the operator; and it may, especially if not much curved, become entangled with the forceps.

Dr. Morris makes another observation on the case in question, which gives me an opportunity of urging on young lithotomists a point of, I think, far more practical importance than that which forms the subject of his paper. He remarks, that "the extraction of the stone (which was by no means large) was a difficult and most tedious affair." I admit that it was so; and to this tediousness I believe this patient, and many others on whom I have operated with much larger stones, owe their subsequent safety and good recovery. I have the stone before me; it is flat and of oval shape, and measures over five inches in its largest, and nearly four in its smallest, circumference. I had seized the stone (as shown by the marks of the forceps) by the *edges* of its smaller diameter; and thus, when brought to the opening in the prostate, its two projecting extremities were locked, so to speak, inside the gland; and, instead of acting like a wedge, drew down the prostate with it. I could not judge of the shape of the stone, as I had not felt it; but I believed that it was very large, from the extent of surface I could feel between the blades of the forceps. Therefore, instead of loosening my hold, I introduced a straight blunt-pointed bistoury, and divided to a limited extent the right lobe of the prostate. A little more patient traction enabled me to complete the extraction safely.

I cannot too strongly rebrobate violence in the extraction of a stone; for it is my firm conviction, that recovery or death depends, in many instances, solely on the patient, or, as it may appear to bystanders, tedious manipulation of the operator in the removal of a large stone.

The principles on which I act in lithotomy are contained in a clinical lecture published in the *Medical Times and Gazette* for November 9th, 1861.

I am, etc., F. Le Gros Clark.

St. Thomas's Street, Southwark, December 1864.

THE LATE SIR B. BRODIE'S CROONIAN LECTURES.

Letter from Charles Hawkins, Esq.

Sir,—Would you allow me to supply an omission in Dr. Robert Lee's paper, read at the Royal Medical and Chirurgical Society, which is reported in your last number? Dr. Lee, in his history of the Croonian lectures on "Muscular Motion," says that one was read in 1811 by Sir Benjamin Brodie, but omits to state that he read one also in 1813 "On the Influence of the Nervous System on the Action of the Muscles in general, and of the Heart in particular." The Council of the Royal Society directed that it should be printed in the *Philosophical Transactions*, but the author requested that the printing should be postponed, and it never was printed. The Council permitted me to copy this communication, and it will appear in the forthcoming edition of the author's works. In this lecture he details a series of experiments he had performed, showing that the heart, when suddenly and completely emptied of blood, continued to act even for a longer time than when it remained with its cavities distended with dark-coloured blood after the cessation of respiration, the contractions of the different parts of it being as regular, as orderly, and as vigorous as when the circulation is still going on; and he was led first to reject the hypothesis of Haller, and refer the contractions of the heart to the nervous influence supplied by the cardiac plexus of nerves, and not to the stimulus of blood on its cavities; and secondly, to apply the same explanation to the movements of other involuntary muscles.

I am, etc.,

Charles Hawkins.

Savile Row.

Medical News.

University of London. M.B. Second Examination, 1864. Examination for Honours.

First Class. *Medicine.*
Best, Palemon, Scholarship and Gold Medal, University College
Fairbank, Thomas, Gold Medal, St. Bartholomew's Hospital
Fox, Edward Lloyd Harries, University College
Hingston, Charles Albert, St. Bartholomew's Hospital } equal.
Kempthorne, Henry Law, King's College }

Second Class.
Carter, Wm., Charing Cross and St. Thomas's Hospitals }
Casey, Edward, King's College }
Hooper, John Harward, St. Thomas's Hospital } equal.
Simms, Frederick, King's College }

Third Class.
Nunneley, John Albert, Leeds and Guy's Hospital
Ludlow, Ebenezer, St. Bartholomew's Hospital

First Class. *Midwifery.*
Fox, Edward L. H., Scholarship and Gold Medal, University College
Phillips, John Jones, Gold Medal, Guy's Hospital
Fairbank, Thomas, St. Bartholomew's Hospital

Second Class.
Kempthorne, Henry Law, King's College
Hingston, Charles Albert, St. Bartholomew's Hospital
Casey, Edward, King's College
Carter, Wm., Charing Cross and St. Thomas's Hospital
Hooper, John Harward, St. Thomas's Hospital

Third Class.
Ludlow, Ebenezer, St. Bartholomew's Hospital
Nunneley, John Albert, Leeds and Guy's Hospital

First Class. *Forensic Medicine.*
Fox, Edward L. H., Scholarship and Gold Medal, University College
Fairbank, Thomas, Gold Medal, St. Bartholomew's Hospital
Carter, William, Charing Cross and St. Thomas's Hospitals

Second Class.
Casey, Edward, King's College
Kempthorne, Henry Law, King's College

Third Class.
Simms, Frederick, King's College
Hingston, Charles Albert, St. Bartholomew's Hospital
Ludlow, Ebenezer, St. Bartholomew's Hospital

M.D. Examination, 1864.
Hicks, John Wale, B.A., B.Sc., St. Thomas's Hospital
Huxley, James Usher, King's College
Lanchester, Henry Thomas, St. Bartholomew's Hospital
Miller, John Nicholas, University College
Moxon, Walter, Guy's Hospital
Pye-Smith, Philip Henry, B.A. (Gold Medal), Guy's Hospital
Stevenson, Thomas, Guy's Hospital

University of Cambridge. First M.B. Examination, December 1st. Examined and approved.
Lee, R. J., B.A., Caius College
Mickley, G., B.A., Clare College

Royal College of Surgeons of England. The following members of the College, having undergone the necessary examinations for the Fellowship, on November 22nd, 23rd, and 24th, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and, at a meeting of the Council, on Nov. 25th, were admitted Fellows of the College.
Baker, William Morrant, Andover, Hants; diploma of membership dated April 16th, 1861
Bowen, Essex, Birkenhead; June 7, 1850
Buszard, Frank, Infirmary, Northampton; April 16, 1860
Maurice, James Blake, Marlborough; April 10, 1861

Apothecaries' Hall. On December 1st, the following Licentiates were admitted:—
Appleby, Frederick Henry, East Retford, Notts
Baker, George Benson, Cross Street, Islington
Brideoake, Robert Farrar, Leigh, Lancashire
Butler, Charles Henry, Camborne, Cornwall
Earle, Robert Charles, Totnes, Devon
Markby, Thomas, St. George's Hospital
Owen, Robert Edward, Guy's Hospital
Tidy, Charles Meymott, The Hollies, Cambridge Heath

At the same Court, the following passed the first examination:—
Duke, John Challen, King's College Hospital
Ridout, Charles Lyon, St. George's Hospital

APPOINTMENTS.

ROYAL NAVY.

LUCAS, Leonard, Esq., Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.

MOLLOY, Gerald, Esq., Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.

VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

FITZGERALD, C. E., M.D., to be Assistant-Surgeon 2nd Administrative Battalion Cinque Ports R.V.

DEATHS.

COOPER, Richard, Esq., late Surgeon 4th Dragoon Guards, at Club Chambers, on December 4.

MARSTON. On December 2nd, at Southsea, Alice Mabel, infant daughter of J. A. Marston, M.D., Royal Artillery.

MORGAN. On December 5th, at Cheltenham, Elizabeth, widow of the late Hill Morgan, M.D., Bombay Civil Service.

SIEVEKING. On December 3rd, at 17, Manchester Square, Alexander Edward, infant son of *Edward H. Sieveking, M.D.

THE SOCIAL SCIENCE ASSOCIATION will next year meet either at Sheffield or at Gloucester. Invitations have been received from both those quarters.

APOTHECARIES' HALL AND RAILWAY ENCROACHMENTS. The master and wardens of the Society of Apothecaries are at legal issue with the Chatham and Dover Railway concerning the encroachment of the railway upon their premises in Blackfriars.

SANITARY IMPROVEMENT IN LIVERPOOL. £100,000 is about to be expended in Liverpool on the improvement of the dwellings of the poor and the destruction of filthy courts, under the able superintendence of Dr. Trench, the medical officer of health, whose services are recompensed by the salary £750 a year.

FLINT IMPLEMENTS. M. Bourdain has discovered two new deposits of flint implements—one in Paris itself, and the other an hour's distance. The gravel in the squares, promenades, and gardens of the city, the author says, contain archeologieal treasures—a prodigious quantity of arrow-heads and such like.

UNIVERSITY COLLEGE, LONDON. Free admission has been granted for three or four students of the London Missionary Society, to attend the medical and surgical practice of the hospital, with a view to their acquiring such medical knowledge as may most likely be useful to them in their missionary life.

BEQUESTS. The paymaster-general has been authorised to pay to University College Hospital the sum of £375, portion of a bequest made by the late Madame de Lilly to her Majesty for the benefit of the poor in London. Miss Ann Cranstoun Fryer, formerly of Hammersmith, but late of Reading, has bequeathed to the Royal Infirmary, Edinburgh, a legacy of £6,000.

SIGNOR MARINI has come to Paris with his preparations, and anybody who wishes may see at the Hotel Mazarin a round table entirely made up of a sort of mosaic of petrified brain, blood, bile, etc. He has dried or mummified limbs, which, by injecting, he can make to look as if they came from a recently deceased body. The process may have an interest for people of morbid tastes, like Dr. Van Butchell, who, I think it was, kept his two dead wives in his bedroom. He married a third, who insisted on the interment of her rivals before she would go to the altar. (*Chemical News.*)

ODONTOLOGICAL SOCIETY. At the meeting of this Society on December 5th, E. Saunders, Esq., in the chair, a paper was read by Dr. Kingsley, an American dentist, on the treatment of cleft palate, and artificial velum. The author spoke especially of congenital cleft palate, which, he contended, was not hereditary, although several instances might occur in the same family. After some remarks on the physiological action of the palate in deglutition and articulation, he referred to staphyloraphy; regarding which he acknowledged that better results, as regards union, were obtained in this country than in America, and that some improvement in speech was no doubt obtained. Great improvement was, however, rarely obtained, because the new septum was too small, and the movements of the palate were interfered with by the operation. He thought that the prospect of a merely limited improvement did not justify the performance of a tedious operation; and read extracts from the works of Mr. Fergusson and Mr. Pollock, to shew the imperfect results of staphyloraphy. He then described an artificial velum which he had designed, and exhibited several specimens, which, he said, were duplicates of appliances actually made for and worn by his patients. The instrument was ingeniously formed of vulcanised India-rubber, the parts being arranged so as to move on each other, and to obey the direction given by the muscles. It was fixed to the teeth—natural or artificial—by gold wire or other convenient material. In order to make it fit accurately, a model of the parts was first taken in plaster of Paris. He had never known its introduction to produce irritation. The result had been great improvement in speech, so that sometimes the deformity could not be detected at the end of six months. An animated discussion followed, which was led by the President, who exhibited some metallic artificial palates which he had designed many years ago. He had always found much difficulty in overcoming irritation. Mr. Sercombe would give the author full credit for his invention, but must differ from him as to the hereditary nature of the deformity. He had in all instances been able to trace inheritance—sometimes not directly, but in collateral branches. He had commenced the treatment of fissured palate ten years ago, and had seen many cases. At first he designed a rather complicated apparatus; but this he gradually simplified, until he produced the obturator which he at present used. The necessary qualities of an artificial palate were, that it should not be readily put out of order, or, if disarranged, that it should be easily restored; that it should fulfil all the objects required; and that it should be of durable material. His apparatus, he believed, had all these qualities. A gentleman under his care had worn one since 1857. The apparatus was moreover so simple that nineteen out of twenty dentists could construct it. Dr. Kingsley's apparatus somewhat resembled one brought forward by Stearns in 1845, which was very difficult of application. It (Dr. Kingsley's apparatus) was adapted for those rare cases in which the soft palate was so far destroyed that no moveable part remained; but it was complicated, and probably would not last above three years. Mr. Pollock regarded the results of staphyloraphy as by no means satisfactory; improvement of articulation was effected in some cases, but it was uncertain. Mr. Sercombe's apparatus was a very useful one, and, as he had seen, could be adapted even to children. Dr. Kingsley's apparatus was no doubt most useful in cases of loss of palate from ulceration; and there Mr. Sercombe's apparatus had also been very useful. An important point was the expense of the instrument; Dr. Kingsley's apparatus was expensive, and therefore not likely to come into use for hospital patients. Some remarks also were made by Mr. Bell, Mr. A. Coleman, and Mr. Mason. The general impression appeared to be, that Dr. Kingsley's apparatus was a most ingenious one; but that it was too complicated and wanting in durability to be brought into general use.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M.

TUESDAY. Royal Medical and Chirurgical Society. Ballot at 8 P.M. 8.30 P.M.: Dr. Pidduck, "On the Causes and Prevention of Infant Mortality"; Mr. J. Morgan, "Ulcer of the Ileum communicating with the Bladder."—Ethnological.—Zoological.

WEDNESDAY. Microscopical.

THURSDAY. Harveian Society of London, 8 P.M. Mr. Victor De Méric, "On Syphilitic Affections of the Nails."—Zoological.—Royal.—Linnæan.—Chemical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL *to be addressed to the* EDITOR, *37, Great Queen St., Lincoln's Inn Fields, W.C.*

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ERRATUM.—In last week's number, at page 629, column 1, line 27, after "The description given above is applicable only to extreme cases of fatal coma," add "and is an inadequate expression of phenomena."

E. W.—The address of the Linnæan Society is "Burlington House, Piccadilly." The secretaries are Messrs. Busk and Currey.

F. O.—The statement is exactly correct. The journal referred to, in its unceasing abuse of the Association, does not disdain to call in or accept the aid of a homœopathic practitioner's pen. The homœopath in question is assuredly not a member of the British Medical Association.

THE DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE for November contains the following original communications:—Contributions to the Volumetrical Analysis of Urine, by Dr. A. W. Wallace; An Unusual Form of Dislocation of the Hip-Joint, by Mr. G. R. Symes; Notes on Medicine and Surgery, by Dr. P. C. Smyly; Remarks on the Hebrew Catalogue of Skin-Diseases, by Dr. T. W. Belcher; A Simple Object-Finder for Students' Microscopes, by Dr. T. Powell; Notes of a Visit to the Medical Institutions of New York, by Dr. H. King; Granular Swelling or Benign Fungus of the Testicle in Infants, by Dr. C. Fleming; Case of Ileus accompanied by Fecal Vomiting, successfully treated by Galvanism, by Mr. J. M. Furney. The number also contains Reviews of Radcliffe on Epilepsy; Miss Nightingale's Notes on Hospitals; the *Medico-Chirurgical Transactions*; Markham, Spence, etc., on the Introduction of Cinchona into India; Neligan and Macnamara on Medicines; Macleod on Surgical Diagnosis; Recent Works on Ophthalmology; New French Medical Dictionaries, etc.: as well as the Proceedings of the Dublin Pathological, Dublin Obstetrical, and the Cork Medical and Surgical Societies.

H. S.—In our opinion, Captain Clarke, who prosecuted the scoundrels Henery and Co., has no claim at all upon the profession, that they should assist him by contributing to the payment of his legal expenses. Captain Clarke has paid for his weakness in throwing himself into such hands, instead of seeking proper medical advice. That he prosecuted the quacks, we may be very sure, was not done from any philanthropic motives; but to relieve himself from an insufferable persecution. If people commit acts of folly, we may commiserate their weakness; but we are not called upon to pay hard-earned cash to recuperate them for the consequences of their folly. The proper persons to assist him in his difficulty are the innumerable victims who have already suffered in the hands of the rascals. We would recommend our contemporary, who patronises a subscription for Captain Clarke, to open its pages for the reception of subscriptions from anonymous victims of "Our Silent Friends".

P. S.—For a second time, and in a leading article, the journal in question has published the following:—"A new Provident Fund," it says, "just started, would certainly have ended in the same way, had the official *Journal* of the Association had its own way, and had not Mr. Carter of Stroud enlisted our assistance in opening that Fund to all the profession." This statement, we again repeat, is not only false, but it is directly opposed to even a possibility of truth. The author of it neither does nor can produce the shadow of a proof, that we have ever said one word or uttered the smallest hint against the proposition of opening the Fund to the whole profession. Any honest man who reads lines so brazingly asserted, would naturally believe they were true. We therefore, in self defence, are forced once again to say, that they are a pure invention, or fabrication.

AN INDIAN ARMY MEDICAL OFFICER writes:—"I have heard the opinions of several of the seniors of the Indian Medical Service. They are all well pleased with the promises of the Despatch. We must not, however, forget that sometimes a controlling authority puts a different interpretation on what seems at first sight clear enough."

THE USE OF THE TITLE OF DR.—A correspondent asks: "Is a gentleman with L.R.C.P.Edin. (exam.) entitled to place Dr. on his door-plate and card?"

[The question asked has been again and again the subject of journal-discussion. We apprehend that no one can be prevented by law from prefixing Dr. to his name. The London College of Physicians refuses to give the title of Dr. to any Licentiate not possessed of a recognised doctorate-diploma; but custom or practice or courtesy seems at present inclined to give the title of Dr. to a physician, though he possess no doctor's diploma.]

WRIGHT *v.* DAVIES.—A correspondent writes: "I beg to call your attention to a case reported in the *Times* of December 2nd last, Wright *v.* Davies, another of those actions brought against a medical man for supposed maltreatment in an infant suffering from purulent ophthalmia, in which professional jealousies are brought into play, and the witnesses for the complainant acted most unfairly against the defendant."

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—J. A. Ledgard, Esq. (Wetherby), 5s.; J. P. Knott, Esq. (Towcester), 5s.; W. D., 5s.; Robert King, Esq. (Uxbridge), per Dr. Luce, 5s.; G. H. Macnamara (Uxbridge), per Dr. Luce, £1:1; Dr. Luce (Uxbridge), £1:1.

Amount previously announced, £105:2:6. Received at the *Lancet* office, £6:14.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, December 7th, 1864.

MR. TALLEY.—SIR: I herewith enclose you a portion of the *Exeter Gazette* for Friday last, in which the self-constituted champion of the medical profession announces an increase of his family.

"TALLEY.—Nov. 29, at Beaconsfield, the wife of William Talley, solicitor, of a daughter. No doctors."

COMMUNICATIONS have been received from:—Mr. T. SPENCER WELLS; Dr. J. G. PARSONS; VERITAS; THE SECRETARIES OF THE HARVEIAN SOCIETY; Mr. E. WILSON; Dr. R. FOWLER; AN ASSOCIATE; J. W. W.; Mr. T. POPE; Dr. E. WOAKES; Mr. J. VOSE SOLOMON; Mr. R. HARRISON; Dr. MACKENZIE; THE ASSISTANT SECRETARY OF THE ROYAL SOCIETY; Dr. B. HARRISON; Mr. F. MASON; Mr. R. S. FOWLER; Mr. J. R. HUMPHREYS; Mr. WILLIAM LIDDON; Mr. HARTSHORNE; Mr. R. H. MEADE; Mr. RICHARD GRIFFIN; Dr. J. GARDNER; Mr. CAUDLE; Mr. CHARLES HAWKINS; Mr. ERASMUS WILSON; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. CURGENVEN; Mr. PICK; Mr. W. TRENERRY; M. S.; and Mr. F. W. PITTOCK.

Addresses and Papers

READ AT

THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th*, 1864.]

THE RADICAL CURE OF EXTREME DIVERGENT STRABISMUS.

By J. Vose Solomon, F.R.C.S., Birmingham.

When a patient affected with divergent strabismus is unable—let his muscular efforts be ever so great—to do more than bring his eye to the centre, the case comes under the category of *extreme divergent strabismus*. This condition may result from several causes; but I propose confining myself in the present paper to the consideration of instances where the deformity has had its origin either in a too free division of the tendon of the inner rectus muscle and the subconjunctival fascia, by Dieffenbach's operation for squint; or in paralysis of the inner rectus, unconnected with tumour of the orbit.

When the squint is referrible to a badly performed operation for the relief of strabismus convergens, the tendon of the inner rectus has acquired attachment far behind its normal position, and the muscle, having become contracted and shortened, is no longer competent to antagonise its opponent. The deformity which results from this loss of balance is increased by the caruncle and semilunar fold of the conjunctiva having fallen so far backwards as to be invisible, which gives an apparent increase of size to the eye, and a markedly vacant expression to one side of the face.

With a view to remedy one or more of these defects, several plans have been tried by surgeons.

1. The excision of a large portion of the *external* rectus muscle. This, when successful, would leave the eye motionless, and is therefore most objectionable.

2. The removal of a portion of the conjunctiva between the semilunar fold and inner edge of the cornea, and then bringing the cut edges together by sutures—this, when successful as regards the position of the caruncle and semilunar membrane, fails to cure the divergence.

3. A *third* plan has been to excise the belly of the inner rectus, and then bring its cut ends together with sutures, the operation being concluded by a tenotomy of the external rectus. Of this method, invented and practised by Mr. Critchett, it may be sufficient to note, that in the hands of that able surgeon, the globe sometimes suppurated. Moreover, it is not a physiological proceeding, as normal convergence is not restored by it.

4. A *fourth* method, I have been told, since I practised my own operation, consists in dissecting up the inner rectus muscle, and then fixing the eye by ligatures in a much converged position; the internal squint which is induced by the operation being subsequently treated by a subconjunctival tenotomy. (Von Gräfe.) The objections to this plan are, that inversion cannot always be maintained for sufficient time to insure a more forward adhesion of the tendon, without which no benefit would accrue; another and very serious objection is derived from the liability of ligatures so placed, when tense, to irritate the cornea, and if not tense they are useless; and, under the most favourable circumstances, the muscle does not acquire its normal length.

The indications to be fulfilled by any proceeding undertaken for the radical cure of *extreme* divergent strabismus, when a result of previous tenotomy of the inner rectus, are: to give the eye a central position; *to restore the length* and the proper point of attachment to the adductor muscle, thereby insuring balance of the opposed muscular forces and permitting normal convergence.

The division of the attachments of the inner rectus, with its conjunctiva and subjacent fascia (in a manner to be presently described), and of the tendon of the external rectus, suffices to place the eyeball in the axis of the orbit.

The great difficulty consists in protecting and fixing the globe until the inner rectus obtains a proper attachment to it. Careful study of the subject led me to institute in persons who are in good health the following plan.

Anæsthesia having been induced by chloroform, and the lids separated widely by a self-acting speculum, the *first step* of the operation is commenced by making a flap of the parts which contain the inner rectus. To effect this a rather long perpendicular incision is made at about half a line from the inner margin of the cornea, down to the sclerotica; with curved scissors the inner side of that membrane is dissected bare. In order to make the flap come forward and over the cornea, two short incisions are practised through the extremities of the first incision, towards the nose. (Fig. 1.)

Second Step. As soon as it is found that the flap will reach, on being stretched, the vertical diameter of the cornea—when the eyeball is in the axis of the orbit—the external rectus is divided by a rather long perpendicular incisoin, just behind the insertion of its tendon. (Fig. 2.) The conjunctiva, which intervenes between this incision and the outer margin of the cornea, is reflected forwards, *and made to form a second flap.*

Third Step. The two flaps are united over the vertical diameter of the cornea by sutures, three of which are generally sufficient, one in the centre, one just above and one below the upper and lower margin of the cornea. (Fig. 3.)*



Fig. 1.

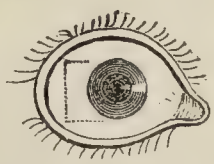


Fig. 2.

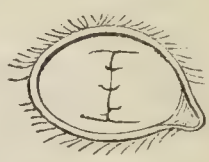


Fig. 3.

The eye now occupies the axis of the orbit; the *inner rectus is stretched to its utmost limit*, and the tendon placed over the most favourable site for adhesion to the sclerotica; the external rectus retracts, and if the power of moving the globe inwards and outwards be at this stage tested, it will be found still to exist, but to a slight degree only, the antagonism being about equal.

The *after treatment* aims at securing the immediate union of the inner flap, and the preservation of the nutrition of the globe. These indications are fulfilled by keeping both eyes closed, and with the temples covered for about ten days by jeweller's cotton wool. The central suture is removed on the second or third day so as to obviate *corneitis*. Inflammatory chemosis, should it occur, must be met by the application of two, three, or four leeches to the temple, and pain

* For these sketches, I am indebted to my friend and former pupil, Mr. Arthur Bracey.

in the eye by the internal use of morphia. If there be much puro-mucous discharge the local use of astringents is necessary. At the end of three weeks the conjunctiva should be trimmed of any uneven processes.

I have practised this method for upwards of four years with great success.

These stereoscopic portraits exhibit the state of a lady before and after the treatment. It will be observed that the deformity was great, and although not possessed of good features, the patient's expression has been much improved. Not a vestige of outward squint remains, the power of convergence being normal.*

In cases of *paralysis* it will be obvious that careful selection and a special regard to their pathology would be required before recourse be made to surgical treatment.

I have applied the operation in the present year to an instance in which the inner rectus of both eyes and the levator palpebræ of the left were paralysed; and there was also paresis of the other muscles which are supplied by the third nerve.

The patient, a man aged twenty-one, applied at the hospital in October 1863, complaining of fixed pain in the head, vertigo, and of affection of the muscles mentioned. A seton was put in the neck and some medicine given. He attended afterwards once only in that year, and was not again seen till February 5th, 1864. He then stated that the seton had cured the pain in the head, and at the end of six weeks from the time of its insertion he had taken it out. As a careful examination failed to discover disease or disorder of any organ except that of the paralysed muscles and their nerves, I determined, on February 15th, 1864, to accede to the request of the patient by making an attempt to place the right eye in the centre. At this date the right eye read minion type (Jäger's No. 4) with clearness, and by the aid of a 20-inch double convex glass, brilliant, or Jäger's No. 1. The left eye he stated was always imperfect; with it he read double pica (Jäger's No. 14). The pupils were of equal size, and very inactive to the usual tests, but contracted well with Calabar bean. The right pupil had a diameter of three lines, and when diminished to one half that size by Calabar bean paper, the eye read, without the aid of spectacles, brilliant type, or Jäger's No. 1, indicating that the retina was perfectly healthy.

The position of the eyeballs before operation is well shown in the left eye of the woodcut, and the result of the treatment represented by the right in the same drawing. In consequence of the palsy of the left eyelid it was necessary to elevate it with the thumb while the photograph was being taken. (Fig. 4.) The power of convergence possessed by the operated eye is shown in the other drawing. (Fig. 5.) Both of these sketches have been taken from photographs, which I have brought with me, and will hand to the President for your inspection. It will be found on comparing them that the artist has been strictly accurate in his magnified representations.

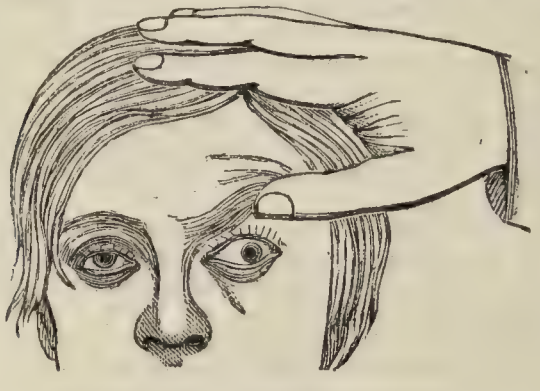


Fig. 4.

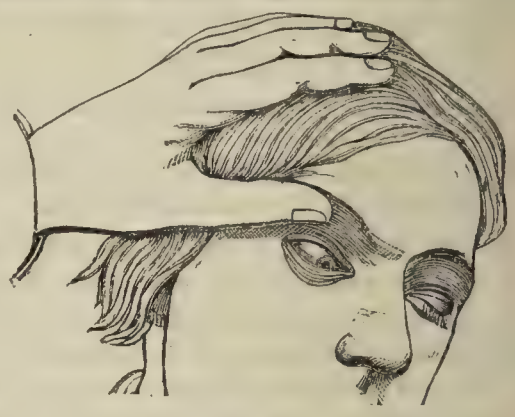


Fig. 5.

In this instance the first incision was made to extend over the inner edge of the corneo-sclerotic union, and a piece of the inner flap was cut off, also about one-fourth of the external rectus muscle.

The case affords not only an illustration of the advantage obtained by the method which I advocate, but an excellent example of the great power of recovery which is evinced by paralysed muscles (the nervous centres being healthy) after the action of their antagonists has been lessened, or entirely removed.

The more numerous and striking instances of this physiological fact present themselves in the domain of orthopædic surgery, and upon them has been based, by Mr. Barwell, an entirely new method of treatment, in which tenotomy is dispensed with.

In conclusion, permit me, Mr. President, to say that I am fully sensible of the numerous points of interest which a more full clinical description of the last case would afford for discussion; I have, however, felt constrained, out of deference to the exigencies of this meeting in respect to time, and to the title of my paper, to confine the details to such points as were sufficient to illustrate the particular method of operating which you have permitted me to make known at this meeting of the Association, in your august and time-honoured seat of learning, science, and religion.

The operation appears to me to offer the following advantages:—

1. In healthy subjects it is devoid of danger. No injury to vision has followed its performance.
2. The external squint is completely removed.
3. It restores a normal degree of convergence; hence improves the optical accommodation.
4. It has been successful in a case where the deformity was dependent on paralysis of the inner rectus muscle, and has restored a considerable amount of convergence.

[Since reading this paper, I have devised a plan by which, I believe, the contracted muscle may be extended to its natural length, and the outer flaps of conjunctiva dispensed with.]

* It has not been considered necessary to reproduce the portraits in this place, inasmuch as the accompanying woodcut of a man affected with paralysis of the muscles supplied by the third nerve, demonstrates the value of the treatment.

USE OF PHARMACEUTISTS. An ill-informed pharmaceutist is more dangerous than an ignorant physician; for the former may cause the death of the patient directly, while the physician has a *lightning-conductor* in the way of his homicidal prescriptions; and this lightning conductor is the pharmaceutist. (*Le Moniteur Scientifique.*)

Original Communications.

THE TREATMENT OF ECZEMA.

By R. H. Meade, F.R.C.S., Senior Surgeon to the Bradford Infirmary.

After perusing the learned paper on the Nature, the Varieties, and the Treatment of Eczema, by Mr. Erasmus Wilson, which was read at Cambridge, and published in the British Medical Journal of November 19th, I felt that the last division of the subject was much less satisfactorily treated of than the earlier ones; for, while the description of the nature and varieties of the disease was very graphic, the directions regarding the treatment of this common and troublesome affection were too general and indecisive.

In the treatment of this as of most other complaints, it is doubtless necessary, as Mr. Wilson says, to look to the constitution of our patient, and endeavour to correct any disordered function that may be present, or remove any predisposing causes; but is this sufficient to cure a case of eczema? May we not often succeed in strengthening or otherwise improving the general health, and yet find the disease as troublesome as ever? Are there no remedies which may be looked upon in some measure as specifics? I believe there are; but the only one recommended in this light by Mr. E. Wilson is arsenic; and though the efficacy of this tonic is undoubtedly great in many forms of cutaneous disease (the true scaly affections, for instance), I have little or no faith in its curative powers in cases of eczema, and have almost always found it disappoint my expectations.

Though eczema (as Mr. E. Wilson truly says) occurs in various forms and degrees, arises apparently from various causes, is met with in very different constitutions, and breaks out at all ages, yet I have mostly found it yield to the same remedies; and the most efficacious ones in my experience are bichloride of mercury and antimony. I quite agree with Mr. E. Wilson, that eczema is generally a disease of debility; but though it mostly arises in weak states of constitution, it is in its own essence inflammatory; and therefore, while the strength is supported by generous diet, an alterative remedy, like bichloride of mercury, which is so generally efficacious in chronic inflammatory complaints, may be advantageously given, and even combined with tonics.

With regard to antimony, it is less generally applicable in eczema than corrosive sublimate, but it will sometimes be found very useful; and in some obstinate cases, I have seen these two remedies exceedingly efficacious in combination. The form of the disease in which antimony administered singly seems more particularly applicable, is that in which it is acute in its character, and occurs in persons of a full inflammatory habit, who are also, perhaps, subject to gout or rheumatism. Tartar emetic given here, in combination with aperient salines and magnesia, will often cure the complaint very quickly.

We frequently see very annoying cases of eczema in oldish people, in whom the skin round the anus and about the scrotum or labia is affected. I have found the combination of bichloride of mercury and tartar emetic in the same mixture particularly useful in these cases, and sometimes cure them in a week or two, when they had resisted other treatment for two or three years. The dose of bichloride which I generally find sufficient is one-sixteenth of a grain, given three times a day, with one-eighth of a grain of antimony; in some demulcent mixture, as decoction of sarsaparilla or dulcamara.

Eczema very frequently occurs in infants, breaking out soon after birth, and becoming aggravated as teething commences. Most of these cases have, I believe, an hereditary origin—one or the other parent having a disposition to the complaint. These young subjects are mostly weak, and require strengthening treatment. Unless they are suckled by a strong mother or wet-nurse, they should have good beef-tea or broth given them, in addition to the milk; and have little or no farinaceous food. These are cases which will be especially benefited by corrosive sublimate. It must be given in very small doses, and continued a long time; it may be taken with occasional intermissions for months together, with advantage. A sixtieth of a grain, or even less, in a very young child, taken twice a day, with a little fluid extract of sarsaparilla and glycerine (which is a very good demulcent), will mostly check the complaint. Should the bowels be at all irritated by the mercury, a little opium may be combined with it.

In recommending bichloride of mercury so strongly as a remedy for eczema, I do not wish it to be inferred that I am bringing forward anything new; for I believe that this medicine has been long and largely used in this complaint, by the medical officers of the London Hospital for the Diseases of the Skin; and, knowing this, I was the more surprised that it was not even mentioned by Mr. Wilson in his paper. Having long used it in my own practice, I am anxious to bear testimony to its efficacy; and can recommend those of my medical brethren who are not yet acquainted with its virtues in the treatment of eczema, to give it a fair trial, both in combination with antimony and without it.

In the few remarks which I have made upon the treatment of eczema, I have made no allusion to external applications. I now mention them, for the purpose of saying that I by no means underrate their importance; but, as I am not professing to write a paper on the general treatment of this complaint, but only wishing to call attention to one or two particular remedies, I think it unnecessary to enter fully into the subject.

NOTES ON HERNIA.

By John Thompson, M.D., F.R.C.S., Bideford.

Hernia in the adult, everywhere a very common ailment, is, I think, more than usually frequent in this neighbourhood. I draw this conclusion from a comparison of the out-patients attending at a London hospital, and a similar number of patients of the same class, coming under my observation here. The difference in the occupation of the two will, I think, account for the variation. In town, a large amount of labour is in character sedentary, but here the principal occupations require active exertion of the lower extremities and abdominal muscles.

The oblique inguinal is the most frequent in occurrence; the femoral, beyond all comparison, the most liable to strangulation, and, when strangulated, the most difficult to reduce.

Of fourteen cases of strangulated hernia occurring in private practice under my treatment or observation, which required operation, thirteen were femoral, and but one inguinal (this was in a male); eight of the femoral were in females, five in males. In one of the male cases the sac contained omentum only; in all the rest in both sexes, intestine. Taking into consideration that femoral hernia is so frequent in

women, and relatively so unfrequent in men, these facts support the opinion, that the danger of strangulation in femoral hernia of the male is greater than in any other variety of the disease.

Generally speaking, the symptoms of a hernia are sufficient to make the patient suspicious of the nature of his ailment; but not unfrequently, especially in small femoral hernia, he has no idea of the serious nature of his case, and thus strangulation may occur, and inflammation be set up, before professional aid is sought. I deem it a matter of the greatest practical importance, to have a lively suspicion of the possible existence of a strangulated hernia, in all cases of complete intestinal obstruction attended with marked constitutional disturbance.

The patient may perhaps deny that he has a rupture, and attribute his complaint to a cold taken on a particular occasion, or to some injudicious feeding, etc., the statement being made in perfect good faith; when, nevertheless, the whole malady is due to some little intestinal protrusion unnoticed by the sufferer.

I knew a case where a young woman sent for her surgeon, in consequence of what she thought was a casual bilious attack with obstruction of the bowels. He made on his visit due inquiry for rupture, but was assured, most positively, that none existed; as he was still suspicious, he requested permission to make an examination, which was refused, on the ground of its being unnecessary; nevertheless, he persisted in the request, and on being eventually allowed to examine, he found a hernia; this he succeeded in reducing, and at once relieved the patient of her distress.

I was asked by a surgeon to visit a person suffering from strangulated femoral hernia, who had been under treatment for two days, without either the patient or his attendant being aware of the nature of the case, which was, however, discovered by the medical man before he requested my attendance. In this case reduction was found impracticable; I operated successfully, and the man recovered.

A patient of my own, who had frequently suffered from partial suppression of urine, and was accustomed in consequence to place herself under my care, applied to me for what she termed an attack of her old complaint. On my visiting her, she informed me that she had a good deal of pain about her back and loins, and also in the lower part of her bowels; that she had been rather sick, and had scarcely passed any urine for several days. She was at this time sitting by the fire in the downstairs sitting-room. I prescribed the usual remedies, but heard next day that she had not been relieved, in fact, thought herself worse, and desired another visit from me, which I accordingly gave her. She was now in bed; had eructation, retching, and occasional vomiting, the matters ejected having the first character of stercoraceous vomit. I questioned her respecting the existence of rupture; she denied having any, but, on my making an examination, I found a very small femoral hernia in the right groin; it was too small to be noticed unless under actual manipulation. I succeeded in reducing it, and in consequence at once removed the most formidable part of her disease. Here the hernia had probably become strangulated by the forcible efforts at urination; in all probability a rupture had existed for some time, as the patient, after the reduction had been effected, admitted having felt a sensation of bearing down in the part on some previous occasions.

I was sent for by a young farmer, who stated in his message that his "bowels were swollen like a barrel, and that nothing had passed through him for many days." On my visit I found eructation, retching, and occasional vomiting, with pain of the abdomen and swelling. He was quite unconscious of having a rupture, but, on my making an examination, I found a little femoral hernia, which was thought by the patient to be merely a swelling of the glands. I took great trouble to reduce this, and was ably assisted by a professional friend, but could not succeed. I therefore operated; and, though strangulation had evidently existed four days, the patient made an excellent recovery.

Dr. Watson speaks of two cases of supposed idiopathic peritonitis to which he was called, that, on examination, he discovered to be produced by strangulated hernia, and in both instances death resulted. He expresses his sensation to have been that of "horror," when, by examination, he discovered the true cause of the disease, and felt that it was too late to attempt an operation.

What are usually called the constitutional symptoms of hernia, are more strictly speaking the indications of acute intestinal obstruction from a mechanical cause; they suggest hernia, because this is beyond all comparison the most frequent cause of such obstruction.

I was called to a gentleman suffering from complete constipation, with some pain of a dull character in his abdomen, attended with eructation, retching, and vomiting. He had had incomplete hernia of the right side, for which he had worn a truss; but at this time there was no protrusion, and the finger could be pushed up the right inguinal canal to a considerable distance. His general symptoms exceedingly resembled those of strangulated hernia, and my observation was confirmed by two leading practitioners in the district, who attended with me in consultation. Our efforts to relieve our patient failed, and after death we found that complete obstruction of the cæcum, caused by extremely hardened fæces, presenting distinct facets, had been the cause of the illness with its symptoms and results. This gentleman was homœopathic in his views, and averse to taking aperient medicine; he could scarcely be said to have had for a long time a thorough evacuation of the larger intestines. The tympanitie state of the abdomen, during the illness, prevented our diagnosing by percussion with accuracy.

In another patient, presenting during his illness very similar symptoms, which had the same unfortunate result, the obstruction was caused by a strictured contraction of the small intestines. The absence of heat of skin, quick pulse, and other indcations of feverish action, was very marked in both these cases, during the first days of illness. Compared with hernia as a cause of obstruction, such instances are, however, very exceptional.

It has often struck me that, among the first symptoms of intestinal obstruction from hernia, much stress may be laid on the peculiar eructation and retching, which precede the vomiting, and, when this occurs, commonly form the first part of the process which terminates in ejection of the contents of the stomach. They differ considerably from the eructations and retchings which sometimes occur in dyspepsia and other complaints, in having a particularly diaphragmatic character, and suggesting a combination of retch and hiccough, forming together a more determined and spasmodic act, than is observed where they attend in other diseases. The pain attending the obstruction varies, but is not commonly very severe till inflammation ensues.

Where strangulation is produced concurrently with the hernia, and the latter is femoral, most intense suffering may occur at once. Mr. Lawrence made this observation long since, in his *Treatise on Hernia*, and I give the following case in illustration of its truth. A man in this town was employed as porter

to a steam-boat; and one night, at about eleven o'clock, when he had nearly completed his labour, he was seized with agonising pain in his bowels, and had to be taken at once to his home. Some one shortly after came and informed me of the man's suffering; and, as I knew him to be fond of drink, I suspected that he was suffering from some imprudence in his potations. I sent him some medicine containing full doses of tincture of opium, and requested to be informed of the effect. During the night I was called, and found him in agony; he could not stay in bed, but walked the room making loud expressive wailing. As he was a strong manly fellow, in fact an old wrestler, he would not have been the man thus to complain had not his suffering been intense. I soon questioned him about swelling in the groin, and also examined for it, when I found a glandular enlargement, and under it a little femoral hernia. The man said the glands had been enlarged for some time, but he had not known of the other swelling before. I attempted to reduce this hernia, using bleeding, the warm bath, and the taxis, but to no purpose, and in the morning a medical friend came to my assistance, and I at once operated. We found the glands in the groin much enlarged, and it was not easy at once to find the sac, so that my friend almost suspected that I had made an error, but it was not so, for a very small hernia existed. I opened the sac, divided the stricture, returned the intestine, and the man was relieved; he subsequently recovered without a bad symptom.

The length of time after strangulation, before inflammation of the abdominal contents is set up, varies much; moreover, some individuals succumb, where the indications of abdominal inflammation are not very marked, the long duration of the strangulation seeming to exhaust the constitution. Perhaps, in most of these cases, inflammation, mortification, and gangrene of the strangulated gut cause the death, without involving the peritoneum generally in the disease.

I was called to a female, the housekeeper in a gentleman's family, many miles from my residence, suffering from strangulated femoral hernia. She had been visited by her medical attendant for several days, and he had used every exertion to return the hernia, but had only succeeded in reducing its size. Still the constitutional symptoms of obstruction were not severe, and there was no marked abdominal tenderness. The patient could not believe that she needed an operation, as she suffered so little, and the persuasion of her ordinary medical attendant and myself was insufficient to impress her with its necessity.

This was the only case that I ever met with where a patient persisted in refusing to be operated on. It gave additional evidence of the necessity of never allowing the mildness of the symptoms to be sufficient excuse for deferring the operation; for she died without any great pain or symptoms of peritoneal inflammation.

Medical men will sometimes echo the language of their patients, and say that, till the symptoms are more urgent the operation is not justifiable; but such an expression rather indicates a want of resolution than a just view of surgical practice.

[*To be continued.*]

A Good Speciality. A man may know how to make a nail, and not know how to make a lock; but would it be possible for a doctor to understand the eyes, and be totally ignorant of the ears? A speciality is good, provided always there is generality also.

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

A CASE OF ECHINOCOCCUS-CYST IN THE ORBIT.

By T. Wharton Jones, F.R.S., Professor of Ophthalmology in University College, London, etc.

[*Read Oct. 19th*, 1864.]

In Dr. Mackenzie's *Practical Treatise on the Diseases of the Eye* (Fourth Edition, p. 104), it is observed: "It is remarkable that the disease described in this section" (Section 6, chap. ii, Encysted Tumour in the Lacrymal Gland) "has not been met with, as far as I know, by any practitioner in this country."

The following case, which lately occurred to me, appears to be identical with those quoted by Dr. Mackenzie from Schmidt (*Ueber die Krankheiten des Thränen-organs*, p. 73; Wien, 1803), who originally described the disease, and called it *Glandula lacrymalis hydatoidea*.

A man, about 30 years of age, was brought from St. Pancras Workhouse to University College Eye Infirmary with the left eye in a state of exophthalmia. The disorganisation being great, I decided on first excising the protruding eyeball from the ocular capsule. This being effected, I proceeded to explore the orbit by the touch; and found that the cause of the protrusion of the eyeball was a fluctuating cyst adhering to the upper and outer wall of that cavity and extending back towards its bottom. The removal of the cyst was accordingly the next object to be accomplished. As the first step towards this, I slit up horizontally the external commissure of the eyelids, together with the adjacent part of the ocular conjunctiva, which had been dissected from the excised eyeball. The anterior part of the cyst was thus rendered quite accessible; and all that was now required to isolate it was, to divide the cellular tissue between it and the remaining contents of the orbit—viz., the ocular muscles, capsule, etc. In the course of this stage of the operation, it was found that the cyst extended back deep into the bottom of the orbit. Thinking it, therefore, not advisable to follow it with the knife so far, I contented myself with removing as much of it as appeared to be safely accessible. On first opening into the cyst, a large quantity of serous fluid escaped; and on laying it further open, there was discovered what appeared to be a smaller cyst lying free in its interior.

This smaller cyst being lifted out with a pair of forceps, was found to be about the size of an ordinary plum; and proved, on examination by my assistant Mr. Power, to be an echinococcous parent-sack, or vesicle, with its contained fluid and colony of echinococci.

The cellulo-fibrous external cyst was, lastly, dissected out to as great an extent as was considered safe.

Before applying the dressings, the wall of the orbit, where the cyst had been attached, was examined with the finger, and felt to be beset with exostotic spiculæ.

The operation being completed, the external commissure was reunited by suture, and the space left by the removal of the cyst, between the upper and outer wall of the orbit on the one hand, and the ocular muscles, capsule, etc., on the other, was lightly filled with charpie.

Suppuration from the cavity was duly established, and the healing went on favourably. The condition

of the parts eventually was the same as when the eyeball is simply excised.

The patient appeared to be fatuous; and the attendant who brought him to the hospital informed us that it was sometimes necessary to confine him to the lunatic ward of the workhouse. During his residence in the hospital, the man was quiet enough. Sometime after the patient was dismissed from the hospital, we were informed, on sending to the workhouse to inquire how he was, that he had been transferred to the county lunatic asylum.

The case which I have thus briefly related appears, as I have observed, to be identical in nature with the two cases quoted from Schmidt in Mackenzie's *Practical Treatise*, pp. 101-2, under the name of encysted tumour of the lacrymal gland, or, as Schmidt himself called the disease, *Glandula lacrymalis hydatoidea*.

In Schmidt's first case, the patient died without any operation having been attempted for his relief. On examination after death, the tumour was found lying in connexion with the lacrymal gland, which was smaller than usual. It was composed of an external and an internal membrane, between which there was interposed a quantity of fluid. The external membrane, or covering, consisted of condensed cellular tissue, and could not be easily separated from the scattered acini of the lacrymal gland. The internal membrane, which was very fine, semi-transparent, and filled with a limpid fluid, admitted of being freely extracted from the interior of the external covering. Schmidt, correctly enough, recognised this internal membrane as a hydatid; but darkened the subject by his hypothetical speculations concerning the origin of the tumour in the lacrymal gland. In my case, although the external cyst encroached on the lacrymal gland anteriorly, it extended to the bottom of the orbit posteriorly, and there was no indication that it was originally developed in the lacrymal gland, rather than in the cellular tissue of the orbit.

In Schmidt's second case, the tumour was punctured with a trocar passed under the upper eyelid. A quantity of clear fluid was thereby evacuated at the time, and some continued to issue from the wound for several days after. At last, on the fourteenth day, a whitish substance presented at the wound, which, being seized with a forceps and drawn out, was found to be what Schmidt recognised as an hydatid more than an inch in diameter.

This was, no doubt, an echinococcous parent-sack, or vesicle, with its contained fluid and colony of echinococci, like that extracted in my case. The size was the same.

The walls of the echinococcus-cyst were composed of an external coat, laminated, extremely tough, and of a yellowish colour, and an internal coat, rough and easily lacerated. In the clear fluid filling the cyst, Mr. Power found suspended an immense number of echinococci, round cells, and detached hooklets. The echinococci, which are just visible to the naked eye, varied a good deal in length and outline; some from having the head retracted, some from having it protruded, some from being in different stages of development.

Siebold has shown that echinococci are capable of becoming developed into a species of tænia, and that, therefore, they may be viewed as larvæ, just as *cysticerci telæ cellulosæ* have been found to be a species of tænia in an undeveloped state.

Siebold's experiments consisted in mingling lukewarm milk with *echinococci veterinorum* and giving it to dogs. On examining the animals thus fed, after an interval of three or four weeks, Siebold found in their intestines a species of three-jointed tænia, into which the echinococci had become developed.

BENGAL BRANCH.

CASES OF TYPHUS FEVER IN CALCUTTA.

By S. Goodeve Chuckerbutty, M.D.

[*Continued from page 652.*]

Case viii. Castello, aged 30, an unemployed East Indian clerk, living at Chandrey-Choke, was admitted into my European male ward on August 20th, 1864, with a fever of four days' standing. No previous history was obtainable, as he could not speak rationally for any time. He got for that day the liquor ammoniæ acetatis mixture every three hours, and low diet.

August 21st. During the night, he was very restless, raving, and walking up and down the ward, with only occasional glimpses of intelligence; had had no sleep whatever; was now in a state of delirium; eyes ferrety; head hot; skin hot, harsh, and dry; abdomen tumid; distinct borborygmi and gurgling; liver projecting about an inch beyond the margins of the false ribs; pain on pressure over the right hypochondrium; mouth dry; teeth covered with sordes; tongue dull red at tip, clean and moist at the edges, covered with a granular uniform fur on the surface, tremulous and jerking; pulse 120, small, soft, and regular; respiration 40; percussion-note anteriorly duller than usual; respiratory sounds feeble. The head to be shaved, and a blister applied to it. Calomel, tartar emetic, and quinine, to be taken every four hours. Diet: milk and sago.

On August 22nd and 23rd, the delirium continued, with subsultus tendinum and picking of bed-clothes; pulse 108-120, and excessively feeble. On the latter day, there was congestion of the skin of the trunk, with a tendency to patches, disappearing on pressure and returning on its removal. Eyes congested; pupils contracted. The former medicines to be omitted; a mixture of quinine and dilute sulphuric and nitro-muriatic acids to be taken every four hours; ice to the head. Diet: milk and sago, beef-tea, and port wine.

The delirium and other unfavourable symptoms increased; and he died at half-past 2 P.M. on Aug. 25. There was no remission nor intermission of the fever from his admission.

Post Mortem Examination, seventeen hours after death. Weather sultry. Cadaveric rigidity still in the legs, none in the arms; skin of the body generally covered with mulberry patches. Lungs both deeply congested, more so posteriorly; on section, their parenchyma appeared dark, and a good deal of non-spumous dark blood flowed out; section of the posterior surface looked like that of the liver, and a portion of it from the right lung thrown into water readily sank to the bottom; the congestion in the posterior part of the left lung was a little less; its section gave issue to a large quantity of serous fluid; a portion thrown into water did not sink; much congestion of the anterior mediastinum; pericardium contained a little serous fluid; heart fatty. On opening the skull, a good deal of fluid gushed out; the meninges were vascular; substance of the brain flabby, deeper coloured on the surface than usual; white matter and choroid plexuses congested; optic thalami and corpora striata natural. Kidneys larger than usual, and easily stripped of their capsules; both deeply congested, right more than the left; on section, the right kidney presented an extraordinary patchy appearance, the cones and the cortical portion being deep purple, the interpyramidal part and the part around the pelvis, as well as the line of junction between the pyramids and the cortex, being inky; left kidney also flabby, but lighter coloured on the surface; section of it presented the same appearances

as the right, except that the latter was more red and the former more purple. Stomach and intestines distended with flatus, the latter also of a greenish colour; liver flabby, but of an uniform reddish yellow colour throughout, somewhat larger in size; section let out a frothy grumous-looking fluid; spleen larger than natural, softer, and digitate on its inner surface; on section, a fluid came out. The mucous membrane of the stomach was almost blackened near its cardiac end; mucous membrane of the small intestine for several feet from the pylorus pale, afterwards uniformly congested for about three feet, then half a foot or so with intervening patches of paleness, the injection being arborescent; no prominence of the Peyer's patches; ileum generally pale, some arborescent congestion about the middle; below this again, pale down to the cæcum. The large intestine was healthy and pale, except in the transverse and descending colon, where it was somewhat congested. Walls of the heart rather thin; cavities contained a little thin blood; valves healthy; substance congested; a portion of it under the microscope presented oil-globules within the sarcolemma in the place of the sarcous elements, and so did also a piece of the kidneys.

Case ix. Olaf Nelson, aged 21, a Swedish seaman, living in China Bazaar, was admitted into my European male ward, on August 21st, 1864, with a fever of three days' standing, which had come on with a great pain in his head, and which had not undergone any remission or intermission since the commencement.

I saw him immediately on his admission. He was sitting on his bed; countenance flushed; eyes bloodshot; skin of the face covered with patches of redness; similar patches, but of a lighter colour, on the trunk; a great number of boils of different sizes on the legs and arms; the patches noticed above disappeared under pressure and returned on its removal; countenance heavy; irides iron grey; pupils of moderate size and sluggish; headache; lips dry; teeth covered with sordes; tongue covered on the surface with a grey granular fur, patchy anteriorly, tip and edges dull red and clean; bowels open; urine free; pulse barely perceptible at the wrist; respiration 32; no cough; a slight tremor in the arms when held up; abdomen full; epigastrium dull, tense, and painful. Ordered, a mustard plaster to the epigastric region; quinine, James's powder, and calomel, every four hours; head to be shaved, and cold lotion applied to it. Diet: milk, sago, and port wine.

Aug. 23rd. Slept last night; skin hot; headache; eyes congested; face flushed; countenance heavy; skin of the trunk congested, with a tendency to form into patches; abdomen tumid, dull and painful at the epigastrium. The former medicines to be omitted; and a mixture of quinine, dilute sulphuric and nitro-muriatic acids, and tincture of opium, to be taken instead. Diet and wine to be continued.

August 24th. Some distinct reddish patches had appeared on the hands; pulse very feeble, 120.

August 25th. Pulse 120, very small; asleep, or rather in a deep stupor; mouth half open; lips and teeth covered with dark sordes; tongue parched, the fur on it brownish. The tincture of opium was omitted; the other treatment continued.

August 26th. Subsultus tendinum and muscular tremors increased; stupor as before; liver projecting, and very painful; skin congested; respiratory murmur harsh, with a sonorous rhonchus; no delirium. The former medicines were omitted. Ammonia mixture every hour; mustard plaster to the chest; turpentine fomentation to the abdomen. Port wine in increased quantity; beef-tea and milk. He died at 11.30 A.M.

Post Mortem Examination, twenty-two hours after death. Legs still rigid; arm lax; body covered with some scattered purplish patches; decomposition advanced a good deal. On opening the skull, a good deal of dark fluid blood was poured out; the meninges appeared congested; no adhesion between them near the longitudinal fissure; the pia mater was of a deeper red than usual; surface of the convolutions of a deeper colour; no effusion of lymph; on section, both the white and the grey matters were found firm; cerebellum congested. Liver, kidneys, spleen, etc., all enlarged, softened, and somewhat congested. Intestines healthy throughout, except that a foot of the large intestine below the cæcum, and a foot and a half of the small intestine commencing a foot above the cæcum, were congested.

Case x. Thomas Fleming, aged 24, a country-born European writer, living at the Almshouse, was admitted into my European male ward on August 21st, 1864, with a fever of four days' standing, which had never left him since the outset, nor remitted, nor exacerbated. He ascribed it to getting wet, and remaining in his wet clothes for six or seven hours. His bowels had been confined from the first; and his body was covered with well marked patches of a mulberry eruption from the third day.

At 7 A.M., on August 22nd, he presented the following symptoms. Mind quite rational; skin warmer than natural; tongue moist, clean, and scarlet at tip and edges, covered with a light yellow fur in the centre; pulse 120, small and weak; some cough and expectoration; nausea, and great abdominal uneasiness; numerous well defined small patches of a red eruption on the whole surface of the body, but more densely on the trunk than the extremities, disappearing under pressure and returning on its removal; face red; eyes slightly bloodshot; thirst considerable; pain in the right hypochondrium; only one stool since admission. A blister to the hepatic region. An ounce of castor-oil at once; quinine, James's powder, and calomel, every four hours. Diet: milk and sago.

August 23rd. Fourteen copious greenish-yellow stools from the castor-oil; vomited three or four times; the eruptive patches on the skin seemed to be fading; body perspiring and of ordinary temperature; tongue moist, less red at tip and edges; soft fur on the surface; pulse 108, of moderate size, but weak; respiration 26. Opium (gr. ss) to be added to each powder. Diet: milk, sago, beef-tea, and port wine.

August 24th. Tongue dry and rough, with a brownish fur in the centre, tip very dry and dull red, edges clammy; eruption on the skin much the same; body warm, but moist; two or three brown liquid stools; vomited five or six times a brownish fluid; pulse 104, small, feeble; respiration about 20; spleen projecting. Former medicines omitted. Acidulated quinine mixture every four hours; port wine increased.

August 26th. Mulberry patches of eruption, disappearing under pressure and returning on its removal, and more confluent than before. Medicines omitted. Ten minims of oil of turpentine in mucilage every six hours. Tartar emetic and tincture of opium in camphor mixture every four hours. Diet and wine as before.

August 28th. Quinine (gr. x) three times a day. Diet as before, with chicken-broth.

August 29th. Lips and teeth covered with sordes; no subsultus tendinum; skin a little above the ordinary temperature; pulse 100, moderately full, weak; slight headache; mind intelligent; general redness of the skin, but no mulberry eruption. Turpentine omitted; port wine increased; soda-water. Diet as before.

August 30th. Improving; no trace of eruption anywhere; redness of the skin less.

Sept. 2nd. Complexion dusky; pulse 80, soft; respiration 20; eyes almost clear; lips very slightly covered with sordes; tongue quite dry, glazed, of the colour of raw flesh, and leathery on the surface, glazed and adhesive at the edges; sudamina on the skin of the abdomen; lower edge of the spleen still about an inch beyond the ribs; skin warm, but moistish; very slight pain on pressure above the umbilicus; efflorescence less; several soft fæcal stools. Tartar emetic mixture omitted. Fowl cutlets added to diet.

Sept. 4th. Skin of the forehead covered with erythematic patches, over the sacrum, and hip-joints abraded and surrounded by erythematous inflammation. Citrate of quinine and iron, with infusion of quassia, thrice a day. Soap-plasters to the sores. Port wine to be increased.

After this, his diet being increased, he gradually but very slowly improved. On Sept. 30th, his bed-sores were nearly healed; and he could stand upon his legs, though still too weak to walk.

Oct. 11th. He was now quite well; and, on the 13th, was discharged.

Case xi. Ellen Freeman, aged 36, a married Irish woman, mother of several children, living near Tiretta Bazaar, was admitted into my European female ward, on Sept. 17th, 1864, with a fever of nine days' standing, which was said to have abated a little on the two preceding mornings, when she took some quinine, besides jalap and salts as purgatives. The last purgative operated freely; but the fever continued.

When seen by me, soon after admission, she was lying on her left side, moaning a little; face, neck, and upper part of the chest, hot and red—the redness on the forehead, cheeks, and skin of the chest particularly, seeming to be in patches not disappearing so completely under pressure as in the preceding cases; pulse 120, slightly thrilling, small, weak, and regular; respiration 32; body hot but moist; no cough; nausea and a great thirst; pain in the epigastrium; tongue moist, covered with a transparent, granular, greyish fur on the surface; clean at tip and edges; no headache; slight muscular tremor; no subsultus tendinum; mind perfectly rational. Tartar emetic and laudanum in camphor mixture every four hours. Mustard plaster to the epigastrium; linseed-tea *ad libitum*. Diet: milk and sago.

Sept. 18th. No remission or intermission of the fever; redness of and pellicular deposit on the mucous membrane of the throat. Nitrate of silver lotion to the throat; quinine (gr. x) thrice a day; beef-tea and ice added to the diet; and port wine.

Sept. 19th. Vomited several times yesterday and last night; delirious, and slept very little; skin hot; pulse 96, small, weak; redness of the skin now completely disappeared under pressure and returned on its removal; tongue moist; countenance staring; pupils semi-contracted; throat all right. Former medicines omitted. Quinine, nitro-muriatic acid, and infusion of calumba, every four hours; a castor-oil and turpentine enema; a blister to the epigastrium, and cold lotion to the head. Diet as before.

Sept. 21. Back and thighs covered with numerous petechial spots, each of the size of a pea, disappearing under pressure and returning on its removal; pulse 136 (?), small, weak; respiration 48; stupor; pupils of moderate size, contracting readily on exposure to light; hearing dull; tongue moist, clean at tip and edges.

Sept. 27th. Muscular tremors increased; bowels open; lay with the eyes shut, puffing at the mouth, froth escaping between the lips; respiration noisy, not stertorous; skin damp with perspiration, in the armpit 107° Fahr., on the cheeks 100 Fahr.; intolerance of light on opening the eyelids; pupils of moderate size, though rather sluggish; on being roused was conscious, though stupor was unceasingly deep; pulse 92, moderately full, weak; respiration 40; abdomen full, soft; teeth covered with sordes; heart-sounds feeble, but without murmur. Medicines omitted; blisters to the chest and head; hydrargyrum cum cretâ and carbonate of soda every three hours; ammonia mixture every hour. Diet as before.

Sept. 28th. Comatose since yesterday. Stimulant mixture every half hour. She died at 10 P.M.

Post Mortem Examination, ten hours after death. Weather hot and sultry. Body cold, legs rigid, arms relaxing. The transverse colon was enormously distended with gas; omentum loaded with fat; small intestines very slightly distended; mucous membrane of the duodenum slightly congested, and the Brunner's glands more prominent than usual; that of the jejunum pale and healthy, of the ileum marked by ramiform injection in patches of varying size; cæcal part of the large intestine was only a little congested; three or four round worms in its cavity. Lungs much congested; divided surfaces patchy, chiefly red, partly black; a portion of the upper part of the left lung thrown into water partially sank; a similar portion of the right, little, if at all. Heart flabby; very fatty looking on the surface; walls of the right ventricle almost entirely made up of fat; pulmonary artery beyond the valves contained some black fluid blood; surface of the left ventricle fatty; section of the walls fleshy, though flabby, and lighter coloured than usual; left ventricle contained some dark fluid blood. Valves generally healthy, but blood-stained. Liver not particularly large, of yellowish-white colour in part, and in part pinkish; substance very pale, and the lobules well defined, with their circumference formed by a pale ring, and the centre by a pinkish patch; little or no blood escaped from the cuts. Gall-bladder small, almost empty; spleen flat, about five inches in length, scarcely half an inch thick at the border, three inches broad at the widest part; surface marked by short reticular white lines; pulp appeared quite fluid, and the trabeculæ numerous. Kidneys both of natural size, but very pale; the left much more congested than the right, and a few drops of blood flowed from the divided surfaces; large openings in pyramidal portion leading into blood-vessels; interpyramidal spaces occupied by thick columns of a granular material; pelvis of a redder colour, and the cellular tissue around it congested; on pressure, a little milky fluid flowed from some of the papillæ. Membranes of the brain congested, and adherent to the margins of the longitudinal fissure; surface of the cerebral hemispheres, as seen through the arachnoid and pia mater of a light yellow or fawn colour; the white substance presented a good deal of punctiform injection, the grey a slight pinkish hue; the lateral ventricles contained little fluid; the corpora striata, thalami optici, corpus callosum, fornix, etc., were all pale, but of usual firmness; choroid plexuses and septum interpositum pale and empty; cerebellum and base quite healthy.

Case xii. John Sullivan, aged 23, an Irish seaman, living at Mariners' Hotel, Loll Bazaar, was admitted into my European male ward, with a fever of five days' standing, on October 8th, 184 . He stated that he had been, previously to that, drinking very hard for some days; that on Monday he was drunk, and had the horrors in the night; that on Tuesday again he went out, got drunk, and had the horrors; and on Wednesday he again went out, and came home drunk, and had a shivering fit in the night, fol-

lowed by fever, which fever has never abated nor intermitted since the outset.

October 9th. He was lying on his back, but, on perceiving our approach, sat up in his bed. Had not slept since the commencement of the fever, which he ascribed to his having drunk freely of spirits on a stretch for three days previously. There was no one else ill with fever at the time in the boarding-house. Skin of the body now generally turgid; trunk covered with distinct maculæ pretty densely, apparently raised, disappearing on pressure, and returning on its removal; similar eruption also on the arms and legs; skin rough; cuticle desquamating; upper part of the sternum and the whole of the neck and face suffused and dusky red, the colour disappearing on pressure, and returning on its removal; during the temporary disappearance of the redness, the surface looked yellow; eyes slightly blood-shot; eyelids, lips, and the tip and edges of the tongue, were of a vivid red; surface of the tongue covered with a granular light yellow fur; aching of the head, and a pain across the loins, and a tightness of the chest; body hot; pulse 112, full, tolerably firm; respiration 44, very weak; very slight tremor of the body; could not swallow, owing to a soreness of the throat; percussion-note of the chest anteriorly clear, posteriorly rather dull; anteriorly, vesicular murmurs rather weak, posteriorly weaker still; no rhonchus; pupils of natural size, and contracting readily on exposure to light.

October 10th. Delirious in the night; but slept, he said. The fever, eruption, and state of the tongue, as before.

October 11th. Delirium and fever increased; eruption as before.

[*To be continued.*]

Reviews and Notices.

A Manual of Practical Hygiene, prepared especially for use in the Medical Service of the Army. By Edmund A. Parkes, M.D., F.R.S., Professor of Military Hygiene in the Army Medical School, etc. Pp. 612. London: 1864.

[*Concluded from page 657.*]

The subject of the fifth chapter is Food. Dr. Parkes thinks that the principles of diet ought not to form part of a work on hygiene; that it is the application of these principles which is to be considered. But, as many of the works on principles are not accessible to army medical officers, he enters into the subject more fully than he otherwise would. He divides aliments into four great classes—nitrogenous substances or albuminates; fatty substances; carbohydrates; and salts. The albuminates (albumen, fibrin, casein, etc.—all containing sulphur and phosphorus) nourish the tissues which give rise to mechanical force; and probably also these are connected with mental action. They also contribute to animal heat by oxidation, but not to a great extent. Fatty aliments are both plastic and heat-giving. They are essential to the production of mechanical force. Carbo-hydrates (starch, sugar, and their allies) are supposed to be entirely heat-giving; but on this point there is still room for inquiry.

In regard to food, as to other matters, much responsibility has been thrown on the army surgeon. He is required to ascertain that the food of the men is good and properly cooked; and also to give advice, on taking the field, on the subject of rations. This implies that the army medical officer "will be called on to give opinions on the quantity of all kinds of food supplied to soldiers; on the composition of diet; on the quality and adulteration of the different articles, and on their cooking and preparation." In speaking of quantity, Dr. Parkes takes into consideration the amount of food required by a man, the required quantity of nitrogen, carbon, and salts, and of the fundamental dietetic principles, and gives tables showing the proportions in which these enter into the soldier's diet. He then expresses the following opinion.

"The ration of the English soldier at home appears to be deficient, to a certain extent, in albuminates; to be very poor in fat, and to be in excess in starches. The fresh vegetables are sufficient. It would be improved by the addition of more meat, or, what would perhaps be better, two ounces of good cheese—by some fatty food, such as bacon, butter—or by a greater use of oil in cooking (an excellent way of getting fat into the system)—and by a larger employment of beans and peas. The accessory foods are rather deficient, and vinegar especially should be used." (P. 145.)

The next sections are on the amount and kind of food in sickness; the digestibility of food; variety of food; and diseases connected with food.

In the sixth chapter, the subjects are, the Quality, Choice, and Cooking of Food, and Diseases attributable to Improper Quality. In speaking first of meat, Dr. Parkes gives direction for inspecting live animals and estimating their weight, age, condition, and health; briefly mentioning the diseases to which cattle, sheep, and pigs are liable, and their diagnostic symptoms. He then goes on to describe how dead meat is to be inspected, both fresh and salt; and speaks of diseases arising from altered quality of meat.

In speaking *seriatim* of the effect of various cattle-diseases on meat, Dr. Parkes finds that there is a good deal of doubt as to the effect of eating the flesh of cattle which have suffered from pleuropneumonia or malignant pustule. He brings forward (as he always does in regard to debateable points) the facts adduced on both sides of the question; and says, "that much more careful study than has yet been given to the subject is necessary to clear up the great variations of statement."

The section is concluded with sections on the cooking and preservation of meat.

The next sections contain instructions as to the examination of wheat and flour; the detection of adulterations by the microscope; the making and the use of biscuits and bread; the examination and adulterations of bread. Then come sections on barley, oats, maize and rye, rice, millet and other cerealia; on the leguminosæ, succulent vegetables, milk, butter, cheese, eggs, sugar, starches, etc.

In the seventh chapter, on Beverages and Condiments, the author speaks first of alcoholic liquors—beer, wines, and spirits. Among the various matters in this section, we find an excellent epitome of what is at present known of the physiological action of alcohol on the various organs and tissues. On the use of beverages containing alcohol, Dr. Parkes expresses opinions which the teetotallers will not fail to adduce in support of their doctrines.

"Beer and the weaker wines contain other ingre-

dients which are useful; and when used in moderation, the quantity of alcohol is small. Experience does not show at present any increase of sickness, proneness to special diseases, or lessening of duration of life, in those who take moderately of beer or the weaker wines. In some cases, indeed, the moderate use seems to increase appetite and improve nutrition. But, on the other hand, experience most decidedly shows that the highest health, the greatest vigour, and long life, are quite compatible with entire abstinence from these liquids. In the case of spirits, the result of experience is very different, and I believe it may be asserted that experience does not sanction the use of spirits; or, if in health their employment is useful, it can only be, I believe, in quite exceptional circumstances; viz., where either a sudden stimulant is necessary for a failing heart, or when, in cases of deficient food, it is desired to lessen as far as possible the waste of the body, or to diminish mental power." (P. 232.)

In a subsequent page, he speaks still more strongly against the use of spirits.

"If spirits neither give strength to the body nor sustain it against disease—are not protective against cold and wet, and aggravate rather than mitigate the effects of heat—if their use even in moderation increases crime, injures discipline, and impairs hope and cheerfulness—if the severest trials of war have been not merely borne, but most easily borne, without them—if there is no evidence that they are protective against malaria or other diseases—then, I conceive, the medical officer will not be justified in sanctioning their issue under any circumstances. The terrible system which in the East and West Indies made men drunkards in spite of themselves, and which by the issue of the morning dram did more than anything else to shatter the constitutions of the young soldiers, is now becoming a thing of the past. But the soldier is still permitted to get spirits too easily, and is too ignorant of their fatal influence on his health. Still the British army bears the unhappy character of the most intemperate army in Europe; and it is certain that its moments of misconduct and misfortune have been too frequently caused by the unrestrainable passion for drink. Remembering all these things, and how certainly it has been proved that drunkenness increases the spread of syphilis, it is not too much to say that the repression of this vice, both by example and precept, must be considered to be the duty of every officer in the army. Moderation should be encouraged by precept and example; wholesome beer and light wine should be invariably substituted for spirits; and if these cannot be procured, then it may safely be said that the use of tea, coffee, or simple water is infinitely preferable to spirits under all circumstances of the soldier's life." (Pp. 236-7.)

After this condemnation of alcohol, in which there is certainly a good deal of reason, comes a section on non-alcoholic beverages—coffee, tea, cocoa—with drawings by which their structure and that of the substances with which they are adulterated may be recognised; and the chapter ends with remarks on condiments and on lemon-juice.

In the eighth chapter, on Soils, Dr. Parkes speaks first of conditions of soils affecting health; viz., conformation and elevation, vegetation, mechanical structure, chemical composition; he then makes some observations on the healthiness of the different kinds of soils, and gives directions for their examination, and for the choice and preparation of sites for stations.

The succeeding chapters, from the ninth to the sixteenth inclusive, have the following titles: Habitations (viz., Barracks, Wooden Huts, Tents and Camps, Hospitals); Sewerage; Warming of Barracks and Hospitals; Exercise and Physical Training; Clothing; Weight of Dress and Accoutrements; Description of the Meteorological Instruments used in the Army, and a few Remarks on Meteorology; and Climate. From all these we could gather instructive extracts; but must be content with commending them as containing as able and at the same time concise expositions of the various subjects as any one can desire to see. One point, however, although comparatively trivial, is worthy of notice as demonstrating the impartiality and candour of the author. In speaking of soldiers' packs and kits, he describes various kinds of pack that have been invented; and describes one which he has himself designed. Having done this, he points out some objections to it, arising from its mode of support; and says that, "although the plan is easy, the objections are, I believe, fatal to its adoption; and even in point of ease, I do not think it equal to Sir Thomas Troubridge's valise."

In the seventeenth chapter, a practical application is made of much of the matter contained in the preceding parts of the book, to the Prevention of some of the Important and Common Diseases in the Army. This may be attempted, the author says, in two modes:

"1. By conforming with the several rules of hygiene, by which the body and mind are brought into a state of more vigorous health.

"2. By investigating and removing the causes of the diseases which we find actually in operation."

In carrying out the latter mode, Dr. Parkes points out that the true foundation of etiology is correct diagnosis; and that all inquiry into causes is fruitless, unless diseases are properly identified. He recognises classification of diseases as convenient and useful; but if such terms as miasmatic, zymotic, etc., "make us overlook the absolutely different and uninterchangeable characters of the causes of the several diseases thus classed together for convenience, they can only be productive of harm." In very many cases, our knowledge of causes is but imperfect, and therefore our means of prevention are not yet obvious and precise. But we must not wait for perfect knowledge until anything is attempted in the way of prevention.

"We must act, as in many other affairs, on probability; and endeavour to remove those conditions which, in the present state of our knowledge, seem to be the most likely causes of the disease. It may be that, in some cases, we may be attacking only subsidiary causes, and may overlook others equally or more important. In some cases, indeed, we may overlook entirely the effective causes, and may be fighting with shadows. Still, even from mistakes, progress often arises; if, indeed, the difficult path of human knowledge is not always through error." (P. 427.)

The author first takes into consideration the Specific Diseases; viz., paroxysmal fevers; yellow fever; cholera; spotted typhus; bubo, or oriental plague (Pali plague in India); typhoid fever; relapsing fever; bilious remittent fever; eruptive fevers; erysipelas; and hospital gangrene. He then notices various Non-Specific Diseases—dysentery and

diarrhœa; liver-diseases; insolation; phthisis pulmonalis; scurvy; military ophthalmia; and venereal diseases.

In speaking of the latter subject, after noticing the great loss to the public service from diseases arising from sexual intercourse, Dr. Parkes notices, as preventive means, continence, marriage, precautions against the disease, and also the cure of the disease in those affected. He considers, very rightly, that the cultivation of a more high moral tone than at present prevails among youth, especially of the working classes, is of the highest importance. Indeed, he believes the morality of the barrack to be at least not worse, in many instances, than that of home life.

"While, in spite of the exciting literature of the day, and of the looseness of some of the older boys at the public schools or at the universities, the moral tone of the young gentlemen of our day is perhaps better than it was some half-century ago, the conversation of the classes from which the soldier is drawn is still coarse and lewd as in the middle ages. There is too close a mixture of the sexes in the English cottages for much decency, and the young recruit does not often require the tone of the barrack to destroy his modesty. In fact, it is possible that, in good regiments, he will find a higher moral tone than in the factory or the harvest-field. We must trust to a higher cultivation, and especially to religious influences, to introduce among the male youth of the nation, in all its grades, a purer moral tone, so that the safeguard of modesty and religious scruples may be cultivated and not destroyed. In the army, the example of the officers, and their exertions in this way, would do great things, if we could hope that the high moral tone which happily exists in some cases could inspire all." (P. 451.)

Besides this, Dr. Parkes would have restrictions put on temptation; that is to say, he would have prostitutes prevented, as far as possible, from openly exercising their calling in the streets, or from assembling in public places near barracks. As to the allegation of "interference with the liberty of the subject," Dr. Parkes observes that "it is quite true that men should see that, in the case of venereal diseases, the state must as much protect its citizens, as from the danger of foul water or the chances of gunpowder explosions, or the risks of any other perilous and unhealthy trade."

Besides moral training and the removal of temptation, Dr. Parkes recommends regular physical and mental employment of an agreeable kind; and especially temperance. As to marriage, he does not appear to think that much can be done towards making it a preventive of venereal disease, beyond "allowing as many men to marry as possible" (six per cent. is the present number), "and making marriage a reward, by providing good quarters, and by allowances to married men when *en route*."

We have already, on several occasions, expressed our opinion on the Contagious Diseases Prevention Act, that it is a step towards the continental system of registering, and therefore recognising, prostitutes. Dr. Parkes does not take the same view of it; nor does he think that by the Act any undue interference with liberty is committed. A woman, he argues, ought to be as much prevented from propagating syphilis, as from propagating small-pox; and, as we cannot set aside prostitution entirely, "let us obviate its effects, as we best may, while, at the same time, by higher culture and better religious teaching, we endeavour gradually to remove the custom." The provisions of the Act relative to the apprehension of diseased prostitutes, Dr. Parkes believes likely to work well; at all events, he hopes that a fair trial will be given to the measure.

The eighteenth and nineteenth chapters are on Disposal of the Dead, and Individual Hygienic Management.

In the twentieth chapter, Dr. Parkes gives some very useful instructions regarding Statistics; and points out the fallacies by which they are often rendered useless; such as ambiguity or want of uniformity in the dividing character of the units examined. This is a chapter which will repay study by those who are in the habit of collecting medical statistics.

This chapter ends the first book, in which the general principles of hygiene are illustrated, as far as possible, by examples from the life of the soldier. In the second book, Dr. Parkes considers more closely the nature of the soldier's service, and its influence. This he does in five chapters, entitled respectively, the Recruit, Home Service, Foreign Service, Service on Board Ship, and War. In the third of these chapters, the meteorological, sanitary, and statistical conditions of each of the foreign stations are given very fully—the chapter, in fact, occupying nearly seventy pages of the book.

We must close this review, although in doing so many points must be overlooked on which there would be room for comment or analysis. The mere titles of the chapters, however, and the sketches which we have given of different parts, will enable some idea to be formed of the high merits of the work. It contains, expressed in instructive language, everything that the army medical officer should know—as far as present knowledge will permit him—as to the means of preserving the health of the soldier or protecting him from disease. More than this, the material contained in the greater part of the book, being of general application as well as special, would form an excellent basis for a complete treatise on hygiene for civil use. We should like to see the applicable portions of the book, unmilitarised, and supplemented by necessary matters, formed, if not by Dr. Parkes himself, at least with his cooperation, into a Manual of Practical Hygiene for ordinary use.

Another thought remains to be expressed before we conclude. This book is written for the use of the army-surgeon. This officer is now not merely casually consulted on hygienic matters; but he is, by the Army Regulations, positively required to "advise commanding officers on all matters affecting the health of the troops, etc." What he ought to know in order to do this, Dr. Parkes has enabled us to see far more clearly than we saw before. The army-surgeon, to be able to do his duty properly, must not only be a well qualified medicine-man, but must have, always in order for use when required, a considerable amount of chemical, mathematical, and other scientific knowledge. The army medical officer, in fact, is now more than ever required to be the representative of science, in its most extended meaning, in the army; and he is there for the express purpose of applying that science to its highest purposes. The perusal of Dr. Parkes's book has impressed on us more forcibly than ever the conviction

that the position of the army medical officer ought to be one of the highest honour consistent with the absolute necessities of discipline. In the present stage of the question of the treatment of army medical officers, the appearance of this book is most opportune. We heartily trust that his Royal Highness the Commander-in-Chief, and the Director-General, and all authorities of the War Office and Horse Guards, will look into it carefully; for we are sure that—unless obtuse beyond other mortals—when they see how great an amount and variety of knowledge an army surgeon ought to possess, in one department alone of his duty, they will wonder how they could ever imagine or assert, that "third-class men were good enough for the medical service of the army."

British Medical Journal.

SATURDAY, DECEMBER 17TH, 1864.

THE TREATMENT OF A PARTURIENT FEMALE TWO HUNDRED YEARS AGO.

Our readers may be interested at the present moment with the details of how a parturient woman was treated nearly two hundred years ago. M. Le Roi, Conservator of the Library at Versailles, has just published some original and authentic "curiosités historiques" of the times of Louis XIII, Louis XIV, and Louis XV. Therein we find detailed an account of the birth of the Duke of Burgundy, grandson of Louis XIV.

Anne Marie Victoire of Bavaria, wife of the Dauphin, was of very delicate constitution. When, therefore, she became pregnant, and was about to give an heir to the throne of France, great anxiety was felt as to the event. Up to that time, it had been the practice with royalty to employ female midwives. Marie de Medicis, Anne of Austria, and Marie Thérèse, wife of Louis XIV, were all delivered by *sages-femmes*. But, on this occasion, Louis XIV determined that the Dauphiness should be confided to the hands of Julien Clément, who was then the most renowned accoucheur in Paris. Clément was born at Arles, in 1638; came at an early age to Paris, and there studied midwifery under Lefebre. He soon obtained renown, and by his skill greatly contributed to the revolution in practice—the employment of man-midwives—which was now finally accomplished by the decision of Louis XIV.

This point being settled, the next was to choose a nurse for the Dauphiness. The practice was to select a woman in the seventh month of pregnancy. The following were the qualities then demanded of a nurse fit to suckle a prince. She must be between twenty-two and thirty years of age; have had her milk three months; be of a sanguine temperament; hair black or brown-chestnut; a robust constitution; good appetite; be delicate neither in eating nor drinking; gay and good-humoured; always cheerful; subject to no unpleasant affection; have no bad odour of the breath, axilla, or feet. The skin must be white and smooth. She must also be tolerably good-looking, of good address, and well made. But, above all, her breasts must be well formed, and give a good supply of milk. She must also be of good reputation. M. Le Roi, on this score, relates an instance in which it was only discovered by pure accident that the husband of the nurse who had been chosen to suckle one of the children of Marie de Medicis was afflicted with syphilis.

In the case of the Dauphiness, four nurses answering the above description were selected, and were then visited by an agent of the physician-in-chief of the court at their own dwellings. This agent first learnt from the *curé* that they were good Catholics; then obtained from their medical men certificates that there was neither epilepsy, scrofula, etc., in any member of their families. Next, he inquired of their neighbours that they were of good repute. The inquiry being satisfactory, they were at once placed under the *gouvernante* of the nurses—a sort of duenna; and each in her own apartment fed her child, awaiting the accouchement of the Dauphiness. When this event occurred, the physicians selected one of the four to suckle the royal child; and the other three were kept in reserve. The selected one was then put under the constant observation of a woman, to prevent her husband from approaching her. Dionis, the surgeon, relates an anecdote on this point, showing how a nurse was instantly dismissed for having spoken to her husband.

On the evening of the 4th of August, 1682, the Dauphiness felt her first labour-pains. Clément had been already living a month at Versailles, awaiting the event; and from this moment up to the 6th, when the child was born, he never quitted his patient. The news of the approaching event spread through the Palace, and soon the whole Court was in motion. The court-yards, the squares, and the road from Paris to Versailles, were lit up with the torches of visitors, as if it had been day. The antechambers of the Dauphiness's room, and the gallery leading to it, were crowded. The King, however, was not informed of the state of things until five o'clock on the following morning. He rose at once, ordered prayers to be offered up, and himself immediately attended mass; and at six was with the Dauphiness. At this time, the labour-pains had diminished. In the afternoon of the 5th, the pains again returned with force. By this time all the ambassadors, etc., were assembled, ready to despatch news of the birth to their different courts. The Queen remained constantly with the Dauphiness. As the pains continued, and the child was not produced, she ordered the relics of

St. Marguérite (which were usually exposed in the Queen's room during confinement) to be brought; and next the lying-in bed—*lit de travail*—was prepared. This bed had already been used by Anne of Austria and Marie Thérèse in their confinements. The Dauphiness's women then arranged her hair, and put a larger nightcap on her head, to preserve her from cold. During the night of the 5th, the pains were strong and prolonged. The prayers of the Queen were incessant. The King himself was present, constantly encouraging the Dauphiness; and on several occasions, assisted by her husband, supported her whilst walking about in the room.

The duration of the labour at length caused serious alarm. "Clément alone remained unmoved. He had satisfied himself that there was no important obstacle to delivery; and had already assured the King that, though the labour would be tedious, it would terminate well." The pains still increasing, it was decided that the Dauphiness should be bled. Dionis performed the operation, by the aid of candles, the windows being shut, as was then the custom, in order better to see the vein. The first physician held the candle, and the head apothecary the bleeding-cup. Thereupon, the labour-pains increased; and Clément informed the King that the delivery was near at hand. The Dauphiness was, in fact, delivered of a son at ten o'clock on the morning of the 6th. The practice at the time was not to cut the cord until the placenta had passed; but Clément objected, and divided it. He argued, that the child should be at once removed into the hands of the nurse; that, the longer the placental circulation continued, the greater the difficulty of separating the placenta. The child was then cleansed with a sponge dipped in warm water and wine, in which butter had been dissolved. The placenta, when it was passed, was placed upon a silver plate, and examined by the physicians, to prove its integrity.

The labour had lasted two days and nights, and the Dauphiness required repose. She was placed in her bed; and, as the parts had been much bruised, etc., Clément applied to them a poultice of eggs and almonds. To the stomach, in order to prevent inflammation, he applied the warm skin of a black sheep, which was skinned in a neighbouring room.* A potion of oil of sweet almonds, etc., was then administered. Clément, moreover, in conformity with a custom which he afterwards abandoned, left Dionis to converse with the Dauphiness, in order to prevent her sleeping for three hours after delivery. The window-shutters were then closed; and, night and day, for the next nine days, the light of one candle only was allowed in the room. The first three days the patient's food was broths, fresh eggs, and jelly, and her drink barley-water, etc. When the fever was over, soup and fowl were given, and a little diluted wine. At the door of the room was posted, for six weeks, a servant, whose duty was to prevent any one having a perfume about them to enter. This precaution was held to be of the highest importance in those days.

Louis XIV gave Clément 10,000 *livres*, and thanked him warmly for his services. He ever afterwards behaved most generously to Clément, who was afterwards the *accoucheur* of the Duchess of Burgundy; and went three times to Madrid to deliver the Queen of Spain. In 1711, the King gave him letters of nobility, "containing a clause which honoured alike the King and the subject of his generosity." This clause was to the effect that he was not to abandon the practice of his art. He never forgot the "prudence and the calm and steady conduct of Clément, which were the principal causes of the successful issue of this important event."

* The chronicle states that the butcher himself who skinned the sheep carried in his apron the piece of hot skin to the bed of the Dauphiness; and that, to the horror of all the ladies, etc., the bloody sheep itself followed the butcher up to the very side of the royal bed! "De sorte que le mouton écorché et tout sanglant le suivit et entra jusq'auprès du lit, ce qui fit un peur effroyable à toutes les dames présentes à ce spectacle."

THE MORTALITY IN LONDON.

No one can have read the weekly returns of the Registrar of Births and Deaths in London without being struck by the now almost habitual recurrence of the statement, that the number of deaths has exceeded the calculated average, and this in no trifling degree. During four recent weeks, the deaths were respectively 1409, 1454, 1586, and 1742. At this season, we look for an increasing rate of mortality; but these numbers are 210, 215, 307, and 331, in excess of what they ought to have been, allowance having been made both for the season of the year and for the increase of population. The quarterly returns tell the same story. In the quarter ending Sept. 30th, there were 18,008 deaths; nearly 1000 more than in 1863, and nearly 3000 more than in 1862. In the second quarter of this year, the deaths were 17,346, against an average of 15,000 to 16,000; and in the first, when the general mortality was swelled by unusually severe cold, 22,733 persons died—the calculated average being about 19,000. In these three quarters, then, we may say, that there have been, at least, from 6000 to 7000 more deaths than if there had been only the average mortality.

Going no further back than this, we might say, with confidence, that this high death-rate could not be regarded as a mere fluctuation—a swing of the pendulum in the direction of death, speedily to be compensated by a return to the opposite extreme. It is obvious that it is not merely a case of old people whose term of existence has been anticipated by a spell of cold weather, or of children prematurely carried off by summer diarrhœa. Some general cause unfavourable to health must be in operation to

account for an effect so continuous; and this cause, as might be expected, is to be found in the prevalence of the so-called zymotic diseases. Whenever there is an important and sustained rise in the rate of mortality, it may almost certainly be referred to one or other of these diseases. We watch them, therefore, on this account, and also for other reasons. These are the diseases often called preventable; preventable, that is, by public measure. All diseases may, of course, be said to be, to some extent, preventable by individual precautions. Bronchitis and pneumonia, and other consequences of exposure to cold, may be prevented by appropriate clothing; phthisis, gout, and diathetic affections, by individual attention to the laws of hygiene—ventilation, diet, exercise; but no regulation of a Board of Health can compel a man to wear warm clothing, or to eat and drink moderately, or to seek the vital stimuli of sun, air, and exercise, or to let out injurious gases and exhalations from his dwelling. Society is, therefore, not responsible for these matters; but by the organisations representing it, Boards and Officers of Health, it may frame regulations which shall operate efficiently in preventing overcrowding, in ensuring the removal of refuse, in providing that none but pure water and food shall be supplied: measures which prevent or resist the rise and spread of these zymotic diseases.

This high rate of mortality—the increased prevalence of zymotic diseases—is not limited to the present year; but extends back to 1863 and 1862. Up to the end of the year 1860, the average mortality was diminishing. From 1840-1849, it was 25.1 per thousand; 1850-59, 23.6; in 1860, 22.6. We were beginning to plume ourselves on the good results of our sanitary measures; and to think we were making steady progress in the reduction of town mortality, from 23 or 24 per thousand, at which it now stands, to the 17 per thousand of country districts. But our boasting was premature. In 1861, the death-rate had risen to 23.2; in 1862, to 23.56; and in 1863, to 24.52. Towards the end of 1861, typhus suddenly made its appearance, unexpectedly, and almost unaccountably. The reports of the Registrar-General do not distinguish between typhus, typhoid, or enteric fever and relapsing fever, which are all included under the term typhus; and we gather from them simply the fact that, in the last quarter of 1861, fevers were greatly on the increase. The records of the Fever Hospital, and the able researches of Dr. Murchison, show that this increase was due entirely to true typhus. In the first instance, it seemed as if it had been imported; but we cannot enter into this question; and we incline to believe that the fever found its source, as it has since found abundant aliment, in London. An epidemic of typhus is always significant; and the present one acquires increased significance from its association with epidemics of all the important zymotic diseases which have successively swept through London; and, in spite of many favourable circumstances, the death-rate, as seen above, has become higher and higher. Showing itself in the winter quarter of 1861, when 624 deaths from fever were registered, typhus prevailed through 1862; the deaths in the successive quarters being 991, 1015, 833, 796. In the summer months of 1863, it subsided, increasing again towards the close of the year. As winter approaches this year, it is again on the increase, and to a degree hitherto unprecedented.

Scarlatina, which constantly yields a large mortality, gave, in 1861, 2338 deaths. It increased gradually through 1862, and gave a total of 3457; and again, in 1863, the startling number of 5075. Fortunately, its ravages have abated during the present year; but the numbers have risen considerably during the past quarter.

The remarkable invasion of small-pox will not soon be forgotten. In 1861, there were only 215 deaths from this disease; in 1862, 345; in 1863, it may be said to have raged, there having been no fewer than 2012 deaths from it. It was checked, we may suppose, by vaccination; and, in the last quarter, gave only 140 deaths. This sudden and fierce epidemic cannot have been due simply to the number of unprotected individuals. The spread of small-pox was, no doubt, greatly favoured by the conditions which rendered the other zymotic diseases epidemic.

Finally, measles contributed its share to the general result. The mortality from this disease remained low till the third quarter of 1862. In the winter of 1862-63, it was exceedingly high; falling again during 1863; but giving formidable returns for the last two quarters of the present year, 844 and 855—double the average.

These diseases, the cause of the increased mortality—21,005 dying from them in 1863, as compared with 13,001 in 1861—are, no doubt, themselves due to some cause or causes. We have not left ourselves space to discuss this question. We may just allude to the cotton-famine, driving hither half-starved operatives; the displacement of population by the railways, and consequent overcrowding at other points; and the evidence of destitution, not very apparent in other ways, which is furnished by the unusually frequent instances of death from this cause.

Professor Dr. Mosler of Giessen, well known by his helminthological researches, and other inquiries on sundry subjects of clinical medicine, has been called to Greifswald in Prussia as Professor of Clinical Medicine, and has already assumed the duties of his new office. His predecessor was Professor Rühle, now Clinical Professor at Bonn.

Extracts from Lectures
CLINICAL AND SYSTEMATIC.

BY
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SURGEON TO HER MAJESTY'S HOUSEHOLD, ETC.

I.—On Innocent and Malignant Tumours.

I now propose to make a few observations upon the distinctions between innocent and malignant growths.

Sufficient evidence has been adduced to prove that, in some of the cases where cancer has been said to have been cured, the disease was not a cancerous, but an innocent growth; one which might have been safely left alone, or treated in a much milder mode than the curer adopted, and with greater success.

It is undoubtedly true that, in some few cases of alleged cancer, medical men have expressed an opinion that a tumour was cancerous, yet it has been removed, and has not returned. But, in all probability, such cases should be explained by an error of diagnosis. Some assistance towards lessening the number of such cases may be obtained by bearing in mind certain leading distinctions between cancerous and other tumours. These distinctions may be shortly summed up in the following tables. I have arranged them in two series. The first are the signs which may be observed before the removal of the tumour, or without any puncture or other interference with it; the second are those which can only be known after anatomical examination of the structure of the growth.

Table I.—Before Operation.

MALIGNANT OR CANCEROUS TUMOURS.	INNOCENT TUMOURS.
1. Are often multiple, occurring simultaneously in different tissues or organs.	1. Are usually single, or found in one tissue or organ only.
2. Are generally very painful.	2. Seldom very painful.
3. Usually grow fast.	3. Usually of slow growth.
4. When near skin or mucous membrane, usually implicate them, and interfere with their movement.	4. Skin and mucous membrane usually move freely over them.
5. Undergo spontaneous change or decay.	5. Rarely degenerate.
6. Cause hard swelling of neighbouring glands.	6. Glands rarely affected; any swelling is not hard.
7. When bare, there is rapid formation of morbid vegetations, and fœtid corroding discharge.	7. No such vegetations, nor discharge.
8. Are often surrounded by smaller growths of the same nature.	8. No such smaller growths.
9. Are preceded or accompanied by a peculiar hexia.	9. General health may be perfect.

Table II.—After Operation.

MALIGNANT OR CANCEROUS TUMOURS.	INNOCENT TUMOURS.
1. The cellular elements often differ both in form and arrangements from those which constitute normal structures. (Heterologous.)	1. The cellular elements always resemble normal structures either in their embryonic or perfect form. (Homologous.)
2. The elements are combined in great variety.	2. The elements are as uniform as those of normal structures.
3. Adjoining tissues are infiltrated or destroyed by the diffusion of the new structure.	3. Neighbouring parts are compressed or displaced; not otherwise altered.
4. Usually return after extirpation, in the same or in some other part.	4. Do not return in the same or in any other part, if completely removed.

The following remarks upon each of the above characters of the two classes of tumours should be borne in mind.

1. Several innocent growths may be multiple; for example, warts, encysted tumours, enchondroma, fatty tumours and fibroids. Hence this character is only distinctive of malignancy when other characters of innocent growths are wanting, or when several different tissues or organs are simultaneously affected; for instance, breast and uterus, breast and lung, testicle and liver, are very seldom simultaneously attacked by innocent growths.

2. Malignant tumours are usually painful at some stage of their growth. The pain is often almost unbearable, especially at night. It arises spontaneously, or is excited by motion or pressure. There are but few exceptions to this rule, although encephaloid, melanosis, and colloid, sometimes attain a large size before there is much pain. The character and degree of pain vary—(*a*) with the tissue or part affected, (*b*) the nervous supply, and (*c*) the tension of surrounding fasciæ. Innocent tumours are seldom painful; and if pain be induced in them by pressure, it is seldom durable, unless the tumour is a neuroma, or is in close connection with a nerve.

3. Although malignant tumours, as a rule, grow faster than others, yet there are many exceptions to this rule. For instance, epithelioma may go on for ten or twenty years before any extensive destruction of tissue is effected; while innocent cystic or cysto-sarcomatous tumour of the ovary may attain a very large size in one or two years.

4. The rule that malignant growths adhere to the skin or mucous membrane which covers them, while innocent growths (even of large size) admit of the skin or mucous membrane being freely moved or folded on them, is only open to exception when a strong fascia or a serous membrane intervenes between the tumour and the skin. For instance, soft cancer of the testicle may attain a large size while the skin of the scrotum remains freely moveable.

5. At some stage of their growth or development, malignant tumours soften and break up. This occurs without any injury or inflammation, as a simple process of decay which takes place early in some textures, late in others. This is a totally different change from the decay of an innocent polypus when its pedicle is compressed or twisted, and from the superficial ulceration of a fatty tumour when rubbed by clothing or otherwise irritated.

6. The swelling of the glands to which lymphatics pass from a malignant tumour may be sympathetic only, or is the hardness of infiltration. In the latter case there is pain, more or less persistent, and increased on pressure, while the swollen gland is very

hard. It has become the seat of malignant deposit, and after the removal of the original tumour, the same disease will progress in the gland if not removed. The softer the malignant tumour, the sooner are neighbouring glands hardened. Hard cancer may exist for a long time without any affection of lymphatics or glands; but as soon as softening commences, the fluid passes along the lymphatics and the glands suffer. The merely sympathetic enlargement of glands in the neighbourhood of a malignant tumour —an enlargement which may disappear after the removal of the tumour—occurs without hardness or much sensibility; while the glandular swellings which accompany suppuration or the inflammation of innocent growths are more acute, are not hard, and yield readily to treatment, or cease with the inflammation which was the exciting cause.

7. When a malignant growth is exposed to the air by the removal or giving way of its coverings, the surface becomes covered with morbid vegetations, which either die nearly as soon as they spring up, or form protruding masses. In either case a very irritating sanious fetid pus is formed in abundance, which corrodes any unprotected part upon which it is allowed to remain or flow over. Nothing like such vegetations are seen in any innocent tumour, with the exception of some in the mouth, which are kept in a state of irritation by the warmth and moisture, the constant passage of food and air, the perpetual motion of the tongue, or the irritation of a rough tooth.

8. The formation of several smaller tumours around a large one of the same character is often quite characteristic, and is sometimes the first or only undeniable proof of malignancy.

9. The cachexia which accompanies malignant growths may be primary or secondary. In some cases the tumour is only the outward and visible sign of a constitutional disease, or of an altered state of the blood, either inherited or acquired. In such cases the physiognomy is altered before the tumour appears, or the change takes place simultaneously with the appearance of the tumour. In other cases the constitutional contamination is secondary—the blood is altered by the absorption or entrance into the blood-vessels of the fluid portions or products of the tumour. Here the local disease—epithelioma, for example—may exist for several years before the general health is sufficiently affected for disease to become apparent in the physiognomy.

Passing now to the distinctions enumerated in the second table, it must be observed, that as these structural characteristics can only be discovered by anatomical, microscopical, and chemical examination after the tumour has been removed—or by watching the results of removal—they are of comparatively little practical importance. They are useful in proving the accuracy or error of diagnosis, and in prognosis; but the surgeon has to determine the question of removal on other grounds, many of which have been already stated. I shall, therefore, refer you to standard works for an account of the anatomical, microscopical, and chemical characters of the different varieties of cancer, only remarking with regard to these characters, that the form, arrangement and combination of the cellular elements (as stated in the first and second propositions of the second table), are so different in the two classes of tumours, that there is seldom much difficulty in distinguishing those of an innocent from those of a malignant nature by the structure alone.

With regard to the value of infiltration of healthy structure as a sign of malignancy, it must be remembered that, while no innocent tumour commences as a morbid infiltration amongst natural structures, yet the converse does not hold, for we cannot say that a tumour is innocent because it is distinctly circumscribed.

Lastly, with respect to the return of tumours after extirpation, either at the same spot or at a distance, it should be remarked, that some innocent tumours of the cellular tissue increase very rapidly after removal, if only a small piece be left behind; but that innocent tumours very seldom return, if completely removed. If a swelled gland in the neighbourhood of a tumour of doubtful character has been removed, and the swelling has been only sympathetic or inflammatory, the gland is found to be merely infiltrated with fluid blastema not arrived at a stage of new organisation. The microscope detects none of the structural elements of new growths. But when the swollen gland is hardened by cancerous infiltration, and is removed with the tumour—or when the process goes on in neighbouring glands after the removal of the tumour—then the gland on examination is found to resemble in structure, and to have the same malignant tendencies, as the original tumour.

These remarks upon innocent and malignant tumours, should be accompanied by some suggestion that in the present state of science the practical surgeon requires a more exact classification of tumours than is afforded by this simple division into two classes. While preparing some such classification for the pupils at the Grosvenor Place School, I met with Dr. Billroth's paper on tumours (*Deutsche Klinik*, 1859), and I give it here as the best I have seen. It has the great advantage of being prepared principally with a view to prognosis—or to the different degrees or modes in which different tumours are apt to spread or return—while those names are retained which are most useful to the surgeon, and those are eliminated which are chiefly interesting to the histologist.

I. Innocent Tumours. Those which very seldom return after extirpation, but sometimes extend in great numbers over the whole surface of the body. 1. *Simple Cysts, a*, with serous fluid; *b*, with mucous contents; *c*, with soft, fatty contents; *d*, with blood. 2. *Fatty Tumours.* 3. *Fibrous Tumours. a*, Soft fibrous tumours; *b*, Hard fibrous tumours. 4. *Simple Cartilaginous Tumours.* 5. *Exostoses. a*, Spongy exostoses; *b*, Ivory exostoses. 6. *Vascular Tumours. a*, Erectile Tumours; *b*, Cavernous vascular tumours. 7. *Horny Excrescences.*

II. Sarcomas. Tumours which often return locally, but seldom extend to internal organs. 1. *Glandular* (adenoid) *Tumours.* 2. *Colloid Tumours. a*, Homogeneous colloid sarcoma; *b*, Areolar colloid tumours. 3. *Cystoid and Cysto-sarcomas.* 4. *Hard Sarcomas.* 5. *Soft Sarcomas.* 6. *Soft Papillary Tumours.*

III. Carcinomatous Tumours. Tumours which always return locally, then in the nearest lymphatic glands, and lastly extend to internal organs. 1. *Carcinoma.* 2. *Cancroid, or Epithelioma.* 3. *Scirrhus.*

IV. Medullary and Melanotic Tumours. Tumours which generally rapidly return locally, and soon extend to internal organs. 1. *Encephaloid.* 2. *Melanotic Tumours.*

An Artificial Leech. M. Damoiseau has recently called attention to a monstrous (artificial) leech—*Térabdelle*—which he has invented. It seems to have many advantages over the old-fashioned pneumatic cupping apparatus. The author is able to draw, with one glass, fifteen drachms of blood in a minute, and the blood does not immediately form a clot which plugs the vessels, as with the cupping-glass. Bloodletting is so much out of fashion in England that probably no one will take any notice of this invention, and yet it seems to offer advantages which are deserving of attention.

Association Intelligence.

WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,
Honorary Secretary.

Taunton, December 10th, 1864.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MONTHLY MEETING.

A MONTHLY meeting of the Birmingham and Midland Counties Branch was held at the Birmingham Library, on December 8th; JAMES RUSSELL, M.D., President-elect, in the Chair. Thirteen members were present.

Member of Council. Mr. Oliver Pemberton was elected member of Council, *vice* Dr. Wade elected Honorary Secretary.

New Member. Mr. Thomas Thompson, Queen's Hospital, was elected a member of the Branch, having been previously elected by the Council a member of the Association.

Dr. Russell having vacated the Chair, it was taken by Mr. T. Watkin Williams (Honorary Treasurer).

Paper. The following paper was then read.

Notes on Epilepsy. By J. Russell, M.D.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

NOVEMBER 17TH, 1864.

HENRY LOWNDES, Esq., Vice-President, in the Chair.

Cirrhosis of the Liver. Mr. RAWDON showed a specimen of cirrhosis of the liver weighing 2½ lbs., the spleen weighing 1½ lb.; and gave a brief outline of the case.

Mr. STEELE remarked, that this was an instance of the disease occurring in a person of temperate habits. He had met with several similar instances in his practice; and the conclusion which he drew was, that we must not regard alcohol as the only cause of the disease. He mentioned this in the belief that we are too apt to regard alcohol as *the* cause, and not *a* cause, of this altered condition.

Dr. SHEARER, Dr. GEE, and Dr. BURROWS took part in the discussion.

Intestinal Disease. Mr. RAWDON showed a specimen of perforation of the transverse colon, with malignant disease of the rectum.

Remarks on some Points in the Surgical Writings of Celsus. By H. LOWNDES, Esq. After some prefatory remarks on the period of time that had elapsed since the days of Celsus, Mr. Lowndes commenced with the subject of fractures. Celsus points out the necessity of early reduction by extension; but, if some time has elapsed, it must be postponed till the swelling has subsided. At the setting, the limb is to be wrapped in linen cloths soaked in wine and oil. On the seventh or ninth day, splints are to be applied; and the broadest splint should be placed on the side to which the fracture inclines. In compound fractures, the bones are not to be put in apposition till the healing process has commenced. The limb is to be placed in the most comfortable position, and the wound dressed with oil and wine. Compound fractures of the thigh generally require amputating; those of the humerus less frequently. There is always shortening after fractures of the thigh. In cases of ununited fracture, the limb is to be extended to excite fresh injury. In the present day, we are not obliged to regard shortening as inevitable in cases of fractured thigh. With reference to the treatment of ununited fracture, we are indebted to a member of the Liverpool Medical Institution for a new method, which promises to be successful in the treatment of these cases. With regard to injuries of the head, Celsus describes an instrument very similar to the modern trephine; but he used it rather for disease of bones than for injury. Celsus insists on the careful probing of wounds of the head, to detect fracture and its direction. For these cases he recommends simple treatment, and, on the subsidence of febrile symptoms, healing ointments. But, if untoward symptoms supervene, he recommends excision of the fractured portion, in order to give vent to fluid beneath. Celsus recommends the use, during the operation for excision of bone, of a copper plate, to prevent injury to the membranes of the brain; but he does not describe anything like our modern elevator. Mr. Abernethy was one of the first English surgeons to point out the necessity of discrimination between those fractures requiring active treatment and those that did not; he says that the wound made by a trephine is far more serious than many fractures themselves. Sir Astley Cooper coincided in the view. For the treatment of varicose veins, Celsus recommends either cautery or excision. The cautery is applied by first exposing the vein with a knife. In excision, he appears to have removed portions of the vein, and then covered the wound with an agglutinating plaister. Till lately, palliative measures have generally been resorted to; but now several modes of radical cure are getting into common use. Mr. Lee recommends pressure, by pins introduced under the veins, combined with subcutaneous division of them. The simple subcutaneous division practised by Sir Benjamin Brodie was found dangerous; but Mr. Lee's plan of sealing the veins above and below the wound renders the operation safe and effectual. Celsus treats diseases of the anus in less than two pages, and yet leaves very little else to be said. Fissures and external piles are to be excised. Internal piles are to be ligatured; if they are very numerous, they are not all to be operated on at the same time. Regarding wounds of the intestines, Celsus considers those of the small intestine as incurable, while those of the large intestine are to be stitched up and returned in their proper order. Alluding to wounds of the abdominal parietes, Celsus says that they are to be sewn up, but that sutures of the skin or of the "interior membrane" alone are insufficient. We have here carefully described a mode of bringing together abdominal wounds that has been revived of late years by those who have brought the operation of ovariotomy to so great perfection. That surgeons in the time of Celsus were very successful in treating abdominal wounds, we may infer from the fact that they operated for ventral hernia by removing elliptical portions of integument and peritoneum, and uniting the wound by the method just described. Rhinoplastic operations do not appear to have been practised on a large scale in the time of Celsus; but he gives some directions for removing deformities about the nose, mouth, and ears, arising from ulceration. He gives directions for making a prepuce in cases where the glans penis has been left bare. Fistulæ that do not get

well by injection are to be excised; if depending on caries, the bone is to be cut away and removed. Fistulæ *in ano* he treats by the introduction of twisted threads, which are to be moved about twice a day, and changed every third day. When the knife is used, he recommends the introduction of a pledget, that the edges may not immediately close. In the treatment of excessive traumatic hæmorrhage, Celsus would first fill the wound with dry lint, and make pressure with a cold sponge; he would then try styptics; and, in case of these failing, he recommends ligature of the vessel above and below its wounded part, dividing it in the interspace. This proceeding is the one so strongly insisted upon by Guthrie; and it is curious that it did not suggest to the ancients the use of the ligature in amputations. Mr. Lowndes then drew attention to the great advance made in surgery, instancing herniotomy, lithotrity, lithotomy, ovariotomy, subcutaneous operations, and acupressure in amputations. Mr. Lowndes then briefly referred to the interval between the decay of medicine, that followed the Augustan era, and its revival with the general revival of learning. Passing to later days, he referred to the writings of medical men, including a work on surgery written in the year 1612 by Peter Lowe; also one by John Muys, from which particularly quaint quotations were given. These quotations showed very plainly the sad state into which our art had fallen towards the close of the middle and indeed dark ages.

Dr. Desmond thanked Mr. Lowndes for his paper. He thought that some of the observations of Celsus would not disgrace surgeons of the present day.

Dr. Shearer coincided in these remarks.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 2nd, 1864.

Robert Greenhalgh, M.D., Vice-President, in the Chair.

Six gentlemen were elected Fellows.

Diseased Urinary Organs in an Infant. Dr. Gervis exhibited the Bladder, Kidneys, and Ureters, removed from a child who died at the age of five weeks. The bladder was thickened, the ureters dilated to the size of the finger, the pelvis of the left kidney greatly distended, and the structure of the kidney itself very thin. After birth there was no apparent difficulty in micturition.

Monstrosity. Mr. Jay, of Pulham-Mary, Norfolk, showed a specimen of Double Monstrosity. The children, both females, were joined together by the sides of the thorax and abdomen. They were in other respects perfectly formed. The labour was not attended with any great difficulty. They were born alive, but died in a few minutes. There was but one cord.

Vaginal Douche. Dr. Adolph Rasch exhibited a Vaginal Douche. It consisted of six feet of strong India-rubber tube, made heavy on one end by a hollow piece of lead, and having at the other an elastic bougie with several holes in the bulbous end, for introduction into the vagina. The instrument acted as a syphon; and the only but important point, for which Dr. Rasch claimed some credit, is the simple way of establishing the flow through the tube. This is done by immersing about two feet of the tube, along with the leaden end, in a vessel containing water, whereby this part of the tube becomes filled with water. It is then lifted over the brim, and the vessel being placed on some elevated article of furniture, the fluid at once escapes on the well-known syphon principle. Having no complicated structure, it cannot get out of order. The force of the stream is, of course, regulated by the height from which the fluid is made to flow. The instrument was made by Mr. Evan Lewis, of the City Road. [The principle for which Dr. Rasch claims credit is the same as that described by Dr. Fleming, in the Journal for October 1, 1864.]

Monstrosity. Dr. J. Braxton Hicks showed an Anencephalous Monstrosity. The monstrosity was one of twins. Its delivery could not be effected until the cord was divided, owing to the shortness of the latter. The cord was cut through above the brim of the pelvis.

Ovariotomy. Dr. Greenhalgh and Dr. Braxton Hicks presented a report on the specimen removed by Mr. Baker Brown by the operation of ovariotomy. After giving a complete account of the general and microscopical appearance of the tumour, they conclude by stating that it was a specimen of that form of disease recently designated adenoma of the ovary.

ON THE MANAGEMENT OF THE THIRD STAGE OF LABOUR. BY HENRY EASTLAKE, L.K.Q.C.P.

This paper consisted of an historical, analytical, and critical dissertation on the subject. Having briefly described the opinions which existed amongst the accoucheurs of times gone by, the author proceeded to give an account of the modern views and principles which govern the placental stage of labour. Dr. Eastlake laid great stress upon the hand being placed firmly on the fundus uteri at the moment the child is being expelled, the uterus being thus followed down, and the contraction maintained by gentle pressure. External manipulation, judiciously applied, was, in the majority of instances, quite sufficient *per se* to effect the expulsion of the after-birth, without any traction whatever on the funis. He believed that the great secret was to exert the pressure during a contraction; in short, to act in unison with nature as we did in the application of forceps, where we applied our chief force at the moment of a pain. Dr. Eastlake had no doubt that many would imagine that after all this was no modern idea; but he demonstrated that this teaching was not definitely described and insisted on in our manuals of obstetrics. Dr. Credé, the professor of midwifery at Leipsic, appeared to be the only one who had advocated this doctrine and brought it prominently before the profession. The author next considered the subject of retained placenta, and alluded to the various causes which arrest nature's process of extruding the after-birth. The three steps in the natural expulsion—namely, (1) the detachment from the wall of the uterus, (2) its extrusion from the uterine cavity, and (3) its expulsion from the vagina—were recognised and dwelt upon. Regarding the subject of morbid adhesion of the placenta, Dr. Eastlake suggested the possibility of being able to diagnose this condition by means of auscultation. For a long time he had been fully persuaded that by means of auscultation we often possessed not only a negative but a positive sign of fœtal death—a peculiar modification of the uterine *souffle*. The alteration in tone suggested the idea of a muffled sawing noise, very different to the gentle blowing murmur heard in normal cases, where a living child existed *in utero*. He considered that no ergot of rye should be given in cases of retained placenta, unless we were quite sure that no abnormal adhesion or irregular contractions existed. In cases of spasm of the os uteri, where the placenta became encysted, the administration of chloroform was recommended. Another point of interest alluded to was the occasional existence of a supplemental after-birth, which was spoken of by Dr. Barnes, Dr. M'Clintock, and other authors under the name of *placenta succenturiata* or

placenta spuria. He (Dr. Eastlake) had seen a specimen of such an after-birth in the museum of the Lying-in Hospital in Dublin, obtained from an ovum of five months. When such a mass remained in the uterus after the true placenta had been expelled, it often gave rise to secondary hæmorrhage, and an impression arose that due caution had not been exercised in the extraction of the after-birth. He agreed with Dr. M'Clintock that, remembering the possibility of such an occurrence, we should be slow to utter any opinion which would damage the character of a professional brother. In conclusion, the author alluded to the several conditions which generally authorise us to have recourse to a speedy removal of the placenta, such as *post partum* hæmorrhage, convulsions, rupture of the uterus, and possibly, under certain circumstances, where the uterus was inverted, with the after-birth still adherent.

Dr. Palfrey had understood the author to state in his paper that in his opinion the length of time that ought to be allowed to elapse before any active measures were adopted in cases of retained placenta was one hour. Dr. Palfrey distinctly differed from the author. It appeared to him that an hour was considerably too long a time to wait, for by so long delay the evil largely increased. Take, as an example, a case of adhesion of the placenta to the uterus, the result of previous inflammation. Is not the treatment in such a case attended with much greater risk and anxiety after waiting an hour than a delay of half that time? Again, Dr. Palfrey would inquire of the author, would he advise so long a time as an hour to elapse in a case of irregular contraction of the cervix uteri, where probably a portion of the placenta may be felt protruding through the os, and the remainder firmly detained in the cavity of the uterus? Dr. Palfrey's opinion was, that in all cases of retained placenta, from whatever cause such retention might arise, *thirty minutes* was the full extent to which, with safety to our patient, we dare wait.

Dr. Greenhalgh was of the author's opinion, that adherent placenta was of very rare occurrence; but that its retention from the so-called hour-glass, irregular, or spasmodic contraction happened every now and then. He (Dr. Greenhalgh) did not approve of letting blood out of the funis, on the ground that the uterus did not contract so efficiently upon a lax as on a firm substance, and that, in event of artificial detachment being required, the ill-defined boundaries of the placenta would greatly complicate the case. He had never experienced any material difficulty in removing a detached placenta from the cavity of the uterus or vagina where early had recourse to. He confirmed the experience of the author, that the same uterine contraction which caused the expulsion of the child frequently detached the placenta. As a rule, he should not feel inclined to delay the extraction of the placenta beyond the half hour, unless the labour had been very lingering, the uterus in a state of inertia, or the patient much prostrated, when he might be induced to wait an hour. In hæmorrhage, convulsions, inversion, etc., it might be necessary to proceed to the immediate removal of the placenta. Dr. Greenhalgh then drew attention to a case of placenta prævia, in which so great had been the loss of blood that the introduction of the hand in performing version, and subsequently for the extraction of the placenta, occasioned the most severe convulsions, in one of which the patient died. He strongly deprecated powerful traction on the funis, which might lead to irregular action or inversion of the uterus, laceration of the funis or placenta, etc. A considerable experience had convinced him that chloroform had not the slightest influence in delaying the expulsion of the placenta; on the contrary, its anæsthetic effects greatly aided the practitioner in making firm pressure over the uterus, and thus facilitating its extraction. He had never met with a case of supplemental placenta. In conclusion, he thanked the author for directing his attention to the difference in the uterine souffle before and after the death of the fœtus *in utero*; of which, he stated, he had no experience.

Dr. Eastlake, in reply, said that he had listened with great interest to the remarks made by Dr. Greenhalgh. In answer to Dr. Palfrey, he said that gentleman had misunderstood that portion of the paper which referred to the time that should be allowed to elapse before extracting the after-birth. An hour was the maximum period that he (Dr. Eastlake) would wait in any case of retention, and then only where a doubt existed as to the cause; but in the majority of instances the placenta might be removed within a quarter of an hour. He had had the pleasure of meeting Dr. Graily Hewitt at a case two nights ago, and he felt sure that that gentlemen could testify to the ease with which he (Dr. Eastlake) had pressed off the placenta on that occasion.

Dr. Graily Hewitt could corroborate Dr. Eastlake's statement as to the effect of the pressure over the fundus uteri, unaided by traction on the cord, in expelling the placenta, having very recently witnessed it in the case to which he was called by Dr. Eastlake. He had himself been in the habit of depending chiefly on pressure on the uterus for expulsion of the placenta, although he also held the cord just tightly enough to ascertain where the placenta was and how it was moving. He believed Dr. Eastlake's paper would have good effect in more widely inculcating a practice which he believed to be good. With reference to the effect of direct pressure on the uterus in procuring expulsion of the placenta, he had observed an interesting fact: in one case where pressure had been used for nearly an hour unavailingly, the uterus suddenly and forcibly expelled the placenta when the organ was grasped, one hand at each side, just at the junction of the Fallopian tubes with the body of the uterus. It appeared in this case, at all events, that this part of the uterus was more susceptible than others. Possibly this fact might have an application in other cases.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, November 4th, 1864.

George D. Pollock, Esq., President, in the Chair.

Excision of the Hip-Joint in Children. Mr. Holmes exhibited to the Society two children, one, a boy, seven years of age, the other, a girl, aged ten, in whom he had excised the hip-joint in the course of the present year; and a dissection from another successful case, in which the child had died a few months after the operation, of inflammation of the lungs, accidentally contracted. The latter preparation had been exhibited at the Pathological Society, and will be found more fully described in the 14th volume of their *Transactions*. The notes of the cases were given in the *Lancet* for Nov. 5.

Mr. Holmes remarked that his object in this communication was rather to show what the results of successful excision of this joint are, than to discuss the general question of the propriety of the operation: he, therefore, merely dwelt so far on the latter subject as to insist that there are conditions for which excision holds out a prospect of cure where natural cure is hopeless; and in these cases the time required for recovery after operation is far less than that required for the natural cure, while the joint which is left by it is more useful.

In the case of the boy, there had been extensive abscess, reaching nearly to the knee, and the child was rapidly sinking under the profuse suppuration at the time of the operation, which was performed in February last. At the operation, the femur was divided through the trochanter, and the acetabulum, which was ulcerated, was scraped out. Recovery was comparatively speedy. The boy has been going about for some time, and has lately been walking on a high boot. All the wounds have long been soundly healed; there is motion in every direction, he can walk with a slight limp for a considerable distance; and his gait is daily improving, as he becomes more accustomed to his boot. The shortening is about one inch and a half.

In the other case, that of the girl, there was great distortion at the time of the operation, much shortening, and very loud crepitus on rotating the limb. The head of the femur was lying loose in the joint, and quite denuded of all soft parts; there was also a portion of the neck of the femur lying loose in the joint, and the surface of the remaining part of the femur was ulcerated; consequently a natural cure was impossible. The acetabulum was healthy. The recovery was rapid, the operation having been performed in June, and the child having been about now for some weeks. It is only very lately, however, that she has been fitted with a high boot, so that she walks awkwardly as yet. The shortening, also, is greater than in the former case—about two inches—but the range of motion is equally extensive.

Most probably, in both these cases, the same state of things existed as in the dissected preparation, where the end of the femur was drawn up into the joint by the common tendon, and united to the acetabulum by numerous bands of adhesion, allowing free motion in all directions. A perfect capsule of fibrous tissue surrounded this new articulation.

In reply to a question, Mr. Holmes said that he had never performed the operation, except there was abscess, and unless bony crepitus was heard on pressing the joint-surfaces together.

Aneurism of the Arch of the Aorta. Dr. Way brought forward a case. The subject of this disease was an English merchant who, in the spring of 1861, and whilst residing in Buenos Ayres, sustained a severe concussion of the thorax. His horse falling, he was thrown from the saddle, and fell with violence on the chest. He was not aware of having sustained other injury than a severe shaking; but in the summer of the following year he began, whilst on a voyage to England, to suffer pains which were at times intense, and were referred to the chest, shoulders, and arms. In October of 1863, the existence of an intrathoracic aneurism was ascertained. In November, when he first came as a patient under Dr. Way's observation, a large pulsating swelling of the chest was apparent, its centre at the level of the third costal cartilage, and vertically in a line with the left sternoclavicular articulation; it presented all the characters of an aneurismal tumour. The patient was the subject of severe and paroxysmal pains; sleep was only procurable by the aid of opiates; there was loss of appetite, feeble voice, and great general prostration. At this point in the history of the case, the patient consented to the continuous application of ice, with a view to the solidification of the tumour; and, aided by the valuable counsel of Dr. Herbert Davies, this plan of treatment was carried out perseveringly during a period of upwards of six months. A recumbent posture on an Alderman's bed was adopted, and absolute rest maintained. From the commencement of this treatment to within a few weeks of the patient's death, there was an entire remission of the painful symptoms. The tumour became flattened, firm, and the pulsations less apparent; the general health improved, and the voice regained its natural power. In June last, after an attack of cough with expectoration of a pneumonic character, he was seized with symptoms which indicated a spasmodic closure of the glottis. These recurred at intervals; the inhalation of chloroform (practised at the suggestion of Mr. Christopher Heath) afforded great relief to these symptoms; others, however, which seemed to proceed from a mechanical closure of the windpipe supervened, the dyspnœa became extreme, and the patient sank exhausted on the 10th of July last.

On *post mortem* examination, there was found on the left side of the thorax an aneurismal sac, reaching from the level of the third rib to the cricothyroid membrane, measuring six inches from base to apex, and thirteen inches in circumference; the wall of the sac was formed in front by the remains of the sternum and three upper ribs and their cartilages, these having become much eroded and absorbed. Posteriorly, pressure on the trachea had led to absorption of portions of its three upper rings, and a nipple-like projection of the mucous membrane narrowed the calibres of the tubes, and formed the only boundary at that that point between the windpipe and the contents of the aneurismal sac. There was no erosion of the bodies of the vertebræ, or of the ribs at their vertebral extremities. The aneurism commenced at a point two inches above the origin of the aortic arch, with which it formed a slit-like communication, extending so far as the origin of the left subclavian artery. The sac was occupied by a mass of coagula, hard and decolorised in front, semifluid and dark in colour on the posterior aspect. The vagus and recurrent laryngeal nerves were involved on the left side in the wall of the aneurism, and the latter nerve was greatly stretched and flattened. There was much œdema of the whole of the soft parts about the rima glottidis. There was some hepatisation of the base of the right lung. The left (as well as the heart and other viscera) was healthy.

Correspondence.

CAUSTIC POTASH IN ECZEMA.

Letter from Erasmus Wilson, Esq., F.R.S.

Sir,—Your correspondent "Enquirer" asks of me three questions in reference to my recommendation of caustic potash in eczema.

It must be premised, that the case under treatment is one of chronic eczema, attended with thickening and induration of the skin; the thickening and induration being occasioned by serous infiltration into the tissues of the corium; and the intention of the remedy to cause the exudation of the serous lymph from the infiltrated tissue. In such a case, I should pencil the surface with a solution of equal parts of potassa fusa and water. The pain is burning and severe, but ceases at the end of a quarter of an hour, and is followed by a sense of relief. The pain is by no means unbearable. In a few seconds after the application, a gelatinous-looking exudation appears upon the surface of the skin, sometimes in such abundance as to require to be absorbed by means of a piece of dry lint; after which, the part should be dressed with the oxide of zinc ointment. The repetition of the solution may be made at the end of a week, if the skin retain its hardened and thickened character; and again with a similar interval, until the eruption is cured.

I may observe, that the remedy is not suitable for

a large surface, nor for an acute stage of the affection; and that the blistered part should be dressed after the operation with the oxide of zinc or basilican ointment spread on lint. I am, etc.,

ERASMUS WILSON.

17, Henrietta Street, Cavendish Square, Dec. 6th, 1864.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your affording me space to lay before the Poor-law Medical Officers the following Bill, in order that they may give it their serious consideration prior to the meeting of Parliament. It will be seen that I have thrown upon the General Council of Medical Education, in conjunction with the Poor-law Board, the responsibility of fixing our salaries, which, I trust, will be the means of preventing the opposition of the Guardians to the Bill. I hope my medical friends will not object to the establishment of dispensaries in all densely populated places, as I feel sure it will not only be beneficial to the poor, but that it will tend to elevate the Poor-law medical officer in the opinion of the public, and save him a vast amount of time, which might be far better spent than in dispensing medicines.

I am not at present prepared with a member of Parliament to take charge of the Bill; if, therefore, any Poor-law medical officer can induce an honourable gentlemen to do so, and will communicate with me on the subject, I will furnish all requisite information. I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, Dec. 5th, 1864.

A Bill on the subject of Poor-Law Medical Relief, with a view to secure to the Poorer Classes the most efficient Medicines, and to the Poor-Law Medical Officers an uniform and equitable rate of payment.

WHEREAS it is expedient to alter and amend the laws relating to the Medical Relief of Poor Persons in England and Wales: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows.

1. That within six months after the passing of this Act, it shall be the duty of the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, to lay down an uniform system of medical relief for the poor.

2. That the Poor-Law Board shall order the establishment of dispensaries in all those parts of unions, incorporations, and parishes under Local Acts, where the population resident in an area, the diameter of which is less than four miles, exceeds ten thousand in number, and when they deem it expedient, may unite the medical departments of two or more unions, incorporations, or parishes, for the purposes of this Act.

3. That in unions, incorporations, and parishes under Local Acts, or parts of one or the other where the population is much scattered, the Poor-Law Board may allow the Poor-law medical officers to find medicines for the sick poor, and shall direct the Guardians to pay them, in addition to their salaries, such sum or sums of money as the Poor-Law Board, under the advice of the Medical Council of Education and Registration, shall advise.

4. That the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, shall fix the salaries of all the Poor-law medical officers, whether union, parochial, or under Local Acts in England and Wales, on an uniform and definite principle, especial regard being had to the number of sick poor attended by them, and the distance to be travelled.

5. That the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, shall draw up a list of cases for which extra medical fees shall be paid, and also fix the amount of money which shall be allowed for each case on such list; but should the Guardians be desirous to commute the extra medical fees, they may be allowed to do so, on making a triennial calculation of the amount of fees which have been paid during the preceding three years, and adding them to the salary; but where the fees have already been commuted, that then a calculation of the cases where fees would have been payable, but for the commutation, shall be made, and the amount added to the salaries.

6. That all medicines found by Boards of Guardians or their medical officers, all salaries, and all extra medical fees, shall be paid for out of such moneys as shall be annually voted by Parliament for the purposes of medical relief and by the Boards of Guardians, in equal shares and proportions; or, in default of any parliamentary grant for the purpose, then the whole payment shall be an union charge.

7. That the Poor-Law Board shall annually lay before Parliament a classified report of the diseases treated by the Poor-law medical officers in each union, incorporation, or parish under a Local Act, in England and Wales, and also the number of deaths occurring in each class.

8. That the statutes now in force, or rules, orders, and regulations of the Poor-Law Commissioners or Poor-Law-Board, or parts of either one or the other, which are contrary to the true intent and meaning of this Act, shall be and they are hereby repealed and rescinded, and from and after six months from the passing of this Act, shall have no force or effect; but nothing herein contained shall prevent the Poor-Law Board issuing any order or orders, or making any rule or rules, or regulations, for the better carrying out the true intent and meaning of this Act.

THE NEW INDIAN MEDICAL WARRANT.

SIR,—Your correspondent, "A Retired Surgeon-Major," seems to have been guided by his feelings rather than his judgment.

The question of relative rank is not raised in Sir Charles Wood's dispatch to the Governor-General at all. It is obviously not a question which can be handled by the Secretary for India until it has been determined by the Horse Guards and War Office. When Sir Charles Wood withholds from Indian medical officers any boon of this kind which has been conceded at home, he may cry out, but not before. Questions of rank can only be settled with the consent of the highest military authority in the kingdom; and the battle must be fought, not at the India Office, but at the Horse Guards.

Again: it is true that Indian officers always had Royal Commissions; but the "Retired Surgeon-Major" forgets to add that those commissions had effect "in India only"; whereas the new commissions hold good all over the world.

The Medical Funds of India were, no doubt, noble institutions, and it is to be regretted that Her Majesty's Government should have interfered with them; but the "Retired Surgeon-Major" does not tell you that *military* funds in India are abolished also, and that there is nothing to prevent a provident man

making a provision for his wife out of the liberal pay now allowed.

Your correspondent says: "There is not a word about furlough pay to Europe." Is it possible that this gentleman, who undertakes to advise his younger brethren on the choice of a career, can be ignorant that this has already been settled in an extremely liberal manner by a previous dispatch?

A little further on, he says that, "in the British service, sick or private leave counts for pension." If this gentleman knew anything of the British service, he would know, first, that very little "private leave" is to be had in the British service; secondly, that if an officer is sick for more than a month or two at a time, he is at once put on half-pay, when not an hour counts for service or pension.

Will you allow me to ask your correspondent where he will find any service in the world that will give a man £220 a year for seventeen years' service? In contrasting the old and the new scales of pension, your correspondent ignores the fact that, if a medical officer has served a tour as deputy inspector-general, he gets £250 a year *over and above* what his *time* entitles him to; if an inspector-general, he gets £300 extra. Thus an officer who has served twenty-seven years, including five as an inspector-general, can now retire on a pension of £806 a year.

Once more. Your correspondent entirely forgets to notice that, under the old rules, a medical officer, if absent for *one day* from his charge, was subject to heavy stoppages. Under the new, he enjoys a liberal scale of "unemployed pay".

I am, etc., D. F. G.

TREATMENT OF PARTURIENT WOMEN.

Sir,—In controversy, it is of the utmost importance to keep clearly in mind the subject to be discussed; to define closely the terms employed; and, above all, to exclude any matter irrelevant to the one point at issue.

In the recent discussion, as to what is the proper diet for a woman during child-bed, I hold the inquiry, as to whether parturition be a physiological process or a disease, to be an instance of such irrelevant matter; for not only does it open out to us new questions for settlement, such as, what is a natural process and what a disease? where does the one end and the other begin? etc.; but, what is of more importance, it leads us to connect our ideas of treatment, be it medicinal or dietetic, with such processes or diseases, rather than with the special indications presented by the patient under our care. What we have to do is, to treat our patients, not their diseases. Take an average case of a lying-in woman just delivered, average age, average strength, average pregnancy, average labour, and what do we see? and what do the principles of medicine teach? We find the entire economy to have undergone a change; depression has followed on action; rest succeeded labour; one set of organs, the uterine, is gradually subsiding into tranquillity; another, the mammary, as gradually arising into activity; the various bodily functions, digestion amongst them, are all, more or less, suspended; tired nature is, as it were, seeking her therapeutical restorer, physiological rest. During this stage, is not a light diet as most rationally indicated, as it is found by experience to be by patients most constantly desired? In the course of a few days, sometimes sooner sometimes later, reaction ensues, demanding a gradually increasing supply, both in quantity and quality of nourishment; so that, before the end of the first week, the usual diet of health may generally be resorted to.

On either side of such an average example as this, a wide range of cases is to be met with, characterised, on the one hand, by plethora and congestion, and, on the other, by anæmia and debility; and it would be as criminal to order strong food for the former, as it would be to insist on slop-diet for the latter. If the movement of Dr. Graily Hewitt be only negative in its aim—if it be instigated for the purpose of overthrowing the notion that woman during childbed always requires a low diet—all very well; but if it be intended to establish the opposite—viz., that, under such circumstances, she invariably requires a liberal diet—let us beware lest, while endeavouring to avoid Scylla, we run into Charybdis. Each dogma would be as unsupported by reason and experience; as, if acted upon, it would lead to baneful results. Of the two, I confess, I lean rather to under- than over-feeding. The symptoms indicative of want are generally, by those on the look out for them, readily understood, and their remedy easily administered. Let us do nothing by rule. Let us remember that, as meddlesome midwifery is bad, so a meddlesome interference with the dictates of nature as to the diet of the parturient woman is bad also.

I am, etc., J. W. W.

[Our correspondent seems to us to have hit the just—the physiological—*milieu*. We are surprised that this side of the question has been so little regarded. So long as the fœtus is *in utero*, its organic processes are in active operation, and at the expense of the mother's blood. The mother, not only has to provide for the nutrition of her own body, but she has to supply materials for the vigorous development of another body. But the moment the child is separated from the mother, that large supply is no longer needed, and is in fact suddenly arrested. Between this moment and the moment when the mother yields a full supply of milk to the child, there is a complete revolution effected in her physiological state, what might naturally be called a moment of repose. Editor.]

Letter from Thomas Pope, Esq.

Sir,—Mr. Legge will have it that pregnancy is not a disease; but what says Milton?

> "Of that forbidden tree, whose mortal taste
> Brought death into the world, and all our woe."

And he proposes what he thinks a puzzle—a definition of the words disease, disorder, and the French word malady; to all of which he assigns different meanings, whereas they are all synonymous, and nothing more easy of solution. Ease, order, and *bon-à-Dieu* are blessings; but their opposites are curses—diseases. This attempt to mystify leads him to ignore syllogism, which tells us that all maladies must be diseases. He then says: "If, then, parturition be a disease, so must micturition and defæcation be diseases also." Can this be logic? Healthy micturition and defæcation are pleasant; disease is painful; therefore healthy micturition and defæcation are not diseases. Strangury and tenesmus are painful; disease is painful; therefore strangury and tenesmus are diseases.

I do not coincide with Mr. Legge's concluding paragraph; and so far am I from anticipating that the justly celebrated trio with which he concludes will condemn my advocacy, I flatter myself they will even join the phalanx of veterans.

One word more, not only to Mr. Legge, but to all those who use the abdominal bandage immediately after delivery. With this custom I have never complied, from a conviction that it could not be beneficial, more particularly where the superincumbent parts above the pelvic, and in part hypogastric con-

tents, are more or less in excess. How can the uterus and its appendages, the bladder, and rectum, be advantaged by their being forced down thereon? Is there not danger of procidentia uteri, to say nothing of undue pressure of the ovaries, etc.? My idea is, that the custom would be more honoured in the breach than the observance.

Hoping my professional brethren will give me credit for my sole motives in this controversy, the good of the better part of our nature, and the advancement of our noble profession,

I am, etc., THOMAS POPE.

Cleobury Mortimer, Shropshire, December 3rd, 1864.

MEDICAL EVIDENCE IN LAW COURTS.

LETTER FROM RICHARD THURSFIELD, ESQ.

SIR,—I have for many years been subjected to the attacks of Mr. Frederick Hezekiah Hartshorne of this town; but as they circulated only in the neighbourhood in which we were both well known (for I was in full practice here before he was born), I invariably treated them with silence. I should have treated his letter of the 1st instant with the same indifference, but for the remarks you have deemed it fit to make as editor.

I shall forbear detailing Mr. Hartshorne's exhibition in the Madeley County Court, against a poor man, his own tenant, and his next door neighbour; nor will I describe the state in which I found the little boy who had met with the accident. Mr. Hartshorne, in his letter, states that I attended the child immediately after he had withdrawn from the case. This is simply incorrect. My assistant, Mr. Onslow, was sent for about 11 A.M. on the day following the accident. He refused to go, in consequence of my express orders, long ago given, that he never interfered with Mr. Hartshorne or his patients in any way. They sent twice again; and he went on being told the last time that Mr. Hartshorne was no longer in attendance. On my return home, he told me the parents wished me to see the boy. I refused to go; but, when he returned, he said the wife told him Mr. Hartshorne should not attend the child again, and that it was very unkind of me to refuse to go, and, if I would not, she would send over Severn for another surgeon. I then went; and I may remark here that I had occasionally attended the family; and had for years attended the families of both her husband and herself. Do you still think I was in error? The tale of the lady, I know nothing about.

At the hearing of the case brought by Mr. Hartshorne against the father of the child, for the recovery of his bill, I was in the court in my official character as high bailiff; and being called upon to give evidence (of which I had had no previous notice, and which I was compelled to do under a fine of £10), I answered most of the questions put to me; but the evidence I gave was very different in effect to that quoted by Mr. Hartshorne. I gave no evidence whatever as to the treatment of the child by Mr. Hartshorne, or the fee he ought to charge for his services. I purposely abstained from stating any opinion on these points, for the reason stated in your remarks; and, before leaving the court, I was complimented, both by the judge who tried the case, and the registrar of the court, who was present, and who is Mr. Hartshorne's brother-in-law, upon the very fair and proper manner in which I had answered the questions put to me.

I trust to you to insert this in your earliest publication; and, as I have neither time nor inclination to enter into a paper war with any one, much less with Mr. Hartshorne, I shall treat any further communications from him with the silence and contempt I have hitherto done, with this single exception.

I am, etc., RICHARD THURSFIELD.

Broseley, Shropshire, Dec. 13th, 1864.

[Our remarks last week were made on the statement of Mr. Hartshorne; viz., that Mr. Thursfield had said in the County Court, "that, under the circumstances, £3 was a sufficient payment." Mr. Thursfield denies that he gave any evidence whatever as regards the fee. Accepting his contradictions as true, we feel bound to answer his query by saying, that we do not consider him in error in the matter. EDITOR.]

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on December 8th.

Clerke, Jonathan, Dublin; diploma of membership dated April 18, 1828
Forbes, John, Royal Crescent, Notting Hill; April 10th, 1827
Garner, Robert, Stoke-upon-Trent; March 4, 1831
Tweed, John James, Upper Brook Street; July 25, 1842
Wallis, Frederic, Bexhill, Sussex; December 16, 1842

UNIVERSITY OF OXFORD. The degree of M.B. was conferred on the following gentlemen on Dec. 8.

Church, William Selby, Christ Church
Griffin, Frederick Charles Griffith, Lincoln College
Paxton, Francis Valentine, Christ Church
Williams, Charles Theodore, Pembroke College

APOTHECARIES' HALL. On December 8th, the following Licentiates were admitted:—

Allen, Bryan Holme, University College Hospital
Bullmore, Charles Forrester, Falmouth
Carnley, Vaughan, Church Street, Barnsley
Collier, Thomas, Bridgend, Glamorganshire
Dove, John Reuben Bathurst, London Hospital
Manser, Frederick, Chatham
Peirson, George Brigg, Sherburn, Yorkshire
Spooner, Charles Henry, Newington, Surrey
Spyers, Thomas Charles, Faversham, Kent
Wiltshire, Thomas, Abingdon, Berks

At the same Court, the following passed the first examination:—

Goodall, Joseph, St. Bartholomew's Hospital
Langdon, George Charles, St. Bartholomew's Hospital
Sarjent, James Forbes, St. Mary's Hospital
Wright, Edward Seymour, London Hospital

APPOINTMENTS.

ARMY.

ROBERTSON, Surgeon H. F., 40th Foot, to be Staff-Surgeon, *vice* J. E. Young, M.D.

YOUNG, Staff-Surgeon J. E., M.D., to be Surgeon 40th Foot, *vice* H. F. Robertson.

ROYAL NAVY.

BROWN, Allan, M.D., Surgeon, to the *Blenheim*.

MILITIA.

FRANCIS, A. O., Esq., to be Assistant-Surg. 1st Derbyshire Militia.

DEATHS.

BLYTHMAN. On October 20th, at Rio de Janeiro, on his passage from Monte Video, aged 25, Frederick David, third son of *Robert O. Blythman, Esq., Swinton, Rotherham.

*KIRKES, William S., M.D., at 2, Lower Seymour Street, aged 41, on December 8.

MANN, George Smyth, Esq., Deputy Inspector-General of Hospitals, Bengal Presidency, at Dacca, aged 47, on October 31.

SMITH. On December 5th, at Brompton, Lady Smith, wife of Sir Andrew Smith, K.C.B.

THOMPSON. On December 4th, at Jarrow-on-Tyne, Sarah Jane, wife of Robert F. Thompson, M.D.

TURTLE. On December 10th, at 9, Colet Place, Mary Gude, wife of Frederick Turtle, M.D.

Mr. Brodhurst has been nominated a Foreign Member of the Academy of Sciences of Rome.

Testimonial. At the forty-second anniversary dinner of the Loyal Brunswick Lodge, Brighton, Mr. Richard Rugg was presented with a massive silver loving cup, on resigning the office of surgeon, an appointment which he had held for nearly thirty years.

Sewage of Towns. A deputation, consisting of parliamentary and municipal representatives of Birmingham, Nottingham, Derby, Wolverhampton, Coventry, Preston, and Bath, had an interview with the Right Hon. Sir George Grey at the Home Office, on Saturday, on the subject of the utilisation of the sewage of towns, and preventing the pollution of rivers and streams.

A Political Tapeworm. Somebody said that the Schleswig-Holstein question was the political tapeworm of Germany, interminable and always growing again. Felix mas (Prince Felix Schwarzenberg) and grenade bark had failed to remove it, but at last it had been effectually expelled by a dose of oleum Düppellii.

Bequests. By will Miss Harman, of Tunbridge Wells, leaves to her medical friend, Robert Duncan, M.D., £200; to the Tunbridge Wells Dispensary, £50; to the Maidstone Ophthalmic Hospital, Brompton Consumption Hospital, Eye Infirmary, and Blind Charity, 19 guineas each. The Rev. John Dight, of Folkestone, has bequeathed to the societies in London and Paris for the Prevention of Cruelty to Animals £100 each, and a like legacy to the Devon and Exeter Hospital. Mr. Underwood of Norwich leaves to the Norfolk and Norwich Hospital and the Cumberland Infirmary, each £200.

Anti-Poisoning Bottles. Mr. Mumbray, of the Pharmaceutical Society, says: "Almost without exception, the whole tribe of inventors have been quietly shelved or altogether ignored. The only really practical 'poison-bottle' I have seen is that invented by Messrs. Gilbertson and Sons. Its form being a wedge, it cannot be stood upon a shelf in company with other bottles, consequently can never be mistaken for another. The shape, too, is very advantageous, as it does not allow the contents to run out, even when uncorked; this is no trifling advantage, obviating as it does the possibility of an upset and damage resulting from corrosive solutions, as iodine, etc.

Royal College of Physicians of Edinburgh. At the annual election meeting, held on Thursday, December 1st, 1864, the following office-bearers were elected for the ensuing year. *President*, Dr. J. G. M. Burt; *Council*, Dr. D. Craigie, Dr. W. Seller, Dr. J. Moir, Dr. R. B. Malcolm, Dr. Alexander Wood, Dr. W. H. Lowe; *Vice-President*, Dr. D. Craigie; *Examiners*, the President, Drs. Craigie, Seller, Wood, Douglas, R. Paterson, Wright, Keiller, Pattison, Cumming, Duncan, J. W. Begbie, Haldane, and Sanders; *Treasurer*, Dr. S. Somerville; *Secretary*, Dr. D. R. Haldane; *Librarian*, Dr. J. M. Duncan; *Curator of Museum*, Dr. T. S. Wright; *Clerk*, Mr. C. Douglas, W.S.; *Auditor*, Mr. K. Mackenzie, C.A.; *Under-Librarian*, Mr. J. Small; *Officer*, T. Marshall. The election dinner took place in the evening, in the hall of the College, in Queen Street, when among the guests present were, the Right Hon. the Lord Provost, his Grace the Duke of Argyll, the Lord Advocate, Lord Neaves, Mr. Whyte Melville, Mr. Bell (President of the Royal College of Surgeons), Dr. Ritchie (President of the Faculty of Physicians and Surgeons of Glasgow), Professors Moir and Spence, Dr. Currie, C.B., the medical officers of the garrison, etc.

OPERATION DAYS AT THE HOSPITALS.

Monday.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Tuesday. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Wednesday... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.— London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

Thursday.....St. George's, 1 P.M.—Central Londo Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

Friday..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

Saturday..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical Society of London, 8 P.M. Mr. Hunt, "On the Present State of Medical Logic."

Tuesday. Pathological Society of London, 8 P.M.—Anthropological, 8 P.M.—Statistical.

Wednesday. Geological.

Thursday. Royal.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, *37, Great Queen St., Lincoln's Inn Fields, W.C.*

Communications.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

T. F.—The very interesting account of the meeting of German Naturalists and Physicians, lately published in these pages, is from the pen of our talented associate, Dr. Thudichum.

O. T.—The French Medical Association has nothing in common with our own Association, except the name. It is simply a Provident Association, precisely of the same kind as our own Provident Fund. To compare the two Associations, and to draw from the comparison odious and unjust inferences, is necessarily the work either of malevolence or ignorance.

The Establishment of a Branch of the Association at Newcastle will, we trust, be considered a satisfactory reply to those of our friends (!) who have lately exhibited so much anxiety concerning the state of health of our Association. We can assure them that, notwithstanding all their prescriptions and their much gratuitous advice, we are in excellent health, and never stronger or more vigorous in constitution. Their attentions, etc., sometimes remind us of the anxiety occasionally shown by expectant heirs.

An Advertisement.—Our attention has been called to the following advertisement in a Welsh paper:

"Wanted.—A plain, sober, industrious young man, as an assistant, to visit and dispense. No fop wearing rings will answer the purpose. Applications to be made, stating salary, to Mr. ——, Surgeon, ——."

Bleeding in Old Times.—Guy-Patin was a ferocious bleeder. In one of his letters, he says that he bled one M. Mantel thirty-two times for continued fever. The brother of Bélin, who had the ague, was bled four times; and then, in a fresh attack, eight times, and purged violently at the same time. His own son, who had fever, Guy-Patin "recovered by the aid of twenty good bleedings from the arm and foot, together with a dozen strong doses of purgatives." This son, by the way, died at 41, of consumption.

TREATMENT OF CLEFT PALATE.—SIR: Will you allow me a few remarks suggested by your notice of the Odontological Society in your last number. I think there must have been a misapprehension on your part, which is shown in the closing sentence of that article. The statements made to me since the meeting by many of the most influential members present will certainly not bear out that inference. With all due modesty, I must claim for the apparatus which I have constructed, that it fulfils to far greater perfection the requirements set forth by Mr. Sercombe. It possesses all the simplicity that even a child can need to keep it in order. It is formed and [illegible]ised in a metallic mould, which becomes the property of the patient, and duplicates can be multiplied indefinitely for a [illegible]ere trifle at any rubber factory, without calling in the aid of the dentist. I think, therefore, the question of durability not worth the discussing. Mr. Sercombe's imputation, that but few dentists possessed the skill to construct my instrument, pays but [illegible]oor compliment to the profession in this country. I must, wi[illegible] my pride for America, claim for my British friends that the majority of them possess all the ability necessary to that end; certainly, as many as would ever be interested enough in the matter to attempt to carry it out. By inserting the above in your Jo[illegible]RNAL, you will correct a wrong impression conveyed, I think, by the former article. I am, etc., NORMAN W. KINGSLEY.

[illegible] Manchester Square, Dec. 12th, 1864.

*** The condensed report of my remarks at the recent meeting of the Odontological Society, which appears in your last number, contains two inaccuracies, which, with your permission, I will correct. I expressed my belief, as you state, in the hereditary nature of the deformity; but I did not state that in all instances I had been able to trace inheritance. I said that I had been able to do so in the majority. The second inaccuracy is, that I am reported to have said that Dr. Kingsley's apparatus was adapted for those rare cases in which the soft palate was so far destroyed that no moveable part remained. This is exactly the reverse of what I said. I said that Dr. Kingsley's appliance was limited in its application to congenital fissure of the velum; that it was of no use where all moveable parts had been destroyed by ulceration; whereas mine, which I was comparing with Dr. Kingsley's, was just as adaptable to these cases, which appear to me the most difficult of all to meet, as to congenital fissure.

I am, etc., EDWIN SERCOMBE.

49, Brook Street, W., December 13th, 1864.

THE SILENT FRIEND SYSTEM SUPPORTED BY DRUGGISTS.—SIR: I beg respectfully to call your attention to the enclosed advertisement, which is taken from the *Manchester Guardian* of December 2nd, 1864. If respectable druggists in the principal streets of large towns furnish such advertisements, and take such agencies, I think it behoves the profession to treat them accordingly. It would well become the Medico-Ethical Societies in various parts of the kingdom to watch the proceedings of druggists who lend themselves to the diffusion of quack medicines at the same time that they seek to profit by the patronage of legitimate practitioners. I am, etc., AN OBSERVER.

Manchester, December 5th, 1864.

"THE vigour of youth restored in four weeks, by Dr. Ricord's Essence of Life. This wonderful agent will restore manhood to the most shattered constitution in four weeks. Success in every case is as certain as that water quenches thirst. Sole agents in Manchester: Richards (late Ingham), chemists, 46, Market Street."

QUACK ADVERTISEMENTS.—SIR: In an excellent article of the *Times*, these words occur:—"It is hard to believe that powers do not already exist to put down such exhibitions"; namely, quack bills and quack advertisements. Such powers do really exist, although they seem to be but little known. Act 18, George II, c. 15, by embodying the Charter of 5, Car. 1, enacts "That whensoever any empiric hereafter, or any such person, whether being a native subject of the kingdom of England or an alien, and ignorant of the art and science of surgery, and not approved of or lawfully admitted to practise surgery, shall affix or put out any pictures, bills, writings, or signs, upon posts, outsides, or walls, or other conspicuous place within our said cities of London or Westminster, or either of them, the suburbs and limits thereof, or within seven miles of the said city of London, to call in any persons passing by, travellers, or other persons whatsoever, to have anything done there which, according to our royal intention above declared, belongs to skilful, allowed, and admitted surgeons; then it shall and may be lawful for the Masters or Governors of the mystery and commonality aforesaid for the time being, by themselves or any of their officers whatsoever, to take away, blot out, demolish, and totally cancel all such pictures, bills, writings, and signs, lest our people by any such impostor may be deceived or deluded."

Although it is not to be expected that the President or other officer of the College of Surgeons will blot out or cancel the bills of these empirics or impostors (at least, not in the present day), yet the fact remains, that such advertisements, whether upon walls, or circulated by means of public newspapers, are *illegal*, being a violation of the above Act, and as such, an indictable offence.

The fact of these advertisements being *illegal*, might possibly have more weight with such editors who admit them into their papers, than their outraging all decency, corrupting the morals of the young, and cheating the unwary. It is to be hoped that the recent exposures will cause all respectable papers to cease co-operating with a class of men pronounced as "impostors" by a Public Act of Parliament. I am, etc.,

JAMES GAGE PARSONS, L.R.C.P.Ed.

Bristol, December 5th, 1864.

VACCINATION CERTIFICATES.—A correspondent writes:—"I have recently received from the relieving-officer of this parish three books containing certificate forms for vaccination. One or other of these, he informs me, I am to give to the parents of every child vaccinated by me, under penalty of certain fines in default of so doing; and, in order that there may be no mistake in my mind, he tells me of a case in which a medical practitioner was compelled by action of law to pay such a fine, with, I believe, costs. Can you, sir, inform me if such is really the state of the law on this point, so that medical men holding no parish appointment are compelled to furnish the parish authorities with gratis certificates of the result of the vaccination of their private patients."

Another correspondent, not an union medical officer, has forwarded us the subjoined letter, which has been addressed to the medical men in his district.

"———— Union, 25th November, 1864.

"SIR: I am directed by the Guardians of this Union to call the attention of all the medical practitioners within the Union to the requirements of Section 4 of the Act 16 and 17 Vic., c. 100.

"That section requires the medical practitioner, who shall have performed the operation of successful vaccination on any child, to give a certificate, in the form provided by the Act, that the said child has been successfully vaccinated; *and also to transmit a duplicate of the said certificate to the Registrar of Births and Deaths of the subdistrict in which the operation was performed.*

"It has come to the knowledge of the Guardians, that very few only of these certificates are transmitted to the Registrars, although it is considered essential to the well working of the Compulsory Vaccination Acts that the documents in question should be regularly furnished.

"Some time since, the Guardians of the Cambridge Union preferred an indictment against a medical practitioner who refused to furnish the certificate required; and the result was, that the defendant compromised the case, by furnishing the certificate, and paying five guineas towards the expenses.

"In consequence of the great importance of seeing that the Vaccination Acts are duly carried out, I am directed by the Guardians of this Union to inform you that they think it right thus to draw your attention to the matter; and further, should it become necessary to do so, they consider it will be their duty to take steps to enforce a compliance with the section referred to.

"I am, sir, your obedient servant,

"————, Clerk to the Guardians."

It would appear, therefore, that the certificate is required in England and Wales. The question to which our correspondents refer, has also been agitated in Scotland, which has a Vaccination Act of its own; and a writer in the last number of the *Edinburgh Medical Journal* gives the following questions and official answers thereto.

"*Query.* Am I required to keep books, enter cases of vaccination, and make returns to Board of Supervision, as per Sec. xxi, of such cases as I vaccinate as *medical practitioner*, as well as of such as I vaccinate as *vaccinator*?

"*Answer.* I have to inform you, in reply, that the returns required by the Board of Supervision are intended to include only the cases of paupers and others, vaccinated by the vaccinator in his official capacity, by the instructions or orders of the Parochial Board.

"*Query.* Am I, in terms of the Vaccination Act, Sec. xxiii, bound to transmit, within forty-eight hours, to the Registrar the particulars of any vaccination certificate which I may grant in my capacity of private medical practitioner; or is this only requisite in those cases which I vaccinate as vaccinator?

"*Answer.* I have to state in reply, that in my view of the interpretation of the statute, the provisions of the twenty-third section do not apply to your private practice. "I am, etc.,

"(Signed), "JOS. WALKER, *Secy.*"

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. Mackinder (Gainsborough), 5s.; Dr. Bryan (Northampton), 5s.; G. John Hinnell, Esq. (Thingoe), 5s.

Amount previously announced, £108:4:6. Received at the *Lancet* office, £6:14.

I am, etc., ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, December 14th, 1864.

A PROVINCIAL STUDENT.—The next primary or anatomical and pass or surgical examinations for the diploma of membership of the Royal College of Surgeons, will take place on the 14th and 21st of January respectively; and the preliminary on Tuesday next.

A DR. BENJAMIN JUNG has just published a pamphlet, entitled *Prohibition of Vaccination.* It is dedicated to Dr. Jenner, as follows:—"To the Man-destroyer, Dr. Jenner of England, Importer of Vaccination: Homo vanus et levis, cerebro vacuus et temerarius, mente et judicio carens.

Scientiam profanasti,
Terram perdidisti,
Populum occidisti!"

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 1st of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary.*

Birmingham, December 1864.

COMMUNICATIONS have been received from:—Mr. T. WHARTON JONES; Mr. R. H. MEADE: Dr. W. M. KELLY; Mr. E. SERCOMBE; Mr. R. H. COBBOLD; Mr. W. PARKER; Mr. H. STEEL; Dr. HYDE SALTER; Mr. EDWARDS; Mr. R. W. DUNN; Mr. T. M. STONE; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr. JOHN THOMPSON; Dr. ROBERT FOWLER; THE SECRETARY OF THE ODONTOLOGICAL SOCIETY; Mr. WHITWELL; Mr. R. THURSFIELD; Dr. BOYCOTT; and C. DE C.

BOOKS RECEIVED.

1. On Diphtheria and Diphtheritic Diseases. By J. W. Walker, M.B. London: 1864.
2. Sixth Report of the Herefordshire Medical Association. Hereford: 1864.
3. Handbook of Dental Anatomy and Surgery. By John Smith, M.D. London: 1864.
4. Manual of Materia Medica and Therapeutics. By J. F. Royle, M.D., F.R.S., and F. W. Headland, M.D., F.L.S. Fourth edition. London: 1864.

ADVERTISEMENTS.

Just published, crown 8vo, price 2s. 6d.

The Laryngoscope, Directions for its Use, and Practical Illustrations of its Value in the Diagnosis and Treatment of DISEASES of the THROAT and NOSE. Two Lectures delivered at the Royal College of Physicians. By GEORGE JOHNSON, M.D., F.R.C.P., Professor of Medicine in King's College; Physician to King's College Hosptal.

London: ROBERT HARDWICKE, 192, Piccadilly.

Aërated Lithia Water. — Messrs. BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original Manufacturers under Dr. GARROD'S instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain two grains and five grains in each bottle, either by itself of combined with BICARBONATE of POTASH or PHOSPHATE or AMMONIA.—Also, Potash, Citrate of Potash, Soda, Seltzer, Vichy, and Mineral Acid Waters, as usual.

BLAKE, SANDFORD, and BLAKE, Pharmaceutical Chemists, 47, Piccadilly.

TO PHYSICIANS, SURGEONS, AND DRUGGISTS.

Brown's Cantharidine Blistering TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lyttæ P. L., easily applied and removed, and will not produce strangury or troublesome after-sores. It has received the sanction and commendation of many of the most eminent practitioners in the kingdom.—In tin cases, containing ten feet, 6s. 6d.; and small cases of five square feet, 3s. 6d. each.

BROWN'S TISSUE DRESSING.

An elegant, economical, and cleanly substitute for all ointments as a dressing for Blisters, Burns, etc., and may be called a companion to the above. In tin cases, containing twelve square feet, 1s. 6d. each.

Sole Inventor and Manufacturer, T. B. BROWN, Birmingham. Sold by all Wholesale and Retail Druggists and Medicine Agents throughout the British Empire.

ESTABLISHED 1848.

Mr. J. Baxter Langley, M.R.C.S. Eng. (late of King's College, London), PROFESSIONAL AGENCY, 50, Lincoln's Inn Fields, W.C.

Medical Assistants. — Wanted Immediately, several competent In-door and Out-door ASSISTANTS, qualified and unqualified, for Town and Country. No charge for registration, but references in all cases required. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

Competent Assistants provided without delay, free of expense to the Principals. No gentlemen recommended whose antecedents have not been inquired into. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

Excellent Family Practice in Northamptonshire for transfer. Receipts, about £750 per annum, steadily increasing. Patients wholly of a good class. Opposition small. Three months introduction. Address, "S., 1047," Mr. Langley, as above.

Death Vacancies for Sale.— Several most eligible Death Vacancies in London, with and without Appointments. Well established connexions with open surgeries. With prompt purchasers having ready money at command, liberal terms would be made. Address, Mr. Langley, as above.

Partnerships for negociation.— Mr. Langley is authorised to introduce to several large Practices, professional gentlemen of unquestionable attainments, and possessing capital from £500 to £3000, as Partners, or as Assistants with a view to partnership and succession. Address, as above.

Death Vacancy in Staffordshire. Receipts of the deceased, about £500 a year. Appointments, £100, capable of immediate increase. The Practice has been efficiently kept together. Large house, with garden, stabling, and two acres of land. Rent, £32. The practice has been established seven years, and is situate in a good and improving town. Very reasonable terms would be accepted from a suitable successor. Address, "S., 1043," Mr. Langley, as above.

In the best part of Leicestershire. A well established Practice, capable of complete Transfer. Receipts £400 a year. Appointments £250. Excellent house, rent £45. Terms £400. Apply to "974," Mr. Langley, as above.

In a large Town in Notts.—A well established Family Practice, realising upwards of £1000 a year. Appointments £70. Complete introduction. Good house, etc. The successor should be a graduate of Edinburgh. Address, "1,005A," Mr. Langley, as above.

In a large Village in Devon. A Practitioner in failing health is willing to treat for the succession to his Practice, which has been established nearly twenty years. Receipts, upwards of £400 a year. Appointments, £120. Good house, garden, coachhouse, and land, at a very moderate rent. A great number of good families in the neighbourhood. Premium, £500. Address, "S., 1044," Mr. Langley, as above.

In Surrey.—An Excellent Nu- CLEUS for Transfer upon very easy terms. Double qualifications necessary. Salary from public appointments £140 a year, exclusive of extras. A few drugs and fixtures to be taken, valued at about £50. No premium required. Address, "S., 1,009," Mr. Langley, as above.

In a good Town in a well fre- quented Island on the coast. A Family Practice for sale. Receipts average about £300 a year. The town contains upwards of 10,000 inhabitants, and 70,000 visitors during last season. Premium, 250 guineas. Address, "S., 1,010," Mr. Langley, as above.

West End Practice or Partner- SHIP. £600 a year. Mr. Langley is authorised to negociate for the Transfer of the above, or the introduction of a Partner. Apply at the Professional Agency, as above.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

FARRINGDON DISPENSARY.

NON-MERCURIAL TREATMENT OF SYPHILIS.

Under the care of R. W. Dunn, Esq.

Case I. C. G., aged 49, a single woman, had indulged freely in alcohol all her life, but lived well. She came under my care last June, suffering from constitutional syphilis. She had received no treatment for the primary disease; and when I first saw her, she was suffering from syphilitic psoriasis, attacking principally the face, body, arms, legs, and abdomen. She had ulcerated sore-throat, mucous ulcers on the lips, ulcer of the tongue, and enlargement of the inguinal glands on each side. She had lost hair; and was also suffering a great deal from mental anxiety. I ordered her to take five grains of chlorate of potash in water three times a day; and to apply to the psoriasis an ointment of six grains of nitric oxide of mercury and six drops of creasote to an ounce of lard.

July 7th. She was improving except the throat, which still was ulcerated. I touched it to-day with nitrate of silver; and directed her to continue the medicine.

July 21st. An ulcer had appeared on the right leg. I ordered it to be dressed with the ointment; and the medicine to be continued.

July 28th. She was much better. From this time till September, she went on with her medicine regularly, and was then discharged quite cured. No relapse has since occurred.

Case II. N. S., aged 19, contracted a primary sore some months before he came under my care. He had cured himself by lotio nigra; but had received no internal treatment. He applied to me on October 6th, having a swelling in the right groin, and a rash upon his skin. Upon examination, I found that he had an enlarged gland on the right inguinal region, and syphilitic psoriasis, principally on his body, legs, and arms, slight sore-throat, and loss of hair. I ordered him to paint the gland every other night with iodine paint; to take five grains of chlorate of potash three times a day; and to apply the same ointment as in the former case to the eruption on the skin.

Oct. 13th. The enlargement in the groin was nearly gone; and the eruption much better. He was ordered to continue the remedies.

Oct. 27th. The gland was quite well; the eruption much better. The remedies were continued.

Nov. 24th. He was discharged cured.

Case III. J. J., aged 11 weeks, was the second child of a woman who had been suffering from the same disease. She lost her former child. The present patient had been treated with grey powder and mercurial ointment. Upon examination, I found that the infant had syphilitic psoriasis on its legs, buttocks, and arms; it snuffled much, looked emaciated, with a wizened, old appearance. I ordered it, on Sept. 29th, to take three times a day a teaspoonful of a mixture containing twenty-four grains of chlorate of potash in an ounce and a half of distilled water.

The child was discharged cured on Nov. 24, 1864.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE TREATMENT OF GLAUCOMA, ETC., BY "DIVISION OF THE CILIARY MUSCLE."

Under the care of J. Vose Solomon, F.R.C.S.

[*Concluded from page 598.*]

Case XVI. *Glaucoma. Division of Ciliary Muscle. Temporary Relief. Relapse.* James Taylor, aged 22, a strong and healthy labourer, admitted into the Eye Hospital on Dec. 4th, 1860. Three weeks previously, he went to bed quite well; towards morning, severe aching pain, attended by lacrymation, seized the left eye. At daylight, the eye was found blind, even to firelight. He had not had rheumatism, or gout, or syphilis.

Present State. There was acute external congestion of the globe, attended by a copious serous discharge. The humours were turbid, more especially behind the iris; the pupil was moderately dilated. The eye was blind to the light of day. The eyeball was hard; but not of stony hardness. He had no pain. The light of a lamp, reflected by the ophthalmoscope, failed to penetrate the pupil.

The ciliary muscle was divided at a right angle with the rim of the cornea. A little vitreous humour escaped; the chambers became clear; and the patient could see features.

December 6th, 4 P.M. The eye was examined; the patient said he could distinguish features.

December 9th. The tension of the left was the same as that of the right eye.

December 13th. Vision had improved up to this date. To-day, it was more dim; the humours were turbid. He was ordered to take quinine.

December 21st. There was still considerable turbidity of the humours. Vision was very misty.

December 24th. He was made, at his own request, an out-patient. He attended for several weeks. The hardness returned to the eye; with confirmed amblyopia.

These notes have been abridged from voluminous records taken by Mr. Sidney Proctor, at that time house-surgeon of the hospital, who, like myself, took the greatest possible interest in the case. Unhappily, the result, to our serious disappointment, was precisely the same as in a parallel case which had been recently treated by one of my colleagues with medicines alone.

Case XVII. *Partial Staphyloma of the Cornea cured by Division of the Ciliary Muscle. Relapse. Iridectomy. Permanent Relief.* James Dews, aged 34, collier, was admitted into the hospital on Nov. 20th, 1861, with a large staphyloma of the cornea, the result of an injury thirteen weeks previously. It was at once removed by the knife, and the patient discharged cured on December 4th. At this date, the surface was flat, and there was a good deal of clear cornea above it; behind which it was designed, at a future day, to make an artificial pupil.

On December 21st, he returned to the hospital with the eye much inflamed (catarrho-rheumatic ophthalmia). The new corneal material had yielded to the pressure from the increased secretion, and a large staphyloma was again present. Leeches, and calomel and Dover's powder, at bedtime, were ordered.

December 22nd. Division of the ciliary muscle was performed; much vitreous humour escaped.

December 25th. The staphyloma was cured.

Vitreous humour protruded through the wound up to Feb. 5th, 1862, when it had healed; and the cornea was flat.

Feb. 8th. He was made an out-patient.

Feb. 16th. The staphyloma had returned; and on the 20th, iridectomy was performed.

Feb. 25th. The staphyloma was gone. He had perception of light.

There was no relapse after this date.

CASE XVIII. *Acute Choroido-iritis in a Diabetic Subject. Division of the Ciliary Muscle: no Relief. Iridectomy: Relief to Pain and Tension, etc.* A feeble young woman, aged 26, who was suffering from diabetes (urine of specific gravity 1035), applied at the hospital May 28th, 1861, with acute choroido-iritis. There were great tension and considerable external congestion; the ciliary veins were large; the iris and chambers dull. She had agonising pain. Division of the ciliary muscle was performed. Bark was administered internally; and atropine drops used.

In three days (May 31st), the pupil was of medium size; the chambers were dull; the globe of stony hardness; the conjunctiva thickened. She had great pain. Iridectomy was performed. The forceps brought out a sheet of lymph; after which, the chambers, pupil, and iris, became clear. The conjunctiva cut like brawn. Hot fomentations were applied for a few hours. Beef-tea, eggs, and milk, were ordered.

June 1st. There was less tension; but trifling pain since the operation. The external congestion was gone. No vomiting occurred from chloroform.

June 3rd. There was no pain. The tension of the eye was below normal. The wound was healed. The vitreous humour and iris were turbid. She recognised fingers.

June 4th. The chambers were filled with turbid lymph as on admission. At the upper part of the coloboma, there was a communication between the two chambers. She had no pain; the globe was flaccid. She perceived the shadow of fingers. At her own request, she was permitted to return home. On that day, the iris was recovering its lustre; a sheet of greenish-brown lymph filled the whole of the coloboma, except at the upper part.

June 15th. The iris and humours were bright. Tension was nearly the same as in the fellow eye. She had perception of shadows.

CASE XIX. *Myopia complicated by Glaucoma. Division of the Ciliary Muscle. Blindness and continued Tension. Left Iridectomy. Tension Reduced.* I saw, in June 1861, in consultation with the late Dr. Skerrett, Mrs. B., aged 58, who had been near-sighted all her life. For the last eight months her vision had been failing; it was worse at one time than another. Everything was in mist. With the right eye, small pica was read at six inches, not beyond. The pupil was dilated and fixed. The left eye was blind, except to shadows. Both globes were hard. The irides were dusky grey. The conjunctival rim of each cornea presented patches of redness. In the right eye, the vitreous humour was turbid; the optic nerve was white. The retinal vessels consisted of two short branches; one extended to the nasal side, and one to the inferior part of the fundus. A small staphyloma posticum bordered the lower rim of the right optic (inverted image). The fundus of the left eye did not admit of illumination.

July 1st. Division of the ciliary muscle was performed on the right eye, and iridectomy on the left.

At the end of twenty days, there was slight enlargement of field of vision of right eye. Vision was much the same, but more steady. It did not go and come. Tension was as on day of operation. It then relapsed; and, while I was from home in July, subacute inflammatory glaucoma attacked the eye, and it became hopelessly blind. The tension was as before operation. In the left, the tension was normal.

CASE XX. *Glaucoma: Division of the Ciliary Muscle. No Relief: Amaurosis.* T. W., aged 42, of Dudley, was admitted October 2nd, 1863. The right lens was dislocated into the lower part of the vitreous humour. Tension 2½. On the 13th, the lens was extracted; some vitreous humour escaped, On October 29th, he was made an out-patient. Tension 2½.

November 10th. Tension was diminished.

November 17th. A pea-issue was placed in the right arm.

November 24th. Tension 3. "Division of the ciliary muscle" was performed.

December 8th. He was readmitted with glaucoma of the left eye. Its conjunctiva was injected. Tension 2. He had iridescent vision. The right eye was excised.

December 13th. Iridescent vision was gone. The iris was convexed; the pupil dilated, but not widely. Tension 2. There was no cupping of the optic nerve. A large paracentesis corneæ was performed.

December 31st. The medical treatment (leeches, and mercury to slight ptyalism) had had no effect. Tension 3. The conjunctiva was injected; the pupil dilated and muddy; the iris dull and of leaden hue; the ciliary vessels much gorged. In order to relieve them, "division of the ciliary muscle" was performed. A free discharge followed, but little blood. The vitreous humour was still firm.

January 8th. There was no remission of tension; nor improvement of vision, which was limited to perception of shadows. He refused iridectomy, and returned home.

October 1864. He has amaurosis, and is unable to earn his living, or take care of himself in the street. He has not done a day's work since the accident.

THE TREATMENT OF GLAUCOMA BY IRIDECTOMY.

Under the care of J. V. SOLOMON, F.R.C.S.

CASE XXI. *Congenital Myopia: Glaucoma (choroido-sclerotitis?) after Fever: T 2½. Iridectomy: Relief. Recurrence of Tension.* Sarah Emery, healthy, aged 8, of Shenstone, near Lichfield, was admitted August 16th, 1864. She read Roman type (Jäger's No. 20) when held at from four to five inches from the eye; nothing smaller. She experienced flashes and iridescent vision. Tension 2—2½. The optic discs were uneven, and of a greenish grey colour. The retinal circulation was anæmic. On the inner side of the discs was a staphyloma. The value of the vision in the two eyes was equal.

August 19th. Iridectomy of the upper circle was performed on both eyes, in the presence of Dr. Anderson and others, without the slightest accident.

August 24th. The wounds were healed; the eyes free from irritation. She was allowed to leave her bedroom for the day-ward.

August 28th. She made out No. 16. The photopsy was undiminished. *Tension was normal.*

September 2nd. She was made an out-patient.

September 13th. Tension 2½; there was less photopsy. She read canon type (No. 18), and a few words of 16 (Jäger's two-line great primer). On examining to-day the patient's sister, aged 14, I found that she was myopic, and her eyes presented tension 2. She had a small staphyloma posticum in each eye. The optic discs were of a yellow shade. Photopsy was present. With concave 36", brilliant type (No. 1) was read with facility. My operation would greatly improve her.

September 27th. The patient read 16 well. Double pica, or No. 14, was impossible.

October 25th. Tension 1½—2. She read with difficulty 16. For the last month, the photopsy

had diminished. The retinal circulation was improved (?).

Case xxii. *Glaucoma of the Right Eye, of three years' duration. T 3. Iridectomy in* 1858. *Vision the same in* 1864 *as before the Operation. Glaucoma of the Left, of seven years' duration, ending in Disorganisation. Enucleation of the Globe on the same day as the Iridectomy.* Mr. Jas. C., aged 59, an ornamenter of papier maché, was operated upon on Whit Monday, 1858, for chronic glaucoma, by iridectomy. A broad piece was removed from the upper part of the iris. The left globe, which was blind, hard as stone, cataractous, and disorganised, was enucleated at the same time; chloroform being used. By this treatment, the iridisation, recurrent obscurations, photopsy, and stony hardness of the globe, which were present on admission, were removed. The right eye had been declining for three years, and the left seven years, before the iridectomy. He could not fix the date of loss of useful sight in the left eye.

November 7th, 1864. The patient has been obliged since the operation to wear a fourteen-inch convex glass, which is blackened over, except for a space in the centre of two lines' diameter. The eyeball being prominent, and the lids very wide apart, the upper part of the cornea is not covered. Hence circles of dissipation are formed on the retina; and vision is confused, without the use of stenopœic spectacle.* The field of vision, on the inner or nasal side, is obstructed by a dark cloud; on the outer, by "a gloom". A little above and below the horizontal meridian, the field is obstructed by "a red shade". Consequently, it is only just in the centre that he sees clearly; and it requires a little time to bring the axis of vision on a line with the transparent circle (pupil) in his spectacle-glass; but, having attained this, minion type can be read fluently. He reads small pica (Jäger's No. 8) for half an hour before fatigue ensues. All these symptoms were present before operation. On testing his field of vision in the usual way, I find he can see only the tip of the finger, which is held in front of the eye. His field of vision is limited to a single spot, of not more than one inch in diameter. The patient, who is an intelligent man, remarked that he considered the vision to be about one-third what it was when perfect. His mode of progression in the street resembles very much that of a blind man.

The lens presents, all round the margin of its anterior surface, circular patches of opacity (pigment ?), of similar size, figure, and density. They have been stationary six years. The optic nerve is small, and of the same colour as the surrounding choroid, except at the blind spot. The retinal veins are small, of good length, and few in number. Arteries invisible. No cupping apparent. The pupil is very large, the greatest width of the iris being not more than three-quarters of a line.

The patient has not done an hour's work since the iridectomy. He considers his visual power to be exactly as it was previous to operation. He is now sixty-three years of age.

Case xxiii. *Great Tension: Contracted Field of Vision: Engorgement of the Choroido-retinal Venous Systems. Glaucoma? Iridectomy. Relief not permanent.* Edward V., aged 33, a clerk from Cumberland, was admitted December 19th, 1863. He was fair, florid, and perfectly healthy, except in his vision. The tension of the right eye was great, but susceptible of some compression (T 2). The field of vision on the temporal side was good; on the nasal, *six* inches. He read brilliant type (Jäger's No. 1); and with ease No. 2. He accommodated for small pica (No. 8) from seven to fourteen inches. The optic nerve was grey. The retinal vessels, which apparently emerged from the nasal rim of the optic disc (inverted image), were much gorged; also the choroid, but less so than in the left eye. The retinal arteries were rather small. There was no pulsation; no cupping. The left eye presented tension 2. The ophthalmoscopic appearances were the same as in the right, but the congestion was much greater. The vessels were of normal length and number. On the temporal side, features were seen as shadows; on the nasal, the form only of the head and face could be discerned. Vision was best when he powerfully converged the globe.

His sight was perfectly good up to seven months previously, when he first noticed aching in the globe from work. Four months before admission, he could read only for twenty minutes at one time. The left eye was most dim. He had had supraorbital pain occasionally, but not severely, for three months. A candle-flame presented a halo. There was no iridescence; no vertigo or headache. It occurred to me, that the ophthalmoscopic appearances were indicative of obstruction in the venous sinuses of the brain. I therefore ordered a seton in the neck, and the administration of iodide of potassium.

On December 25th, while reading, sight failed him altogether.

January 2nd, 1864. The symptoms were as on admission. The patient had come nearly two hundred miles for treatment; and iridectomy might assist in clearing up the diagnosis; and, if the symptoms were not ameliorated, no harm would accrue by performing it on the left eye. Would tension be reduced? A broad iridectomy was made on the upper and outer circle of the iris; fully one-sixth of that membrane was removed close to its origin. The bent triangular knife was passed obliquely through the sclerotic, close to the front of the origin of the iris. No accident occurred.

January 7th. He had acute sclerotitis.

January 14th. He saw face and features more distinctly, when opposite to his nose, than he had yet done. The nasal field was from four to six inches. Tension was diminished, but still *plus;* it was decidedly less than in the right eye. I removed the seton.

January 15th. He was ordered to go out of hospital for a few days, and was readmitted on the 23rd.

February 16th. In the left eye, the nasal field was $5\frac{1}{2}$ inches; the temporal nearly a yard. With an 18″ convex glass, he could make out letters of Jäger's 16, or two-line great primer.

February 20th. He was discharged.

August 16th. With the left eye he read letters of No. 20, assisted by an 18″ convex lens. The eye was blind unless he greatly inverted it. The engorgement of the veins and of the choroid was much diminished. Tension $1\frac{1}{2}$. Vision was reported to be more steady. The right eye could not now read minion (No. 4); but, with an 18″ convex lens, No 2 was read. The nasal field was four inches; temporal, three feet.

The right eye is now (October 1864) under treatment, and will be duly reported.

* It is under these circumstances that I recommend a portion of the coloboma should be covered over by "gliding" the conjunctiva, and so making an artificial pterygum. If it be deemed desirable to obtain adhesion of the conjunctiva to the cornea, it is only necessary to denude the epithelium of the latter.

Earliest Drug Shops. The first shop for the public sale of medicines of which history reports was established at Bagdad in the year 765, by the Arabian Caliph Almansor. The first establishment of that kind in the West was the "Apotheke," which existed about the year 1364 in the then free town of Ulm in Germany.

Original Communications.

SELECTIONS FROM LECTURES ON OPHTHALMIC SURGERY.

By Haynes Walton, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

Protrusion of the Eyeball.

I still proceed with protrusion of the eyeball from causes within the orbit.

Tumours. Under this I class the several varieties of encysted, osseous, and encephaloid tumours. In the great majority of instances, the protruded eye is forced out by the one or the other of them; indeed, any other cause may be called quite exceptional. It is of the utmost importance to a patient that there should be a correct diagnosis of these several tumours; and it is seldom that an experienced surgeon is deceived, if he will but take a little trouble, and has the chance of watching the disease.

Of the *Encysted Tumour* I will speak first. It is what is called the sense of fluctuation that must be relied on here above all other symptoms to determine the character; and, therefore, the discrimination will be more easy and certain in a later than in an earlier stage.

It should be a rule to get rid of, by destruction or removal, all cysts that are growing, or are injurious. But this is not so easy as might be supposed; and in the attempt there is risk of local and constitutional disturbance. After a large experience in these cases, my present plan is not to attempt in the first instance to dissect out the cyst, except it be small and superficial; but to open it by a free incision, and wait for the result. This will be favourable, or not, according to the nature of the tumour, the state of its walls, and the character of its contents. The common termination of those that are thin-walled is the destruction of the secreting membrane by suppuration. A delicate cyst will break down rapidly; and it is said that the cyst-walls may adhere. I do not, in the first instance, attempt to produce suppuration by the introduction of lint and other substances, or the application of an escharotic; I rather trust to a natural process, lest the consecutive inflammation prove very severe. At the same time, I do not hesitate, when I think it necessary to prevent premature closure, to insert in the opening, for a day or two, a few shreds of lint. This is a safe and cautious mode of proceeding; and, if it does not effect all that is needed, a better knowledge of the nature of the disease is obtained. We cannot be too careful and cautious in operating on the orbit. Death has been caused by what would be called simple operations; and I have over and over again seen patients placed in a state of great danger, followed by tedious recovery, when I had no reason to expect such a course.

I should next resort to the use of an injection; and I have not been able to prove, of the many drugs which may be called to our aid, any superior advantage of the one over the other. Different men prefer different ones. One is perhaps taken up by mere chance or fashion, and then spoken of as the wonderful agent. I usually employ alum.

Although I will not say that a surgeon ought not to undertake to remove a cyst that he may find superficial, rather than inject it, any more than I will pretend to lay down any surgical rule that is not to be departed from—I feel no hesitation in expressing myself to the effect that the deeply seated ones had better never be attempted to be dissected out; for I never saw one that passed to the apex of the orbit ever entirely removed. In every case, the operator has been disappointed. But, besides the depth, the relations of a tumour may render the detachment impossible, without taking away some of the contents of the orbit, not even excepting the globe of the eye. My opinion is, too, the more fortified by the fact that, during the last thirteen years, I have had several of these cysts, of very various depths, directions, and capacities; and not in an instance have I failed to effect a cure by injections. In some, the eye was enormously protruded, and vision more or less impaired from the pressure on the eyeball, sometimes almost extinct. It must not be expected that a single injection will effect a cure always. Sometimes it will, and a most remarkable example of this is to be found in a paper of mine in the *Medico-Chirurgical Transactions*; but the treatment, including also nice manipulating, the keeping of the orifice sufficiently open, perhaps compresses, etc., may extend over weeks and months.

Under this head of encysted tumours, I include hydatids, acephalocysts, and echinococci. Their nature can never be determined till a puncture or an incision is made; for they present symptoms the same as those arising out of any kind of fluid tumour. When they are thus detected, the free use of hot water with a strong syringe will wash out much of the contents. The cyst readily suppurates.

Fatty Tumours are not common in the orbit—that is, at all deeply seated; but I have met with some small ones about the margin. Their removal is imperative, because of the almost certain increase. When it is possible, they should be removed within the eyelids, to prevent deformity.

There can be no doubt that the eyeball may be thrust out by a simple growing or increase of the orbital fat, without the formation of a distinct tumour within a capsule—I mean a true fatty tumour—as does sometimes happen in other parts of the body, whereby a swelling or tumour is formed, and relief may be afforded by reducing the redundant mass.

Exostosis of the Orbit is rare. All parts of the orbit are alike liable to it; and, as with exostoses in other situations, it varies in size and other physical properties, in the mode of attachment, having a narrow or a broad connexion with the skull, and in density; whence the division into varieties, according as it is ivory-like, made up of bone and cartilage, or of bone and fibrous tissue. When an exostosis in the orbit is hidden from the touch, there is no point of diagnosis by which it can be distinguished from any other tumour that protrudes the eyeball. It may be painless, or very painful; this being due to its position, whether pressing on a nerve, or not. The slowness of growth is the only circumstance that may cause a suspicion of its nature. Neither can it be always determined whether an exostosis will admit of being removed, till a portion of it has been exposed, and the nature and extent of its attachment ascertained. In what may be called the simple form of exostosis—that which is mere bony texture growing at the extremity by a plate of cartilage—division at the neck suffices. In that composed of fibro-cartilaginous structure within the expanded bone, either the bone to which it is attached must be removed, or the tumour completely extirpated.

No very precise rules can be laid down for the manner of operating; but this may be said, that more may be done with the bone-forceps, especially

if the base of the tumour be small, than with any other instrument; and the forceps should have short and narrow blades, and long handles. It is judicious to be prepared with two pairs, the one straight, the other convex or angular. In addition to these, there should be provided a variety of small saws and gouges, of different shapes and sizes; in short, all the modern instruments that are used for operations on diseased bones. The upper wall of the orbit, and the inner, require the greatest care in operating; but, as elsewhere, the surface throwing out an exostosis is generally thickened.

Encephaloid Tumour. This comprises an extensive subject, and therefore, in a short lecture, I can do no more than allude to certain points, those which it most concerns the surgeon to know, and which bear directly on practice.

All the forms of cancer do not occur in or around the eye with equal frequency. Colloid cancer has never yet been found in the eye or orbit. Scirrhus is exceedingly rare as an affection either of the eyeball or of its appendages. Epithelial cancer attacks only the eyelids or conjunctiva. Recurrent fibroid disease has been met with as intraorbital tumour in one instance only that has come to my knowledge. Medullary cancer, in the form of encephaloid or melanosis, may attack either eye or orbit; and it is the one or the other variety, more particularly the former, which is present in the great majority of cases.

As soft cancer is a common cause of ocular protrusion, so, perhaps, is it the most difficult to be diagnosed in the early stage, especially by the inexperienced. But, before I proceed further, I will go into a question that has perhaps occurred to many of those who hear me. Does the position of the eyeball in any way determine the nature and situation of the cause of the protrusion? In obscure cases, where there is not any indication to be gathered from the state of the eyelids, the direction of the protrusion might somewhat assist in diagnosing the nature of the case, by localising it more certainly. But such evidence may be wanting; and in no instance can it be solely relied on, because of the irregularity in form and unequal development of morbid growths. In estimating the value of doubtful physical signs, the dissimilar axes of the eyeballs, and of the orbits, demand attention; while the manner in which the globe is tied by the oblique muscles, and the anatomical relations of the optic nerve, will influence the direction it will assume from pressure posteriorly. Displacement inwards is more readily effected than in any other direction. When, from the commencement, the displacement is lateral to the axes of the eyeball, it is reasonable to presume that the force also is lateral. Direct protrusion will in general prove the most embarrassing; for with bony and other growths at the side of the orbit, within certain limits of size, and situated rather posteriorly, the eyeball may be pushed forwards without any lateral displacement. This, I presume, must be attributed to the mechanical properties of the fat in the orbit. Yet, if the only symptom be direct protrusion, until further evidence to the contrary, the cause must be considered to be seated at the back of the orbit; I will not say the apex, for that is indeed a very rare position. Certainly, in soft cancer, the direction of the protrusion does not in the least assist in diagnosis.

Malignant tumours originating deeply in the orbit exhibit no peculiarity in the physical changes which they produce in the orbit or orbital appendages of the eye, by which they can be at first distinguished from simple tumours.

In some instances, however, the rate of progress, or other peculiarities in any given case, may produce the suspicion of malignancy at an early period.

It is necessary to say something about the seat of malignant growth. It may be in any part of the cellular or adipose tissue, or even to spring from the optic nerve while the eyeball is yet sound. Then the cancer may originate in the frontal cells or from the antrum of Highmore, and make its first appearance in the orbit. When, however, the disease advances and protrudes laterally, or at least can be felt tolerably, the true nature can generally be made out by the peculiarity of fixedness and immobility. It seems as if it grew from the side of the orbit, and from a large base. Of course, any constitutional effects of the malady, and any development of blood-vessels, assist to a right conclusion; but these appear only late. The rapid growth, then, the immobility, and the youth of the patient, are the signs to be relied on. I have very rarely seen an example after forty years of age, and the majority have occurred to me between the ages of fourteen and thirty.

It is a momentous question respecting what is to be done. Most certainly, my experience is against operating, as a rule. If an operation will only relieve pain, or if it will arrest bleeding, and for a time prolong life, or if the pressure of the morbid growth on the brain is productive of any ill consequences, I should operate. As soft cancer is merely the local evidence of a poison at work with the system, any idea of curing the disease by operation can be only attended by disappointment.

Periostitis. Inflammation of the periosteum of the orbit, which must, I presume, be always more or less combined with inflammation of the bones, may protrude the eyeball; and, although such disease may follow traumatic injury, constitutional causes, such as struma, and syphilis in particular, generally produce it; but, whichever it may be, the diagnosis is seldom obscure, if proper investigations be instituted.

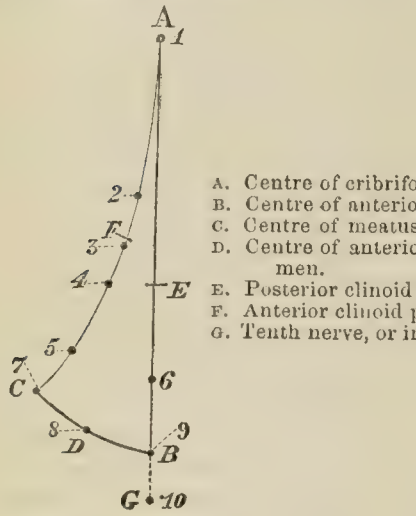
Disease of the Optic Nerve has been a cause of protrusion. A tumour of the size and shape of an olive, just a little behind the sclerotica, and consisting principally of thickened neurilemma, the nerve-tubes being unaltered, had displaced the eyeball upwards and outwards. The discovery was made in a dissecting-room.

ON A NEURO-MNEMONIC TRIANGLE AT THE BASE OF THE SKULL.

By Walter Garstang, M.D., F.R.C.S.Edin., Blackburn.

The Neural Triangle, to which the purport of this communication, written for mnemonic purposes a few years ago, is the invitation of the young dissector's attention for a moment, includes a small portion of the anterior, middle, and posterior fossæ, at the base of the skull, corresponding, respectively, to the encephalic lobes. Along its boundary-lines, as in the subject before me, are seen the whole of the cerebral (intracranial) nerves of each side, at situations that are internal to the dura mater, and at which we usually find them to be divided with the scalpel, on removing the brain from the cavity of the cranium. It is to this fact that the triangle owes its mnemono-anatomical significance; and the practical application of it by the inexperienced student of anatomy will, I apprehend, remove one of the many causes of his early dissecting-room perplexities, and will enable him to remember with certainty no inconsiderable item of cranio-neural anatomy, more expressly with reference to the relation of parts.

Posteriorly, the triangle is bent in the direction of the foramen magnum, and rests on the inner third of the posterior surface of the petrous portion of the temporal bone, and the eminentia innominata of the occipital. The illustration submitted, without any pretension to rigid accuracy, is deduced from the left side of the cranium, where the sides composing the triangle are found to have the relative admeasurements of the diagram adjoined, of which the scale of parts has been reduced to one-half; and they observe the following courses.



A. Centre of cribriform plate.
B. Centre of anterior condyloid foramen.
C. Centre of meatus auditorius internus.
D. Centre of anterior half of jugular foramen.
E. Posterior clinoid process.
F. Anterior clinoid process.
G. Tenth nerve, or infraoccipital.

Curvilinear in direction, the external boundary is viewed as coursing from the apex of our triangle, along the outer margin of the groove for the olfactory nerve, on the cerebral surface of the lesser sphenoidal wings, and thence across the optic foramen, by the internal surface of the anterior clinoid process, and upon the superior angle of the petrous portion of the temporal bone, terminating at the centre of the meatus auditorius internus. This line, at its commencement, is the guide—first, to the olfactory bulb, and to the nasal branch of the ophthalmic nerve; secondly, to the ophthalmic nerve and ophthalmic artery, where these enter the optic foramen; thirdly, to the oculo-motory nerve, which pierces the dura mater just at the outer side of the anterior clinoid process; fourthly, to the trochlear nerve; fifthly, to the triple-facial nerve; and sixthly, to the facial and auditory nerves, and internal auditory branch of the superior cerebellar artery.

Again, line 1-9, commenced anteriorly at the centre of the left division of the cribriform plate of the ethmoid bone, runs almost directly backwards; passing, on the bare bone, by the external side of the middle clinoid process, along the internal margin of the furrow, seen on the basilar portion of the occipital bone, for the inferior petrosal sinus, then close by the eminentia innominata, down to the centre of the anterior condyloid foramen. If we should thence prolong this line to nearly one inch, it will lead, as at 10, to the place of exit, from the spinal canal, of the suboccipital nerve—sometimes regarded as the tenth cranial nerve—corresponding with a groove behind the superior articular process of the first cervical vertebra. In the tract of this line are seen, from before backwards (*vide* diagram), in the recent preparation, the olfactory bulb, and the sixth and ninth cranial nerves.

Lastly, the line 7-9, which constitutes the base of the triangle, connects the two former. It runs directly inwards, downwards, and backwards, and crosses in the middle of its course, the anterior division of the foramen lacerum posterius, which affords exit to the trunks of the eighth nerve, consisting of the glosso-pharyngeal, pneumogastric, and spinal accessory nerve. As a whole, the foramen, it may be remarked, transmits, additionally, the blood from the lateral sinus into the internal jugular vein, the inferior meningeal branch of the occipital artery, and the posterior meningeal branch of the ascending pharyngeal artery.

Transactions of Branches.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

ABSTRACT OF A CASE OF SEVERE INJURY TO THE BRAIN.

By Frederick Fry, Esq., F.R.C.S.

[*Read October 28th*, 1864.]

Thomas H., aged 22, a labourer, was admitted into the West Kent General Hospital at Maidstone, on December 29th, 1859. He was watching the blowing up of a blacksmith's anvil. The wooden plug splintered; and some pieces entered the patient's head through an aperture in the right supraorbital ridge sufficiently large to admit the insertion of the little finger. Several fragments of wood were extracted by forceps. Cerebral substance escaped. The patient was conscious. No bad symptoms occurred, and he was sitting up in a few days. Some small pieces of bone came away with a slight amount of suppuration. He was discharged on February 7th, 1860, forty-one days after the accident. There was only a slight oozing from the aperture at this time.

He attended as an out-patient for two or three months. Subsequently, he worked for five weeks at brick-making, but was compelled to desist because of pains in the head. He became an out-patient for the second time, and attended the hospital for three or four months. He was then seized with intense vomiting, failure of the powers of speech, strabismus, and difficulty of walking. He now kept his bed at his own home, and was visited by the house-surgeon. The contents of the rectum and bladder were voided involuntarily, and the patient became almost idiotic. He died whilst taking food, apparently choked. His death occurred in February 1861, upwards of thirteen months from the receipt of injury.

Post Mortem Examination. The body was well nourished. There were sprouting granulations in the wound, whilst the aperture in the bone was closed by osseous matter to a point that would but just admit a probe. The dura mater was healthy, An abscess, containing about twelve ounces of laudable pus, was found occupying the middle and posterior lobes of the right hemisphere. The lateral ventricle was empty, and not opened into; but its roof was depressed. The right hemisphere pressed against the left, but there were no adhesions; and the falx suffered pressure. The abscess appeared to possess a pyogenic membrane. Two pieces of wood (one measuring about an inch by an inch and a half, and the other an inch and one-eighth by five-eighths of an inch) were found imbedded in the cerebral substance at the posterior extremity of the abscess, behind the collection of pus. The thickness of the pieces of wood was that of a lozenge.

In the discussion that followed the reading of this paper, the rarity of osseous closure of apertures in the skull was commented upon.

Dr. Monckton once had a case of osseous closure. The aperture (compound fracture) was at the boundary betwixt the frontal and parietal bones. The aperture measured about an inch and a half by an inch.

Mr. J. M. Burton narrated the case of a child five years old, who was struck on the head by the hoof of a horse. The skin was not wounded. Convulsions and insensibility occurred immediately. Mr. Burton's brother made a crucial incision, and raised depressed bone by means of an elevator. Consciousness was regained; the convulsions ceased; and recovery was perfect in six weeks.

Mr. Fry mentioned the case of a Merry Andrew who was injured by a sledge-hammer wielded by a woman in a brawl. The man lay for sixty hours perfectly unconscious, without coldness of skin, convulsions, or other bad symptom. He recovered instantly, whilst the surgeon was at the bedside. Doubtless, it was a case of prolonged stunning, with abrupt recovery.

Dr. Armstrong mentioned a case in which a sailor, injured by a fall from the rigging, lay for two hours in an unconscious state, and then recovered abruptly.

Dr. F. J. Brown remarked, that stunning and concussion might be different conditions; for under stunning there is no collapse, no alteration of pupil or of respiration—nothing abnormal, excepting the state of unconsciousness.

Dr. Monckton suggested that the abrupt recovery might be explained in the following manner. The state of stunning passes into *deep sleep;* and sudden *waking* then occurs.

SPONTANEOUS WITHDRAWAL OF THE ARM, AND CEPHALIC BIRTH, SUCCEEDING TO ARM-PRESENTATION.

By George Henry Furber, Esq.

[*Read October 28th*, 1864.]

On June 22nd, at eight o'clock in the evening, I was called to see Mrs. C., in labour with her eighth child. I found that the pains had commenced about three in the morning, and that the waters had escaped about twelve hours. She was, when I saw her, walking about, with frequent and active pains. On examination, I found an arm presenting, a considerable portion of the extremity having passed the os uteri; and, on a deeper exploration, the finger came into contact with the side of the head. On introducing my hand for the purpose of turning, I found the uterus so firmly contracted, that it would not allow of my doing so. I gave her at once forty drops of tincture of opium, and sent for another medical practitioner, who arrived within an hour.

Upon consulting, we came to the conclusion that, taking all the symptoms and state of the mother into consideration, we should be perfectly justified in waiting a short time longer, in hopes that possibly the labour might terminate even with such a state of things existing, or that the uterus might relax under the influence of the opium given. After a lapse of an hour and a half, the pains increasing, but without any power, another examination was made; and we found that no progress had taken place. The mother remaining still very comfortable, and free from exhaustion, we determined, prior to taking more active steps, upon awaiting the result of another hour. For this purpose, we both left our patient and went down stairs; but in less than ten minutes we were suddenly summoned by the nurse, when we found the head presenting; and, with one vigorous contraction of the uterus, the child, full grown and alive, was brought into the world. The placenta followed quickly, and all was over by 11 P.M.

I ought, perhaps, to mention that I followed a midwife, she having had charge of the case some hours.

Reviews and Notices.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A.Cantab., Assistant-Surgeon to St. George's Hospital and to the Hospital for Sick Children. In Four Volumes. Volume the Fourth. Pp. 1079. London: 1864.

This, the fourth and concluding volume of Mr. Holmes's *System of Surgery*, contains articles on the Diseases of the Organs of Digestion, of the Genito-urinary Organs, of the Breast, Thyroid Gland, and Skin; together with an Appendix of Miscellaneous Subjects, and a General Alphabetical Index and List of Authors.

The first article, on Surgical Diseases connected with the Teeth, and their Treatment, is contributed by Mr. S. J. A. Salter. The points on which he writes are: 1. Alveolar Abscess; 2. Painful and Difficult Eruption of the Wisdom Teeth; 3. Tumours of the Gum and Tooth-pulp; *a*, epulis; *b*, congenital hypertrophy of the gum and alveolar borders of the maxillæ; *c*, polypus of the gum; *d*, vascular tumours; *e*, polypus of the tooth-pulp; *f*, sensitive growth of pulp after fracture; 4. "Abscess" of the Antrum; 5. Dentigerous Cysts; 6. Alveolar and Maxillary Necrosis from, *a*, phosphorus fumes; *b*, eruptive fevers; 7. Hæmorrhage after Extraction; 8. The Application of Obturators, etc., in Fissure of the Cleft Palate or Fistulæ of the Antrum.

The Congenital Hypertrophy of the gum and alveolar border referred to in the list is a very rare malformation, of which two instances only have come to Mr. Salter's knowledge. One of them he saw under the care of Mr. Pollock at St. George's Hospital; the other has been described by Gross in his *System of Surgery*. The two cases, Mr. Salter says, are singularly alike in all particulars.

Mr. Pollock's patient was a girl eight years old. Within five weeks after birth, she had six teeth; and the gums were full, thick, and puffy. They increased; and at two years of age were cauterised, and all the teeth which had appeared were removed. She had at birth an unusual quantity of hair on the head and limbs, and the same peculiarity was observed on her admission. The patient was epileptic. A large, pink, slightly corrugated mass protruded from the mouth; it was very dense, inelastic, insensitive, and appeared as if covered with skin. The protrusion was greater from the upper jaw than from the lower. The mass consisted of an expanded and prolonged development of the alveolar borders of the maxillæ, with immense thickening of the fibrous tissue of the gum, and exuberant growth of the papillary surface. On examining some portions removed by operation, some of the temporary teeth were found completely enclosed in the thick fibrous mass, with the fangs imbedded in sockets, but the crowns free of bone, and each surrounded by a serous-like chamber, without communication with the surface. One superior central incisor was nearly an inch from the surface. The

fangs of the permanent teeth were developed in proportion to the age; but the crowns were still encased in the bony loculi. The epithelium of the papillary surface had changed into a very thick and hard epidermis; and the papillæ, instead of being from one-seventy-fifth to one-thirty-fifth of an inch in length, were from one-sixth to one-fourth of an inch. When the epidermis was removed by maceration, the papillæ stood up like the pile of plush or velvet, and could be brushed from side to side by the finger. The treatment followed in both the cases was, to remove from time to time portions of the projecting mass by means of scalpels and bone-nippers, until the alveolar borders were reduced within moderate limits.

Mr. Salter objects to the term "Abscess" of the Antrum. What is ordinarily thus designated is, he observes, "not the suppuration of inflamed parenchyma, but the occlusion in a cavity of the purulent secretion from the surface of a mucous membrane which lines the cavity." Referring to the anatomy of the antrum, he points out a variation in its size; which, he says, although described by Otto in 1830, is not mentioned in text-books on anatomy.

"The antrum may extend so as to be in immediate relation to all the teeth of the true maxilla from the canine to the dens sapientiæ, or it may be contracted to such narrow limits as only to correspond with two or three of the central ones. . . . . Occasionally a root or roots of the first molar tooth (rarely any other) extend into the cavity, free of any bony covering, and merely overlaid by the mucous membrane lining the sinus; more often, however, the palatine and external roots diverge so as to leave an interval, between which the more depending sulcus of the antrum is excavated." (Pp. 25-6.)

Dentigerous Cyst is a condition of which but few examples are recorded; and Mr. Salter gives a brief outline of the cases that have been described. The cyst consists of a serous or seriform collection in the maxillary bone, dependent on misplaced teeth. In one instance only, within Mr. Salter's knowledge, has the affection been connected with a temporary tooth. The symptoms consist of a general expansion of the jaw-bone at some particular spot, with disfigurement of the features and a sensation of weight and tension. Sometimes, if the impacted tooth press on another, there may be considerable pain and distress, and even some constitutional irritation. On pressure, the bony walls yield and return with a crackling sound, like the doubling of stiff parchment; and fluctuation can generally be felt through the thin bone at some part. An important diagnostic sign is the absence of some tooth or teeth which should have appeared. The diagnosis may be further confirmed by the introduction of an exploring needle or trocar; and, on laying the cavity open, the tooth may be felt by means of a probe. The treatment consists in evacuating the contents of the cyst and removing the tooth. The result has always been satisfactory.

The next article, on Diphtheria and Croup, is written by Dr. A. W. Barclay. We should have thought such a subject scarcely coming within the range of a *surgical* work; nevertheless, here we have it. Dr. Barclay speaks very cautiously regarding tracheotomy in both these diseases; he does not condemn it, but his observations show that he is not a very strong advocate for its performance.

Mr. George Pollock contributes a series of articles on Diseases of the Mouth and Alimentary Canal. His list is, of course, a long one; and all the subjects are ably treated of; but we can afford space for special notice of one or two only.

In speaking of Cleft Palate, after referring to the anatomical peculiarities of this malformation, Mr. Pollock gives directions as to the feeding of infants thus affected. The child cannot suck, on account of not being able to form a vacuum with the tongue, the naso-buccal septum being wanting. Hence it must be fed artificially; but, for this purpose, breast-milk alone should be employed in the earlier weeks. This should be drawn from the nipple, and administered through a bottle having a smooth flat ivory pipe with a small orifice, through which, the position of the bottle being regulated by the hand, the milk may flow gently into the mouth. For several weeks, the child should be held almost upright during feeding, so as to allow the nourishment to flow downwards and backwards into the pharynx. After a time, a remarkable degree of facility in taking food, considering the defect, is acquired. As to means for supplying the defect, Mr. Pollock says that an artificial septum is desirable as soon as it can be adjusted. "The sooner one can be worn, the less defective will the articulation become, and the more readily will the education of the child be advanced." For the plate for the hard palate, Mr. Pollock prefers gold; silver is readily soiled, and vulcanite occupies space. The plates, however, must be renewed as the child grows; and hence the question of cost becomes an important one. An artificial soft palate, made of thin India-rubber sheeting, may be worn not only without inconvenience, but with much benefit. In a note, Mr. Pollock says:

"The author cannot allow the opportunity to pass without bearing testimony to the ingenuity and efficiency with which Mr. Sercombe, surgeon-dentist to St. Mary's Hospital, has adapted artificial palates to the mouths of children afflicted with very extensive clefts; with so much success has his practice been attended, that an ultimate operation for the complete closure of the palate becomes a matter of choice rather than one of absolute necessity, for the improvement of the voice, etc." (Pp. 93-4.)

Operation for the closure of cleft palate should not, in Mr. Pollock's opinion, be performed before puberty; and in the meantime an artificial palate should be worn. The surgeon requires all the aid that the patient can give him; yet the operation has been performed at an earlier period. Billroth (*Archiv für Klin. Chir.*) closed, by successive operations, a cleft extending from the lip to the uvula, before the age of twelve months.

In the operation for cleft of the soft palate, Mr. Pollock has modified the process for dividing the muscles, first proposed by Mr. Fergusson. The last named eminent surgeon divides the levator palati muscles on each side by cutting with a right-angled knife behind the curtain of the soft palate. To cut with the point of such a knife out of sight is a proceeding in which, Mr. Pollock observes, few surgeons unaccustomed to such an operation would feel at ease; and hence it has occurred to him to divide the levator palati *through the palate.*

"A suture is passed through one section of the soft palate at the root of the uvula, the ends secured together by a knot and held outside the mouth. A second suture is then passed through the opposite side at a corresponding point. One of the sutures,

now firmly holding one-half of the soft palate, is drawn gently forwards and to its opposite side, so that the section of the palate is well stretched towards the median line. A thin, narrow, sharp-pointed knife, fixed in a long handle, is then introduced into the palate, close to the hamular process, a little in front and to its inner side. This process can be distinctly felt in the substance of the soft palate, internal, and a very little posterior to the last molar tooth. Running the knife upwards and backwards, and somewhat inwards, the point may at last be seen in the gap, having passed through the entire thickness of the soft palate, and having cut, if not wholly, at any rate partially, through the tendon of the tensor palati; the knife should now lie above most of the fibres of the levator. If the handle of the knife be next raised, the point becomes depressed; and if the blade be drawn forward, while it is at the same time made to cut downwards, it travels through a considerable section of a circle on the posterior surface of the palate, and insures the division of the greater portion of the levator palati. As the knife-blade travels downwards, the tension of the palate gives way, and often the division of the muscle is felt to be suddenly effected; the ligature being no longer pulled on by it, though previous to division it will be felt sensibly and spasmodically contracting. As the knife is withdrawn through the wound, the division of the levator muscle should be thoroughly effected. . . . . Should any resistance still be observed, the knife must be again introduced through the anterior wound, and the fibres a little more fully cut in a downward direction. . . . . Though Mr. Fergusson recommends the division of the palato-pharyngeus muscles, the author has of late satisfactorily operated on several clefts of the soft palate, without having divided those muscles or touched them with the knife." (Pp. 96-7.)

Having described the operation for cleft of the soft palate, Mr. Pollock next speaks of the means of remedying fissure of the hard palate, by raising flaps from the bone on each side and bringing them together in the middle line. These flaps, he says, consist of all the soft tissues covering the latter—it being difficult, probably impossible, to separate the mucous membrane from the periosteum; and hence he believes that the operation described in 1863 by Professor Langenbeck, under the name of "the operation by muco-periosteal flaps", is identical with the mode of operating introduced many years ago by the late Mr. Avery.

As to the result of operation on the palate, Mr. Pollock has found the improvement marked and satisfactory; speech, previously indistinct and even unintelligible, being rendered easily comprehensible. Of course, as he observes, time is required for the patient to learn to form letter-sounds, the requisite organisation for which has not existed. "It becomes, in fact, a task to the patient to learn how to pronounce correctly and distinctly a new dialect." Attention to the teeth, which are often defective and irregular, is necessary as a final step.

In speaking of Stricture of the Œsophagus, Mr. Pollock adds his authority to the condemnation of attempts to pass a bougie through the obstruction. In the early stage, it may be desirable to discover by exploration the exact seat of the disease; but, after this, little if anything is to be gained, in the way of benefit, from such treatment. And even positive harm may be done; for, even in skilful hands, the mediastinum, the pleura, and the pericardium, have been penetrated by the end of the instrument, and death has rapidly followed.

Intestinal Obstructions—excluding all forms of external hernia—are divided by Mr. Pollock into those which produce acute and rapidly fatal results unless promptly relieved, and those which act more slowly. In the first class are comprised: 1. Congenital strictures or malformations; 2. Foreign bodies in the intestine; 3. Twisting or dislocation of the bowel; 4. Loops, formed by false membrane, by diverticula, or by fimbriated processes or other portions of viscera; 5. Mesenteric pouches, the foramen of Winslow, or thickened peritoneal sheaths, the result of old herniæ; 6. Invagination. The more slowly acting processes are: 1. Constipation; 2. Inflamed and thickened intestine; 3. Chronic peritonitis (tubercular) and abscess; 4. Tumours pressing on the bowel; 5. Simple stricture from ulceration, etc.; 6. Cancer.

This division into acute and chronic is not, Mr. Pollock warns us, to be accepted as absolutely correct, but rather as a mere outline. It must not be taken as a fact, that acute symptoms never attend any of the causes of the obstruction mentioned in the second class; but, as a general rule, while the symptoms of the cases coming under the first division are urgent and acute, most of those in the second division are attended by symptoms which come on gradually.

Regarding the value of constipation as a symptom, Mr. Pollock enters a caution.

"Constipation, or entire stoppage of defecation, is not an absolutely requisite symptom to indicate fatal obstruction of the intestine; nor, in suspected organic obstruction, should we presume to say that the disease has yielded to our treatment, even though diarrhœal action of the bowels comes on; it will probably last but for a short time, or the quantity of fluid passed will be small in proportion to the frequency of the motions. A relaxed state of the bowels in stricture is usually indicative of ulceration, and may occur, in old contracted stricture of the intestine, within a very short period of death." (P. 154).

Mr. Pollock has attempted to give an estimate of the relative frequency of obstruction from the several causes mentioned at various periods of life; and concludes that, in order of frequency, they occur in the following order: in *youth*, internal strangulation by bands or diverticula; adhesion of coils of bowel to each other; intussusception; foreign bodies taken by the mouth; cancer (rarely, and hitherto in rectum only): in *middle age*, the causes are, twists of the large or small intestine; gall-stones, intestinal concretions, and foreign bodies; simple stricture; mesenteric hernia; internal strangulation by bands, etc.; peritonitis, often resulting in abscess; simple constipation; and cancer: in *old age*, the causes of obstruction are, cancer; thickened intestine from old reducible hernia; intussusception; simple stricture; and internal strangulation.

As regards the diagnosis of the cause of obstruction, Mr. Pollock shows this to be very difficult—except in the case of intussusception. No other cause of obstruction, he says, produces such perpetual desire to go to stool in the early part of the attack; nor, with such attempts, the passage of blood and mucus. These symptoms are, then, of high diagnostic value as regards intussusception; but, as to the diagnosis of obstruction from other causes, setting aside the

probability of any one of them derivable from the age of the patient, the matter is much more difficult. Some practical information on the subject is, however, given by Mr. Pollock; and we must refer our readers to his remarks.

In speaking of the treatment of intestinal obstruction, Mr. Pollock mentions a case which shows the necessity of caution; it was one of stricture of the rectum, in which the author himself, while passing his finger through the stricture, produced a rent in the anterior part of the rectum through the diseased (cancerous) mass; the fæces escaped into the peritoneum, and death rapidly ensued.

Mr. Pollock describes the operations for the formation of artificial anus, as well as the proceeding for opening the peritoneal sac so as to explore its contents and set free the intestine from bands, etc. Here, again, he points out that the duration of constipation is not to be taken as the positive indication for operation; inasmuch as it may exist for some time, and be followed by recovery.

"But, in the more acute instances of strangulation, with vomiting, pain, and distension, complete constipation must be present to justify operative interference. In the more chronic instances of obstruction, no matter how great the distension of the intestines, so long as fæcal ejections can be secured in ever so small a quantity, the means to encourage them must be persevered in. No immediate operative measures should be sanctioned." (P. 176.)

As to the conditions which indicate the performance of one or other of the operations abovementioned, Mr. Pollock observes that opening the peritoneum is justified by a sudden attack of pain, with ineffectual desire to open the bowels, and persistent vomiting; if there be little or no tenderness, complete constipation must have existed more than twenty-four hours.

The conditions demanding an opening in the lumbar region are, long continued and unyielding constipation, great abdominal distension, and commencing irritability of the stomach, or actual vomiting.

Having described the several operations—Littré's, Amussat's, and Callisen's—Mr. Pollock concludes his valuable practical series of articles, with directions for performing the operation of tapping.

Mr. Henry Smith contributes an article on Diseases of the Rectum; in which he treats of Hæmorrhoids, Prolapsus, Fistula, Ulcer, Stricture, Cancer, Polypus, Pruritus, and Neuralgia. In regard to all all these subjects, the author brings into use, in an instructive manner, the practical knowledge which he is well known to possess regarding them.

The important subject of Hernia has been entrusted to Mr. Birkett, who treats of it under the following divisions: 1. Pathology and Treatment of Hernia in General; 2. Special Kinds of Hernia. The account given by the author of the causes, symptoms, diagnosis, and treatment, of hernia in general and of its various forms is thoroughly full and complete; but contains little that demands to be especially noticed. We may observe, however, that, *inter alia*, Mr. Birkett has with considerable care investigated the statistics of the occurrence of hernia, using for this purpose the records of the London Truss Society for 1860 and 1861. Among the observations thus made, are some which tend to correct commonly received notions, especially as to Crural Hernia. Crural hernia is usually said to be most frequent in females, and to occur in them oftener than inguinal hernia. The first of these statements Mr. Birkett does not dispute; the second, he says, is not founded on facts. From the data abovementioned, he finds that inguinal hernia is nearly as frequent in females as femoral hernia. The tables of the London Truss Society for 1860-61 give the following result: Inguinal hernia—males, 7543; females, 699; femoral hernia—males, 306; females, 748. In a total of 1442 cases of hernia in females, the relative frequency of occurrence of the two forms at various periods of life was found to be as follows:

Ages.	Inguinal.	Femoral.
Birth to 10 years	146	1
11 to 20 „	103	37
21 to 30 „	153	180
31 to 43 „	164	252
41 to 50 „	76	158
51 to 60 „	33	84
61 and upwards	19	36

From this table it appears, that inguinal hernia is much more common than femoral in females under twenty years of age; and that the largest number of cases of femoral hernia occur between the ages of 20 and 40. This is true both relatively and absolutely; for, on comparing the numbers with the female population, the proportions of cases of femoral hernia to a million females have been found to be, under 20 years, 77; between 20 and 40, 952; above 40, 901.

Mr. Birkett has collected twenty-five of the most recently received cases of Obturator Hernia; and these, he says, may be divided into two classes—those, the majority, in which the hernial tumour was not discovered during life; and those in which its presence was ascertained by examination. He refers to several of the recorded cases, and points out the practical lessons to be derived from them.

In speaking of the diagnosis of this form of hernia, the author first describes its signs when a tumour can be felt externally.

"After passing through the obturator canal, the hernia emerges upon the thigh below the horizontal ramus of the pubes, to the inner side of the capsule of the hip-joint; behind, and a little to the inner side of the femoral artery and vein; and to the outer side of the tendon of the adductor longus. The tumour is covered by the pectineus muscle. From crural hernia, therefore, it may be distinguished by observing the relative positions of the horizontal ramus of the pubes and of the femoral artery..... In obturator hernia, these structures are in front of the tumour; in crural hernia, they are behind it." (P. 333.)

But, when no tumour or fulness exist, and well marked indications of strangulation are present, the difficulty of diagnosis is necessarily very great; as is shewn by the numerous cases in which the hernia was not discovered till after death. In these circumstances, Mr. Birkett believes that sufficient evidence of the presence of obturator hernia to justify operation may be obtained—

"By pain during the development of the hernia; by pain at the commencement of the present attack; by pain of a peculiar character during the progress of the illness; by pain referred to the course of the cutaneous filaments of the obturator nerve and the plexus formed with it and the internal cutaneous and its distributions; by pain excited by certain definite movements of the hip-joint; by pain induced by local

pressure carefully applied; and by pain when an examination of the pelvic orifice of the obturator canal is made *per vaginam.*" (P. 324.)

In the treatment, if a hernia be detected, an attempt may be made to reduce it by pressing it so as to free it from, and make it pass under, the ramus of the pubes. If it be determined to make an exploratory incision, this should be commenced a little above Poupart's ligament, midway between the spine of the pubes and the femoral artery, and should be carried down parallel with the artery or with the adductor longus muscle. The parts should be gradually cut through, and the hernia searched for carefully, until even the obturator muscles are separated, if necessary; "for it is not until the finger can be placed upon the outlet of the obturator canal, that the search for the hernia should be abandoned as hopeless." Whether, after making an exploration on one side and finding no hernia, the surgeon should repeat the process on the other side, is a question which Mr. Birkett leaves "to the judgment of those who may happen to be placed in such an unpleasant dilemma." But what, if a hernia be found and returned, and the symptoms persist? That such an occurrence may take place, is indirectly intimated by Mr. Birkett, who mentions that, in several instances in which the hernia was not detected during life, protrusion through *both* obturator canals was discovered after death.

[*To be continued.*]

Progress of Medical Science.

ANATOMY, PHYSIOLOGY, & PATHOLOGY.

Embolism of the Renal Arteries. At the Pathological Society, on December 6th, Dr. Hermann Weber exhibited kidneys with so-called fibrinous deposits from embolism of the renal arteries. The patient, a woman aged 26, had been admitted into the German Hospital on October 3rd, with old mitral disease and pulmonary apoplexy. On October 5th, she was suddenly seized with violent pain in the right side, just below the twelfth rib, with collapse, vomiting, and diarrhœa, the pain being increased by pressure. These symptoms abated after about two days. On October 12th, a similar but still more violent attack occurred, the pain being this time on the left side, lasting almost a week with varying intensity, and being only relieved by frequent subcutaneous injections of morphia. The urine, which had hitherto contained very little albumen, became highly albuminous during and for about a fortnight after this occurrence; it contained many tube-casts, principally transparent. From the end of October, however, until the time of death, the urine was free from albumen and casts. Traces of blood only had existed during a few days at the time of the attacks. Anasarca of the lower extremities, which had been moderate before the attacks, increased much immediately after them, but diminished again with the disappearance of the albumen from the urine. There was intense icterus during the last fortnight. Death occurred from pulmonary apoplexy and pleuritic effusion on November 11th.

The *post mortem* examination manifested narrowing of the mitral opening, it being oval, and the edges rough. There was great dilatation of the left auricle. The tricuspid orifice was moderately contracted (from adhesion between two of the folds, and slight thickening of all three), and the right auricle dilated. The right lung exhibited the products of pulmonary apoplexy in various stages, and the right pleural cavity was filled with sero-purulent fluid. The mucous membrane of the small intestines was swollen, closing the opening of the gall-duct. The liver was nutmeg, with commencing atrophy, and the tissue very tense. The spleen was hard and tense; as also the suprarenal capsules. The right kidney contained in the centre a pale yellowish deposit shrunken and depressed below the surface of the surrounding tissue; the left kidney contained several larger deposits, likewise of pale yellow colour, but slightly raised above the level of the surrounding normal tissue. The deposits occupied the greater part of the upper portion of the kidney. The corresponding artery was obliterated by an old fibrinous plug; while the artery supplying the normal portion was free. The plug in the obstructed branch of the artery was slightly adherent to the walls; it could, however, be separated without injuring them. It did not obstruct the whole length of the branch, but terminated at two ramifications rather abruptly, leaving the remainder free.

Dr. Weber remarked, that the case showed the embolic nature of so-called fibrinous deposits of the kidney; that it further elucidated the symptoms of embolism of the kidneys, which affection, in this instance, had been diagnosed by Dr. Baumler, the resident physician of the hospital at the time of the occurrence; and that it manifested also the changes taking place in these "deposits"; that in the right kidney having occurred thirty-eight days before death, being already shrunk below the level of the surrounding tissue, while the "deposits" in the left kidney, having occurred between a week and a fortnight later, were still slightly prominent above the level of the surrounding tissues, but without the elevated red margin seen in still more recent cases. Dr. Weber mentioned, that Virchow had clearly proved, by experiment, that much larger pieces of fibrine than that forming the plug in the case before the Society, could be propelled by the heart, and carried by the blood to distant organs, until they were arrested by the diminished size of the artery, or by a bifurcation, leading thus to plugging of some arterial branch or branches.

Infantile Paralysis. M. J. V. Laborde says that the belief that the muscles in the paralysis of children always undergo fatty degeneration must be accepted with some restrictions. In a case in which paralysis had existed for two years, and was connected with a well marked morbid change in the spinal cord, he found the muscles merely atrophied, the fibres being pale and wasted. He has communicated to the Société de Biologie the results of a histological examination of muscles in the successive stages of the disease mentioned. The alterations are classed by him as follows. 1. In the first degree, there are evident traces of striation of the muscular fibres; but the striæ appear spaced out; the large intervals where they are absent are filled with opaque molecular granules, many of which also cover the remaining striated fibres. The granules are not removed by ether or alcohol; but are sensibly diminished in number by slightly diluted acetic acid. This condition is met with in muscles which have apparently undergone least change, and in which red fibres are still perceptible to the naked eye.

2. In a more advanced stage, no appreciable trace of striæ can be found; the longitudinal fibres, almost deprived of undulations, are seen; the granular element is always very abundant.

3. In the third degree, the striæ have completely disappeared, and the longitudinal fibres are more

rare, and in all cases are enveloped in a mass of granules. The interfascicular spaces are filled with serrated fibres of areolar tissue, with more scattered nuclei.

4. The fourth phase of the morbid process represents only as it were the skeleton of the muscular fasciculus, at most contains some outlines of longitudinal fibres. The granular condition predominates. The spaces between the fasciculi are enlarged; and the areolar tissue is increased in quantity.

5. In the last stage, not only the proper muscular tissue, but also the granular element, have disappeared. The empty transparent tubes of myolemma alone remain; some scattered granules are seen lying on their walls. These tubes are widely separated and surrounded by areolar and fibrous tissue mixed with some elastic fibres.

In the last two degrees, the muscles have entirely lost their normal appearance, and consist only of a kind of greyish fibrous-looking cord. (*Gaz. Méd. de Paris*, 12 Novembre, 1864.)

Epithelium of the Pulmonary Vesicles in Mammalia. In order to ascertain whether the pulmonary vesicles possess epithelium, Dr. Chrzonszczewsky of Casan has employed the following process. Having expanded fresh lungs by insufflation, he injected the vessels with gelatine and immediately immersed the preparation in a solution of nitrate of silver (.05 to .5 per cent.); and, having allowed it to remain there for eighteen to twenty-four hours, hardened it with alcohol. Sections of this, coloured with solution of carmine, were examined in glycerine slightly acidulated with acetic acid, or better with tartaric acid. Epithelial cells, of polygonal form, were distinctly seen lining continuously the base and the walls of the alveoli. The cells were very distinct, and their nuclei often had a deep brown colour. (*Wurzb. Med. Zeitschr.* and *Gaz. Méd. de Paris*, 15 Oct., 1864.)

Pathology of Congenital Syphilis. Dr. Förster of Würzburg founds the following propositions of an analysis of thirty-six *post mortem* examinations. 1. The presence of a deep-coloured eruption (papulæ, etc.) around the mouth or anus positively denotes congenital syphilis when the eruption has appeared in the first weeks after birth. 2. A croupal, diphtheritic, or ulcerous affection of the nasal fossæ in new-born children and nurslings, is a probable, but not certain sign; the probability of syphilis is greater if the disease of the nasal fossæ have appeared soon after birth. 3. Lobular indurations and inflammatory foci in the lungs, having a smooth, hard, grey or reddish yellow section, and presenting cheesy softening in the centre, denote congenital syphilis, unless the presence of miliary tubercles indicates tuberculosis. 4. The presence of gummata (*tubercules gommeux*) in the lungs of a fœtus, new-born child, or nursling, must be regarded as an indubitable sign of syphilis. 5. Fissures at the angles of the lips, deep or superficial ulcerations on the lips or tongue, with sharply defined edges and a lardaceous aspect, are, if they have appeared at or soon after birth, probably due to congenital syphilis. 6. Gummata of the liver, fibrous degeneration of Peyer's glands, and subcutaneous patches of suppuration on the skin of new-born children, are certain indications of the disease. (*Würzburg. Med. Zeitschr.*; and *Gaz. Méd. de Paris*, 15 Octobre 1864.)

Bacteria in the Secretion of Bronchitis and Coryza. M. Pouchet, having several times observed that patients who had bronchitis or coryza, or otitis, were sometimes awakened by an insupportable itching in the affected part, was led to imagine that this sensation might be analogous to the itching produced by ascarides, and be due to the presence of microscopic animalcules. Accordingly, on examining the sputa first expectorated by a patient with slight pulmonary catarrh, who had been awakened from a calm sleep by violent itching in the trachea, he found the secretion to contain an immense number of bacteria moving rapidly; some monads were also present. In half an hour afterwards, the expectoration, which was abundant, presented no trace of these organisms. A similar observation was made in a case of coryza; as well as in one of chronic otitis of the external ear. M. Pouchet says that the appearance of these animalcules—bacteria, monads, and vibrios—coincides with the rapid putrefactive changes undergone by the secretions of the mucous membranes and of some parts of the skin, under the influence of an elevated temperature and of retention on the surface of the membranes. (*Gaz. Méd. de Paris*, 19 Novembre, 1864).

SURGERY.

Rapid Obstruction of an Artery by Contusion. A man, aged 24, was admitted into the Lariboisière Hospital under M. Cusco on August 17th, 1863. His left arm had been caught between the buffers of two railway carriages three hours previously. When admitted, he had on the upper part of the arm, at the inner edge of the biceps, a contused wound, involving apparently only the skin; and other cutaneous injuries were present on other parts of the limb. There had been but slight hæmorrhage, and it had been easily arrested. The humerus was not broken. The limb was cold; and sensation was somewhat blunted. There was no pulsation in the radial and ulnar arteries, nor in the brachial below the wound just mentioned; above this, it was distinct. The next day, warmth returned to the limb; but the arterial pulsations were still absent. The patient did well, with the exception of an attack of erysipelas in the end of the month, which retarded his recovery. On September 10th, the wounds were almost healed, and he left the hospital, complaining only of a little deadness in the fingers and muscular weakness in the arm. On October 16th, he felt rather weak in the arm, but was otherwise well. Only some feeble beats could be felt in the radial artery, evidently produced by the collateral circulation. M. Cusco believes that the obliteration of the vessel was produced by the rupture of the internal membranes and the formation of a clot above the seat of injury. He considers the case interesting, on account of the rapidity with which so large an artery as the brachial became obliterated under the influence of a violent contusion, of which the action was indirect only. (*Gaz. des Hôpitaux*, 4 Aôut, 1864.)

Wound of the Small Intestine: Recovery. Dr. Pelizæus relates the following case. F. N., aged about 30, of good constitution and robust, was, on July 30th, 1863, wounded with a two-edged dagger in the abdomen during a quarrel; and was brought to Dr. Pelizæus about an hour and a half afterwards. On examination, there was found projecting in the left iliac region a reddish-brown convolution of intestine, of about the size of two hands; its vessels were bleeding vigorously and it was covered here and there with a whitish fluid. In this mass there were four wounds, two running obliquely and two transversely to the direction of the intestine, and varying from three-quarters to half an inch or less in length. The mucous membrane projected through all the wounds, and a whitish inodorous fluid escaped from each;

showing that it was the upper part of the small intestine that was injured. The wounds in the bowel were united by sutures, which were cut off close to the knots. The protruded bowel was then replaced; and the wound in the abdominal wall was also united by sutures. Febrile symptoms set in in the evening; and the patient had full doses of morphia and applications of cold water. The next morning he was better; but, as there was some pain in the umbilical region, ten leeches were applied. Under the use of morphia and cold applications, the patient recovered so far that he was able to rise (although against advice) on the third day. On the fourth day some castor-oil was given. At the end of three weeks, recovery was perfect; there was only a little painless swelling between the umbilicus and ilium; and the functions of the intestines were quite normal. (*Archiv für Klin. Chir.*, 1864.)

In the same journal, Dr. F. Wysler relates a case of penetrating wound of the hypogastric region, attended with protrusion of the intestine, which was wounded in two places. In this case the wound was united by sutures. An abscess formed, which discharged pus through the wound; and for a time there were symptoms of purulent absorption. The patient, however, ultimately recovered; and was quite well at the end of two months.

Spontaneous Expulsion of Calculi. Dr. Von Thaden describes one hundred and eighty calculi, varying in size from a poppy-seed to a pea, as having been passed by a man in the course of seven months. The calculi, which were of rather firm consistence—a small fragment being reducible to powder by strong pressure with the finger—consisted of uric and phosphoric acids, lime, and magnesia. The patient, who had generally enjoyed good health, had first passed small calculi, without much difficulty, six years previously. Seven months before he was seen by Dr. Von Thaden, he began, without apparent cause, to pass the calculi now described; their passage was attended with violent desire to pass urine and much pain, which latterly had much diminished. The ordinary symptoms of calculus were wanting; but the painful desire to pass urine was but relieved by constantly lying on the back. The bladder was examined on three occasions, in one of which a firm body, apparently about as large as a walnut, was felt. The urine contained scarcely any blood, was acid, of specific gravity 108, deposited a little mucus, and contained epithelium from the bladder, but no crystals. Whether the pieces came from one or more calculi, Dr. Von Thaden could not determine. He observes that the spontaneous expulsion of calculi does not frequently occur; but refers to cases mentioned by Walther, Leroy d'Etiolles, Crosse, and other surgical writers. (*Archiv für Klin. Chir.*, 1864.)

Digital Compression in Aneurism. M. Vanzetti of Padua has communicated to the Surgical Society of Paris the notes of seven cases of aneurism treated by digital compression during 1863 and 1864. The first case was that of a lady aged 28, who had an arterio-venous aneurism at the bend of the right arm, the result of a wound in bloodletting. The second case was one of arterial aneurism in a woman aged 63, also at the bend of the arm, and from the same cause. In the first of these cases, the cure was effected in six, and in the second in eight hours. In the third case, a man, aged 42, had popliteal aneurism, which had come on suddenly twenty-three days previously. A cure was effected in thirteen days, pressure having been applied to the femoral artery during 120 hours. During the treatment, pulsation in the aneurism returned on the twelfth day; but finally ceased on the application of pressure for eight hours. The fourth case was one of arterio-venous aneurism, and the fifth of arterial aneurism, both at the bend of the arm, the results of wound made in venesection. A cure was effected in both; in the former in five hours; in the latter on the fifth day. In the sixth case, a man aged 40 had a large traumatic aneurism of the left axilliary artery. M. Vanzetti applied compression to the subclavian artery for thirteen days, suspending it every eight or ten minutes; but at the end of this time, the artery having been compressed during ninety-five hours, the aneurism shewed no disposition to solidify; the pain returned, and the swelling became œdematous. M. Vanzetti therefore tied the subclavian artery at the point of its issue from the scaleni. This was done on July 27th, 1864, and the ligature came away on the twelfth day; the swelling had gradually diminished, but the aneurism remained fluid. On August 31st, there was still fluid in the tumour; but its size had diminished, and sensibility and emotion, which had been impaired, were returning in the fingers. M. Vanzetti observes that there is still room for fear lest the aneurism should inflame and suppurate. In the seventh case, a man aged 42, had an aneurism of the right popliteal artery. Pressure was kept up during forty-eight hours on the femoral by the convalescent patients of the hospital, when perfect solidification was effected. In the cases of arterio-venous aneurism at the bend of the arm, M. Vanzetti has found it expedient to compress the vein near its connection with the tumour, so as to bring the latter nearer to the state of an ordinary aneurism, and thus render it more amenable to treatment by compression. (*Bull. Général de Thérap.*, 15 Octobre, 1864.)

Subpubic Puncture of the Bladder. A commission, consisting of MM. Ségalas, Huguier, and Ricord, have reported to the Academy of Medicine on the operation of subpubic puncture of the bladder, proposed some time ago by M. Voillemier. (See British Medical Journal, vol. i, 1864, p. 95.) They say that, comparing this operation with other modes of puncturing the bladder, they do not hesitate to give it the preference; although they doubt whether the proceeding will come into general use until it has been proved, by a sufficient number of facts, that no mischief is produced by wounding the venous plexus which is traversed by the instrument. (*Gaz. Méd. de Paris*, 29 Octobre, 1864.)

MIDWIFERY AND DISEASES OF WOMEN.

Epidemic Icterus of Pregnant Females. At the meeting of the Academy of Medicine in Paris on October 25th, M. Blot read a report on a memoir by M. Bardinet of Limoges, on epidemic icterus in pregnant females, and its influence in producing abortion and death. *A propos* of this memoir, M. Blot related a case of severe sporadic icterus which had occurred under his care in the accouchement *clinique*. It agreed with the descriptions given by M. Bardinet. A young woman, aged 20, had reached the middle of the fifth month of her first pregnancy. After a quarrel, she was seized with icterus, attended with extreme agitation, and loss of consciousness. Her movements were disordered; she uttered acute cries; and vomited, in abundance and with suddenness, a greenish watery fluid. The os uteri was completely dilated; the membranes were ruptured artificially; and a dead fœtus was removed. She now was in a state of somnolence, which was followed by extreme restlessness; the pulse became small and frequent; coma set in; and she died on the second day. At

the *post mortem* examination, numerous subcutaneous ecchymoses were found; the skin had an icteric tint. There was considerable vascularity of the cerebral meninges and of the cortical substance of the hemispheres. There were ecchymoses under the pericardium; the ventricles contained black diffluent blood. The lungs were in a state of hypostatic congestion. Beneath the peritoneum were seen ecchymotic patches, especially over the stomach and bladder. The kidneys were rather large, and coloured yellow. The liver was small, of a deep brown colour, and more firm than in the normal state. The biliary vessels were empty. Examined under the microscope, the tissue of the organ presented no appearance of hepatic cells; there were only abundant fat-globules mixed with biliary matter. M. Blot thinks that the peculiar severity of icterus in pregnancy is due to modifications produced by this process in the liver—consisting in hypertrophy and a more or less fatty condition. (*Gazette Méd. de Paris*, 29 Octobre, 1864.)

Purgatives in Puerperal Fever. Professor Breslau of Zurich states that, during three and a half years, he has seen 137 cases of puerperal fever among 485 lying-in women; of these, 30 died. Of the 137 cases, 81 were mild and 56 severe. He gives, after relating the histories of several cases, the following conclusions. 1. It is not prudent to wait more than twenty-four hours after the commencement of puerperal fever before administering a purgative—even when it is not certain whether the disease is puerperal or milk fever. The administration of the purgative, he says, can never do harm; while its omission may produce most grave results. 2. The purgative ought to be energetic; and the practitioner ought not to fear to repeat it twice, thrice, or often, according to circumstances. Dr. Breslau prefers infusion of senna with potassio-tartrate of soda. Sulphate of magnesia or of soda may also be used; or castor-oil, jalap, or calomel. Dr. Breslau usually does not repeat the same purgative, but varies the substances used. Not unfrequently the diarrhœa continues; the disease then takes a favourable turn. 3. Inflammation of the peritoneum, ovarian ducts, or Fallopian tubes ought not to deter us from the use of purgatives; they are to be regarded as the most powerful antiphlogistic remedy. Besides purgatives, other means may be employed according to circumstances; such as leeches, mercurial frictions, ice, cataplasms, etc.; but, when there is not intense peritonitis, these are useless. Purgatives alone can arrest commencing peritonitis. The author supports his views by the recital of twenty-seven cases. (*Archiv der Heilk.*, and *Gaz. Méd. de Paris*, 22 Octobre, 1864.)

Utero-Interstitial Pregnancy as a Cause of Difficult Labour. At the Academy of Medicine on August 2nd, M. Parise of Lille read the history of a case, in which a female was delivered of a child, there being one already retained in an abnormal division of the uterus. No autopsy was made; but the diagnosis was verified by M. Depaul, who was called in consultation. M. Parise ended his memoir with the following conclusions. 1. A well formed fœtus may be developed in the uterus and in the substance of its walls, so as to form an utero-interstitial pregnancy. 2. This disposition may form an obstacle to natural labour, and constitutes a cause of dystocia, to be added to those—already too numerous—with which we are already acquainted. 3. It may retard the development of the uterine contractions, and prolong gestation beyond its natural term. 4. It may be diagnosed sufficiently early for the surgeon to be able to save not only the mother but also the child. 5. The following symptoms should lead to a suspicion of the existence of utero-interstitial pregnancy:—A large rounded tumour, occupying the base of the vagina, formed at the expense of one of the lips of the cervix uteri, and in the interior of which portions of a fœtus can be felt; the os uteri being situated very high on one side the tumour, and embracing it in a crescentic form. 6. The tumour, with the exception of presenting hard fœtal structures in its interior, may be taken for hypertrophy. 7. The most certain means of forming a diagnosis is to introduce the left hand, if the tumour lay on the left side, and *vice versâ*; to glide the hand between the tumour and the fœtus, high enough to ascertain that the whole of the fœtus is contained in the uterus and that no part of it is lodged in the tumour. 8. The existence of an utero-interstitial pregnancy having been recognised, the hand should be introduced, and the upper border of the partition which separates the two cavities seized with the ends of the fingers. A probe-pointed bistoury, fixed on a long handle, should then be introduced, and the partition should be incised from above downwards for a sufficient extent to allow the removal of the portion of fœtus lodged in the pouch. This operation, performed sufficiently early, may save the life of both mother and child. (*Gazette Méd. de Paris*, 6 Août, 1864.)

Hernia of an Ovarian Cyst. A young woman aged 17, was safely delivered nine months after marriage. Four months after her confinement, the catamenia had not returned. Subsequently, the patient began to feel general *malaise*, weakness of the lower limbs, headache, and occasional shooting pains in the left iliac region, with a sensation of weight. Five years afterwards, a tumour of the size of a walnut appeared in the fold of the left groin. On examination a few months later, M. Casati found, above the left crural region, a round fluctuating tumour, nearly as large as the head of a fœtus at full term; and the whole of the left iliac region was occupied by a tumour at least twice as large as that found externally. The abdominal tumour presented fluctuation, and appeared to communicate with the other. The diagnosis made by M. Casati was, that there was an ovarian cyst protruding externally. He punctured the external tumour and injected iodine. A month afterwards, there was only a small tumour in the crural region, and the patient appeared to be cured. (*L'Ippocratico*; and *Gaz. Méd. de Paris*, 12 Nov., 1864.)

Case of Vicarious Menstruation. M. Franceschi, in an essay on this subject, refers to the following case as being related in a Venetian medical journal. A woman aged 60, unmarried, subject to a certain degree of religious monomania, had for more than thirty years observed the following phenomena. The catamenia did not appear; but, instead of them, there was a discharge of blood from some part of the body, the precise time of appearance of which was predicted by the patient. Dr. Giachi saw one of these hæmorrhages. The blood came from the middle of the forehead; six ounces being discharged in an unbroken thread-like stream. The fluid was a pale rose colour and coagulable with difficulty. On another occasion, the hæmorrhage is reported to have come from the sternal region. There was no local disturbance; and the only appearance left was a small ecchymosis resembling a flea-bite. (*L'Ippocratico*; and *Gaz. Méd. de Paris*, 12 Nov., 1864.)

Occlusion of the Vagina Treated by Incisions. Margaret S., aged 27, was admitted into hospital on October 11th. Dr. Cronyn found her to be in the second stage of labour; but there was complete occlusion of the vagina, about half an inch from the vulva. A

year and a half previously, she had had a protracted labour, which was terminated by instruments; and she had veen very ill and sore for some months afterwards. In consultation with Dr. Denham and Dr. Kirkpatrick, it was resolved to open a passage in the vagina—the labour-pains being very strong, and no impression being made on the occluding tissue. Accordingly, chloroform having been given, and a catheter introduced into the bladder, Dr. Denham carefully made an opening with a bistoury in the septum; and, on a director, made a incision forwards and backwards, and one to each side. The opening was then dilated with the finger. The liquor amnii escaped with the first incision; and in three hours and a half afterwards a healthy female child was born. The patient went on well, and was discharged at her own request on the nineteenth day. The vagina was much contracted, as she would not submit to any treatment with the view of making the cure permanent. The case was reported before the Dublin Obstetrical Society; and, in relating it, Dr. Cronyn referred to a similar instance in the twelfth volume of the *Dublin Quarterly Journal*. (*Dublin Quart. Journ. of Med. Science*, November 1864.)

British Medical Journal.

SATURDAY, DECEMBER 24TH, 1864.

THE VENEREAL DISEASES COMMISSION.

It would be well that the profession knew somewhat better than they do at present, what are the exact objects of the Commission which has been appointed to inquire into the nature and treatment of venereal diseases—whether or not the Commission has any clear and definite purpose before it. We do not wish to be captious, and especially in the very rare case of a medical Commission appointed by Government; but, for the very reason that the Commission is a governmental one, it is desirable that it should, in its conclusions, respond to the expectations of the Government which appointed it. May we not, therefore, usefully inquire as to its prospects of success in this respect; and particularly so under the somewhat suspicious character of the initiation of the Commission? Unless we are much misinformed, the Commission was, at all events in part, initiated under the influence of what might be called enthusiastic ignorance. That is to say, the very last thing which had anything to do with calling it into existence was the voice of scientific inquiry. An enthusiastic gentleman, who holds views on the subject of syphilis such as are laughed at by every other member of the profession, by the very force of his own credulous convictions, so worked upon the non-professional ideas of navy and army authorities as to assist much in bringing the Commission to life. If this be true, the Commission is in some degree a homage paid by Government to ignorance, rather than to science. That which is the laughing-stock of the profession has operated seriously upon Government, and has aided in producing an assemblage of scientific men to investigate and report on the nature and treatment of venereal diseases.

Good sometimes comes out of folly; and, in this case, good may result from the inquiry. But we may in the meantime fairly ask, Would any body of scientific medical men have ever proposed a Government Commission for such a purpose? Would the Medico-Chirurgical or any other scientific medical body, for example, have undertaken to respond to such queries? Surely, when we consider the origin of this Commission, we may fairly inquire, What good is it likely to effect? What are its chances of answering satisfactorily the question put to it? And what is the main thing required of it by those who appointed it? The Commission, no doubt, before accepting the responsibility of such an inquiry, has put to itself questions of this kind; has tried its own powers and capabilities:

"Quid ferre recusent,
Quid valeant humeri."

But as yet the profession have not been informed of the views of the Commissioners—of the ideas which they entertain of the nature of the work which they have taken in hand, and of the direction in which they think to carry it out. It would be a great misfortune if the Commission should eventually make a report which leaves the matter just where it found it. Indeed, if it have not a chance of giving the Government some useful practical information, it would assuredly have been better that it had never been called into existence.

Let us, therefore, in the absence of any authoritative information, inquire in what way such a Commission is likely to produce useful or positive results. What are the considerations which would naturally press themselves upon the mind of any body of scientific men, when called upon to decide as to the propriety of forming a Commission for such a purpose?

And, first, as regards the scientific side of the question, it is manifest, on the face of the thing, that to the army and navy authorities it must be a matter of profound indifference whether or not there be one, two, or half a dozen varieties or species of syphilitic virus; whether or not secondary and tertiary and syphilitic productions are inoculable; whether mercury be or be not the right remedy for the disease; etc. The question those gentlemen want answered is this, How shall the syphilitic diseases of our soldiers and sailors be prevented or diminished? Reports or dissertations on the nature of syphilis, summaries of the opinions of all the learned authorities on this side and the other, and the conclusions *pro* and *con*, unanimous and otherwise, of the Committee as to its treatment, will manifestly be no answer such as the Governmental authorities want.

A scientific dissertation on the nature and treat-

ment of venereal diseases, signed by all the highest authorities of the Faculty and all the venereal specialists in Europe, would be of no use to the army and navy authorities. What they want to know is, how to prevent the soldier and the sailor from catching venereal diseases; how to prevent the loss of these men's services to the country, which results therefrom. The Government knows well enough that when the man has once caught the disease, his services are for a given number of days or weeks inevitably lost, and will be lost despite of the most learned reports on the subject, and despite of the most skilful treatment of the disease. A soldier or a sailor affected with venereal disease, whatever the treatment employed, is necessarily useless to the service for a given number of days or weeks; and we, as scientific men, know right well before the Commission enters on its business, that nothing which it can do in the way referred to can prevent that result. The very most that it can hypothetically pretend to is, to recommend as preferable over others some one of the methods of treatment already in use—to diminish by a few days the period of a venereally diseased soldier's or sailor's life in hospital.

Now, we have already said in this JOURNAL, and we repeat, what seems to us the plain English of the matter—that if this Commission is to do any service whatever in the sense for which it has been appointed, its main and prominent object must be the consideration of the prophylactic treatment of venereal diseases, how to prevent the spread of them; how, in a word, to prevent soldiers and sailors from catching them. What would any one now-a-days think of a Commission which was appointed to inquire into the nature and treatment of fevers, and appointed, of course, for the purpose of diminishing those fevers in a country—what would be thought of such a Commission, if it did not, primarily and above all, lay down rules for its prophylactic treatment? Science is all powerful in preventing the rise of certain fevers; science is all feeble in their treatment. In a lesser degree, equally is this true of venereal diseases. If, therefore, this Commission be of use to the Government, it will be so, not by discussing questions which every scientific men must feel beforehand that it can never solve, but by recommending the Government some means of arresting the diseases at their very origin and source. *Principiis obsta* must be their motto, if they do the work wanted by the authorities.

We can well understand a learned society of scientific men undertaking an investigation into the actions of chloroform, and into the best remedy for the asphyxial state, and producing most useful conclusions. Such a society experiments and learns from facts; and its recorded deductions, being the results of the observations of a body of learned and capable men, naturally have weight with the world.

But what definite and satisfactory deductions can be expected at the hands of even the most scientific body of men who are engaged simply in collecting and collating a heap of opinions—opinions, let it be, of the most scientific authorities—and who from these opinions alone (modified or unmodified by their own preconceived views on the subject) arrive at conclusions concerning the nature and treatment of venereal diseases? Can we, *à priori*, expect much in this direction from the labours of a Commission constituted, even as this Commission is, of the most capable of men?

WE had imagined that the old and respectable institution, a jury of matrons, had lapsed into obscurity. It still, however, seems alive, to mock the advance of scientific knowledge. A man and woman having been condemned to death at Norfolk,

"The prisoner Baker was asked if she had anything to urge in stay of execution. She stated that she was in a state of pregnancy; whereupon a jury of matrons were impanelled and sworn to try whether she were pregnant or not. The jury of matrons, having examined the prisoner Baker last night, found that she was pregnant. His lordship thereupon respited execution of the sentence until the delivery of her child or Her Majesty's pleasure be known."

If we remember right, it was not many years ago that a woman under sentence of death, who had been declared by a jury of matrons not *enceinte*, was nevertheless found to be so by the medical officer of the prisoner. We need not, to our professional brethren, discuss the patent absurdity of such a practice as allowing matrons to decide the question.

THE French Academy of Medicine, on the 13th inst., at its annual meeting, decreed the prizes for the year 1864. To Dr. Desguin, an army surgeon, was given 600 *francs*, the Academy's prize, for his answer to the question, "The clinical study of the Nervous Complications arising in the course of Acute Rheumatism"; and to MM. Ollivier and Ranvier 400 *francs*, for their theses on the same subject. Baron Portal's prize found no taker, on the question, "To determine the state of the Nerves in Local Paralysis". The subject of Madame de Civrieux's prize was, "The history of Progressive Locomotive Ataxy"; Dr. Topinard received therefrom 600 *francs*, and Dr. Bach 400 *francs*. Baron Barbier's prize on apparently impossible subjects; viz., The discovery of radical cures for cancer, epilepsy, typhus, and so forth, was not accorded; seven claimants, however, competed for the 4000 *francs*. Dr. Itard's prize of 3000 *francs* for the best work or paper on Medicine and Therapeutics was accorded as follows: 2000 *francs* to Dr. Davaine for his treatise on Entozoa; 1000 *francs* to Dr. Bonnafort for his treatise on Diseases of the Ear; and honourable mention of the names of Dr. Latour for his work on Animal Heat as the Principle

of Inflammation, etc."; and of M. Bonjean, *pharmacien*, of Savoy, for his treatise on Ergot of Rye. Dr. Capuron's prize of 1000 *francs* goes to Dr. Poreau, for his paper on Incoercible Vomiting during Pregnancy; and honourable mention is made of the names of two other physicians. Orfila's prize of 6000 *francs* on the subject of Poisonous Mushrooms, being indivisible, goes to M. Bondier, a *pharmacien*, of Montmorency; honourable mention is made of the names of Drs. Reveil and Cordier. Dr. Godard's prize of 1000 *francs*, for the best work on Internal Pathology, goes to Dr. Legros. Besides these, prizes of money, and gold, silver, and bronze medals, and honourable mention, were accorded to numerous medical men, for the services performed by them in the matters of vaccine and of epidemics during 1863.

The following are the prizes proposed for 1865 by the French Academy of Medicine. The subject of the Academy's prize of 1000 *francs* is Traumatic Paralysis. For Baron Portal's prize of 1000 *francs*, is proposed the question, "Does Cancer present any Specific Anatomical Characters?" For Madame Civrieux's prize of 1000 *francs* is proposed, "The Relations between General Paralysis and Madness." 'The state of the Pulse in the Puerperal State" is the subject of Dr. Capuron's 1000 *francs* prize. Baron Barbier's prize of 8000 *francs* is too large a prize to be taken; it is for him who shall find a cure for the (as recognised) most incurable diseases; viz., hydrophobia, cancer, epilepsy, scrofula, typhus, and such like. By the way, how is it that the endless tribe of advertising quacks, who yearly discover infallible remedies for these sort of diseases, do not put in their claims to the Academy? 8000 *francs* are not to be despised, even by a well-to-do empiric. We may also add that, if any of our own legitimate brethren (as sometimes it happens) thinks to have made a great discovery—for example, to have completely routed small pox by sarracenia; put an end to epilepsy by cotyledon umbilicus; fever by quinine; and so on *ad infinitum*—he should test the value of his invention by the light of M. Barbier's 8000 *francs*. This prize, adjudged by the Academy, will be a very satisfactory certificate. Dr. Amussat gives 2000 *francs* for the best surgical cure or remedy. Dr. Godard gives 1000 *francs* for the best essay on Surgery. For the year 1866, the Academy offers the following prizes and questions. Epidemic Erysipelas, 1000 *francs;* Headache, 800 *francs;* Shivering in the Puerperal State, 1000 *francs;* Digitaline and Digitalis, 2000 *francs;* Melancholia, 1500 *francs*. The essays for the prizes to be adjudged in 1865, must be sent to the Academy before March 1st, 1865, written in French or Latin.

As Government Commissions in a medical direction seem creeping into fashion, we would suggest, as well worthy the attention of such a learned fraternity, the subject of vaccination direct from the cow, as now practised at Naples. Here, at all events, is an actual fact capable of being distinctly dealt with; and a fact which may bear results of infinite service to the whole of our community. Dr. Palasciano read a paper on the subject at Lyons; and said that at Naples for twenty years and upwards cows were kept for the purpose of affording supplies of vaccine; that vaccine was supplied direct from the cow to the party vaccinated; that the children of the late King of Naples were thus vaccinated; that all those who could afford to pay the few shillings required for the luxury were at this day so vaccinated; and that the system was spreading through Italy—the united. Could any question be more worthy of serious inquiry? If all that is said of this mode of vaccination be true, it ought to become the universal practice. No doubt, vaccination in ninety-nine cases out of a hundred is an innocent operation; but to this day we have not the proof, that the seeds of a constitutional disease may not be transmitted with the vaccine from infant to infant. We know that, in the case of syphilitic disease, it has been so transmitted; we know that there is a very wide spread belief amongst mothers, that their children are apt to fall ill one way or other after vaccination; and every medical man must have observed the occurrence of eruptions, etc., in children after vaccination who had been previously perfectly free from disease. The very possibility of the occurrence of such a transmission per vaccine matter (pure or impure), should induce us to take serious cognisance of such a fact as that brought to our notice by Dr. Palasciano. This mode of anticipating the evils of small pox is, in our opinion, quite as worthy of consideration as is that other great evil, synonymous in name, which now occupies a Royal Commission's attention. M. Diday thus announces the fact.

"A grand fact in medicine has just been produced. The vaccination of animals, often previously attempted in France, but universally abandoned, has been successfully practised under our eyes in a way which assures us of its future success. Vaccine fluid taken from a cow has been inoculated in another cow, and at the same time in three children, and all the inoculations have succeeded."

A late meeting of the French Academy of Medicine was almost wholly occupied with the reading of a report by M. Blache on a paper of M. Barthez, on the Expectant Treatment of Pneumonia in Children.

"There are", says the French critic, "enlightened men who have the courage openly and boldly to advocate the principle of an expectant treatment generally in diseases. In their view, the duty of the medical man should be limited to watching over the natural progress of the disease; his art should not blindly and inopportunely interfere with nature. He should be contented with placing his patient in the most perfect hygienic conditions; and having done this, should leave him in the hands of a curative nature. They regard with sorrow those fussy practi-

tioners, who are as busy as flies, and who never leave their patients a moment's repose, incessantly tormenting both them and themselves; for ever giving orders, prescribing, bleeding, purging, etc.; in fact, men who are just like a corporal exercising recruits."

The paper of M. Barthez is founded on the observation of 212 cases of pure pneumonia observed during seven years at Hôpital Ste. Eugénie, in children of from 2 to 15 years of age. Two only of these 212 cases were fatal; and they were both cases of double pneumonia. In nearly one-half of these cases, scarcely any medicinal treatment was employed; in a large number, it was insignificant; and in about one-sixth of the whole, it may be called active. The duration of the pneumonia was between ten and fifteen days when the disease was left to itself. Under the expectant method, the convalescence occurred in from five to ten days; but was prolonged under treatment. M. Barthez concludes, with M. Legendre, that pure pneumonia in children habitually terminates favourably.

Dr. M. Duncan details in the *Edinburgh Monthly Journal* statistics touching the Weight and Length of the Newly-Born Child in Relation to the Mother's Age. From his careful investigations, he concludes that "a study of the weights and lengths of newly-born mature children tends to support to the doctrine that the vigour of the female reproductive system waxes till the age of about 25 years is reached, and then wanes."

The Commission appointed by the Academy of Medicine, to inquire into a method of cure of deaf-dumbness proposed by Mr. Turnbull, has refused further to entertain the subject, Mr. Turnbull having refused to explain his method of cure.

M. Velpeau has placed at the disposal of Professor Remak of Berlin a certain number of patients, on whom to exhibit the effects, therapeutical and galvanic, of the constant galvanic current in cases of nervous affections. M. Remak has brought to La Charité the apparatus which he has long used for the purpose. The Academy of Sciences has appointed MM. Rayer, Bernard, and Velpeau, and also M. Becquerel, a *physicien*, as a committee to assist at his experiments.

M. Pétrequin of Lyons recommends the application of tincture of iodine to cut surfaces as a means of promoting union by the first intention. M. Velpeau thereon suggests that the good effects are probably rather due to the alcohol in the tincture than to the iodine.

Dr. Giuseppe Severini tells us how to vaccinate homœopathically. He assures us that, if to a child be administered cow-pox diluted to the thirtieth degree, the desired effect never fails.

THE LATE WILLIAM SENHOUSE KIRKES, M.D.

William Senhouse Kirkes was born in the year 1823, at Holker, near Cartmel, Lancashire. His education was commenced at the grammar-school at Cartmel; but at an early age he was placed under the care of Messrs. Smith and Harrison, and of Mr. Langshaw, surgeons, in Lancaster, with whom he remained five years.

In 1841, he entered the Medical School of St. Bartholomew's; and the memory is not yet lost of his industry, talent, and blameless life. In the school examinations, he was in 1842 first in Chemistry, in 1843 first in Surgery, in 1844 first in Medicine, Midwifery, Medical Jurisprudence, and Clinical Medicine, and obtained also the collegiate prize. In 1846, he took the degree of M.D. at Berlin; in 1850, he became Licentiate, and in 1855, Fellow of the Royal College of Physicians. In 1856, he was Gulstonian lecturer. In 1848, he was appointed Medical Registrar and Demonstrator of Morbid Anatomy to the Hospital; and in 1854, after a close contest, Assistant-Physician; becoming full Physician in 1864, on the retirement of Dr. Burrows. He was also successively lecturer in the Medical School on Botany, and joint lecturer on Medicine.

The well known *Handbook on Physiology* was first published in 1848, in conjunction with Mr. Paget; the last three editions—viz., the third, fourth, and fifth—appearing in his own name only. He was also the author of numerous papers in the medical journals, some of them of no small value, and of an essay on Embolism in the Medico-Chirurgical *Transactions* for 1852. This, the first English essay on the subject, was founded on researches of his own, the originality of which was in nowise impaired by the publication but a short time before of some papers by Virchow containing similar views. He was an active member of both the Pathological and the Royal Medical and Chirurgical Societies; and, at the time of his death, was on the Committee recently appointed by Government to investigate the subject of syphilis. He had also been for some years indefatigable in collecting materials for a work on diseases of the heart. He died on December 8th, 1864, of double pleuropneumonia with pericarditis, after an illness of only five days.

Such is the brief outline of a life whose work might well have been spread over twice the number of years allotted to him. His success, the full fruits of which he was not allowed to reap, was owing to himself alone. His own merits, the good work he had done, the capacity he had shown, placed him on the staff of St. Bartholomew's Hospital in spite of powerful interest and of all but unbroken custom. Accurate in diagnosis, skilful in treatment, a worthy successor of the great men whose names adorn the roll of St. Bartholomew's Hospital, kind to his patients, ever ready to teach, a prudent and faithful adviser, gentle in act and word, he was yet himself unconscious of

the varied excellence of his own character. His loss will be felt widely beyond the circle of his own medical school, though most deeply there, for his finished work is but the earnest of what was with just confidence expected from him in the future; and though that work may be continued by others, his friends have sustained a loss which time can never perfectly repair.

Association Intelligence.

WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,
Honorary Secretary.

Taunton, December 10th, 1864.

Reports of Societies.

LIVERPOOL MEDICAL INSTITUTION.

DECEMBER 1ST, 1864.

HENRY LOWNDES, Esq., Vice-President, in the Chair.

Renal Calculi. Dr. GEE showed a specimen of a kidney containing two large renal calculi.

Mr. HIGGINSON and Dr. SHEARER offered some remarks on the case.

On Chorea, and on Nature and Art in the Treatment. By J. TURNBULL, M.D. Having pointed out the connection between chorea and rheumatism, and the relation in which it stands to epilepsy and hysteria and some other nervous affections, he stated that chorea might not only be a trifling disorder, but also a very severe, obstinate, and even fatal disease. It had been said that, because cases had been treated by diet and regimen only, and had recovered, the disease might very well be left to itself, and placed in the same category as many other disorders which tend to a spontaneous cure. He observed, however, that there is the same tendency to spontaneous cure in all curable diseases; and that this principle applies quite as much to serious acute diseases as to nervous disorders such as chorea and hooping-cough; and that it might be as well or better illustrated in regard to such acute diseases as pneumonia, the exanthematous fevers, and ague. He advocated therapeutic inquiry; but, in recommending sulphate of aniline as a remedy for chorea, he had done so with a full knowledge of the tendency to spontaneous cure, and had exhibited it as a gentle sedative in doses of two or three grains. It had been given in large increasing doses, as if intended to act as an antidote against the disease, as sulphate of zinc has been given; and a series of unsuccessful cases, in which it had been thus tried, had been published. He had, however, so often seen it prove useful, that he would still advise a trial of it in cases which resisted ordinary treatment, such as by the employment of the mineral tonics. He showed that the effects of aniline and of nitro-benzine had been confounded together, though in reality essentially different. He pointed out that nitro-benzine is one of the xyloids, a series of substitution compounds, all containing nitrogen, and formed by the action of nitric acid on certain organic compounds, and all of them narcotic and more or less highly poisonous, as had been originally made known by Dr. Edwards. In the treatment of ordinary cases of chorea, he considered the metallic tonics the remedies most generally useful—the preparations of iron, arsenic, and zinc. Purgatives were required where there was any source of irritation in the bowels; and the shower-bath he had often found to be a remedial agent of great value and power. Cod-liver oil often assisted by its influence in improving the nutritive functions. On the other hand, there were some agents which appeared to have an injurious effect. Opium and morphia had appeared to be hurtful; and, though it had been said that the inhalation of chloroform proved useful, in his own experience it had rather seemed to have acted injuriously.

Mr. A. B. STEELE, Dr. SHEARER, Dr. VOSE, and Dr. FINIGAN, took part in the discussion.

Dr. TURNBULL, in replying to the remarks that had been made, said that he did not advocate specific treatment in these cases, but thought that each should be treated on general principles. In some obstinate cases, he had found the sulphate of aniline particularly useful as a remedial agent.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, DECEMBER 3RD, 1864.

GEORGE D. POLLOCK, Esq., President, in the Chair.

Bony Ankylosis. By B. E. BRODHURST, Esq., F.R.C.S. The author said these cases were rare. When of the hip-joint, the patient is very helpless, and can only move by the aid of crutches. He is less helpless when the disease affects any other than the hip-joint. The propriety of interfering with bony ankylosis of the knee or ankle joint may be questioned; but, in the case of the hip and elbow joint, it must be of great importance to give the patient a chance of renewal of motion even where it would seem to have been hopelessly lost. In operating, it is important to divide the bone as near as possible to the articulation. In the elbow, a wedge-shaped piece may be taken from the centre of the articulation; and in the hip, the neck of the femur may be divided just below the head of the bone. The divided ends may then be scooped out, so that both surfaces shall be concave and facing each other; for the difficulty is to retain a false joint. So strong is the tendency for bony union to occur, a swinging limb need not be feared. If the action of the muscles cannot be gained, union by bone is certain to take place. It is important, therefore, to divide the bone in the most favourable position for the action of the muscles; and that point must be the nearest possible point to the articulation itself. In these cases, we have to deal with tolerably healthy structures; and hence it is that the tendency to repair is so strong. The muscles, too, which formerly moved the limb, are somewhat altered in structure; and, through disease, they will have lost power. It will require, therefore, for a lengthened period, both patience and fortitude to gain fair muscular power, after bony ankylosis has once become fully established.

CASE. A. M., aged 23 years, suffered from bony ankylosis of the left hip. When she was ten years old, she met with an accident, through which inflammation was excited. She continued to walk, however; no attention being paid to the limb for many months. She limped; the limb swelled; an abscess formed, and continued more or less to discharge pus and necrosed bone for ten years. Pain and abscess

at length ceased, and the limb became motionless. The author first saw the patient in 1862. She was in fair health. The question was, Could motion be given? Ankylosis had taken place, without dislocation of the head of the femur occurring. The neck of the bone was in part absorbed. The limb was shortened one inch and a half, to which the obliquity of the pelvis added two inches. She had for the previous year walked with crutches, and worn a boot raised four inches in the sole. The case appeared favourable for the operation, which was thus performed. An incision three inches long was made over the head of the femur to the outer side of the great trochanter, from which one another incision extended inwards. The neck of the bone was divided, and the ends gouged out. The flesh-wound healed almost by first intention; movement of the limb was attempted when the cicatrix was formed. The great difficulty now occurred. Motion was extremely painful, and, without chloroform, was apparently impossible. Movement was persevered in; and at length the limb readily moved, and some voluntary motion returned, so that she could extend the limb at a right angle. After six months, she could rotate the limb outwards, and sit down with ease. The pelvic obliquity was easily removed, the horizontal position being in itself almost sufficient. The foot was consequently brought much nearer to the ground; a steel support, with joints opposite the hip, knee, and ankle, was fitted to the limb; and the buttock supported by a leather shield. The operation has now been done two years. There is no lack of firmness about the joint, which requires constant exercise to keep it free; and she now walks with a stick, and without instrumental support.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, NOVEMBER 17TH, 1864.

WM. ADAMS, Esq., President, in the Chair.

Lesions Caused by Excessive Smoking. Dr. DRYSDALE observed that in a recent visit to Paris in August, he had been asked by Dr. Fournier, at present engaged in writing an article on the effects of tobacco smoking for the new Dictionary of Medicine, what lesions were attributed to excessive smoking by London physicians. He had replied that opinions varied greatly in this country; one physician of note as a pharmacologist asserting that no pathological states are caused by the habit; whilst another physician of great eminence stated that these well marked diseases were produced by excessive smoking, namely, palpitation of the heart, prolapse of the rectum, and impotence. Dr. Drysdale thought that tobacco smoking certainly tended, if not counteracted by other hygienic habits and a tough constitution, to produce several very disagreeable symptoms. He had recently remarked cases of jaundice in healthy young men, evidently produced by great smoking, such as three-quarters of an ounce to an ounce of tobacco a day. He had also under his care a young man with distressing palpitation of the heart, which the patient dated from his habit of smoking half an ounce of tobacco a day. Profuse smoking, he believed, tended to lower all the appetites, whether for exercise, food, or sex; in other words, to lower vitality.

Mr. CURGENVEN observed that dyspepsia and palpitation of the heart were among the most common consequences of excessive smoking. A gentleman from Havannah, a patient of his, an excessive smoker, who never had a cigar out of his mouth, had one day an attack of syncope, which he had attributed to smoking many cigars on an empty stomach. He was advised to take an early lunch and coffee after dinner. A medical friend of his had suffered greatly from nervousness and great dyspepsia, owing to excessive smoking. He left off the habit and recovered.

Mr. WEEDEN COOKE observed that tobacco smoking affected different persons very differently. Smoking had its beneficial, as well as its deleterious effects. It certainly subdues sexual feeling; and parents, he thought, need not find too much fault with their sons for smoking, as it often kept their desires more under control. He thought, however, that a woman was quite right to insist that her future partner should not smoke much. Many gentlemen from thirty to thirty-five came to him, complaining of impotence; and he had generally found them to be profuse smokers. Literary men were sometimes benefited by smoking, since the brain-irritation prevented their eating, and smoking might prove a sedative. In fine, he supposed tobacco, like opium, was a useful drug in some cases; but, like opium, liable to do injury when taken in excess.

The PRESIDENT said excessive smoking caused nervous diseases, conjoined with dyspepsia and deranged liver. One cigar would often be serviceable, as a promoter of peristaltic motion, whilst many would produce derangement of the intestines. Dilated pupil and amaurosis were caused, he believed, by great smoking; and in a case he had lately sent to an eminent oculist, the ophthalmoscope had shown that gentleman that the disease was caused by the habit.

Dr. ROYSTON mentioned the case of a ship-chandler in Liverpool, an excessive smoker, who had acute inflammation of the liver after an excessive bout of smoking; also the case of a clerk on the Great Western Railway, who never had a pipe out of his mouth, and who had fallen into a fit of intense prostation and died, Dr. Royston believed, in consequence of his profuse indulgence in smoking. No *post mortem* lesions were found.

Mr. JAKIN related the case of a gentleman, a great smoker, whose health was good until he suddenly left off the habit of smoking. He then became seriously ill; his pulse fell to 40, and on recommencing the habit he recovered his health.

Mr. TIMES observed that excessive smoking had bad effects on the brain. A young gentleman, a great smoker, had been rejected three times at an examination which his brothers had easily passed. He had frequently seen similar cases of impairment of intellect caused by excessive smoking.

Effects of the Climate of Tasmania on the Children of the Colonists. Mr. CURGENVEN asked if any member could give information as to the effect of Australian climates on the settlers and their offspring. In Tasmania he had heard that the climate was injurious to children. The heat of the day was excessive; the nights very chilly. He believed epilepsy was common among children. The female children grew tall and thin, and their teeth decayed soon; also the white part at the root of the nail disappeared.

Mr. JAKIN said that the tallness of young females was very marked, and that they were called "cornstalks" for their slenderness. There was large infant mortality in Australia, and much insanity prevailed; also tendency to rheumatism, and absence of chest-complaints.

The PRESIDENT had heard that adults throve well with Australia, while children did not. He was acquainted with an Australian family, where the girls were certainly all very tall, and answered the description given by Mr. Curgenven.

Sore Nipples, Mammary Abscess, and Remedies for the Suppression and Excitation of Milk. The PRESIDENT mentioned a case of diseased knee-joint which had come on after the patient had caught cold, and

had suppression of milk in consequence. The knee became anchylosed, and he did not know to what category of affections to refer the case whether pyæmia or rheumatism. He had broken down the anchylosis under chloroform successfully.

Dr. Royston had rarely in his practice any cases of mammary abscess, and this he attributed to his advice to the mothers to place the child to the breast as soon as possible after birth. The best remedy for suppression of milk he had found to be a lotion of camphor dissolved in spirits of wine, applied to the breast.

Dr. Graily Hewitt observed that, for the prevention of sore-nipples, it was very advisable to inquire into the condition of the nipple before parturition. If necessary, they ought to be elevated by gentle sucking for some days before delivery; also, tender nipples might be bathed in a decoction of oak-bark. After labour, the infant should be applied to the breast as soon as possible, in order as soon as possible to accustom it to suckle. He had found the best lotion for sore nipples to be a solution of nitrate of silver, in which case the child should suckle through a nipple shield. Sore nipples and mammary abscess were closely connected; in apparent abscess sometimes there was no pus, but only milk, even where the skin was red. In such cases the breast should be rubbed and gently pressed; this would often cure the apparent abscess. Treatment of chronic mammary abscess required simply attention to the general health in some cases for its cure. A lady-patient had suffered recently from this painful complaint. She was placed by Dr. Graily Hewitt on a diet containing a bottle of champagne every day, with some brandy, and was able to get about in a week.

Dr. Ballard said that his experience had taught him that the welfare of both mother and child were best secured by delaying the application of the infant to the breast for a few days after delivery. The natives of India had this custom, and it was natural to suppose that they had found it beneficial. If the infant were put to the breast before the third day, it would generally be found to suffer from green motions and diarrhœa; and the mother would be liable to after-pains, and to many diseases of the puerperal state. Large breasts in women were no proof of large secretion of milk; the only proof was the condition of the nursling. He was convinced that the common practice of early putting the child to the breast was opposed to sound physiology.

Mr. Jakin believed one of the best means of suppressing milk was lotion of belladonna, with salines; and for promoting the flow he had heard that the leaf of the castor-oil plant was a good remedy.

Mr. Weeden Cooke believed that, in chronic mammary abscess of either breast, we must abandon suckling in both, or the bad breast would not heal. Pressure by diachylon plaster strips was a good means of suppressing milk. In many cases of mammary abscess cold lotions are more useful than hot.

Dr. Graily Hewitt corroborated Mr. Cooke's assertion that it was necessary to avoid suckling with the healthy breast, in order to allow the one with abscess in it to heal.

Mr. Sedgwick thought the custom of the Indian women ought not to be cited in favour of any practice of suckling, since he had seen the results of their customs, which were by no means agreeable. They are accustomed to suckle their infants for three years, in order to keep back the next pregnancy, and in consequence their breasts became large and pendulous, reaching down nearly to the navel.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 22nd, 1864.

R. Partridge, Esq., F.R.S., President, in the Chair.

ON VASCULAR PROTRUSION OF THE EYEBALL; BEING A SECOND SERIES OF THREE CASES AND TWO POST MORTEM EXAMINATIONS OF SO-CALLED ANEURISM BY ANASTOMOSIS OF THE ORBIT; WITH SOME OBSERVATIONS ON THE AFFECTION.

BY THOMAS NUNNELEY, F.R.C.S.

The author began by referring to the first series of four cases of this uncommon affection published in the forty-second volume of the Society's *Transactions:* and suggested that, as these cases (like the three which formed the subject of the present communication, and especially the results of the *post mortem* examinations of the two patients who died long subsequently to deligation of the carotid artery, the particulars of which he was about to relate) proved the opinion so long entertained of the nature of the affection—aneurism by anastomosis of the orbit—to be incorrect, the name of it should be altered; and he suggested that of "vascular protrusion of the eyeball," as more in accordance with its true character.

The first of this second series of cases was of traumatic origin; it occurred in a man who was thrown from his horse. There were very decided symptoms of fracture of the base of the skull. In a few days after the accident the left eyeball began to protrude, and to exhibit all the symptoms characteristic of the disease. Five weeks after the accident, as the patient was getting worse, and there was fear of the eyeball sloughing, the common carotid artery of the same side was tied. The patient speedily and completely recovered, and now (eighteen months after the operation) remains well.

The second case was of spontaneous origin, in a woman aged 47. It occurred suddenly soon after she got out of bed. It had existed ten months. Beyond rest and cold lotions, very little treatment had been submitted to. It occasioned considerable distress, and incapacitated her from much work, as all exertion increased the suffering. It was probable that before long she would have to submit to more active means.

The third case was also spontaneous in its origin. For a long time the true cause of it was very obscure. The protrusion of the globe was excessive. Although ligature of the carotid (which was resorted to) was successful in arresting the protrusion of the eye, owing to other tumours which the patient suffered from, his health continued to decline, and he died exhausted eighteen months after the operation. The eyeball had collapsed, and had given no further trouble. For some time before the patient's death the disease was known to be malignant. A *post mortem* examination revealed a tumour developed in the cavernous sinus, pressing upon the ophthalmic vein, and passing into the orbit and the zygomatic fossa. Another tumour, which also during life had been pulsating, passed through an opening in the right parietal bone on to the brain. A large tumour projected externally from the sternum, and also into the cavity of the chest. The thyroid was a large mass of malignant degeneration.

The second *post mortem* examination was of the body of Mrs. J—, whose case was reported in the first series of cases. She died upwards of five years after the operation had been performed, since which, until a few days before her death, she had generally been in good health. The fatal disorder was thought to be acute bronchitis; she suddenly became comatose, and died soon afterwards. The entire brain was

found to be small; and the anterior lobe of the cerebrum on the side in which the carotid had been tied was considerably smaller than that on the other side. This condition, however, the author thought could hardly be attributed to the ligature of the vessel, for which he gave his reasons. On the side of the sella Turcica, just as the ophthalmic artery was given off from the carotid, was found a circumscribed aneurism, filled with a solid coagulum, which pressed upon the ophthalmic vein, and thus occasioned the protrusion of the eyeball.

The author thought these seven cases and the three *post mortem* examinations satisfactorily showed the true cause of the ocular protrusion to be pressure upon the post-ocular veins, which interfered with the free return of blood from the eye and orbit. He contended that usually there was no disease whatever in the orbit itself, the condition of the parts in it being merely passive, as a swollen limb is below a large popliteal or axillary aneurism; and that though a circumscribed aneurism, as in most sudden cases of spontaneous origin, or a diffused aneurism from rupture of a bloodvessel in traumatic cases, was the most common cause of the development of the affection, this was by no means a necessary condition for the existence of it. He believed that it might be induced by anything which causes pressure upon the ophthalmic veins or difficulty in the return of blood from them. Though in the most acute form the disease had been rarely seen, and its nature had been misunderstood, the author was inclined to think that in more chronic and much subdued degrees it was not so very uncommon. He considered that in many cases of protruded eyeballs in weak and delicate persons, in those with bronchocele or cervical tumours, and where there is impeded circulation from disease of the heart (particularly of the right cavities) or of the lungs, the disease is essentially of the same character as the more acute affection, though at first sight they may appear to be very different, and certainly do require such different management.

Correspondence.

MR. CRITCHETT'S OPERATION FOR EXTREME DIVERGENT STRABISMUS.

LETTER FROM GEORGE CRITCHETT, ESQ.

SIR,—In the last number of your JOURNAL (December 17th) there is a paper by Mr. Vose Solomon upon the Radical Cure of Extreme Divergent Strabismus. In that paper allusion is made to my method of operating for this deformity in the following terms. 3. "A *third* plan had been to excise the belly of the inner rectus, and then bring its cut ends together with sutures, the operation being concluded by a tenotomy of the external rectus. Of this method, invented and practised by Mr. Critchett, it may be sufficient to note, that in the hands of that able surgeon, the globe sometimes suppurated. Moreover, it is not a physiological proceeding, as normal convergence is not restored by it."

In this short paragraph three serious errors occur. 1. The method of operating is wrongly described. 2. Suppuration of the globe has *never* followed the operation in my hands, or, as far as I know, in the hands of others. 3. The power of the inner rectus is considerably restored. As the method I originally proposed has been extensively and successfully practised during the last nine years, not only by myself but by several of my colleagues, and by ophthalmic surgeons on the Continent, I think it may be interesting and useful to reprint the account that I originally published in the year 1855.

"Cases of eversion following the operation of dividing the internal rectus muscle, sometimes come before our notice. As this is a very distressing deformity,—far worse, in fact, than that for which the operation was originally performed, patients are very anxious to have something done for its removal. I have now operated on five of these cases with so satisfactory a result that I think it may be interesting to the profession if I describe the mode of proceeding that I adopt.

"I may premise that the operation I am about to describe is somewhat difficult and tedious, and should be performed under chloroform, and much of its success depends upon careful attention to minute details. Having freely exposed the globe by means of the wire speculum, the parts covering the inner parts of the globe, including conjunctiva, subconjunctival fascia, old cicatrix and muscle, with condensed tissue around it, must be all carefully dissected off the sclerotic, commencing about two lines from the inner margin of the cornea, and extending upwards and downwards, so as to expose the inner third of the surface of the globe. This dissection must be carefully made so as to preserve the flap entire; it can most readily be done with a pair of scissors. When this stage of the operation is completed, the external rectus muscle must be divided. It is better to defer this part of the operation until now, because the action of the external rectus is useful in keeping the globe well fixed outwards during the first stage of the operation. The next part of the operation is the most difficult and the most important. It consists in passing the sutures. For this purpose small semicircular needles must be used, armed with a piece of fine silk: the flap that has been raised from the eyeball must be firmly held with a pair of forceps, and drawn forward so as to make it tense; the needle must then be passed through it, as low down—that is, as near the inner corner—as possible. Two or three sutures may be passed in this way, at intervals of about two lines. The corresponding part of each suture must then be passed through that portion of conjunctiva which has been left attached to the sclerotic near the cornea. This constitutes another difficulty, because the membrane is here so thin that the fine silk is apt to cut through; this I found a serious difficulty in my first operation, and one that materially interfered with success. In order to obviate this, I adopt now the following expedients:—I first separate this portion a little upwards towards the cornea; the needle must then be passed through it, and then back again, so as to include a portion, which must be tied tightly, so as to prevent it from tearing out. The next point is to cut away all that portion of the lower flap that can be spared beyond the part where the suture has entered, merely leaving sufficient margin to hold it. The silks may be now drawn tightly, and tied to the end that is already fixed near the cornea. The immediate effect of this proceeding ought to be to procure some inversion, if the various steps of the operation have been properly performed. The hope and intention are, to get the parts to unite to the globe in their new position, and thus retain the eye. This, however, is only partially the case; there is always some tendency to relapse, and in two cases I had to repeat the operation, but with ultimate success. The sutures may be allowed to remain until they ulcerate through; the subsequent inflammation is usually slight. The amount of mobility in the eye is very limited, but so long as it occupies a central position this circumstance is not found practically to occasion much deformity, and is

an immense improvement upon the facial discord resulting from extreme eversion.

"My friend and colleague Mr. Bowman has performed this operation at the Ophthalmic Hospital, with his usual neatness and dexterity, and the effect was very perfect. My own experience would lead me now to undertake such a case with confidence in the result, if the patient would persevere; if sufficient effect is not obtained by the first operation, a second is almost sure to succeed. I may mention that one favourable effect of the operation is the drawing forward and restoring the inner caruncle to its natural place, the deformity being much increased by the sinking of this part.

During the nine years that have elapsed since this paper was published, I have operated upon a considerable number of cases, including various degrees of this deformity, both in public and in private practice, and the result has been most satisfactory. Further experience has enabled me to infuse much greater certainty into the operation than during my earlier efforts. I find that by regulating the position where the needles are passed through the flap that has been dissected up, I can restore the eye with great nicety and precision to the exact degree of inversion that I wish. Although I am strongly convinced that this is a safe and efficient operation, I am willing to substitute another proceeding, if it recommend itself to my judgment as preferable to my own, but until such an operation is devised, I am anxious that my method of operating should be fairly stated and fully understood.

I am, etc., GEORGE CRITCHETT.

75, Harley Street, December 19th, 1864.

DR. KINGSLEY'S ARTIFICIAL VELUM.

LETTER FROM EDWIN SERCOMBE, ESQ.

SIR,—Dr. Kingsley dismisses the question of the durability of his artificial velum very satisfactorily to his own mind, no doubt; but I, for one, am not so easily satisfied. Dr. Kingsley stated in his paper that the rubber of which it is made is specially prepared for the purpose. Now, this cannot be kept in stock at "any rubber factory". But, supposing this difficulty overcome, is it likely that the ordinary workmen of any rubber factory would be able to attach the gold tubing through which the fastening of the artificial velum to the teeth is effected? Those who know the nicety necessary in all dental work will not believe this could be done satisfactorily by other hands than those of a dental workman. I think, therefore, the durability of each velum is an important question which has not been satisfactorily disposed of by Dr. Kingsley.

Another important practical point occurs to me. The success of Dr. Kingsley's apparatus depends, on his own statement, upon an accurate adaptation to the fauces. Nothing is more common than an alteration in the size of the tonsils. I have just seen one of my own cases of cleft palate in which these glands have recently grown very much. Such a change would necessitate a reconstruction of every part.

I have never doubted the talents of the body of English dentists, although we are generally less loud in our own praise than our friends across the water are of theirs; but I still say—and, if it were not that I should unduly extend this letter, I would quote some of the remarks made at the different meetings at which this apparatus has been exhibited in America to show that the Americans themselves think that the apparatus can be only successfully made by the few—I still say that it is so elaborate in its construction, that I believe few only would be able to construct it. But, sir, it will be enough for me to explain to your readers that the very first step is to take an impression of the posterior nares and the fauces in plaster of Paris. Supposing the patient to have the greatest self-control, and the manipulator to be very expert, I think your readers will agree with me that the risk to life is by no means trifling from the possible falling of a portion of plaster into the trachea; while all manipulators are not so expert as to render such a proceeding safe in their hands. Thus at the very threshold we are met by a necessary condition, extremely difficult, and even, I believe, riskful to life, to comply with.

I will not say a word now about my apparatus, as I quite intend shortly to bring it before a competent jury to decide on its merits.

The last sentence of Dr. Kingsley's letter quite refreshes me; it is so unlike the opinion entertained by Northerners generally of their English *confrères*. I may perhaps just quote the language of one at a recent meeting of the American Dental Convention, who, speaking of this very apparatus now under discussion, said "he believed these great triumphs legitimately belonged to American dentistry, and hoped that it would continue as heretofore, ahead."

I am, etc., EDWIN SERCOMBE.

49, Brook Street.

TREATMENT OF PURULENT OPHTHALMIA.

SIR,—With a very limited experience in the treatment of purulent ophthalmia, it becomes me to speak with diffidence of the formulæ prescribed by others; but I really cannot avoid hazarding the opinion that a lotion of the strength indicated in the JOURNAL at page 659 would be much more likely to accelerate destructive inflammation than to arrest it. Possibly there may be some error in the formula, hereafter to be corrected.

After having, perhaps, inflicted my share of mischief in the treatment of infantile ophthalmia, I became long ago convinced that frequent ablution with warm water, and the application to the eyes of a very weak solution of nitrate of silver in distilled water—in the proportion at first of one quarter of a grain to the ounce—twice or thrice in twenty-four hours, affords the best chance for the preservation of the sight, and constitutes almost all that is required in the way of external treatment.

The internal treatment must depend upon the peculiarity of each patient; but may be summed up in "occasional doses of calomel, with jalapine, when required." Beyond slightly increasing the strength of the solution as the disease declines, there is little need of any addition to the above.

With the most ordinary cleanliness, I fancy that any danger to the patient's eyes from the presence of matter may be regarded as imaginary and unworthy of serious consideration.

Trusting that there is nothing herein contained at which an old acquaintance can take offence.

I am, etc., C. DE C.

W. Cambridgeshire, Dec. 1864.

AMMONIA IN FIRES. An apothecary at Nantes has discovered by accident that ammonia will put out fires. Seventy litres of benzine in his cellar caught fire. Water was being poured into the cellar without producing any effect, when the apothecary himself took up a pail which was standing neglected in a corner, and emptied the contents into the cellar. To his astonishment the flames were quenched as if by magic, and upon examination he found that the pail which belonged to his laboratory had contained a quantity of liquid ammonia.

Medical News.

APOTHECARIES' HALL. On December 15th, the following Licentiates were admitted:—

Daniel, William Clement, Heath House, Commercial Road
Dawson, Charles William, York
Edger, Warren, Kirkby-Stephen, Westmoreland
Haden, Edward Cresswell, Dudley, Worcestershire
Jackson, George, Plymouth

At the same Court, the following passed the first examination:—

Gowing, Benjamin Chaston, Guy's Hospital
Mackinnon, Henry William Alexander, King's College Hospital
Raby, John, St. Thomas's Hospital
Roper, Robert Gear, St. Bartholomew's Hospital
Smith, Joseph William, King's College Hospital
Ward, Frederic Henry, St. Thomas's Hospital

APPOINTMENTS.

FENWICK, George E., M.D., appointed Physician to the Montreal General Hospital.

STONE, Robert Sidney, L.R.C.P., appointed Resident Surgeon to the Civil Hospital at the Mauritius.

TRAPANI, Giovanni Battista, M.D., to be Collector of Customs in Malta.

ARMY.

BURTON, Staff-Surgeon-Major E. J., M.D., retiring on half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

MASSY, Staff-Surgeon H. H., M.D., to be Staff-Surgeon-Major, having completed twenty years' full-pay service.

THOMPSON, Surgeon J. A. W., M.D., 80th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

ROYAL NAVY.

BAXTER, W. H., Esq., Surgeon, to the *Cadmus*.

CAMERON, W. H., Esq., Surgeon, to the *Cadmus*.

COLLINS, Alexander, M.B., Assistant-Surgeon, to be Surgeon.

COWEN, Philip, Esq., Acting Assistant-Surgeon, to the *Highflyer*.

M'KENNA, Arthur, M.D., Assistant-Surgeon, to be Surgeon.

ROBERTSON, Archibald G., Esq., Acting Assistant-Surgeon, to the *Highflyer*.

WALLACE, Peter W., M.D., Assistant-Surgeon, to be Surgeon.

VOLUNTEERS, (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

DANE, T., Esq., to be Assistant-Surgeon West Middlesex R.V.

FINEGAN, J., M.D., to be Assistant-Surgeon Liverpool Irish R.V.

SAMUELS, A., M.D., to be Honorary Assistant-Surgeon Liverpool Irish R.V.

TAYLOR, J. S., Esq., to be Surgeon 5th Lancashire R.V.

WILSON, R., M.D., to be Surgeon 2nd Northumberland A.V.

DEATHS.

BROWN. On December 19th, at Rochester, aged 2½ years, Frederick Kilmore, son of *Frederick James Brown, M.D.

BULL, Charles, Esq., Surgeon, formerly of Diss, at Norwich, on December 5.

FAIRBAIRN, William C., Esq., Assistant-Surgeon, R.N., on board H.M.S. *Steady*, aged 32, on November 13.

*GODFREY, Joseph J., Esq., at Liverpool, aged 76, on December 14.

HARRIES. On December 5, at Bath, Augustus Edwin, youngest child of *Charles A. Harries, Esq.

HAWKINS. On November 30, at Exeter, Penelope E., wife of Thomas Hawkins, Esq., Surgeon.

JORDEN, William P., Esq., Surgeon, at 12, Lower Belgrave Street, aged 55, on December 11.

SELBY, James, Esq., Surgeon, at Hepburne, Victoria, aged 46, on September 24.

SIMPSON, George, jun., Esq., Surgeon, at Gower Street, aged 35, on December 19.

TIPPETTS, Edward, Esq., Surgeon, at Elm Grove, Brompton, on December 19.

UNIVERSITY COLLEGE HOSPITAL. The sum of £150 has been bestowed on this charity by Mrs. Penn.

STATUE OF LAENNEC. A subscription has been opened in France by decree Imperial for the purpose of erecting a statue to Laennec.

POLISH MEDICAL STUDENTS IN PARIS. The Emperor of the French has through his Minister of Instruction expressed his wish that all Polish students be admitted to lectures in the different universities of France without payment of fees.

BEQUEST. By will Colonel Onslow Baker, of the Indian army, leaves to the Consumption Hospital, Fulham, £100.

THE SOCIAL SCIENCE ASSOCIATION has accepted the very warm invitation given them by the Mayor and Corporation and Chamber of Commerce of Sheffield to hold their next annual meeting in that town.

M. TARDIEU. It was lately bruited about in Paris, and for a time believed by all the medical world in France, that M. Tardieu had been elected Minister of Public Instruction.

DONATIONS. The Royal Orthopædic Hospital has received from the Marquis of Westminster a donation of £200; and the Hospital for Diseases of the Chest, Victoria Park, £500.

SANITARY INSPECTION OF HOSPITALS. Dr. Dane has been authorised to proceed to Norwich, Ipswich, Languard Fort, and Harwich, for the purpose of making his half-yearly sanitary inspection of the barracks and hospitals at those stations.

MEDICAL CANDIDATE FOR A CORONERSHIP. Dr. Kemp has addressed a circular to the members of the Herefordshire Medical Association announcing his probable intention to offer himself as candidate for the office of coroner for the Leominster division of the county.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN. This Society has just received from Mrs. Penn, at the hands of W. Owen Lucas, Esq., a benefaction of £150. We are happy to add that this half-year the allowance made by the Society to 52 widows and 21 children of its former members amounts to £1,160—a noble amount to be spent twice a year in relief.

ROYAL COLLEGE OF SURGEONS. During the present week, upwards of eighty gentlemen have undergone the preliminary literary examination by the College of Preceptors for the diploma of membership of the College. The result will not be known until the next meeting of the Court of Examiners, about the 16th proximo, when the report from the College of Preceptors will be received, and the result communicated to the candidates.

THE HOSPITAL AT VIENNA. On the 12th inst., the stone to the newly-built Rudolph's Hospital at Vienna was laid by his Majesty in person. A document laid in the stone was signed by the Emperor, the Empress, the little Crown Prince, nine Archdukes, and Archduchesses, Francis d'Este Duke of Modena, and by all the Ministers and high dignitaries of State. The hospital, which has room for one thousand patients, is the first edifice built by the State for pacific purposes during the reign of the Emperor Joseph.

VEXATIOUS PROSECUTIONS. At a meeting of the Reading Pathological Society, held on December 13th, 1864, it was proposed by Mr. May, seconded by Mr. Vines, and carried unanimously: "That the members of this Society desire to express their sympathy with Mr. Davies in the late trial of Wright *v.* Davies, and their satisfaction with the verdict; and they regret that members of the medical profession should be exposed to harassing and vexatious prosecutions." It was also resolved that the preceding resolution be sent for insertion in the BRITISH MEDICAL JOURNAL, *Lancet*, and *Medical Times and Gazette*. [Might not the sympathy of the profession be more substantially expressed? Mr. Davies has, no doubt, been put to considerable expenses at the trial. We would suggest to the Reading Pathological Society, that it might open a subscription for the purpose of paying these expenses. EDITOR.]

University of Cambridge. Natural Sciences Tripos, December 15th. *First Class:* Danby (Downing); Bradbury (Downing); Rankin (Trinity); Cooper (Caius); Hon. A. Strutt (Trinity). *Second Class:* Clayton (Queen's); Hodgson (Trinity); Darroch (Trinity); Callis (Catherine); Barclay (Trinity). *Third Class:* Chambers (Trinity); Wilson (Caius); Jones (Queen's); Berners (Trinity Hall). The Examiners were: P. W. Latham, M.D.; C. Babington, B.D.; S. G. Phear, B.D.; and W. H. Brown, M.A.

Actonian Prize Essay. The Actonian Prize or Prizes of the Royal Institution will be awarded in the year 1865 to an Essay or Essays illustrative of the Wisdom and Beneficence of the Almighty as manifested in any of the Phenomena of Radiation. The prize fund will be 200 guineas, and may be awarded as a single prize, or in sums not less than 100 guineas each, or withheld altogether, as the managers in their judgment should think proper. Competitors are requested to send in their Essays on or before December 31st. The adjudication will be made in April 1865.

Royal Humane Society. Of suicides during the past five years in Hyde Park there were 86 attempts, of which 32 were fatal, the majority of deaths being caused by persons hiding themselves in the park of an evening, and when the gates were closed going deliberately and silently into the water without the chance of being seen. Fifty-four persons were rescued and recovered by the society's officers. It is gratifying to find that very rarely, if ever, is a second attempt made to destroy themselves by the rescued people, only one case of a renewed attempt having come under the notice of the society.

Honours to Scientific Men. In the *Moniteur* has appeared a report of M. Duruy, giving the names of those who, besides M. Ruhmkorff (who gained the 50,000 *francs* prize), have done the state some service in the application of voltaic electricity to useful purposes, and who are adjudged honourable mention. They are M. Lenoir, for his gas-engine; M. Caselli, for his telegraphic apparatus; M. Gaiffe, for his method of engraving by electricity; M. Bonelli, for his electric loom; Mr. Hughes, for his electro-printer; M. Froment, for his electro-motion engines; MM. Foucault and Serrin, for their electric lamp; and one or two more of less note. M. Froment is recommended for the officers' cross of the Legion of Honour. The same prize will be adjudged for the same purpose in 1868.

The Indian Medical Service. It is with the most sincere pleasure that we find ourselves for once able to praise heartily an act of the Indian Secretary of State. In a despatch, dated November 7th, he reconstitutes the separate medical service for India, throws over all the recent ideas, and offers terms splendidly liberal—terms which will most assuredly fulfil his expressed hope of securing "gentlemen of good social position, liberal education, and professional ability." Under the new regulations surgeons appointed to the Indian service will not be required to serve out of India except with their own consent, but will retain their full rank in any part of the world. Formerly every assistant-surgeon had to wait for a death vacancy to become a full surgeon—often a period of 17 years. His salary during that time might remain almost unaltered. The new despatch orders that every assistant shall, after 12 years' service, become a surgeon, whether there is a vacancy or no; that the grade of surgeon-major shall be introduced, that separate inspectors and deputy-inspectors general shall be appointed to the local service, and that they shall hold office only for tours of five years each, thus greatly accelerating promotion. Moreover, the pay is fixed on an entirely novel scale. The assistant-surgeon begins his career on a minimum pay of £350 a year, as he did before, but it is to rise steadily with length of service till he receives as unemployed or *minimum* pay *per annum*:—After five years, £365 *per annum;* after six years, £472; after 10 years, £492; after 12 years (surgeon), £770; after 15 years, £812; after 20 years (surgeon-major), £1,022; after 25 years, £1,065. This, be it remembered, is when unemployed—*i.e.*, the absolute *minimum* wage, the allowances for employ being, according to the rules laid down in the despatch, at least £250 more. As an Indian officer is never, except for a few months in a lifetime, left out of employ, the true *minimum* rates may be roughly stated at £350 to begin with, £560 after five years, £700 after ten, £1,000 after 15, and £1,200 after 20 years' service—really good pay. These rates, moreover, are independent of prizes, of an inspectorship on £3,000 a year, and at least three sub-inspectorships on £2,200 each, of a monopoly of stations with practice, of irregular cavalry regiments, and of various other exceedingly pleasant and profitable incidents of the career. This, however, is not all. The rates of pension have also been revised, and amount for the future to—After 17 years' service, say 41 years of age, £220; after 21 years' service, say 45 years of age, £292; after 24 years' service, say 48 years of age, £365; after 27 years' service, say 51 years of age, £465; after 30 years' service, say 54 years of age, £550; independently of the £300 a year granted by the Medical Retiring Fund, which fund, with all its liabilities, now very great, is henceforward to be managed and guaranteed by the State. The pensions, are, in other words, brought up within a third of those granted to the civil service, the best paid body of men who ever existed under a civilised government. And, in addition to all this, a deputy or full inspector will, after his five years' tour, be entitled to £250 a year in excess of the pension of his grade. To put the matter in ordinary English, out of official formulas, a young surgeon who enters this service at twenty-four will receive £350 a year; rise £50 year as a *minimum* for 20 years, and return home at fifty with a pension of £650 a year for ever, enjoying meanwhile all manner of extra chances, depending on special ability, special services, or special interest made by himself in India. If those terms do not bring good men into the service then competition must be abandoned for direct nomination, for no government in its senses would or could offer higher; but we have no fear of the result. Sir Charles Wood has broken through many rules and more precedents to settle the matter once for all, to give the view of the House of Commons a fair and honest trial, to grant the profession terms heavy enough to make good men willing to compete, and to "diffuse through them, when appointed, a spirit of satisfaction and contentment." If this despatch should fail there will be no remedy except to propose once more to the House to abolish competition, and, if it will not consent, to refuse all responsibility for the health of Her Majesty's subjects eastward of Alexandria. (*Spectator.*)

The Belfast Riots Casualties. Dr. Murney has published a pamphlet, giving an account of the casualties during the Belfast riots. The statistics have been compiled from returns made by seventy-three out of seventy-four medical men in town, and do not include trivial injuries. It appears that 316 persons were sufferers at the hands of the rioters—298 males and 18 females; 299 recovered; 11 died; and 6 were still under treatment. Nine of the 11 deaths were due to gunshot injuries, and two to contusions and

lacerations. There were 98 cases of gunshot wounds, of which 64 were slight and 34 severe; nine of the latter terminating, as before mentioned, in death. Under the head of "slight" are reckoned injuries from shot and superficial wounds from bullets and slugs. There were 5 cases of stabbing. The number of contusions and lacerations was 212; of these 149 were slight, and 63 severe. Many of the sufferers sustained serious and permanent injury, the marks of which they will retain through life. Throughout the town, to an extent which can hardly be realised, persons have had their health seriously impaired, and their nervous system shattered by fright. One case, at least, of mania is clearly traceable to the riots. (*Dublin Medical Press.*)

Varieties.

Professor Rose was a most amiable and liberal man. His students and assistants were his friends, and were constantly invited to his house. He never made use of his students to perform the drudgery and routine of his private researches. He seems even to have disliked receiving fees for his instruction. His lectures were illustrated in the simplest manner, and for most of his experiments he required only an ordinary test-tube. His dislike to display gave rise to the story that, after his assistant had caused the tarnished spirit-lamps to be brightened, the professor was found busily employed in restoring them to their former dingy hue. "He could not talk," he said, "amid so much glitter."

Pregnancy or Ovarian Disease. A circumstance has lately occurred in Ireland which has caused a good deal of "talk." A married female, mother of three children, presented herself to an hospital surgeon, and stated that for *a year and a half* she had observed a gradually increasing abdominal tumour, which gave her annoyance and interfered with her health. She was received into hospital, and after some weeks' residence the tumour was pronounced *ovarian*. She was considered a favourable case for operation; but previous to such a remedy a consultation was called. There were a goodly number of medicos present, and among them "professors" and "clinical teachers." After due examination of the patient, some thought immediate operation and some deferred interference advisable. The latter view was adopted, and in a few nights after the consultation the intended operator was suddenly summoned to the woman's bedside, when lo! nature had *operated* in relieving her of a *five months'* fœtus! It would seem that her husband *had been absent* some two years, and the tumour annoying her, she laid her plan for being *legitimately*, and, on *sound* principles, free from her burden, and she *succeeded!*—a caution as to a correct diagnosis being formed in abdominal tumours. It is stated that particulars will appear in the transactions of a medical society. (*Dublin Medical Press.*)

Science and the Bully. A writer in *Blackwood's Magazine* makes the following remarks on the examination of medical witnesses in courts of law:—"The grandest achievement of all is a poisoning case—something that is to be two-thirds emotional and one-third scientific—where the interest vacillates between the most powerful passions and the pangs of arsenic; and the listener is alternately carried from the domestic hearth to the laboratory and back again. Now, when one is aware that the 'learned Serjeant' knows as much about chemistry as a washerwoman does of the 'wave theory', the display of impromptu learning he makes is positively astounding. Armed with an hour's reading of Beck and Orfila, the great man comes down to court to puzzle, bewilder, and very often to confute men of real ability and acquirement; to hold them up to the world as hopelessly ignorant of all that they had devoted their lives to master; and in some cases to exhibit the very science they profess as a mass of crude disjointed facts, from which no inference could be drawn, or a safe conclusion derived.... A pitiable spectacle is that poor man of science, pilloried up in the witness-box, and pelted by the flippant ignorance of his examiner! What a contrast between the diffident caution of true knowledge, and the bold assurance, the chuckling confidence, the vainglorious self-satisfaction, and mock triumphant delight of his questioner! Mark the practised leer, the Old Bailey grin with which he comments on something that science still regards as uncertain or obscure, and hear him declare to the jury that, in the present state of medical knowledge, there is not a man in court might not be indicted for having handed the salt or the mustard to his neighbour!"

Suicide in the Vienna Garrison. Professor Engel has collated the statistics of suicide effected in the Vienna garrison during the four years 1859-62, both included. In the short period named no less than seventy-five persons destroyed themselves in this one garrison, averaging from 20,000 to 25,000 men. Of the seventy-five suicides, thirty-four were Austrian Germans—viz., eleven Viennese, ten from other parts of Lower Austria, two Tyrolese, two Styrians, one German Hungarian, and eight German Hanoverians. There were also twelve Bohemians, ten Gallicians, three Servians, one Sclavonian, six Hungarian Magyars, one Transylvanian Magyar, four Italians, and one Wallachian, one Bavarian, one Hessian, and one Rhenish Prussian. Thus twenty-seven belonged to the German race, twenty-six to the Sclavonian, seven to the Magyar, and five to the Italian. Dr. Engel observes, it is remarkable to learn that, in a body almost equally divided in race, the excitable Italian and the dull Magyar should be the two classes that yielded the fewest suicides. Among the suicides there were forty-two common soldiers, seven officers' servants, nine commissioned officers, three cadets, eleven officers of higher rank, and three medical officers. Hence the number of persons entrusted with charges was the half of the number of common soldiers, and of these eleven were Germans. Besides the officers' servants and the three medical officers, there were two belonging to the military police, two to the transport corps, thirty-two to the infantry, two to the Guards, nine to the Jagers, ten to the cavalry, two to the "Genie" corps, four to the artillery, and two to the sanitary corps and Quartermaster-General's staff. In regard to the modes of death, shooting was most usual; hanging was performed in sixteen cases; cut-throat in six; stabbing in two; opening an artery in one; fall from a window in one, and into a well in one; drowning in one, and poisoning in three. Of the Viennese, all chose every kind of death except shooting; two hanged themselves, four cut their throats, one stabbed himself, one opened an artery, one poisoned himself by sulphuric acid, and one by cyanide of potassium. Of the other Germans, six hanged themselves, and one cut his throat. Of the Bohemians, two hanged themselves, and one cut his throat. Of the Gallicians, four hanged themselves, one drowned himself, one stabbed himself, and three shot themselves. One Italian cut his throat, one threw himself from a window, and one into a well. One Magyar drowned himself. Most of the officers' servants shot themselves with their master's pistols, and two hanged themselves; one policeman and two

of the transport train hanged themselves; two Jagers and two artillerymen hanged themselves and one artilleryman cut his throat. Of the cavalry, two hanged themselves, two cut their throats, and one opened an artery. The Jagers and the infantry soldiers committed suicide by other modes of death than hanging—a fact naturally explained in the latter case by the difficulty experienced of obtaining firearms. Of the superior officers two hanged themselves, one drowned himself, and the remainder shot themselves. Of the three medical officers, one poisoned himself with cyanide of potassium, one cut his throat, and one shot himself with a pistol. In only two cases was there marked disease of the body. (*Spitals Zeitung*, and *Brit. and For. Med.-Chir. Review.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Zoological.—Ethnological.
THURSDAY. Royal.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE REGRET to have to defer letters of several correspondents.

A. B.—A medical man having only an Apothecary's License cannot legally put on his door-plate the word Surgeon.

MR. HARTSHORNE.—We cannot admit further correspondence on the subject; and for very obvious reasons. Two gentlemen differ diametrically as to matters of fact. A. says that B. deposed in a Court of Justice "that £3 was sufficient payment" for a certain surgical attendance, etc., done by A. B., on the other hand, declares that "he gave no evidence whatever as to the fee he (A.) ought to charge for his services." In face of such discrepancies, an editor must needs be dumb.

E. C.—We have no doubt that our "disgusted" contemporary knows perfectly well who his homœopathic correspondent is. There can be no great difficulty in eliminating out of four or five medical correspondents who have been allowed to say their say freely against the Association, the one who practises in the globulistic line. At all events, it is no business of ours to enlighten the editor's ignorance, whether real or mock. We will repeat only, that he is not, and as far as we know never has been, a member of the Association.

CHRISTMAS.—It will perhaps save some of our readers a little inconvenience by informing them that the Hunterian Museum and the Library of the College of Surgeons will be closed to visitors on Monday, the 26th instant.

UNFRATERNAL CONDUCT.—The remarks lately made in this JOURNAL under the head of "Our own Brethren", have, we regret to say, brought us several letters containing details of non-neighbourly and unfraternal behaviour between medical men. One gentleman complains that a brother practitioner, X., who attended a case of midwifery for him, during his unavoidable absence, and attended it under the distinct understanding, both from the woman and himself, that it was not X.'s case, nevertheless sends in a charge to the woman for attendance. Our correspondent says that he himself paid the fee to X., who took it without compunction. He then states how differently he himself had shortly before acted towards X.

"Some time ago, I reduced a dislocation of the humerus in a patient of X.'s during his absence, and, upon his return, gave up the case to him. X. thereupon sent me half-a-guinea, as half the fee, with a note, thanking me for my attendance. I returned him the money, stating in my note I could not allow any unfriendly feeling that existed between us to prevent my acting as I considered one medical man ought to towards another, however placed they might be with each other."

Local jealousies must, we suppose, exist amongst mortal professional men; but we would just remark, that such feelings should not, and need never, interfere with a due and the very strictest attention to all the well-known and ordinarily accepted rules of professional etiquette and ethics.

A PLEA FOR NITROGEN.—SIR: The "respirational absorption of nitrogen" was discussed at the late British Association after a paper was read thereon by Mr. Barham, who gave the short historical account, as well as the circumstantial evidences of its being the chief elementary gas, as food for animals and vegetables.

The recent proceedings induce me to lay before your readers reflections on the progress of introducing nitrogen, as the chief element in Nature, since 1832, when cholera first made its appearance in England and Europe. The fatality of this disease then called forth research and thought, how far medicine was founded on the truthful views of the elements of our globe. A natural idea of the origin of the uses of materials (as food and medicine are composed of), first proposed by myself: such fundamental principles were never offered by authors before 1832. Consequently, an entire new field was opened for practice. It may now be said, Woe to that person who dares such inroad with marks of neglect by the *savans!*

If mincing the matter, or flinching from open discussion, had been my plan, epithets of cowardice or inability might have been applied; but such cannot be said. On the contrary, every public and private means have been proposed by me to elucidate utility since 1849; yet silence or indifference has been the result towards a professional man.

As a warm discussion took place, and most severe remarks were afterwards publicly made on Mr. Barham, I desire to know if any one knows the action of assimilation of the gases in the formation of food, etc. I am, etc.,

WILLIAM PARKER, M.R.C.S., L.A.C.

Bath, November 28th, 1864.

VACCINATION CERTIFICATE.—SIR: I fancy the above question has been discussed more than once in the JOURNAL, although your correspondent of last week appears not to be aware of this.

There seems to be no doubt that it is an indictable offence to refuse signing the necessary certificates; but your correspondent seems to think it a peculiar hardship in his case, "not holding a parish appointment". I cannot see the force of his objection. He probably charges his patients five shillings or half a guinea for the operation, while I am paid eighteenpence or half-a-crown by the Guardians, and have frequently many miles to travel. The "three books containing certificates from the Vaccinator", were probably sent to your correspondent by the Registrar of Births, who might also be Relieving Officer; but I think it is self-evident that the "parish authorities" do not require these certificates, and therefore do not pay for them. They are, in fact, sent to the Registrar General. I contend further, that if these certificates are withheld by medical practitioners, the Vaccination Act must be an entire failure; and while I willingly admit its various imperfections, I cannot see the justice of constituting all medical men public vaccinators (as has been sometimes suggested); neither have I at present seen any satisfactory or practical improvement of it suggested. There are many other points that may be noticed; but I believe I have noticed the chief ones of your correspondent's letter. I am, etc., A PUBLIC VACCINATOR.

December 1864.

[If it be for the public good that every man who vaccinates a child should register the vaccination, why should not the public pay him for registering the act? His patient pays him for vaccinating, not for registering the vaccination. The case of a public vaccinator is different. He undertakes to vaccinate, and also to register the vaccination. EDITOR.]

QUACK ADVERTISEMENTS.—SIR: The enclosed quack advertisements will show you how this system is carried on in the country papers. They were cut out of the *Norfolk and Norwich Mercury*. All the others are nearly as bad. Hitherto, I have taken this paper; but shall now decline it, unless the objectionable advertisements are suppressed. One of these persons was proceeded against at Norwich, but the conviction failed, on account of Clause xl being so badly worded. I now beg to propose, whilst the so-called "Dr." Henery or Wray's case is fresh before the public, that a little pressure be put on the Medical Council, in order to make them bring the subject forward the next session of Parliament, in order to amend Clause xl, and make it effectual. I therefore propose that the different Branches of our Association should petition the Medical Council to that effect; and that the clause instead of the present one should be—"Any person who shall take or make use of the name or title of Physician, M.D., L.M.&S., B.M., or Surgeon, General Practitioner or Apothecary, unless he be registered as such under this Act, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds." I merely give this as a proposition, which can be altered or amended by others more competent; but shall be glad if it should meet your approval. I am, etc., AN ASSOCIATE.

December 6th, 1864.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 1st of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary*.

Birmingham, December 1864.

BOOKS RECEIVED.

1. The Diagnosis and Treatment of Cancer and the Tumours Analogous to it. By M. H. Colles, M.B. London: 1864.
2. Curvatures of the Spine; their Causes, Symptoms, Pathology, and Treatment. By Bernard E. Brodhurst. Second Edition. London: 1864.
3. The Treatment of Rheumatic Fever in its Acute Stage, exclusively by Free Blistering. By Herbert Davies, M.D. London: 1864.
4. Acupressure: a New Method of Arresting Surgical Hæmorrhage and of Accelerating the Healing of Wounds. By J. Y. Simpson, M.D., F.R.S.E. Edinburgh: 1864.
5. A Treatise on Smoky Chimneys. By Frederick Edwards, jun. London: 1864.
6. On the Early Symptoms of Phthisis: a Graduation Essay. By P. W. Latham, M.D. Cambridge and London: 1864.
7. The Successful Treatment of Internal Aneurism. By Jolliffe Tufnell. London and Dublin: 1864.
8. Medicines, their Uses and Mode of Administration. By J. M. Neligan, M.D. Sixth Edition. Edited by R. Macnamara, M.R.I.A. Dublin: 1864.
9. On Long, Short, and Weak Sight, and their Treatment. By J. S. Wells. London: 1864.
10. An Effectual and Simple Remedy for Scarlet Fever and Measles; with an Appendix of Cases. By Charles Witt. Fourth Edition. London: 1865.
11. Medical Errors. By A. W. Barclay, M.D.Cantab. and Edin. London: 1864.
12. Practical Dietary for Families, Schools, and the Labouring Classes. By E. Smith, M.D., LL.B., F.R.S. London: 1864.

COMMUNICATIONS have been received from:—Dr. WALTER GARSTANG; Dr. TURNBULL; Mr. FRY; Mr. A. RANSOME; Mr. A. J. GODFREY; Dr. J. B. PITT; Dr. P. W. LATHAM; Mr. REGINALD HARRISON; Mr. CRITCHETT; Mr. T. M. EVANS; Dr. S. W. J. MERRIMAN; Mr. R. N. STONE; Dr. G. M. HUMPHRY; Dr. FREDERICK J. BROWN; Mr. HIGGINBOTTOM; Dr. BOLTON; Mr. T. M. STONE; Mr. JOSHUA JAMES; Mr. R. THURSFIELD; Dr. KIDD; Mr. HAYNES WALTON; Mr. H. TERRY; Dr. H. P. LEECH; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. HARTSHORNE; THE HONORARY SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Mr. A. PRICHARD; Mr. J. VOSE SOLOMON; and Dr. DURRANT.

ESTABLISHED 1848.

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Original Communications.

SELECTIONS FROM LECTURES ON OPHTHALMIC SURGERY.

By Haynes Walton, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

Protrusion of the Eyeball. (*Concluded.*)

Protrusion from Causes without the Orbit.

Protrusion arising from pressure external to the orbit is apt to be overlooked, unless the surgeon be aware of the probability of the occurrence, and the sources whence the pressure may arise. The position of the orbit exposes it to encroachment on all sides. Diseases of each of the cavities and sinuses around, may reduce its capacity and protrude the eye.

Morbid Changes in the Cranium. The most common example from a cerebral origin is to be found in chronic hydrocephalus; the roof of the orbit is pressed down, and the depth of the cavity much lessened. The cause is here at once palpable, and so are most of the disturbing cranial influences. Cerebral tumours may protrude the eye; other changes in the cranium may displace it.

When the physical causes, although cerebral, are less marked, and their seat is not perceptible, headache, loss of memory, fits, partial paralysis, or other indication of lesion in the great nervous mass, with the previous history of the case, will generally determine them.

Frontal Sinus. I have met with an example of suppuration in the frontal sinus producing protrusion. Distension, with elasticity of the bone over the abscess declared its seat; and evacuation of the pus remedied all disturbance.

Writers speak of hydatid and encysted tumours, and polypi, being found in the above sinus; but such occurrences are remarkably rare.

Zygomatic Fossa. I have seen an exostosis, that appeared to have its origin in some part of the temporal or zygomatic fossa, throw the eye forwards. This is the only instance I know of disturbance from this quarter.

Maxillary Sinus. The maxillary sinus, or antrum of Highmore, is the seat of the most frequent cause of displacement, for it is frequently diseased; and a tumour of any magnitude having its seat here, can scarcely fail to throw up the orbital floor sufficiently to affect the eye; and such a cause could rarely be occult. Distension in some other direction, and some collateral symptom, would co-exist and determine it; and it matters not what may be the nature of the tumour—whether aneurism by anastomosis; polypus, or other soft growths of a mild or of a cancerous nature; simple exostosis, or malignant affections of the bones. All these have been met with. Suppuration, however, may greatly enlarge the maxillary sinus, which, in the natural state, is very small, without throwing up the orbital boundary. I have met with several examples of this.

Simple accumulation of mucus has been known to distend the antrum and to displace the eye.

Nasal Fossa. Nasal tumours—and I allude especially to polypi—could not advance and injure the orbit without detection. A careful examination of the nose would always render the cause apparent. Obstruction of the lacrymal duct, too, would surely usher in such intrusion.

Sphenoidal Sinus. Notwithstanding that I cannot advance any instance of protrusion of the eyeball from a distended sphenoidal sinus, I would wish to impress the possibility of the occurrence; for the anatomical arrangement of the parts, I should say, would seem readily to admit it.

I have shown that the direction which the displaced eyeball may take, affords little or no clue of the exact position of the cause of the protrusion.

It has been supposed that attention to the focal range may assist in ascertaining the position of pressure on the globe of the eye; the theory being that, if behind, the antero-posterior diameter will be lessened, and the range be shortened; if at the side, it will, on the contrary, be lengthened. I question the practical application of this; the imperfection of sight has, in all the cases that I have seen, resulted from decided loss of power in the retina.

With the greatest degree of protrusion, the pupil may be natural; but it may be dilated and moveable, dilated and fixed, or of its natural size and motionless. I am not aware that any practical indication can be gathered from any of its assumed states.

It is a well ascertained fact, that the eyeball may become dislocated by accident, being thrown forwards and firmly fixed in that position. Such an occurrence requires that the force be applied within the orbit, and against the eyeball—a person falling against a hook, for instance. In the case of this kind from which I get my knowledge, the dislocation was reduced. The margin of the upper eyelid, which was invisible, was elevated; and the eyeball pressed back to its place, which it entered with a distinct snap. Pains in the head and in the eye ensued, for which he was cupped and purged. Six days after the accident, all symptoms had disappeared, and vision was quite restored. Dr. Jacob suggests the following solution of the accident: that some persons possess very large eyes and shallow orbits; and often, while examining such eyes, he found that, by pressing the eyelids above and below, he could with ease get a back view of the eye. It was not that he merely saw one-half of the eyeball; but, by a little manipulation, he could obtain a view of the posterior part. Now if, by means of violence, the lids were tucked in, they would grip the back of the eyeball, and produce a protrusion of the organ from the orbit. He could not conceive any other way in which the accident could have happened; because neither the muscles sustained injury, nor was the optic nerve ruptured. Another speaker considered that the snap produced by the reduction of the dislocation proved the fact of the muscles being uninjured.

Some years ago, I was extracting an osseous cataract from a disorganised eye. I made the upper section, and had just got out the cataract with the curette, when, before the eyelids were released, the eyeball was forced out, actually dislocated, and, as it appeared to me, by the action of the orbicularis muscle. The protrusion was evidently increasing; and I quickly put the spoon of the curette under the edge of the upper eyelid, and lifted it forwards, while I pressed the eyeball back and restored it to its place. The whole occurrence could not have occupied twenty seconds. Vitreous humour did not escape.

There are important vascular diseases connected with protrusion of the eyeball that must not be passed over; aneurism by anastomis, aneurism in the orbit, and intracranial aneurism of the carotid artery. But as these are peculiar, and require a great deal of consideration, I shall devote a lecture to them.

Transactions of Branches.

BENGAL BRANCH.

CASES OF TYPHUS FEVER IN CALCUTTA.

By S. Goodeve Chuckerbutty, M.D.

[*Concluded from p. 679.*]

Commentary. The preceding narrative forces upon us the melancholy conviction that a *continued fever* of a fatal type has entered the precincts of Calcutta; for, out of the twelve cases related, above five died—a rate of mortality high enough for any country, and especially so for Calcutta, where, in my own experience of the last fifteen years, I have never known anything of the kind before. This fact suggests two significant questions: 1. Is this the so-called *epidemic fever* which for the last two years has been ravaging the villages of Lower Bengal? 2. Can it be the *typhus fever* of Europe?

To the first question I do not feel that I am in a position to return a satisfactory answer. I do not even know what the epidemic fever is, never having had an opportunity of visiting the places which are said to be stricken with it. Persons have sometimes come under my treatment in the hospital, who, I was told, had had the epidemic fever, but who had passed safely through the acute stage, and were only suffering from chronic intermittent fever and enlargement of the spleen and liver, alone or together, at the time of their admission. These, no doubt, were the sequelæ, and not the essential features, of the epidemic. Occasionally, in private practice, I have had cases of severe intermittents, contracted in the epidemic districts, who had, immediately on getting the disease, removed to Calcutta, and placed themselves under my treatment. To say, upon such data, that I have seen the epidemic fever, would be clearly incorrect. Nor can I make out its exact pathology and symptoms from the reports submitted to Government by Dr. Elliott and the Epidemic Commission. They seem to have laboured with commendable zeal, and to have drawn up able papers; but, whether owing to want of sufficient materials to go upon, or to want of leisure, they seem to have failed in giving detailed descriptions of the progress of the symptoms from day to day, and of the *post mortem* appearances in cases of death. Had I had those facts before me, I should have been able to compare them with mine. In the absence of that information, I am unable to accept statements as to the nature of this epidemic fever.

Apart, however, from all pretension of personal knowledge of the subject, and without professing to understand it from the published reports, I may roughly observe that, during the last three months, I have certainly noticed a much higher rate of mortality from fever in Calcutta than I had ever known to occur during the previous fourteen years. Deaths from remittent fever have been unusually frequent; and even the intermittent cases have terminated fatally oftener than before. Then there have been cases of the red fever and sun-fever; but these have not died, so far as I could learn. I am not aware if there have been any persons dying of typhoid fever this year in this country; but I have heard of some deaths from typhus, though only in a loose way.

In replying to the second question—Can it be the typhus fever of Europe?—to smooth the way, I will, in the first place, quote some descriptions of typhus from English authors.

[Dr. Chuckerbutty here read quotations from the works of Drs. Cullen, T. Watson, Graves, Copland, and Murchison, as to the characteristics of typhus; and continued:]

In speaking of the geographical distribution of this fever, Dr. Murchison makes the following statement at p. 58 of his work on *Continued Fevers*.

"As yet, there are no authentic records of typhus, such as we see it in this country, having been met with in Asia, Africa, or the tropical parts of America. . . . . Dr. Ewart has described two cases of 'typhus' as occurring in the jail of Ajmere, in Bengal; but the characteristic eruption was absent, and there was no evidence of contagion. Dr. Allan Webb, in his *Pathologia Indica*, had previously mentioned two cases of fever observed at Simlah, where petechiæ were present. But the fever is not said to have been contagious; and petechiæ are occasionally observed in the severe remittents of India, which have often been mistaken for typhus. According to Dr. Morehead, typhus is unknown on the continent of India. . . . .

"In 1861, Dr. W. Walker, of H.M. Indian Army, described an epidemic of 'typhus' prevalent in the preceding year in the north-western provinces of India, and observed by him in the central prison of Agra. But the evidence that the disease was genuine typhus, as seen in this country, is to my mind not conclusive. An eruption was never detected upon the skin, although it was carefully looked for; the swarthy skin of an East Indian would not suffice to obscure the eruption of typhus in its petechial stage; for I have known the eruption distinctly developed in Africans and East Indians."

I have been thus careful in making the foregoing extracts from some of the best writers on typhus, in order to bring prominently forward the most essential characters of the disease, so that we might so much the more easily compare them with the details of my own cases, and also at the same time subject these latter to the severest test in presence of the adverse opinions of two of the greatest authorities of the day as regards the occurrence of typhus fever in India. Both Drs. Murchison and Morehead are explicit on this point; and both, from their acknowledged ability and learning, deserve to be treated with the highest respect. But, however high their authority in the world of science, it is to facts alone that I wish to appeal in confirmation of my position, that the cases related by me were genuine cases of *typhus fever*. I have been looking out for more than fourteen years for cases of this disease; but never before did I meet with one instance in which I could identify it. The case of Joseph Harlgrave, therefore, came upon me as a real surprise. Since his admission on the 5th of July, up to this day (October 11th, 1864), my wards have never been free from typhus fever, although the total number received under me has been as yet only twelve. Of the other varieties of fever admitted into my wards during the same period, there were, intermittents 119, died 6; remittents 26, died 5; red fever 1, cured; sun-fever 2, cured; doubtful or suspicious cases, recovered fast, 3; heat-apoplexy 3, all died.

Of the 12 cases of typhus, 5 have died, 5 have been dischared cured, 1 is thoroughly convalescent, and 1 was admitted only four days ago. Thus, while the mortality from intermittent fever was 5 per cent., and from remittent fever 19.23 per cent., from the typhus fever it has been 41⅔ per cent.

Of the 12 cases of typhus fever, 10 were in men, and 2 in women. With regard to their nationalities and occupations, 1 was a Portuguese sailor, 1 a Swedish sailor, 3 East Indians, 2 country-born Europeans, 1 a Mahomedan boatman, 2 English sailors, 2 Irish, the man a sailor.

With regard to age, 3 were 25 years old; 2, 30; 1, 44; 1, 32; 1, 37; 1, 21; 1, 24; 1, 36; 1, 23.

One was admitted with a fever of two days' duration; 1, of three days'; 3, of four days'; 1, of six days'; 2, of nine days'; 1, of ten days'; 1, of eleven days'; 1, of twelve days'; 1, of fourteen days'. In the last case, the disease was marked by dysentery till some days after his admission.

Of the cases cured, the whole time from invasion to discharge was, in 2, thirty days; 1, twenty-seven days; 1, eighteen days; 1, seventeen days. Of the 2 cases in the hospital, in 1 the duration has been fifty-six days, and in 1 nine days. Of the cases that died, the period from invasion to death was in 1, seventeen days; 1, thirteen days; 1, sixteen days; 1, nine days; 1, twenty days.

In eleven patients, the *peculiar rash* was noticed to be present. It was of a mulberry colour; macular in form; varying in size; sometimes appearing elevated to the eye, like the eruption of measles; sometimes no higher than the skin; always disappearing on pressure, and returning on its removal; observed between the third and seventh days, sometimes later; and fading away and vanishing after five or six days, sometimes sooner, sometimes later. The only case in which the eruption could not be made out was that of the Mahomedan, though he had all the other symptoms of typhus.

The pulse was frequent and weak in all. The respirations were hurried and more or less difficult in all. Headache and pain in the back were met with in most. The conjunctivæ were congested in all. The pupils were sometimes contracted, sometimes of moderate size and sluggish; never dilated. The skin was hotter than natural, with, in some cases, the cuticle desquamating during convalescence. The tongue was loaded, dry and black, or glazed. The teeth and lips were covered with black sordes. The countenance was in all heavy and flushed. The mind was in a state of delirium, stupor, or coma. Muscular tremors were present in all; and subsultus tendinum in most. Dulness of hearing and want of sleep and appetite existed in almost all. The bowels were mostly constipated; sometimes loose; in the worst cases, moved involuntarily. The urine was scanty and high coloured, not albuminous. There was no pain in the abdomen, except sometimes in the hypochondria; only in one or two cases there was gurgling for one or two days in the iliac regions; tympanitis in most. Prostration of strength was always considerable; and, when recovery took place, the patients were long in regaining their strength.

The entire duration of their stay in the hospital, when discharged cured, was, in one, thirty-two days; in one, nine days; in one, eighteen days; in one, twenty-nine days; in one, fifty days. Death occurred in two in four days; in one, in seventeen days; in one, five days; in one, ten days. Of the two cases still in hospital, one man has been in fifty-two days, and the other as yet only four days.

Of the morbid appearances, congestions of the lungs, kidneys, and brain have been the the most frequent; occasionally, also, of portions of the intestines and stomach, and sometimes of the liver and spleen to a small extent; flabbiness of the heart, and blackness and fluidity of the blood, without coagula, in all cases; prominence of Brunner's glands in one; affection of the Peyer's patches in none; and in one case there was found an osseous piece attached to the falx cerebri, but not causing pressure on the brain. The cerebral membranes were always congested, and contained much serum.

It remains now to consider the question of contagion. Is the fever, of which twelve cases have been given above, contagious? This is a point more easy to moot than to answer. Although now-a-days the contagiousness of typhus fever is almost universally admitted, yet it required long years ere the profession was unanimous about it. The fact is, that it is one thing to be morally convinced that a disease is contagious, and another thing to be able to bring home that conviction to others by unquestionable proofs. Even to this day, the contagiousness of cholera is a debateable ground. Those who believe it to be contagious appeal, apparently, to overwhelming evidence, when they bring forward cases of its occurrence in persons who had had intercourse with cholera patients, and who had, in their opinions, carried it with them from one place to another. Those, again, who, like myself, have seen the disease on a large scale, without its infecting the attendants more than could be accounted for by the atmospheric condition, reject the contagiousness of cholera *in toto*. I mention this fact, not to call in question the contagiousness of typhus, but simply to show how difficult it is to prove it. That typhus *is* contagious is granted. But that my cases were those of typhus is held to be doubtful, till they are proved to be contagious. To solve this difficulty, I fear I cannot offer much in the shape of direct demonstration; and it is on that account that I wish to impress on my professional brethren the nature of the task. But, because I cannot advance direct proofs, it does not follow that the disease is not contagious. In favour of it, we have: 1. The interesting fact that the persons affected had mostly led a seafaring life; 2. That the majority of them came from Loll Bazaar and its immediate vicinity, there being only one from the shipping, one from the Almshouse, and one from the Nimtollah Ghaut; 3. That at no one time were there more than two or three cases distributed through four wards of the hospital; 4. That the ventilation of the hospital is most complete; 5. That the beddings were immediately and invariably destroyed on the discharge or death of every case; and the bedsteads, after being washed with boiling water, were left exposed to the sun for some days before being returned to the wards. We are bound, therefore, to take into account the short duration of the disease among us as yet, the small number of cases, the scarcity of them in the hospital, the thoroughness of the ventilation, and the adoption of precautionary measures against the spread of contagion, in disposing of this question; and then say, after allowing for the efficacy of these things in checking contagion, whether the fever under notice is contagious or not. For my own part, I believe that it *is* contagious; for in one man (James Brown), who was admitted for dysentery, it did appear as if the fever had been caught from Harlgrave, who was in the same boarding-house, either outside or in the hospital. In a second instance, both the husband and wife were admitted with it on the same day; the wife having been ill twelve days, and the husband nine days; consequently, the latter having most probably caught the fever from the former. Besides, there were also several slighter cases, which certainly did occur in the hospital; but as in them the rash did not last long, and the fever soon got well, I have placed them among the suspected cases. Now, I think, if due allowance be made for all these things, the conclusion is inevitable that the fever I have alluded to is contagious; and, further, that it is typhus—an opinion fully supported by its heavy rate of mortality, which is as high as during some of the worst years in London, as noticed by Dr. Murchison.

How did Harlgrave catch this fever? Did he bring it from the Portuguese ship? I made every inquiry on this point, but could elicit nothing. Did he get it on shore? The only circumstances in favour of it are, that an epidemic fever is known to be raging in Bengal; that all the fevers this year have

been peculiarly fatal; and that the overcrowded state of the sailors' boarding-houses, situated as they are in the dirtiest part of the town, in Loll Bazaar, is extremely likely to have given rise to it.

BATH AND BRISTOL BRANCH.

CASE OF STRANGULATED CONGENITAL HERNIA.

By Augustin Prichard, Esq., Senior Surgeon to the Bristol Royal Infirmary.

[*Read December 1st*, 1864.]

John Jones, aged 56, was admitted as my patient on the evening of Sunday, November 6th, suffering from strangulated hernia on the right side. He was a small and rather fat man, a shoemaker by trade, and long the subject of hernia. On this occasion, it had been down about eighteen hours; but never before had it attained the same size. He was a good deal sunken, and distressed by the constant vomiting. The tumour was very tense and tender, and of large size, being twenty inches in circumference, and eighteen inches longitudinally; that is, measuring from the groin over the prominent part, and back to the junction with the body. There was very distinct fluctuation to be discovered, the fluid occupying nearly all the scrotum; and, as in hydrocele, but one testicle could be found.

I gave him some chloroform, according to our custom, intending to try the taxis whilst he was insensible; for he had become very tender, from the tightness of the stricture and manipulations he had been already subject to. He took two drachms of chloroform, and became insensible; when I tried the taxis, but in vain. He then became so weak and collapsed, and almost pulseless, that all chloroform was discontinued, and I was afraid to invert him as I had intended. I punctured the sac with a grooved needle and hydrocele-trocar, and removed about half a pint of serum, without altering the state of affairs. I therefore operated, making a moderate incision. There was a great depth of fat; but all was accomplished most satisfactorily. I found the stricture at the external ring, firm and round like a whipcord; and I divided it without opening the sac. The intestine went back at once.

All this time, the patient had been cold and collapsed, and almost pulseless, but quite conscious; and from this state he never recovered.

I gave him warm brandy and water; and external warmth was applied; and he had a little opium.

The next day, his general condition was the same; but his bowels had been freely moved, and he expressed himself as feeling better, and recovering. During this day, he had stimulus and support, and said, until the evening, that he was mending; whilst the skin had the cold feel of that of a dying man, and his pulse could scarcely be felt.

The next day, he died.

Post Mortem Examination. The body was examined the following day. There was a thickness of at least an inch and a half of fat over the abdomen. The rupture proved to be, as I had diagnosed during life, a large congenital scrotal hernia. A part of the intestine had slipped down again into the scrotum, but was very easily withdrawn, for the opening was very patulous. *Eight feet* of the ileum, with the corresponding part of the mesentery, were of a dark mulberry hue, but quite firm, and of the usual thickness, without any trace of disorganisation or inflammation, and without the hard contraction at the junction of the sound and damaged parts sometimes seen in these cases. There was no effusion of lymph or serum, and no adhesion of the contiguous coils of intestine. The interior of the dark portion of the gut was very black, as if blood had been effused into the mucous membrane. His lungs were healthy. The heart was much loaded with fat upon the outside. The left ventricle was thick and healthy. The walls of the right ventricle were thin and of a healthy colour in the greater part of their extent; but near the apex, perhaps for the space of an inch, the tissue was converted into fat. The lines of the direction of the muscular fibres were perceptible, and the microscope showed the whole to be fat.

Remarks. I think this case worthy of the attention of the Society for two reasons; viz., the hernia itself, and its fatal issue.

Strangulated congenital hernia in the adult is a rare condition, and is especially so when the tumour attains so large a size. Mr. Lawrence says that the stricture is generally in the neck of the sac. In this case, the stricture was undoubtedly formed by the tendon of the external oblique; and, as in the only other case of strangulated congenital hernia I have operated on, was extremely tight. In another fatal case, I found an equal length of intestine in the hernia.

The question of the fatal result is of more practical importance. The operation was quickly performed, and was as satisfactory as could be; and, although I cannot say in direct terms that the patient died from the chloroform, it is my belief that the collapse into which he fell while taking the chloroform took away all his power of rallying. The case bears on the discussion of our last meeting; viz., the safety or otherwise of chloroform. We have here a patient with a condition of heart not discoverable during life, but likely to cause fatal syncope in the event of chloroform being used; the subject of a very severe disease and operation dying within two days, without the slightest reaction or attempt at repair.

It is probable that the actual state was a paralysis of a very feeble heart.

Quackery Abroad. A great type of social ignorance flourishes marvellously in Germany—the quack doctor. With us he works furtively among the very humblest social elements. Those who never hear of him otherwise will be surprised to find how he plasters the walls of Liverpool and the manufacturing towns. But in Germany he is great and eminent. I found him with a newly started project, which was getting a great run—*fichte-nadel Anstalt*, or Fir-needle Institution. The ministering priest of such a temple doses you with a concoction of fir-needles, and bathes you in the same, performing certain other incantations. In a country covered with dense pine-forests, his stock in trade is large enough, should his dupes prove sufficiently numerous. Like most people rurally inclined, I delight in the aroma of pine-woods on a sunny day; but the hot breath from the cauldrons of the Anstalt, as I passed the door, felt sickening. You are told that it cures every disease; and you are not only requested, but perhaps compelled, to submit to this doctrine. I knew of one instance where a very sick lady had fallen into such hands. Her family found that the practitioner, being a medicine Rath—sometimes so pronounced as to sound like medicine Rat—could not only carry out his own nostrums, but could put down all competition with them, having the medical command of the district, which he perambulated with uniform and epaulets; and he would have undoubtedly proceeded deliberately with the slaughter of the patient, had she not, at considerable risk, been removed out of his way. (*Blackwood.*)

Reviews and Notices.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A.Cantab., Assistant-Surgeon to St. George's Hospital and to the Hospital for Sick Children. In Four Volumes. Volume the Fourth. Pp. 1079. London: 1864.

[*Concluded from page 707.*]

Diseases of the Urinary Organs have been most appropriately entrusted to Mr. Henry Thompson; who describes briefly Diseases of the Kidneys and Ureters, and more fully, the Diseases of the Bladder, Prostate, and Urethra.

In speaking of Paralysis of the Bladder, Mr. Thompson observes that this term is often wrongly applied to cases of atony from distension in consequence of obstruction to the flow of urine. True paralysis of the bladder depends on an impairment of the nervous supply; it may be by cerebral or spinal lesion, by excesses, by reflex irritation, etc. Permanent paralysis has never been found by Mr. Thompson to be traceable to an over-dose of belladonna; although it has been described as arising from this cause. In atony from over-distension, in consequence of obstruction, or of long retention of urine, the muscular fibres of the bladder simply lose their power in consequence of being over-stretched.

In his remarks on the Treatment of Stricture, Mr. Thompson speaks very favourably of the plan of rupture brought into practice by Mr. Holt. He says he has repeatedly verified the fact that an old stricture may be dilated up to a certain moderate degree, beyond which the slightest advance produces severe constitutional disturbance. The force employed in the old plan of driving a large conical bougie through the stricture "pushes the stricture down the canal, loosens its cellular connections, and infallibly produces inflammation and fever." On the other hand, the same stricture may, without producing such results, be ruptured by Mr. Holt's instrument, or distended according to a method adopted by Mr. Thompson, of using an instrument which distends the stricture alone up to a calibre of 14 or 16 of the catheter scale.

"I do not hesitate to say, that many of the cases which have hitherto resisted dilatation may be successfully dealt with by that method, whether applied in his" (Mr. Holt's) "manner, or by my own. The cases in which these methods appear most likely to be valuable are those in which the morbid material constituting the stricture does not form too thick or too dense a mass to be entirely ruptured. Where the stricture forms a large and hard nodule, it may, perhaps, be better to divide it with a cutting instrument. For many, however, of the cases which have been hitherto so treated, I believe the plans in question offer considerable advantages. To rupture a stricture appears at first sight a harsh and rough proceeding; but a careful and unprejudiced examination of its results on a large scale, and some personal practice of it, has convinced me that it deserves the character accorded to it here." (P. 399.)

The plan which Mr. Thompson prefers is that of distension of the stricture by means of an instrument consisting of two steel rods, which, by turning a screw, are made to diverge from each other so as to form a spindle-shaped figure opposite the stricture. The application is made very slowly, so as to produce as little rupture as possible, while the tendency of the stricture to contract is overcome.

In introducing the subject of External Urethrotomy, Mr. Thompson gives an interesting sketch of the history of the proceeding. He would restrict the term "external division" to the operation devised by Mr. Syme; while the use of the term "perinæal section" should be limited to the well known proceeding of older date, performed in connexion with strictures which have been found impervious to the catheter.

The author speaks of Mr. Syme's operation as producing excellent results in exceptionally obstinate cases; and says "I have observed such results in my own practice for cases which, I believe, could not have been materially benefited by any other proceeding." As to the mortality after the operation, Mr. Thompson does not consider it large, especially when it is considered what unfavourable subjects selected bad cases of stricture generally are. In 219 carefully collected cases, there was a mortality of between six and seven per cent., mostly from pyæmia.

In the treatment of Retention of Urine, Mr. Thompson holds that the choice of operation depends on the solution of certain questions regarding the patient. If his condition be such as to compel us to afford him immediate relief, without regard to ulterior results, then, unless the distended urethra can be felt in the perinæum, puncture by the rectum is to be preferred, unless the prostate be in the way. But if it be likely that the patient will require to wear a cannula for a considerable time after the operation, then he prefers the suprapubic method. In rare cases, where distension of the urethra may be perceived in the perinæum, a lancet or sharp-pointed bistoury may be employed, and a female catheter introduced; "or, if the powers of the patient are good, and the condition of the parts is natural, perinæal section may be employed."

Mr. Alfred Poland contributes the article on Urinary Calculi and Lithotomy. He gives first, as is usual with authors on this subject, an account of the physical and chemical characters of calculi; regarding which we will only say that it is drawn up with great care and completeness.

The question of the Mortality after Lithotomy is very fully investigated. Adopting a table of Mr. H. Thompson's, and slightly modifying his arrangement, Mr. Poland arrives at the following result. (We condense his table somewhat.)

Ages.	Cases.	Deaths.	Proportion.
1 to 11	850	49	about 1 in 17.33
12 to 16	178	19	„ 1 in 9.5
17 to 29	162	22	„ 1 in 7.36
30 to 48	175	24	„ 1 in 7.3
49 to 70	424	103	„ 1 in 4.12
71 to 81	38	12	„ 1 in 3.16
	1827	229	1 in 8

To this Mr. Poland appends a table drawn up by Mr. C. Williams, the house-surgeon of the Norfolk and Norwich Hospital, during a period of ninety years ending December 1862. We give a portion of it.

Age.	Operations.	Deaths.	Proportion.
1 to 20	455	34	1 in 13.38
20 to 40	119	8	1 in 14.87
40 to 60	190	35	1 in 5.42
60 to 80	146	41	1 in 3.56
	910	118	1 in 7.71

Of these cases, 869 were males, of whom 811 were operated on by the lateral and 41 by the median section—the deaths being respectively 105 and 11; 17 were lithotrised; and 41 were females, of whom 2 died.

As to the rate of mortality, Mr. Poland observes that, although its comparison with the age of the patient seems the most rational and practical course, even this is open to the objection that a large stone may have existed for some time, and may thus influence unfavourably the result of the operation. But certainly, as a general rule, the mortality increases with the age; although, in the tables of Mr. Thompson and Mr. C. Williams, there are some remarkable variations. Thus, in Mr. Thompson's table, while the mortality in the periods, 12-16, 17-20, and 21-29, in 178, 76, and 86 cases, was respectively 1 in $9\frac{1}{2}$, 1 in 7, and 1 in 8, that of the age 30-38 (75 cases) falls to 1 in $10\frac{1}{2}$; while that of the next period (39-48) rises to 1 in 6. Again, in Mr. Williams's table, the mortality of 328 cases from 1 to 10 years was 1 in 14.9; that of 55 cases from 10 to 14, 1 in 27.5; that of 72 cases from 14 to 20 rose to 1 in 7.2; while that of 111 cases from 20 to 40 fell again to 1 in 14.87; after which it rose to 1 in 5.27, ending in 1 in 3.

Mr. Williams has also furnished a table of 44 cases of Median Lithotomy performed in the Norwich Hospital, giving the age, result, duration of treatment, number of calculi, their dimensions, weight, etc. Comparing these 44 cases of median lithotomy with the last 44 cases of lateral lithotomy in the Norfolk and Norwich Hospital, the following results are arrived at. From the lateral operation, there were 2 deaths, which occurred among 14 patients aged from 50 to 60 and from 70 to 80. From median lithotomy, there were 11 deaths; 1 in 9 cases under 5 years of age; 1 in 3 cases between 30 and 40; 2 in 5 cases between 50 and 60; and 7 in 15 cases between 60 and 70. The average duration of treatment after operation in the lateral lithotomy cases, was thirty-seven days; after median lithotomy, thirty days—that is, in the cases which recovered.

Mr. Poland's opinion of median lithotomy is, that "it may be performed where the stone is small"; but that, while recovery is ordinarily expected in children whatever operation be performed, none of the recent improvements seem to supply what is wanted—the lessening of the mortality after the operation in adults. We think certainly that other influences must be looked to, than the mode of operating or the skill of the operator, essential though these are.

Mr. Charles Hawkins furnishes a very complete and practical paper on Lithotrity, an operation to which he has paid considerable attention. Among the recommendations which he makes are; that the surgeon should, especially if the bladder be irritable, crush the stone *once* only in the first operation; that, afterwards, he should do as much at each operation as the patient can bear without great inconvenience, so as to obviate the necessity of very frequent repetitions of the proceeding; that no attempt should be made to remove fragments of calculus by instruments, but that they should be left to be washed out by the urine; and that, in performing lithotrity, the rule should be invariably followed, *to introduce an instrument into the bladder as few times as possible.*

Mr. Hawkins, in comparing lithotomy with lithotrity, shews a strong preference—and with evident reason—for the latter operation; and expresses his concurrence in the opinion of Sir Benjamin Brodie.

"My own experience" (says Sir B. Brodie) "has certainly led me to the conclusion that lithotrity, *if prudently and carefully performed, with due attention to minute circumstances,* is liable to smaller objections than almost any other of the capital operations of surgery. The cases, indeed, to which it is not applicable are very few indeed, and they are chiefly those in which, from the calculus having attained an unusual size, the danger and difficulty of lithotomy are so great that no surgeon would willingly, nor otherwise than as a matter of duty, undertake it." (P. 490.)

An article on Surgical Diseases of Women follows, from the pen of Mr. Jonathan Hutchinson. It is, as the author intimates, necessarily brief and limited in its range: but what there is, bears the general sound character which pervades Mr. Hutchinson's contributions to surgery. The subjects treated of are:—Urethral Hæmorrhoids; Malformations of the Vagina or Uterus; Uterine Polypus; Uterine Fibroid Tumours (in reference to Surgical Treatment); Malignant Disease of the Cervix Uteri; Malignant Disease of the External Genitals; Surgical Measures in Cases of Extra-uterine Pregnancy; Ruptured Perinæum and its consequences; Organic Diseases of the Ovary, and their Surgical Treatment; and Vaginal Fistula.

At page 505, Mr. Hutchinson gives a series of conclusions at which he has arrived regarding the Enucleation of Fibroid Tumours of the Uterus. They are, he says, the result of careful study: but some of them may be modified by further experience. He regards interference with interstitial tumours as a dangerous operation, and not to be performed unless under very urgent or favourable conditions. A tumour of moderate size, partially extended, should be at once removed; and the operation is warrantable even when the tumour is still embedded, if life be threatened by hæmorrhage. Primary enucleation is to be preferred, except when the tumour is very large or is firmly united to the capsule. At the first operation, the surgeon should endeavour to free the tumour from its cyst as much as possible; in this way, primary enucleation may sometimes be effected when the secondary plan had been thought necessary. In primary enucleations, the after-treatment should consist in the use of opiates, stimuli and nutritious diet, and other means of sustaining strength. In secondary enucleations, ergot should be given, at the same time that the patient's strength is supported, and discharges and sloughs removed. In great exhaustion and threatened pelvic inflammation, the internal use of turpentine is of much value. The result of a successful operation for enucleation, Mr. Hutchinson regards as being likely to be favourable.

In the section in Ovariotomy, Mr. Hutchinson puts forth, regarding the advantages of the operation as shewn by statistics, an argument which is not often taken into account in estimating the value of

surgical proceedings. He objects to comparing ovariotomy to lithotomy, amputation, etc., and says that it must be judged on its own merits. "Let it be admitted," he says, "that the object of surgery is the increase of the sum of human life, and the alleviation of its miseries. Whether this life is enjoyed by many individuals over short periods, or by few over long ones, is not of moment, if the sum of it be increased." Then he goes on to institute a comparison between 100 patients submitted to ovariotomy and of whom one-half recover and are restored to health; and 100 other ovarian disease patients, not operated on, who live a life of suffering having an average duration of three and a half years.

"The average age at which women submit to ovariotomy is 35; and the average expectation of life at this period is 30 years. The 50 patients who recovered might, therefore, expect to enjoy a total of 1500 years of health, which compares very favourably with the 350 years of illness which the whole 100 would have had to endure, if not operated on. If it be objected, that it is not just to one person to deprive her of four years of life in order that another may live 30, the reply is, that this is a matter for the patient to consider, and not the surgeon." (P. 535.)

We do not see how an objection to ovariotomy could be fairly put in the form in which Mr. Hutchinson has supposed it. No surgeon would expose a patient to the risk of deprivation of four years of life *in order that* another might live thirty years; that is not his object. He puts before his patient the certainty of a short life of misery, and the probability of a long life of health; and, as Mr. Hutchinson says, "all that the honest surgeon is responsible for is, that the prizes which he offers to the competition of his clients shall be *bonâ fide*, and in sum of value far exceeding the deposits which he exacts."

Dr. G. M. Humphry contributes an article on Diseases of Male Organs of Generation. In it, he describes the various Surgical Diseases of the Testis Vesiculæ Seminales, Scrotum, and Penis. Of the affections of the Vesiculæ Seminales, he says that they have not hitherto received from surgeons that attention which they deserve; "for these bodies are not uncommonly diseased in company with the testicles or independently of them; and such diseases may induce or aggravate inflammation of the bladder, and be productive of other ill effects." They sometimes become secondarily inflamed in gonorrhœa; are not unfrequently the seat of scrofulous disease; and Dr. Humphry has in several cases "known a chronic enlargement of the vesiculæ seminales analogous to the affection of the prostate in elderly persons, and attended with corresponding symptoms of irritation of the bladder" The disease of the vesiculæ seminales is to be detected by rectal exploration.

Mr. Henry Lee and Dr. J. A. Marston conjointly furnish an article on Gonorrhœa. That it has been written by men of such experience, is sufficient warrant of its accuracy and value.

Mr. John Birkett writes the next article, on Diseases of the Breast—a subject on which he has long enjoyed a high reputation.

The next article, Diseases of the Thyroid Gland, is by Mr. Holmes Coote; who describes Bronchocele, Inflammation, and Cancer. He adopts the opinion of Rokitansky, that,

"If we except serous, fibrous, cartilaginous, and bone-like productions, all other new formations in the Thyroid Gland are extremely rare. Tubercle is scarcely ever seen; and cancer in its medullary form is in the highest degree exceptional." (P. 708.)

The description of Diseases of the Skin has been placed in the hands of three writers. Drs. Jenner and Hillier furnish the first part, on General or Constitutional Affections, including under this head the affections commonly recognised as diseases of the skin, together with Plica Polonica.

Mr. Thomas Smith then writes on Local or Surgical Affections of the Skin and its Appendages; including under this head Corns, Bunions, Warts, Horns, Boil, Carbuncle, Malignant Pustule or Charbon, Chilblain, and Diseases of the Nails. On what principle Boils, Carbuncles, and Chilblains, are considered to be local rather than constitutional affections, we do not see.

Here ends the matter proper of the *System of Surgery;* and the Appendix begins with an article on Surgical Diseases of Childhood, by Mr. Holmes, Mr. Brodhurst, and Mr. Shaw. The object of the authors is not to give a full account of the subject, but to notice such matters as have not been treated of in other portions of the work. When subjects have been thus already disposed of, references are given to the parts of the work in which their descriptions are to be found.

Mr. Holmes writes on Operations in Childhood; and on Malformations—including attached fœtus, congenital sacral tumour; congenital malformation of the face; spina bifida; imperforate rectum; malformations of the umbilicus; hermaphroditism; malformation of skin; and malformation of limbs. Mr. Brodhurst writes on Congenital Dislocations and Fractures *in Utero*. Mr. Shaw supplies remarks on Congenital Tumours, Congenital and Infantile Syphilis, Infantile Paralysis, Gangrene, Leucorrhœa, Tumours of the Vagina, Rickets, Lateral Distortion of the Spine, and Pigeon-breast Deformity.

Next follows an article on Hectic and Traumatic Fever, and on the Treatment of Cases after Operation, by Mr. John Croft.

Dr. G. Harley writes on Apnœa; describing it according to the causes which produce it, of which he gives a very distinct classification at page 878.

Mr. George Busk contributes concise but instructive articles on Parasites (animal and vegetable) and the Diseases which they produce; and also on Venomous Insects and Reptiles.

Mr. Holmes writes on Surgical Diagnosis and Regional Surgery.

Sir Ranald Martin contributes a very important article on Hospitals. We regret much that the necessity of concluding this review precludes us, for the present at least, from doing more than mention the fact that such an article is in the work before us. The topics treated of are, the history of the institution of hospitals; site and construction, ventilation, light, and cubic space; hygiene of hospitals; administration; diet and cooking; nurses in military hospitals, and in civil hospitals; respective duties and relative position of nurses and orderlies; statistics of hospitals; mortality of hospitals; finance; and convalescent hospitals.

The last chapter is one by Mr. Holmes Coote and Mr. J. C. Wordsworth, on the principal Surgical Instruments and Apparatus at present in use.

Thus has been completed, within a reasonably short time, Mr. Holmes's *System of Surgery;* and we

cannot conclude without saying that very great credit is due both to him and to the writers who have contributed to the work, for having so well put together such a valuable mass of surgical knowledge. It adds very greatly to the value of the book, that in many instances the names attached to the articles are those of surgeons who are known to have given most careful attention to the subjects, and to have enjoyed special opportunities of becoming more or less thoroughly acquainted with them. We congratulate Mr. Holmes on so successful a completion of a task which, although one of pleasure, must also have been one of great and unremitting labour.

British Medical Journal.

SATURDAY, DECEMBER 31ST, 1864.

OUR PROFESSIONAL BRETHREN.

LIVERPOOL has again been the scene of a trial not unlike the one brought against the surgeons of the Northern Hospital for alleged malpraxis. On this occasion, however, it involved not the surgical staff of a public institution, but the reputation of a highly educated and respected practitioner. Again have we another instance of a surgeon coming forward with an unqualified "bone-setter" to assist in subjecting a medical brother to a cruel persecution.

The facts are briefly these. A Mrs. Pryce fell down stairs, receiving a severe injury of the right forearm. Mr. Essex Bowen, surgeon to the Birkenhead Hospital, was sent for, and at once diagnosed a simple fracture of both bones of the forearm, attended with a very large amount of injury to the soft parts. The limb was at once placed in position, and retained semi-prone by means of a splint. A few days after the injury, much inflammation took place; and eventually a deep slough formed on the inner and middle part of the forearm. The inflammatory action delayed union of the fractured bones. Five weeks after the injury, and whilst the slough was coming away, Mrs. Pryce placed herself under the care of Mr. Evan Thomas, a bone-setter in Liverpool, and his son, Mr. Evan Thomas, jun., M.R.C.S.England; under whose care she has since remained.

The evidence of the father and son at the trial went to show that the condition of the arm was due to improper treatment on the part of the defendant. Mr. Evan Thomas informed the court that he did not know Latin; and, when asked which was the ulna and which the radius, he very candidly replied, "Ask me a plain question, and I'll answer you." Evidence of this sort, it was clear, would not carry a verdict. A professional man was, therefore, required to back it. Liverpool was canvassed; but without effect. Manchester was then appealed to; and sends a representative—Mr. Lund, surgeon (as he states) of the Manchester Royal Infirmary, and in practice since 1847.

The plaintiff stated that, after her arm was set, the palm of the hand looked directly downwards; and the inference drawn from this was, that it was set, not in the ordinary *semi-prone* position, but in the *prone*. Now, this was clearly a mistake; no doubt arising from the fact that, when the arm is raised for the purpose of "setting", the palm looks directly downwards, but, immediately the arm is brought to the usual position at the side, the thumb points directly upwards. Mr. Lund says:

"If Mrs. Pryce's description of the position is correct, I am of opinion that it was improperly placed. The proper position of the arm was with the palm of the hand uppermost; and it was known amongst medical men that the reverse position was wrong. The fracture of Mrs. Pryce's arm was a simple fracture; and, if the arm was placed with the palm of the hand downwards, the circulation of the soft parts of the arm would be interfered with, and there would also be the greatest risk of the bones getting 'glued' or sticking together. An interference with the circulation in the soft parts would end in inflammation, and that was one reason why it was a bad practice to put the arm 'prone'. Examined Mrs. Pryce's arm on Monday, the 12th; and was of opinion that the two bones had grown or stuck together, so that they would not move over each other; and that they would prevent Mrs. Pryce turning the wrist. Agreed with Mr. Evan Thomas, jun., that that was caused by the suppuration of the tendons and the 'glueing' of the bones together. Cross-examination: Have known the semiprone—the thumb uppermost—frequently used by skilled medical men; but could not call to his recollection any case in which the hand had been placed prone, the palm downwards. As far as pain was concerned, it would be more irksome to have the palm upwards than downwards. In all cases, there must be some rupture of the muscle, varying according to the character of the fracture. In this case, the swelling was not of that character as to lead him to think there had been a rupture of one of the large muscles. He said that, because he had not heard of any interruption of the pulsation. The symptoms of a large vessel being injured would show themselves in twenty-four hours; and, if they had so shown themselves, it certainly would not be right to leave the arm with the palm of the hand downwards for nine days. It would not be right in that case to leave it in the semiprone position. It would be too late to turn it after nine days; the consequences of the malposition would have resulted in that time."

Mr. Bowen was then called; and described everything that occurred in what Mr. Justice Blackburn called a clear and intelligible manner. He showed that he was most solicitous for his patient's welfare. He attributed the non-union of the fracture to the mischief which had ensued from the injury that had caused the fracture; and said that at the conclusion of his attendance there was nothing inconsistent with future usefulness under ordinary surgical skill. Mr. Bickersteth "believed he should have acted throughout the case in the same manner as Mr. Bowen did." Mr. Long and Mr. Hakes said the

same; and, in addition, there were numerous other eminent surgeons in court prepared to add their testimony, should it be required, in favour of Mr. Bowen. Mr. South, of St. Thomas's, was of opinion that "the present condition of the arm had arisen from sloughing caused by the great injuries which had been sustained, and was owing to no want of skill in the treatment." The judge having summed up, the jury, after a few minutes' consultation, returned a verdict for the defendant; Mr. Bowen being congratulated by a host of professional brethren, who were waiting to hear the termination.

Here, then, a jury decides that Mr. Bowen had done, and well done, his duty. Why, then, was he prosecuted in a court of law? We may safely assert that, except for the countenance and support of his professional brother, Mr. Lund, the action could hardly have hung together even for a moment. Mr. Lund accepts statements made by an unprofessional witness, Mrs. Pryce, sides with a "bone-setter," and so aids not only in the attempt to inflict a pecuniary damage on a brother, but also to deprive him of his professional reputation. Mr. Lund is without excuse. The defendant is a highly educated Fellow of the College by examination, a Crimean hero, and a surgeon of considerable local eminence; and his attention to the case was never called into question. If he did not use skill, as Mr. Justice Blackburn said, he must have acted against his better judgment; and why should he have done so? If medical men did not come forward on these occasions to assist dissatisfied patients in court, there would be an end of such persecutions. Liverpool, we say to its credit, refused to a man to have anything to do with the support of such an action. In cases of this kind, the profession has two duties to perform:—one is to comfort the injured brother; and the other, to reprobate the conduct of those who by their presence give unjust and unwarrantable support to such actions.

THE COLLEGE OF PHYSICIANS.

The Committee appointed by the College of Physicians to inquire into the condition of the Army Medical Service, have applied for and obtained permission from the College to include in their inquiry the condition of the Navy Medical Service.

In consequence of great dissatisfaction which was expressed at the last annual election of Fellows, the Council were requested by the College to consider whether some better mode than the present of election of Fellows could not be devised. The Council, in reply, report that, after mature consideration, and after taking counsel's opinion as to their legal power in the case, they think no change desirable. They also greatly praise themselves for the extreme and scrupulous care which they have always exercised in the selection of Fellows recommended by them to the College for election. The College certainly, on the last annual election, did not give the Council all the credit they assume to themselves. If no better method can be found, of course the present must be accepted; but we are not bound to consider it perfection.

The Medical Council shows signs of its usual vitality, but none of vigour. It has addressed communications to the College in the old strain, making inquiries, and seeking information on subjects about which it already has, or ought to have, the very fullest information. It also asks the opinion of the College upon matters which, if it were really worthy of its name, worthy of its salt, worthy of its origin, and, we may add, did its duty, it would long ago have itself settled, and long ago have enforced as laws upon the licensing boards of the country. Even one of its simplest and yet very important functions —providing for a proper registration of students—is performed in a most slovenly manner. In fact, the Medical Council very coolly asks the licensing bodies to do for it gratuitously this very work of registration, for which it has received such enormous sums of money from the profession, and for which the profession still yearly bleeds so freely.

The College of Physicians, at a late meeting, decided that in future the Harveian Oration might be delivered in English or in Latin, at the option of the orator; and that the orator should be appointed by the President. Accordingly, the President has appointed the Regius Professor of Physic of Oxford, Dr. Acland, orator for the ensuing year. The Croonian Lectures will be delivered by Dr. Peacock; the Lumleian, by Dr. Handfield Jones; and the Gulstonian, by Dr. E. Smith. Dr. Odling will also give an extra course of six lectures. The President may, moreover, at his pleasure, permit other fitting lecturers to enlighten the Fellows during the ensuing year.

The Leprosy Committee have not yet brought their labours to a close. They have, however, already accomplished a most excellent history of the disease, of which a certain number of copies have been struck off at the expense of the Government, at present for private circulation only. As the President truly said, the work, when completed, will doubtless be the authority on the subject.

The Government appears to be, at the present time, besieged by infallible curers of diseases and their remedies. At the last meeting of the College of Physicians, no less than "three great ones" of the Government communicated with the College about these things. Lord Palmerston forwarded, for the consideration of the Fellows, a box containing six pots of pomade, having, of course, some remarkable virtues. Earl Russell sent a communication received by him from Manilla (where cholera has been raging fearfully), to the effect that, of all remedies tried,

chlorodyne was the most effective. But the remedy was scarce and dear. A grand opening, therefore, for the manufacturer of the article! The noble lord, we may presume, will have given the article a lift. Next comes Earl de Grey, who sends his compliments, and hopes the Council will inquire into Warburg's febrifuge tincture, of which he has heard great things. To him Dr. Alderson, as Pro-president, had already sent an appropriate answer, telling him that the College took no cognisance of unknown remedies. Our readers have, no doubt, often heard of these Warburg's drops. They probably contain beberine; and have been already extensively tried in India, and found not to be as efficacious as quinine.

THE *lex talionis*, in a moral sense, has been well played out against Mr. Crossley of Leicester. Mr. Crossley, some three years ago, appeared as a witness in a county court affair, to maintain that the charge of Mr. Jackson, a brother practitioner, for services rendered to a Mr. Gee, were excessive; and his evidence so far prevailed that the charge was reduced from £15 to £12. But years revolve; and now Mr. Crossley himself appears in a county court to defend his own moderate charges; and, we are happy to say, to defend them successfully. A correspondent gives an outline of the case. We only refer to it now to note the moral of the tale, which of itself speaks an eloquent lesson. Glad are we to note that on this occasion medical brethren appeared in the witness-box, not to object to, but to support, Mr. Crossley's claim. This case showed also painfully before the public the unsatisfactory condition of our system of medical charges. The county court judge was clearly confused by what he heard. His remarks, on summing up the case, are worthy of note.

"Some remarks had been made as to the plaintiff acting in the two capacities of surgeon and apothecary; but it was well known that general practitioners dispensed their own medicines. There were some gentlemen, like Mr. Benfield, who charged only for their visits. There was another class of practitioners, who paid themselves in the most unsatisfactory of all ways—by administering medicine, and so charging for the time which they were occupied. It should be remembered, however, that a surgeon must have occupied the early portion of his life in reading, study, and hospital practice; and that he looked to the amount which was paid him as payment for his time and skill. In the case before them, Mr. Crossley had made his charge for attendance in a lump sum, as he had not entered each attendance in his book. He did not quite understand why surgeons should charge for visits in surgical and not in medical cases."

A peasant, 47 years old, came into Dr. Mosler's hands for diabetes. It turned out that her father, mother, and two of her sisters, had died of the same disease. Three weeks later, a son of this woman, 15 years old, was found to have diabetic urine.

Association Intelligence.

WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,
Honorary Secretary.

Taunton, December 10th, 1864.

Correspondence.

INTRAOCULAR MYOTOMY.

LETTER FROM JAMES VOSE SOLOMON, ESQ.

SIR,—To two of the replies of the five questions to which I gave categorical answers in my letter in the JOURNAL of October 22nd, Mr. Hancock has raised no objections which are intended to invalidate my accuracy. He admits that intraocular myotomy embodies all the principles of a subcutaneous myotomy; that it was devised by me, and is insusceptible of being proved to be a similar procedure to "division of the ciliary muscle". He admits also that in iridectomy, as performed by Dr. von Gräfe for the relief of glaucoma, the ciliary muscle is cut transversely and in front of the iris. It would have been only ingenuous on the part of Mr. Hancock, had he stated it was Dr. von Gräfe who first propounded the hypothesis that the relaxation of the ciliary muscle might possibly have much to do with the good which iridectomy effected in glaucoma. A careful study of Mr. Hancock's papers in the *Lancet* has convinced me that it was upon this suggestion of Von Gräfe's, and an intimate knowledge of Desmarres's practice of puncturing the sclerotic in glaucoma, that he built up his theory of spasm of the ciliary muscle, and its cure by cutting in the direction of its principal fibres. In commenting, in his letter to you, upon Desmarres's practice, and quoting from the first edition of his ophthalmic treatise, Mr. Hancock has not attempted to refute the statements contained in my paper in this JOURNAL (p. 451, vol. i, 1863). I there notice that Desmarres treated with success the acute glaucoma which sometimes follows the depression of cataract, and which proves unamenable to ordinary antiphlogistics—by plunging a Wenzel's cataract-knife into the outer and lower part of the globe, at three *millimètres* or one-tenth of an inch from the rim of the cornea. Such an incision, I contend—and Mr. Hancock has adduced no evidence to the contrary—cuts the ciliary muscle near to its insertion into the choroid, which insertion is distant upwards of four *millimètres* from the external rim of the cornea. Four *millimètres* measure less than one-seventh, and not almost a quarter of an inch, as asserted by Mr. Hancock, who calls upon me to prove "my point by precision and facts, and not by reckless assertion".

With regard to the direction of the incision, there is no room for disputation, as in each of the woodcuts numbered 48, 49, and 50, pages 579, 580, it is delineated as commencing at one-tenth of an inch, and as radiating rather obliquely from the cornea—taking, in fact, as asserted by me, the course of the radial fibres of the ciliary muscle. Indeed, if the line in the woodcut, No. 49, which represents the

sclerotic incision, be carried forward up to the edge of the cornea, the exact obliquity would be obtained which Mr. Hancock declares to be a distinctive feature of the method he claims to have originated.

In order to demonstrate this, I have had a tracing made by Mr. Ordoyno from the woodcut No. 49, p. 579, of Desmarres' first edition, and of Fig. 6, p. 32, of his second edition, Paris, 1855, five years before "division of the ciliary muscle" was introduced. The dotted lines have been added by me, to show the extent of the London modification of Parisian practice.

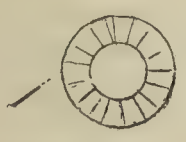


Fig. 49.



Fig. 6.

The instrument employed by Desmarres is a cataract-knife, or a grooved needle which no English surgeon would use; it may be seen at Weiss'.

Having proved, by reference to the anatomy of the ciliary muscle, that Desmarres was in the habit of dividing it for the relief of acute glaucoma, and that his incision was radial and slightly oblique, I will suppose, for the sake of argument, that there is an essential difference, as alleged by Mr. Hancock, in the direction in which the incisions are made; and then apply the same test to "division of the ciliary muscle" which the latter gentleman has laid down for judging of the originality of certain procedures which have been devised since 1859 for the relief eye-tension, and in which the muscle of the lens is cut. In the *Lancet* for August 9th, 1862, Mr. Hancock states that, whatever the direction of the incision, the principle is the same—"division of the ciliary muscle; and whether that object is attained by making the cut obliquely, as I have recommended, or straight, or along the curve of the cornea, it can make but little difference, so long as the muscle is divided, and the transparent cornea is not invaded." After this, in what relationship stands "division of the ciliary muscle" to the operations practised by Whyte and Desmarres, wherein the ciliary muscle was divided—in the one instance upwards of half a century, and in the other nearly twenty years, before the subject was taken up by Mr. Hancock?

Mr. Hancock ridicules the idea that the ciliary muscle (which is one-seventh of an inch in length) should be considered of sufficient size to be cut in more situations than one. He conceives that, for the performance of such a surgical feat, the muscle must "pervade all parts of the eye". I confess I should expect so to find it did—I believe, with him, "that not the least in importance of its functions is to exert an uniform action or influence over the several coats of the eye (cornea and sclerotic!), *in their adaptation* to the various foci necessary to the perfection of vision." (*Vide* a paper by Mr. Hancock in the *Ophthalmic Hospital Reports*, vol. iii, p. 14.)

The hypothesis that the ciliary ligament, by its contraction, aids in elongating the eyeball during optical accommodation, was rejected by Porterfield in 1759. Such opinion I have never entertained, but, on the contrary, in my earliest writings on intraocular myotomy, have spoken of the ciliary as the muscle of the lens, for which function it appears, by its extreme delicacy of structure, feebleness, and situation, to be admirably adapted.

The object with which Desmarres and Mr. Hancock operated in cases of glaucoma, whether originating idiopathically or in the vascular disturbance incident to couching, or the breaking up of a cataract (*broiement*), was identical; viz., to save an eye threatened with destruction. In Desmarres's operation and its London modification, pains were taken to get a copious discharge of fluid. With the theory on which these measures are alleged to be based, practical surgeons and physiologists feel no concern, unless the accuracy of such theory can be attested by experiment, well founded analogy, or an appeal to some recognised physiological law.

When, however, Mr. Hancock concedes, as he has done, that Desmarres cured cases of glaucomatous choroiditis, or acute internal ophthalmia attended by severe pain, great constitutional disturbance, and which resisted medical treatment, by drawing off aqueous humour through a wound in the sclerotic, and this without division of the ciliary muscle,—he makes an admission which is fatal to the theory on which "division of the ciliary muscle" is propounded by him as a cure of glaucoma. He admits that section of the muscle had nothing whatever to do with the results which he (Mr. Hancock) has published. In this view I entirely concur; and it is one at which every surgeon who has practically investigated the subject has arrived. Of this number, I may particularise Bowman, Follin, Hulke, Nunneley, and Power.

Nevertheless, it would be interesting if we were informed by Mr. Hancock whence the aqueous humour was obtained in the cases of glaucomatous choroiditis occurring after the solution of a cataract, an operation in which the vitreous humour is not broken up (Desmarres states he has treated many such complications by paracentesis of the sclera, page 597), and in idiopathic glaucoma—*unless it was by a section which penetrated the posterior aqueous chamber.* And if that cavity be penetrated, by what means the ciliary muscle escaped division. Does the *posterior aqueous* chamber "pervade all parts of the eye"?

As to the Paris letter bearing the date of March 9th, 1860, it simply shows that Dr. Desmarres, like many others, myself included, was unable to comprehend how an incision in the course of the principal fibres of the ciliary muscles could relieve spasm in an analogous manner to the cure of spasm of the sphincter ani, by a *longitudinal* incision of its *circular* fibres.

Be this as it may, Desmarres put "division of the ciliary muscle" to the test of experience; and, at the end of two years, Mr. Bowman (August 1862) announces his name as being in the ranks of iridectomists. What more convincing proof could be adduced, that "division of the ciliary muscle" and paracentesis of the sclerotic were considered in Paris to be agents equally impotent in the treatment of idiopathic glaucoma?

Mr. Hancock has called in question my statement that "with Dr. Whyte originated myotomy of the ciliary", on the ground that "he (Whyte) did not know there was such a muscle in the eye; nor did any one else till the year 1847." I believe I shall find no difficulty in convincing Mr. Hancock that Whyte and his cotemporaries were not so ignorant as he imagines. Whyte wrote in 1802; and in 1759 there was published a work that continues to this day an authority on optics, in which the muscularity of the ciliary ligament was distinctly taught. "As to the efficient cause (of optical accommodation), it has been already demonstrated that this lies in the ligamentum ciliare, which, being muscular, does by its contraction change the situation of the crystalline" lens. (Porterfield, vol, ii, p. 16.) In another place (vol. i, p. 450), he writes: "Nor are we to be surprised that so many accurate anatomists, after a careful examination of the process (ciliary ligament), have not scrupled to affirm it to be muscular."

Porterfield also treats of the effect upon optical accommodation of rigidity, spasm, and paralysis of the ciliary muscle.

Mr. Hancock concludes his letter by stating that I have "appropriated the merit of having originated myotomy of the ciliary muscle". I think, if he will examine my writings with calmness and in a dispassionate spirit, he will be convinced that it is to Whyte I ascribe precedence, and that I have earnestly endeavoured to do full justice also to himself and contemporary labourers in the same field of inquiry.

I am, etc., J. Vose Solomon.

Birmingham, November 21st, 1864.

P.S. Circumstances over which I had but little control have prevented the earlier publication of this letter.

CROSSLEY *v.* MORLEY.

Letter from J. A. Bolton, M.D.

Sir,—The *Leicester Advertiser* of to-day contains the report of a case, Crossley *v.* Morley, tried in the county court. Mr. Crossley is the gentleman who gave evidence in the case of Jackson *v.* Gee, reported in the British Medical Journal of 25th January 1862. On this case you published a leader which gave universal satisfaction to the profession in all parts of the kingdom. By a reference to our Journal of the above date you will find as follows:—

"Mr. C. R. Crossley said he had examined the bill carefully." "It was not usual to charge for medicines and attendance at the same time." "Nor had he heard of the term 'consultation' being used except when two medical men consulted together." "Had examined the bill, and considered it to be exorbitant."

Neither the medical journals nor the profession concurred with Mr. Crossley in this view of the charges; nor could they justify the verdict founded on Mr. Crossley's evidence, which deprived Dr. Jackson of one-fifth of his "fair and moderate bill." Hear, then, Mr. Crossley in court again, but mark well, under different circumstances. He is now the wooer of the coy hand of "justice." He says:—"The items previous to the accident were for medicines and attendance; the charges were fair and reasonable." "He did not charge for visits in the first part of the account because it was a medical case." "He charged for medicine and attendance at the same time." "He remembered being examined as a witness about two years ago in the case of Jackson *v.* Gee." "He then said it was not usual to charge for medicine and attendance in medical cases at the same time; and said that two shillings and sixpence was the usual charge for medicine, and a shilling for ointment." He "had charged in the bill one shilling and sixpence for ointment, as they were large boxes." He "charged as a surgeon and as an apothecary in the bill." He "did not book his visits in surgical cases." (Where he *charges* for them!) "In medical cases he entered his visits." (Where he does not charge for them!)

Having contrasted only a few of Mr. Crossley's statements in the witness box, within a period of two years, I beg you will call upon him for further illustration of his views regarding the proper mode of book-keeping and making out a medical or a surgical bill; and also that you will fully express your own sentiments on this case, which will thereby be infinitely more valuable both to the profession and the public.

I am, etc.,

John A. Bolton, M.D.

Leicester, December 17th, 1864.

P.S. For leaders and letters on the case of Jackson *v.* Gee, I refer our fellow-associates to the *Daily Telegraph* from 25th January to 10th February 1862.

ASSISTANT-SURGEONS FOR INDIA.

Sir,—Why, let me ask your correspondent "D. I. G.," should I be guided by my feelings rather than my judgment? I have retired from the service, and am receiving the pension which I was promised when I entered it.

I do not "advise my younger brethren in the choice of a career." I only gave my opinion of the two services. Nor have I advised either; I merely wrote, "I still say to aspirants for the red jacket, choose the British service, etc."

"D. I. G." writes very positively as to the inability of the Indian Secretary to handle the question of relative rank; I only know that Her Majesty's Warrant of 13th January 1860, giving relative rank to the Indian medical service, emanated from the India Office, and was signed "C. Wood," as is this despatch, which in paragraph 33 refers to the Warrant, and directs *substantive* rank to be given to two grades. Surely if he has the power to do this, he has power to do the rest, for he must be well aware of the general feeling on this subject; and he must know that, until this point is satisfactorily settled, pay and pension will not induce men to go to India when they can go to any part of the world in the British service, instead of being transported to India for seventeen years, where I defy "D. I. G." "making a provision for his wife out of the liberal pay now allowed" (I doubt if "D. I. G." ever lived in India as a married man). How many years will it take an assistant-surgeon to repay himself his passage money to India? In the British service this is found. Does "D. I. G." forget that a man's wife and children may and will get sick, and must be sent home; and if the assistant-surgeon comes home sick, he only gets passage home, *not out again;* this he must find himself; while in the case of the British medical officer passage is found both ways (though it is seldom he has to return). And here I may inform "D. I. G." that what I have written refers to both services in India, arguing from the despatch; and I have no hesitation in saying that it brings into being a new service, totally distinct from the old, without any claim to advantages in previous despatches; for various paragraphs refer to officers *now* in the Indian medical service, and point out the bearing of the despatch on them. Hence I conclude that, as nothing is said of furlough pay to Europe, I should be sorry to trust the Indian Secretary in the event of being obliged to come home sick; and I maintain that all entering the service under this despatch will be bound by it, and cannot claim under prior orders, for you will observe the fatal words "prospective" and "in future" in this despatch.

I am not aware of having said anything against the pensions under the new rules. I only compared them with those under the old, and I fancy I proved that with our Medical Fund we were far better off under the Company; though £220 is a good pension after seventeen years, I do not think it is enough for transportation to India, when I get so much more under the old rules.

"D. I. G." writes of an increase of £250 to deputy-inspector-generals, and £300 to inspector-generals, after five years services in these ranks, as if every man was to attain these ranks. Surely this is not honest to our junior brethren. Why not say there are a few prizes in the new lottery (*one* inspector-general for Madras)? and even then they are not equivalent to the pension and Fund under the old rules, which gave after twenty-eight years £900 *versus* £756 after twenty-seven years under the new rules, not £806, as stated by "D. I. G."

"D. I. G." refers to stoppages under the old rules, if absent for *one day* from his charge. He cannot have

served in India, or he would know that *all* officers were entitled to thirty days leave in every half-year to count as service; and in the case of the staff (adjutants, quarter-masters, and medical officers) private arrangements must be made for their duty being done; thus Dr. A. did the duty of Dr. B. in March, and Dr. B. did the duty of Dr. A. in May or June, and neither suffered from stoppages; I have had many thirty days' leave and never lost a penny; but I confess I am ignorant of the interpretation of "unemployed pay." Under this despatch, if it said on sick leave (and we cannot be otherwise unemployed) in India, then I could understand it, and say it was a boon; nor is the effective pay so very superior: as surgeon of a cavalry regiment, I drew 850 rupees, now it is 890 rupees; as assistant in charge 664 rupees, now 660 rupees; as assistant-surgeon of a native infantry regiment, I drew 421 rupees, now 450 rupees; no great difference when I recollect that as an assistant, I have drawn as much as 720 rupees a month, having extra charges, but these days are gone; now there are no extras; the present pay is fixed for all work that a medical officer may be required to perform; nor does it appear that two months leave in every twelve will now be allowed to count for service, for paragraph 38 specially states that *six months* sick leave will be allowed to count towards actual service in the grades of inspector and deputy-inspector-generals, a mighty boon indeed—*six months leave in twenty-seven years*; not a word about other grades.

"D. I. G." takes me to task for not stating "that military funds in India are abolished also;" I did not refer to military funds, for the very simple reason that they had no bearing on the case, inasmuch as *military funds gave no annuities as medical funds did*, so that I do not see the force of your correspondent's argument, and must admit my ignorance.

Now, sir, as my sole object in writing was to give my junior brethren the benefit of my experience, without any desire for appearing in print, I must decline any further controversy on this subject; but should anyone desire information for information sake only, you may give my address to those you know, and I shall be happy to explain anything I have written. I am, etc.,

A Retired Surgeon Major.

December, 1864.

P.S. The statement in the *Spectator*, that £300 a year is granted by the Medical Retiring Fund, in addition to pension, is incorrect, and at variance with paragraph 45 of the despatch. The comparison between the pensions of the medical and civil service is simply absurd; the highest in the former is £550, against £1000 in the latter.

Hereford Infirmary. Mr. Lingen has resigned the honorary appointment of surgeon to this institution. Mr. Lingen was appointed on December 6th, 1838, on the death of the late Mr. Cam; and became senior surgeon in the following May, on the retirement of Mr. John Griffiths. His services have thus been given to the institution for almost twenty-six years; and he has been induced to resign only because the increase in his private practice leaves too little time at his disposal for the discharge, satisfactorily to himself, of the duties of this appointment. At a special meeting of the governors of the Infirmary, held on Thursday, Dec. 22nd, Mr. Thomas Turner was unanimously elected surgeon in the place of Mr. Lingen. At the same time, Mr. Lingen was unanimously elected surgeon extraordinary to the Infirmary and a life governor, as a testimony of the very valuable services rendered by him as surgeon to that Institution.

Medical News.

Royal College of Physicians of London. At a general meeting of the Fellows, held on Thursday, December 22nd, 1864, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Church, William Selby, M.B.Oxon., Christ Church, Oxford
Saunders, George James Symes, M.B.Lond., Devon County Lunatic Asylum, Exminster

The following gentleman, previously an extra-Licentiate of the College, was also admitted a member:—

Pincoffs, Peter, M.D.Leyden, Naples

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Bottle, Alexander, M.D.Edin., Dover
Collyer, James, Oak House, Enfield
Fagge, Frederick Thomas, Hythe, Kent
Frost, Walter, Brentford
Gowland, John Edward, M.D.Colombia, Mount Pleasant, Gray's Inn Road
Hayes, Hawkesley Roche, Basingstoke
Magor, Thomas, Grantham
Moore, Milner Montgomery, St. Mary's Hospital
Miller, Charles James, Eden Bridge, Kent
Pattisson, Joseph Tarn, Wharf Rise, Kingsland Road
Spooner, William, Eling, Southampton
Stone, Robert Sidney, Bath
Woodman, Samuel, Ramsgate

The following gentlemen were reported by the examiners to have passed the Primary Professional Examination:—

Dowse, Thomas S., Charing Cross Hospital
Goodall, Joseph, St. Bartholomew's Hospital
Haydon, Nathaniel T. J., St. Mary's Hospital
Jones, James, King's College
Major, Napoleon B., St. Mary's Hospital
Marsh, William Joseph, Guy's Hospital
Raby, John, St. Thomas's Hospital
Simpson, John Henry, St. Bartholomew's Hospital
Stevens, George J. B., Guy's Hospital
Taylor, Henry S., Guy's Hospital
Thompson, Joseph, University College Hospital

Apothecaries' Hall. On December 22nd, the following Licentiates were admitted:—

Antonini, Charles, King's College Hospital
Ensor, Alfred, King's College Hospital
Holman, Herman Boerhaave, London Hospital
Shackleton, James, Manchester

At the same Court, the following passed the first examination:—

Braye, Hardwick Hubert, Guy's Hospital
Raine, George Rolph, Guy's Hospital
Rowlands, James David, Guy's Hospital

APPOINTMENTS.

*Lingen, Charles, Esq., elected Surgeon-Extraordinary to the Hereford Infirmary.
Turner, Thomas, Esq., elected Surgeon to the Hereford Infirmary, in the room of *C. Lingen, Esq., resigned.

DEATHS.

Irvine, James Pearson, L.R.C.P.Edin., at Galgate, Lancaster, aged 52, on December 12.
*MacMunn, John, M.D., in Dublin, lately.
Ranking. In Guernsey, on December 18th, Louisa Leathes, wife of *W. H. Ranking, M.D., late of Norwich.

Donations. Mr. Crawshay, of Caversham Park, Reading, has sent a donation of £105, and Mr. E. Crane, Kidderminster, another of £25, to the Royal Free Hospital. The Marquis of Westminster has sent £1000 to the Hospital for Incurables, and £500 to the Hospital for Diseases of the Chest, Victoria Park.

ST. BARTHOLOMEW'S HOSPITAL. The election of a physician to St. Bartholomew's Hospital is fixed for January 10th, 1865.

TESTIMONIAL TO DR. ODLING. On November 30th, the students of Guy's Hospital showed their kind feelings to Dr. Odling by presenting him with a handsome claret jug and fish knife and fork.

THE SPREAD OF FEVER IN IRELAND. The Irish Poor-law Commissioners draw the attention of boards of guardians to the fact that at the present time, and for several weeks past, cases of fever, of a very dangerous type in some localities, have been more frequent in the country than at any time during a long series of years past.

MEMORIAL OF DR. KIRKES. At a meeting at St. Bartholomew's Hospital, it has been resolved that a subscription should be raised by the friends and pupils of the late Dr. Kirkes, to establish a memorial of him. It was also resolved that the memorial should be represented in a gold medal, to be given every year to the student found most efficient in diagnosis and treatment of medical diseases.

THE STUDENTS AT EDINBURGH UNIVERSITY. A circular has been issued by the Senatus Academicus of the University in regard to the disgraceful uproar which took place on the occasion of the delivery of the venerable Principal's inaugural address to the students. The Senatus threaten in future to inflict severe punishment on any student who may be found guilty of such shameful breach of decency and discipline.

PRESENTATION TO MR. F. BUCKLAND. The Council of the Royal College of Surgeons has just presented to Mr. Frank Buckland a complete set (in thirteen volumes quarto) of the *Illustrated Catalogue of the Museum*, elegantly bound, with an inscription signed by Mr. Hodgson, the President, signifying that the presentation is in acknowledgment of the efficient services rendered by Mr. Buckland in searching for and identifying, in the vaults of the church of St. Martin's-in-the-Fields, the coffin containing the remains of John Hunter.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations. 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Pathological Society of London, 8 P.M. General Meeting for Election of Officers.

WEDNESDAY. Obstetrical Society of London, 8 P.M. Annual Meeting. President's Address. Election of Officers. Dr. Playfair, Case of Extrauterine Fœtation; and other papers.

THURSDAY. Harveian Society of London, 8 P.M. Anniversary. President's Address and Election of Officers.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

T. M.—The use and mode of administration of podophyllum will be found in all the new works on materia medica.

THE NEW BRANCH.—A correspondent writes:—"I rejoice to find my old friends in Newcastle are buckling on their armour to join the ranks of the Association. They are good men and true."

F. T.—The County Court Judge at Leicester, who said "A physician can claim nothing in a Court of Law", and the lawyer who assented thereto, are both in error. Some, and the very great majority of physicians in the country, can make legal claim. The Medical Act gave the Colleges the power (if they chose to avail themselves of it within a given time) of excluding themselves from the benefits of being able to enforce their claims for fees in a Court of Law. The London College did avail itself of this privilege on behalf of its Fellows; but we believe no other of the Colleges has availed itself of the dispensing clause. Consequently, most of the physicians in the country can avail themselves of the full benefits of the Medical Act.

THE FRENCH MEDICAL PROVIDENT ASSOCIATION.—The statement made in the periodical, referred to by our correspondent, to the effect that the French Medical Association has expended a handsome sum towards erecting a statue to one of the masters of our art, is—like many other statements made in that quarter—not true. The French Association has not expended a farthing for the purpose indicated. What it did at its annual meeting was to appoint a Committee "to raise a subscription to perform a pious duty towards the immortal discoverer of auscultation." Since then, a decree of the Emperor, of the 27th November, has authorised the erection of a statue to Laennec. And the Committee, consisting of many of the leading men of France, has now opened a subscription list for the purpose; but not one farthing of its funds has been voted by the French Medical Association, or rather Provident Fund; and doubtless could not be voted by it for such a purpose. The statement, again, that the French Association prosecutes quacks, is equally untrue. It has never done so. These erroneous statements, as we have already said, can only be the productions either of malevolence or of ignorance.

MR. HARTSHORNE AND MR. THURSFIELD.—SIR: In Mr. Thursfield's letter in the JOURNAL of the 17th instant, he states:—"I gave no evidence whatever as to the treatment of the child by Mr. Hartshorne, or the fee he ought to charge for his services. I purposely abstained from stating my opinion on these points." If neither the *fee* nor the *treatment* were in question, upon what points did he give evidence? Mr. Thursfield does not deny that he was a witness for the defence, and admits that "the case" was "for the recovery of his bill"; and says, "I answered *most* of the questions put to me." What, then, did the questions he was asked refer to?

I solemnly declare that I sent you a truthful report of Mr. Thursfield's evidence; and, for the most part, in the identical words used by himself. I am, etc., FREDERICK H. HARTSHORNE.

Broseley, December 22nd, 1864.

[Mr. Hartshorne wishes the insertion of the above note in justification of the statements previously made by him. EDITOR.]

COMMUNICATIONS have been received from:—Dr. ALEXANDER FLEMING; Mr. W. DATE; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. STONE; Mr. WILLIAM COPNEY; Mr. C. GAINE; Dr. J. A. MCMUNN; Mr. REGINALD HARRISON; Mr. J. W. IRVINE; Mr. HAYNES WALTON; Mr. J. VOSE SOLOMON; Dr. RANKING; Dr. HEATON; and Dr. C. J. PAYNE.

BOOKS RECEIVED.

1. Functional Diseases of the Stomach. By John Chapman, M.D. Part I. London: 1864.
2. Varicose Veins; their Nature, Consequences, and Treatment, Palliative and Curative. By H. T. Chapman. Second Edition. London: 1864.

INDEX.

A.

Abdomen, colloid cancer of, 599; Celsus's treatment of injuries of, 687
Abortion, death from ergot of rye taken for, 446, 503
Abscess of liver, Dr. Sircar on, 36; between bowel and bladder, Dr. Goode on, 488; of lung, 575; of antrum, 704
Accidents, deaths from, 401
Achorion of favus in the air, 167
Aconite, poisoning by, 600
Action for assaulting a surgeon, 156; against a medical man for negligence, 171; by an assistant, 172; against a druggist for poisoning by mistake, 259; for loss through a hoax, 377; by a club-patient, *ib.*; for illegal detention of lunatics, 396; for medical fees, 429, 734, 736; for unskilful treatment, 658; for recovery of fees, 659, 666, 693; for alleged malpractice, 732
Acupressure in amputation, 67, 520
Actonian prize essay, 721
Adams, Mr. W., subcutaneous division of urethral stricture, 135; restoration of motion in anchylosis, 586; case of anchylosis, 716
Adipocere, relation of to fatty degeneration, Dr. Ormerod on, 153; experiments on, 154
Adulteration of pepper, 376; of snuff, *ib.*
Advertisements, charlatanic, in newspapers, 301; *Times* on, 634
Aerolites, composition of, 67
Africa, water in, 557; small-pox in, 586
Ague in Worcestershire, Sir C. Hastings on, 381; disappearance of, 587
Air, organisms in, 386; how affected by sewage emanation, 556; impure, Dr. Parkes on effect of, 656. *See* Atmosphere.
Alabama, surgeon of the, memorial to, 26, 371; *Daily Telegraph* on, 43; the wounded in the fight with, 228
Albumen, coagulated, transformation into soluble, 89
Albuminuria in diphtheria, Dr. Hillier on, 347
Alcohol, action of, 249; diseases from abuse of, 454; Dr. Parkes on, 679
Alcoholic fermentation, 90
Alford, Mr. H. J., spontaneous gangrene, 238
Allnatt, Dr., ozone tests, 481
America, medical journalism in, 104; war news, 137, 260, 288, 298, 505, 598; homœopathy in, 660; treatment of drunkard lunatics in, 606
American Medical Times on gratuitous services, 166; on fees, 260; suspension of, 401
Ammonia, fires extinguished by, 719
Amputation, acupressure in, 67, 520; of thigh, Gritti's method, 496; at shoulder-joint, Mr. Lowndes on, 519; at knee-joint, 626
Amyl, action of nitrite of, 451
Amyloid degeneration, Dr. Chuckerbutty on, 299, 318; Dr. Pavy on, 604
Anæsthetic, petroleum ether as a local, 94; carbonic acid as an, Dr. West on, 468
Anæsthetics, Dr. Anstie on action of, 291
Analysis, Qualitative, Mr. Galloway on, *rev.*, 549
Anatomy in India, 455
Anchylosis, restoration of motion in, 586; Mr. Brodhurst on, 715; case of, 716
Anencephalous fœtus, 688
Aneurism of innominate artery, ligature of subclavian and carotid for, 66; of popliteal artery, ligature of femoral for, *ib.*; popliteal, compression in, *ib.*; arterio-venous of arm, extirpation of sac and ligature in, 282; of innominate artery, successful case of ligature of, 376; femoral, ligature of internal iliac artery in, 431; femoral, treated by opening sac, 432; of cœliac axis, 522; treatment of by digital pressure, 528, 709; of abnormal artery of lower limb, 603; select cases of, 604; of arch of aorta, 690; by anastomosis, of orbit, 717
Angina pectoris, Dr. Handfield Jones's view of, 442
Aniline, derivates of, 611
Animal magnetism in Vienna, 660
Animals, French Society for Prevention of Cruelty to, 138; transmissibility of syphilis to, 448
Ankle-joint, Dr. Humphry on excision of, 181
Annandale, Mr. T., cases in Mr. Syme's practice, 10
Anodyne, cold as an, in labour, 136
Anstie, Dr. F. E., treatment of diabetes, 325; Stimulants and Narcotics, *rev.*, 627
Antimony, tartarised, in strumous ophthalmia, Mr. Carter on, 102
Antrum of Highmore, extent of, 704; displacement of eyeball by distension of, 725
Anus, Celsus's treatment of diseases of, 687
Aorta, ossification of valves of, 575; aneurism of, 690
Aphonia cured by electricity, 282; hysteric, Dr. Russell on, 619. *See* Speech.
Apoplexy, Mr. T. Jones on causes of, 621
Apothecaries' Hall of Ireland, address to the Lord-Lieutenant, 643
Apothecaries' Society, application of Licentiates of for admission to College of Physicians, 15, 117, 420; prizes of, 345, 564; dispute with Chatham and Dover Railway, 669; pass lists, *see* Medical News, each number
Appetite, inordinate, for food, 521, 565
Arcus senilis, artificial production of, 610
Arm, arterio-venous aneurism of, 282, 709
Arm-presentation, spontaneous withdrawal of arm in, 703
Army, American Federal, deaths of medical officers in, 137; state of wounded in, 173, 259, 260; medical department of, 259; tetanus in, 260; medical service in, *ib.*; order regarding certificates of death of soldiers in, 298; dismissal of the Surgeon-General of, 321; appointment of new Surgeon-General, 401; progress of surgery in, 429
—— British, medical service of, rumour of Committee on, 16, 92; Lord Dalhousie on treatment of officers of, 16; *Morning Post* on deficiency of, *ib.*; South-Eastern Branch, report of Council on, 18; memorial by same Branch, 20; Council of Birmingham and Midland Branch on, 22; competitive examination for, 43; *Daily Telegraph* on, *ib.*; acting assistant-surgeons in, 43, 321, *ib.*; deputation of Metropolitan Counties Branch to Earl De Grey and Ripon, 45; letters on, 49, 255; leading articles on, 63, 280, 550, 633; memorials of the Metropolitan Counties Branch regarding, 45, 68, 70; deputation of Metropolitan Counties Branch to the Commander-in-Chief, 68; to the Director-General, 70; proceedings of East Anglian Branch regarding, 73; services of, 93; North Wales Branch on, 96; West Somerset Branch on, 97; Metropolitan Counties Branch on, 98; Dr. Sibson on, 100; petition of Faculty of Physicians and Surgeons of Glasgow on, 104; Bath and Bristol Branch on, 132; Lancashire and Cheshire Branch on, 132, 133; acting assistant-surgeons, leading article on, 163; Dr. Gibson's statement on deaths in the Crimea, 164, 249, 375; Yorkshire Branch on, 168; Council of British Medical Association on, 191; discussion on, 192; Com-

mittee of Association on, 194; report of Committee, 196; Professor Douglas Maclagan on, 223; memorial of Royal College of Surgeons of Edinburgh, 226; successful candidates, 233; examinations at Netley, 235; *Army and Navy Gazette* on recent admissions to, 248; *Punch* on, 248; power of arrest by officers of, 249; order regarding marking of soldiers, 249; *Daily News* on, 288; new order regarding marking, 340; notice of conduct of officers in New Zealand war, 364; Victoria Cross conferred on officers of, 398; Dr. Clapton on, 411; notice by Director-General regarding marking of discharged soldiers, 421; Mr. Longmore's Manual of Instructions on Testing Vision, *rev.*, 445; deaths of officers of, from yellow fever at Bermuda, 471, 505, 564; nature of competitive examination for, 536; inquiry by College of Physicians on, 550, 733; notice regarding competitive examination for, 564; *Canada Medical Journal* on brave conduct of officers of, 623; question regarding, 644; Dr. Parkes's Manual of Hygiene for, *rev.*, 653, 679

Army, British, syphilis in, 165; health of in 1862, 377; construction of stables in, 428; mortality among black troops in, 497

—— French, amount of sickness in, 402; deaths in, 449; improvement in health of, 528

—— Indian, medical service of, Sir C. Wood's bill regarding, 103, 138; leading articles on, 117; punishment for striking an assistant-surgeon, 171; new warrant for, opinion of correspondents on, 224, 286, 346; opinions of Indian press on, 250, 482; *Times* on, 288, 376; assistant-surgeons in, order regarding transfer of, 345; Dr. Peet's work on Medicine for, *rev.*, 392; assistant-surgeons for, 614; new warrant regarding, 635; leading articles on, 631, 657; opinions on, 644; letters on, 666, 691, 736; military honours conferred on officers of, 637

———— regimental workshops, etc., in, 257; report on sanitary state of, 367; Mr. S. Clark's Practical Observations on Hygiene in, *rev.*, 579

Army hospitals, resolutions of convention regarding, 322

Arneth, Dr., appointment of, 616

Arrest, power of, possessed by army medical officers, 249

Arsenic-eating in Styria, 448

Arteries, supplemental nutrient, for lungs, 426; renal, embolism of, 707

Arterio-venous aneurism of arm, 282

Artery, innominate, aneurism of, 66, 376; popliteal, aneurism of, 66; femoral, Dr. C. Harris on aneurism of, 431; abnormal of lower limb, aneurism of, 603; brachial, rapid obstruction of by contusion, 708

Artisan and doctor, 364

Ascites treated by elaterium and aqua regia, Mr. J. H. Gibson on, 598

Assault on a surgeon, 156; on Dr. Rowe, sentence for, 234

Assistants, caution regarding, 172

Association, British Medical, notice of annual meeting, 44, 67, 95, 130; railway arrangements for meeting, 64; letter from Dr. B. W. Richardson to members of, 118; Dr. Paget's address at thirty-second annual meeting, 141; Dr. Ormerod's address in Medicine, 147, 196; Dr. Humphry's address on Surgery, 175, 203; leading article on meeting of, 186; thirty-second annual meeting of, 189; members present, 189, 251; address of the retiring president, 189; vote of thanks to Dr. Symonds, 190; report of Council, *ib.*; discussion on Army Medical Service, 192; appointment of auditors, 193; vote of thanks to the Council, *ib.*; appointment of secretary, *ib.*; committee on Army Medical Service, 194; *conversazione* at Gonville and Caius College, *ib.*; Committee of Council, *ib.*; presentation of the Hastings prize medal, *ib.*; alteration of law, *ib.*; the place of meeting in 1865, *ib.*; papers read 195, 197, 203, 204; choral service in King's College Chapel, 196; inhalation of oxygen, *ib.*; report on Army Medical Service, *ib.*; *conversazione* at Downing College, 197; report of Medical Benevolent Fund, 198; report of Committee on Medical Provident Fund, *ib.*; discussion on the same, 200; votes of thanks, 204; papers presented but not read, 204; dinner, 204; verses on annual meeting, 282; list of officers and Council, 303; list of members, 305; suggestion regarding, 566. *See also* Journal.

Association, Committee of Council, meetings of, 43, 318

———— Medical Provident Fund. *See* Medical Provident Fund.

———— Bath and Bristol Branch, annual meeting, 131; army medical service, 132; president's address, 242; ordinary meeting, 500, 662; Medical Provident Fund, 500

———— Bengal Branch, president's address, 35; ordinary meeting, 318

———— Birmingham and Midland Counties Branch, annual meeting, 22; ordinary meeting, 478, 586; Medical Provident Fund, 478, 586

———— Cambridge and Huntingdon Branch, meeting, 478; Medical Provident Fund, *ib.*

———— East Anglian Branch, annual meeting, 72; army medical service, *ib.*; Provident Fund, *ib.*; president's address, 112

———— East York and North Lincoln Branch, general meeting, 399

———— Hull Branch, general meeting, 531; Medical Provident Fund, *ib.*

———— Lancashire and Cheshire Branch, annual meeting, 132; medical officers of army and navy, 133; president's address, 162

———— Metropolitan Counties Branch, deputation to the Secretary of State for War, 45; deputation to H.R.H. the Commander-in-Chief, 68; to the Director-General of the Army Medical Department, 70; annual meeting, 98; report of Council, *ib.*; report of Committee on Parliamentary Bills, *ib.*; address by Dr. Sibson, 100; the late Mr. P. Martin, 104; president's address, 216

———— Midland Branch, annual meeting, 44; president's address, 328

———— North Wales Branch, annual meeting, 95; general meeting, 449

———— Northern Branch, formation of, 661

———— Reading Branch, annual meeting, 133; consultation with homœopaths, *ib.*; president's address, 219

———— Shropshire Ethical Branch, annual meeting; 662

———— Shropshire Scientific Branch, annual meeting, 55; Medical Provident Fund, *ib.*

———— South Eastern Branch, president's address, 3; annual meeting, 17; report of Council, *ib.*; memorial to Mr. P. Martin, 19; army medical service, 20; East Kent District Meetings, 399, 638; West Kent District Meetings, 423, 531

———— South Midland Branch, annual meeting, 21; autumnal meeting, 501; Medical Provident Fund, *ib.*

———— South Western Branch, president's address, 270; directors of Medical Provident Fund, 449, 638

———— West Somerset Branch, annual meeting, 97; the late Mr. Collyns, *ib.*; army medical service, *ib.*; president's address, 213; quarterly meeting, 478; Medical Provident Fund, *ib.*

———— Yorkshire Branch, annual meeting, 168 public medical services, *ib.*

Association, British, for Advancement of Science, reports of, 399, 424, 450, 556; next meeting of, 401; money grants at meeting of, *ib.*; preparations for next annual meeting, 592

Association, of German Naturalists and Physicians, thirty-ninth annual meeting of, 473, 495, 529, 553, 609, 663
——— Herefordshire Medical, annual report of, 608
——— Manchester and Salford Sanitary, report of, 585
——— Medical, of France, nature of, 660, 738
——— of Medical Officers of Asylums, notice of annual meeting, 50
——— of Medical Officers of Health, new president of, 454; resolutions regarding late Dr. R. D. Thomson, 455
——— National Medical Registration, dinner to Mr. Lavies, 505, 617
——— National, for Promotion of Social Science, questions for discussion at, 50, 321; Sir C. Hastings's address in Public Health Department of, 379; remarks on, 396; next meeting of, 720
Asthma, Dr. Handfield Jones on, 442; fumigations in, 660
Asylum, Colney Hatch, summer entertainment to patients of, 102; Blind, at Liverpool, bequest to, 259; Sydney, appointment of a homœopath to, 397; Staffordshire County, harvest home at, 536; Blind, at Edinburgh, bequest to, 564; Deaf and Dumb, at Edinburgh, bequest to, *ib.*; Baldovan, for Imbecile Children, bequest to, 592
Atmometer, a new, 610
Atmosphere, organic germs in, 385; of hospitals, 386; in India, Mr. S. Clark on, 579
Atrophy, progressive, of tongue, 134
Auscultation of cavernous lungs, new phenomenon in, 529; in pregnancy, Dr. Routh on, 593
Australia, ovariotomy in, 287; evasion of medical act in, 401; cultivation of cinchona in, 491; mortality among Chinese in, 497; effect of climate of on children, 716
Aveling, Dr. J. H., transfusion of blood, 168

B.

Bacteria in blood, 250, 387; in mucous secretions, 708
Bader, Mr. C., inoculation of pus in granular conjunctivitis, 602
Bandage after labour, a, 168
Bandages, old, evil results of using, 195, 612
Banting, Mr., his system, Dr. Radcliffe on, 203; offer by, 321; leading article on system of, 469; followers of, 481; donations by, 531; Dr. Lankester on system of, 565
Bardeleben, M., reduction of dislocated humerus, 531
Barker, Mr. E., jun., progressive atrophy of tongue, 134
Barnes, Dr. R., spondylolisthesis, 73
Barracks, Mr. S. Clark on ventilation of, 579
Barral, M., conical hailstones, 89
Barthélemy, M., artificial production of monsters, 89
Barthels, Professor, excretion of carbonic acid in diabetes, 476
Barthez, M., expectant treatment of pneumonia in children, 713
Basham, Dr., introductory address at Westminster Hospital, 412
Bath, Dr. Falconer on mineral waters of, 243; mortality of, 400
Baths, Roman, Dr. Wollaston on, *rev.*, 222
Bechamp, M., alcoholic fermentation, 90
Beck, Dr. Snow, puerperal fever, 251
Bees, hermaphrodites among, 663
Belfast, gunshot-wounds during riot in, 286; casualties from riot in, 721
Bell, Dr. J. V., susceptibility of joints to disease, 520
Bengal, Dr. Chuckerbutty on medical profession in, 86, 109; *Hurkaru* on Indian medical warrant, 250
Bennett, Dr. Hughes, physiological aspect of sewage question, 556
Benzine in trichiniasis, 395; as an insecticide, 616
Bequests, 47, 103, 234, 259, 321, 480, 506, 564, 592, 641, 669, 694, 720
Berenger-Ferand, M., phthisis in monkeys, 174
Bergeron and Lemaitre, MM., elimination of medicines, 341
Bermuda, yellow fever in, 402, 429, 505, 564; deaths of army medical officers from, 471; *United Service Gazette* in, 607
Bernard, M., opium and its alkaloids, 431
Bickersteth, Mr., ligature of arteries for innominate aneurism, 66; popliteal aneurism, *ib.*; ovariotomy, *ib.*
Binder, obstetric, 558
Bird, a rare, 454
Birkett, Mr. J., remarkable disease of tibia, 603; hernia depending on abnormal states of the vaginal process, 604; frequency of femoral hernia, 706; obturator hernia, *ib.*
Birnbaum, Professor, labour complicated by echinococcus tumour, 496; pelvis with exostoses, 610
Birth, quadruple, 564; at early age of mother, 616
Blache, M., expectant treatment of pneumonia, 713
Bladder, puncture of, Mr. T. Paget on, 213, 452, 639; Dr. E. Morris on, 257, 534; fistulous opening into from bowel, Dr. Goode on, 488; Dr. Gibb on, 535; retaining stuff in during lithotomy, Dr. Morris on, 490; Mr. Le Gros Clark on, 667; special hospital for diseases of, 581; M. Velpeau on puncturing, 584; Mr. Pollock on puncturing, 588; subpubic puncture of, 709; paralysis of, 729
Blind, statistics of, 2
Blistering plaster, Mr. Morris on ready preparation of, 85
Blood, action of deprivation of food on, 64; transfusion of, 168; bacteria in, 250, 387
Blood-corpuscles, plasticity of, 174
Blood-letting, Mr. Bottomley on, 23; Mr. W. W. Jones on, 24
Blood-sweat, nature of, 118
Blood-vessels, state of in apoplexy, 622
Blot, M., icterus of pregnant females, 709
Bolton, Dr. J. A., the case of Crossley *v.* Morley, 736
Bombay, medical coroner in, 102
Bones, Mr. A. Ransome on encephaloid cancer of, 272
Botany, study of in medical schools, 279, 374
Bottles, poison, 174, 694
Bottomley, Mr. G., types of fever, and blood-letting, 23
Bouley, M., typhus in cattle, 472
Boussingault, M., growth of plants in darkness, 89
Bouvier, M., instruction of deaf and dumb, 494
Bowler, Dr. J. W., death of, 598
Brady, Mr., bequest to daughters of, 429
Brain, a small, 174; meningitis of base of, 342; anæmia and hyperæmia of, 441; composition of in men and animals, 475; neuroses of base of, 496; obscure disease of, 506, 601; Mr. T. Jones on causes of hæmorrhage into, 621; Mr. Fry on severe injury of, 702
Branding of soldiers. *See* Marking.
Breast, hypertrophied, 477; inflammation and tumours of, 602
Bree, Dr. C. R., 346
Breslau, M., purgatives in puerperal fever, 710
Bridger, Mr. J., diphtheria, 457
Brierre de Boismont, M., suicides of reasonable beings and of lunatics, diagnosis of, 341
Brillat-Savarin, M., lead-poisoning, 250
Brinton, Dr., resignation at St. Thomas's Hospital, 564
Briquet, M., contagiousness of typhoid fever, 472
British Museum, purchases by, 75
Broadbent, Mr. E. F., femoral aneurism, 432; laceration of foot, 463
Brodie, the late Sir B., Croonian lectures, 668
Brodhurst, Mr. B. E., anchylosis, 715
Bromfield, the Rev. H., appeal for widow and family of Mr. E. Bull, 236
Bromide of potassium as a sedative, 343; in epilepsy, 501

Bromine, preparations of, 451
Bronchitis in pottery trade, Dr. C. Parsons on, *rev.*, 367; chlorate of potash in, 578; bacteria in secretion of, 708
Brown-Séquard, Dr., appointment to Harvard University, 260
Bryant, Mr. T., inflammation and tumours of breast, 602
Buchanan, Dr. G., tracheotomy in diphtheria, 323
Buckland, Mr. F., presentation to, 738
Budd, Dr. W., investigation of epidemic and epizootic diseases, 354
Bulimia, cases of, 565
Bulimic dyspepsia, 521
Buttercups, poisoning by, 26
Byrne, Dr. T. E. D., Lunacy and Law, 336

C.

Cæsarean section in 1757, 281; cases of, 558, 610
Caffe, Dr., dry diet in disease, 282
Caius, Dr., 126
Calabar-beans, poisoning by, 235
Calculi, spontaneous expulsion of, 709
Calculus, renal, 48, 715; large vesical in female removed without operation, 601; renal, Dr. O. Rees on diagnosis of, 604; spontaneous fracture of a, 610
Calcutta, Dr. Chuckerbutty on typhus fever in, 649, 676, 726
Callender, Mr., introductory lecture at St. Bartholomew's Hospital, 415
Calumny, alleged, imprisonment of an editor for, 589, 634
Cambridge, H.R.H. the Duke of, deputation to, 68
Cambridge, its Universities and Colleges, 119; town, *ib.*; ancient history, *ib.*; Addenbrooke's Hospital, 121, 124; university, 121; origin of university, 122; present instruction in, 123; degrees, 124; museum, *ib.*; laboratories, *ib.*; lectures, *ib.*; university buildings, *ib.*; senate-house, *ib.*; library, *ib.*; church of St. Mary the Great, *ib.*; Pitt Press, 125; Fitzwilliam Museum, *ib.*; anatomical school, *ib.*; botanic garden, *ib.*; observatory, *ib.*; colleges, *ib.*; hostels, *ib.*; origin of colleges, *ib.*; college customs in 1546, *ib.*; constitution of colleges, 126; scholarships and fellowships, 126, 129 (see also each college); St. Peter's College, 126; Clare College, *ib.*; Pembroke College, *ib.*; Gonville and Caius College, *ib.*; Dr. Caius, *ib.*; Trinity Hall, 127; Corpus Christi College, *ib.*; King's College, *ib.*; Queen's College, *ib.*; St. Catherine's College, 128; Jesus College, *ib.*; Christ's College, *ib.*; St. John's College, *ib.*; Magdalene College, *ib.*; Trinity College, 129; Emmanuel College, *ib.*; Sidney Sussex College, *ib.*; Downing College, *ib.*; Dr. Paget on education at, 141; exhibition at, 429
Camphor-water as a solvent of salts, Mr. Morris on, 85
Cancer, Dr. Humphry on, 185; encephaloid, Mr. Ransome on, 272; uterine, carbonic acid as an anæsthetic in, 468; colloid of abdomen, Dr. E. Wells on, 599; of breast, value of retracted nipple as a sign of, 602; Mr. Spencer Wells on diagnosis of, 685; in orbit, Mr. H. Walton on, 701
Candlish, Dr. H., treatment of parturient women, 589
Carbonic acid as a local anæsthetic, Dr. West on, 468; excretion of in diabetes mellitus, 476
Carnochan, Dr. operation by, 289
Carpenter, Dr. W. B., Principles of Human Physiology, *rev.*, 550
Carriage-accidents, deaths from, 401
Carter, Mr. R. B., tartarised antimony in scrofulous ophthalmia, 102; protest regarding Medical Provident Fund, 199; his document concerning the Medical Provident Fund, 300, 339, 370, 607; letters from, 344, 372; on the Journal, 507; on enucleation of eyes, 526, 561
Casali, M., hernia of ovarian cyst, 710
Castration, strangulation of spermatic cord a substitute for, 284
Cataract, congenital, Mr. Lawson on treatment of, 33, 268; Dr. C. Taylor on improved methods of operating for, 539
Catheterism of Eustachian tube, syphilis communicated by, 448
Cattle, contagious disease of, proceedings in Parliament regarding, 103, 171; causes of typhus in, 472; effect of disease of on meat, 679
Caustics in lupus exedens, 47
Cavalry stables, hygiene of, 428
Cells, ganglionic, of brain, structure of, 610; disorganisation of in plants, 611
Celsus, remarks on surgical writings of, 687
Certificates of death, refusal of, 481
Chalvet, M., atmosphere of hospitals, 386
Chambers, Dr. T. K., recovery of, 420; resignation at St. Mary's Hospital, 583; Lectures, chiefly Clinical, *rev.*, 630
Charcot, M., lesions of nutrition connected with hemiplegia, 522
Chemistry, Dr. Herapath's Address on, *rev.*, 525
Chest, shape of in pregnant women and newly born children, 478; M. Marrotte on tapping the, 576
Chevers, Dr. N., state-sanitation, 4
Children, poisoning of by Calabar beans, 235; fistulæ after lithotomy in, 285; Dr. Meryon on paralysis in 444; newly born, shape of chest in, 478; feeding of, 626; excision of hip-joint in, 689; condition of muscles in paralysis of, 707; expectant treatment of pneumonia in, 713; newly born, weight and length of, 714; effect of Australian climate on, 716
Chinese, mortality among, in Australia, 497
Chloroform, report of Committee of Royal Medical and Chirurgical Society on, 39; deaths from, 65, 104; Dr. Humphry on, 178; Mr. Sansom on administration of, 195, 291; responsibility of administering, 223, 256, 320; application of to judicial purposes, 422; in American Federal army, 454; absurd statement regarding, 456, 502; administration by Mr. Clover's apparatus, 494; Mr. Gaine on death during administration of, 547; deaths from drinking, 552
Cholera, Mr. S. Clark on causes of, 580; Dr. Parkes on, 655
Chorea, Dr. Falconer on Bath waters in, 245; treatment of, 715
Chrzonszczewsky, Dr., epithelium of the pulmonary vesicles, 708
Chuckerbutty, Dr. S. G., the medical profession in Bengal, 86, 109; amyloid degeneration, 299, 318; cyanosis, 335; phlegmasia dolens, 364; hydrophobia (?) 365; typhus fever in Calcutta, 649, 676, 726
Chylous urine, 611
Ciliary muscle, operations on, Mr. Solomon on, 363, 697, 734; discussion on in Paris, 397, 422; Mr. Hogg on, 427; Mr. Hancock on, 529
Cinchona, cultivation of in Australia, 491
Clapton, Dr., introductory lecture at St. Thomas's Hospital, 411
Clark, Mr. Le Gros, on retaining the staff in the bladder in lithotomy, 667
——— Mr. S., Hygiene of the Army in India, *rev.*, 579
Clarke, the late Dr. J., 471
——— Captain, his alleged claims on the profession, 670
Clements, Mr. W. J., testimonial to, 172
Clifton, sanitary statistics of, 399
Clinical teaching, Mr. Syme's method of, 430; Mr. Syme on remuneration for, 471; Observations on Functional Nervous Disorders, Dr. Handfield Jones's, *rev.*, 440
Clover, Mr., chloroform apparatus of, 494
Club, Edinburgh University, 16, 592; New University, in Edinburgh, 613
Club-foot, Dr. Humphry on, 182
Club-patients, liability of, 377

Coal-gas, treatment of hooping-cough by vapours of, 528
Cobbold, Dr. T. S., sources of entozoa, 450
Cobra, bite of a, 402
Cock, Mr., select cases of aneurism, 604
Cœliac axis, aneurism of, 522
Cohn, Dr., death of, 616
Cold as an anodyne in parturition, 136
Colic, lead, from contaminated bread, 250
College, Calcutta Medical, foundation of, 88; instruction in, 109
——— Christ's, Cambridge, 128
——— Clare, Cambridge, 126
——— Corpus Christi, Cambridge, 127
——— Downing, Cambridge, 129; *conversazione* at, 197
——— Emmanuel, Cambridge, 129
——— Gonville and Caius, Cambridge, 126; *conversazione* at, 194
——— Jesus, Cambridge, 128
——— King's, Cambridge, 127; choral service in chapel of, 196
——— King's, London, scholarships at, 506
——— King and Queen's of Physicians in Ireland, honorary fellows of, 564; memorial of late president of, 616; address to the Lord Lieutenant, 643
——— Magdalene, Cambridge, 128
——— Pembroke, Cambridge, 126
——— Queen's, Belfast, report on, 171
——— Queen's, Birmingham, prizes at, 234
——— Queen's, Cambridge, 127
——— Queen's, Cork, fire at, 75
——— Royal Medical Benevolent, new president of, 259; prizes at, 641
——— Royal, of Physicians in Edinburgh, pass lists, 232, 563; office-bearers, 694
——— Royal, of Physicians in London, comitia of, 15; early work of Caxton in library of, *ib.*; photographs of Fellows of, *ib.*; memorial of members of Apothecaries' Hall for admission to, 15, 117, 420; pass lists, 25, 138, 429, 480, 737; officers of, 26; election of Fellows, 42, 733; resolution regarding title of Doctor, 94; bill regarding, 103; new Fellows of, 103; decision regarding Harveian oration, 419; inquiry on army medical service, 550, 733; communication of Medical Council with, *ib.*; Harveian orator and lecturers for 1865, *ib.*; leprosy committee, *ib.*; communications regarding infallible cures, *ib.*
——— Royal, of Surgeons of Edinburgh, memorial on army medical service, 226; pass lists, 232, 233, 563, 564
——— Royal, of Surgeons of England, Mr. Fergusson's lectures at, 1, 27, 51, 77, 156; leading articles on examiners, 12, 41, 90, 92, 115; Mr. Turner's candidature for seat in Council, 14, 15; mode of electing councillors in, 15; election of councillors, 42; election of officers, 65; Mr. Paget on examinerships in, 74; meeting of Fellows regarding election of councillors by voting papers, 76, 226; Mr. Turner on necessity of changes in, 76; letters on, 101; examiners' fees in, 115, 167; pass lists, 170, 232, 480, 563, 591, 616, 668; report of Council of British Medical Association on memorial to, 191; Mr. Green's proposal for voting by written papers, 225; news regarding, 402; annual report of income and expenditure of, 455; preliminary examination at, 720
——— Royal, of Surgeons of Ireland, address to the Lord Lieutenant, 643
——— St. Catherine's, Cambridge, 128
——— St. John's, Cambridge, 128
——— St. Peter's, Cambridge, 126
——— Sidney Sussex, Cambridge, 129; scholarships at, 429
——— Trinity, Cambridge, 129
——— University, fellows of, 53; free admission of missionary students to, 669
Colloid cancer of abdomen, Dr. Wells on, 599
Collyns, the late Mr. C. P., 97
Colouring matter of urine, Dr. Thudichum on, 509
Commenge, M., coal-gas vapour in hooping cough, 528
Compression, digital, in aneurism, 528
Concato, Dr. L., aneurism of cœliac axis, 522
Conjunctivitis, inoculation of pus in, 602
Consanguinity, marriages of, 552
Conservative surgery, Mr. Fergusson on, 27; minor, Mr. W. W. Morris on, 85
Constipation, its value as a symptom in obstruction, 705, 706
Contagious diseases, isolation of patients suffering from, 341
Contagious Diseases Act, 42, 94; proceedings in Parliament regarding, 103; application of, 565
Contagiousness of typhoid fever, 472; of syphilis, 608
Contusion, rapid occlusion of an artery by, 708
Convalescent Institution, bequest to, 47
Convulsions, puerperal, 501
Cooper, Dr. W., retention of urine, 276; impacted gall-bladder, 277; hæmorrhage of doubtful source, *ib.*
Corks, refuse, use of, 653
Cornil, M., epithelial tumours of nerves, 522
Coroner, medical, in Bombay, 102
Coronerships, medical candidates for, 564, 592, 720
Coroners' fees for inquests on pauper patients, 74
Corpora lutea, 476
Corrigan, Dr., memorial of, 616
Corvisart, M., pepsine from the pancreas, 209
Cowan, Dr. C., calculus removed without operation, 601
Cow-pox, propagation of among heifers in Naples, 552; commission on suggested, 713
Craniotomy-forceps, a new, 168
Cranmer, Mr., testimonial to, 505
Creasote, Mr. Morris on tincture of myrrh as a vehicle for, 85
Criminal lunatics, new act regarding, 50; statistics of, 172
Crisp, Dr. E., valves in abdominal veins, 426
Critchett, Mr. G., operation for extreme divergent strabismus, 718
Cronyn, Dr., occlusion of vagina, 710
Crossley *v.* Morley, 734, 736
Crossman, Mr. E., treatment of parturient women, 590
Croup, relation of to diphtheria, Dr. Hillier on, 350
Curgenven, Mr., effect of Australian climate on children, 716
Cusco, M., rapid obstruction of an artery by contusion, 708
Cyanide of potassium, sale of, 536
Cyanosis, Dr. Chuckerbutty on cases of, 335
Cyst, dentigerous, of lower jaw, Mr. Fearn on, 241; Mr. S. J. A. Salter on, 704
Cysticercus in pigs, detection of, 554

D.

Dalhousie, Lord, on the medical officers of the army, 16
Danes, fanatical conduct to foreign scientific men, 606
Daniell, Mr. E., testimonial to, 506
Davaine, M., researches on bacteria, 386
Davenport brothers, the, 421, 551
Davies, Dr. H., blistering in acute rheumatism, 524
——— Mr. W., action against, 658
Davis, Dr. J. Hall, craniotomy-forceps, 168
Dead, Dr. Chevers on disposal of the, 7
Deaf and dumb, instruction of in Paris, 494
Deafness, commission on Mr. Turnbull's treatment of, 65, 714
Death, Mr. Morris on registration of causes of, 86; causes of in England, 288; hour of in disease, 451; a puzzling case of, 493, 526
Death-rate of towns, conclusions regarding, 585
Decaisne, M., intermittent pulse from smoking, 94; disease from abuse of alcohol, 454
Deception, attempted, by a female, 447
Degeneration, fatty, of heart, Dr. Ormerod on, 152; ex-

periments on, 154; in diphtheria, Dr. Hillier on, 348; amyloid, Dr. Chuckerbutty on, 299, 318
Delcroix, M., use of horse-flesh, 606
Delhi Gazette on Indian Medical Warrant, 250
Delirium tremens, Dr. H. Jones on, 441
Demonomania, epidemic of in Savoy, 65, 225
Dental surgery, Mr. S. A. Parker's contributions to, 360
Dentigerous cysts of jaw, Mr. Fearn on, 241; Mr. Salter on, 704
Derblich, Dr., meningitis of the base of the brain, 342
Desmarres, M., his operation on the internal muscles of the eye, 560; iridectomy in glaucoma, 584
De Vitré, Dr. E. D., president's address at meeting of Lancashire and Cheshire Branch, 162
Diabetes in a monkey, 174; Dr. Anstie on treatment of, 325; excretion of carbonic acid in, 476; hereditary, 734
Diagnosis by ballot, 259; Surgical, Dr. Macleod's Outlines of, *rev.*, 336
Diaphragm, Mr. Wearne on perforation of, 31
Dick, Dr., subcutaneous division of urethral stricture, 134
Diday, M., natural history of syphilis, 336; syphilitic infection, 422; rapid cure of mentagra, 585
Diet, dry, in diseases, 282; in diabetes, Dr. Anstie on, 325; Mr. Banting's system of, 203, 469, 565; of parturient women, *see* Parturient females; vegetarian, in a workhouse hospital, 634
Digital compression in aneurism, 528
Diphtheria, Dr. G. Buchanan on tracheotomy in, 323; Dr. W. H. Ransom on, 328; Dr. Hillier on, 347; Mr. Bridger on, 457; Dr. J. W. Walker on, *rev.*, 581
Director-General of the Army Medical Department, deputation to, 70
Disease, Mr. Bottomley on types of, 23; hour of death in, 451; importance of geography of, 588; registration of, 643
Diseases, Various, Dr. Oke's Practical Enumeration of, *rev.*, 445
Dislocation of humerus, Bardeleben's mode of reducing, 531; of head of radius, Dr. H. Hare on, 546
Dispensary, Liverpool, bequests to, 259; Northern, London, bequest to, 321; gift of a, at Barnsley, 402; bequest to, 564; Tunbridge Wells, bequest to, 694
Doctorate, study for in Italy, 398
Dohrn, Dr., shape of the chest in pregnant women and new-born children, 476
Dolbeau, M., on Mr. Hancock's operation for dividing the ciliary muscle, 422
Donations, 234, 559, 720, 738
Douche syphon, Dr. A. Fleming on, 389; uterine, 688
Down, Dr. L., introductory lecture at London Hospital, 416
Drainage, of Dublin, 172; Dr. Hughes Bennett on, 556
Dreadnought Hospital Ship, bequest to, 47
Dron, M., syphilitic disease of the epididymis, 283
Drops, variations in size of, 549
Drowned persons, treatment of, 627
Druggist, action against for accidental poisoning, 259; committal of a for manslaughter, 564
Druggists, proposal of defence funds for, 402; grievances of, 482, 506
Drug-shops, the earliest, 699
Drugs, careless dispensing of, 394
Drunkard lunatics, treatment of in America, 606
Drysdale, Dr., abnormal pulse, 586; effects of excessive smoking, 716
Dublin, drainage of, 172
Duncan, Dr. J. M., source of hæmorrhage from uterine tumours, 285; length and weight of newly born children, 714
Dunn, Mr. R. W., non-mercurial treatment of syphilis, 697
Dursy, Professor, Wolff's bodies, 476
Dutch medical periodical, a new, 659
Dyspepsia, bulimic, 521; syncopal, *ib.*

E.

Ear, external, sebaceous tumours in, 134
Eastlake, Dr., obstetric binder, 558; management of third stage of labour, 688
Ecchymosis, production of, 535
Echinococcus tumour in pelvis impeding labour, 496; in orbit, Mr. Wharton Jones on, 675
Ecraseurs, merits of various, 136
Eczema, Mr. Wilson on, 567, 690; Mr. Meade on, 673
Editor, an, imprisoned for alleged calumny, 589, 634
Editorial, apology, an, 298
Edmonds, Dr., ventilation of ships, 376
Edmunds, Dr. J., scarlatinoid disease after operations, 453
Education, Dr. Sandwith on Philosophy of, *rev.*, 605
Elaterium in ascites, Mr. J. H. Gibson on, 598
Elbow, Dr. Humphry on excision of, 181
Electricity, Dr. Routh on treatment of uterine fibrous tumours by, 30; in aphonia, 282; in paralysis, 476, 496; inquiry into in Paris, 714; of metals, 507
Embolism of renal arteries, 707
Emplastrum lyttæ, Mr. Morris on extemporaneous preparation of, 85
Empyema, treatment of, Professor Roser on, 476; M. Marrotte on, 576; case of, 486
Encephaloid tumour in orbit, Mr. Walton on, 701
Encysted tumours of orbit, Mr. H. Walton on, 700; of ovary. *See* Ovarian Disease and Ovariotomy.
Endocardial disease, Dr. Ormerod on, 148
England, causes of death in, 288; quarterly mortality in, 536
English women, a French opinion regarding, 340
Entozoa, sources of, 450
Enucleation of uterine fibrous tumours, Dr. Routh on, 53; of eyes, 526, 561
Epidemic and epizootic diseases, Dr. W. Budd on investigation of, 354
Epididymis, syphilitic disease of, 283
Epiglottis, removal of growth from, 639
Epilepsy, Mr. Morris on acids in, 85; Dr. Russell on loss of speech in, 408; bromide of potassium in, 501
Epithelial tumours of nerves, 522
Epithelium of pulmonary vesicles, 708
Ergot, poisoning by, in attempt to procure abortion, 446, 503; use of in labour, 591, 615
Erysipelas, questions regarding, 453
Erythematous rash after accident, 373
Eustachian tube, syphilis communicated by catheterism of, 448
Ewart, Dr., dinner to, 481
Exanthematous Diseases, Dr. Pursell on, *rev.*, 366
Excision of knee, Mr. Fergusson on, 156; of joints, Dr. Humphry on, 180; of knee, discussion on at Lyons, 226; of lower jaw, Mr. Fearn on, 241; of hip-joint in children, 689
Exophthalmia, cardio-thyroidean, M. von Gräfe on a symptom of, 340; Mr. Walton on, 544
Exostoses of pelvis, 610; of orbit, Mr. H. Walton on, 700
Eye, Mr. Walton on foreign bodies in, 58, 433; Dr. J. Thompson on, 231; Mr. Solomon on operations on, 362; Mr. Hogg on, 427; Mr. Hancock on, 559; enucleation of, 526, 561; Mr. Walton on protrusion of, 544, 700, 725; Mr. Nunneley on vascular protrusion of, 717. *See* Ciliary Muscle, Glaucoma, and Iridectomy.

F.

Face, extensive wound of, 283
Fagge, Dr. Hilton, aneurism of abnormal artery of lower limb, 603
Falconer, Dr. R. W., president's address to Bath and Bristol Branch, 242
Faraday, Mr., treatment of spiritualism, 551
Farr, Dr. W., causes of death in England, 288

Fat, its use as respiratory food, 450
Fatty degeneration of heart, Dr. Ormerod on, 152; experiments on, 154; in diphtheria, Dr. Hillier on, 348; tumours in orbit, 700
Favus, transportation of achorion of through air, 167
Fearn, Mr. S. W., dentigerous cyst of lower jaw, 241
Febrile states, Dr. Handfield Jones on, 441
Fecundity, remarkable, 617
Feeding of children, 626
Fees, medical, in America, 260, 388; at coroners' inquests, 402; actions for, 429, 734, 736
Fellowships at Cambridge, 126, 127, 128, 129
Femoral hernia. *See* Hernia.
Femur, dislocation of, 486
Fenwick, Dr. S., state of stomach and intestines in scarlatina, 229
Fergusson, Mr. W., lectures on the progress of Surgery, 1, 27, 51, 77, 156; *L'Union Médicale* on, 167
Fermentation, alcoholic, 90
Fever, deaths of medical men from, 58, 67, 401; Sir C. Hastings on influence of sanitary improvements in preventing, 380; effect of foul gases in producing, 556, 557; spread of in Ireland, 738
—— intermittent, Sir C. Hastings on disappearance of, 381; disease of kidneys after, 610; propagation by water, 654
—— puerperal, causes of, 251; reduction of mortality from, 529, 610; purgatives in, 709
—— typhoid, contagiousness of, 472; effect of foul air in producing, 556, 557; production of by foul water, 654
—— typhus, in Calcutta, Dr. Chuckerbutty on, 649, 676, 726
—— yellow, at Bermuda, 402, 429, 471, 505, 564, 607
Fibrous tumours of uterus, Dr. Routh's lectures on, *see* Tumours and Uterus; degeneration of heart, Dr. Ormerod on, 152
Fick, Professor, a kymographion, 495
Fire extinguished by ammonia, 719
Fischer, Dr., treatment after tracheotomy, 65
Fish, a many-eyed, 476
Fistula, vesico-vaginal, new method of treating, 136; following lithotomy in children, 285; anal, treatment of recommended by Celsus, 688
Fistulous opening between bowel and bladder, Dr. Goode on, 488; Dr. Gibb on, 535
Fleming, Dr. A., the syphon-douche, 389
Flint-implements, 669
Fœtus, hydrocephalic, Mr. Young on, 600; anencephalous, 688
Foley, M., use of inspiration of oxygen, 65
Follin, M., on iridectomy and division of the ciliary muscle, 397
Food, effect of deprivation of on the blood, 64; nutritive value of elements of, 424; respiratory, fat and sugar as, 450; sources of entozoa in, *ib.*; of army in India, Mr. S. Clark on, 580
Foot, gunshot-wound of, with pyæmia and erythematous rash, 373; tetanus after laceration of, 463
Forceps, craniotomy, 168
Fordyce, Dr. G., Mr. T. Martin on, 31
Foreign bodies in eye, Mr. Walton on, 58, 433; Dr. J. Thompson on, 231
Forster, Mr. J. C., modified obturator hernia, 603
Förster, Dr., pathology of congenital syphilis, 708
Fossil mammalia in Ireland, 89
Fowler, Dr. R., the testimonial to Mr. Griffin, 25, 76, 139, 210, 236, 290, 322, 403, 456, 508, 644, 670
Fox, Mr. C. J., preparation of mouth for artificial teeth, 642
—— Dr. Wilson, multilocular cysts of ovaries, 319
Fracture of humerus, Mr. Lowndes on cases of, 519
Fractures, treatment of recommended by Celsus, 687
France, state of medical profession in, 528; Medical Association of, 660
Franceschi, M., vicarious menstruation, 710
Francis, Dr., bromide of potassium in epilepsy, 501
Frazer, Dr. W., Treatment of Diseases of the Skin, *rev.*, 630
Frémy and Decaisne, MM., maturation of fruits, 89
French opinion of Anglo-Saxon women, 340
Fromman, Dr., structure of ganglionic cells, 610
Frontal sinus, states of producing protrusion of eye, 725
Fruits, maturation of, 89; a source of entozoa, 450
Fry, Mr. F., severe injury of brain, 702
Fulda, Dr., Cæsarean section, 610
Fund, Medical Provident. *See* Medical Provident Fund.
Furber, Mr. G. H., cephalic birth succeeding arm-presentation, 703

G.

Gailleton, M., genesis and treatment of trichophyton, 452
Gaine, Mr. C., death from chloroform, 547
Gall-bladder, impacted, Dr. W. Cooper on, 277
Galloway, Mr. R., Manual of Qualitative Analysis, *rev.*, 549
Galvanism in the treatment of disease, 476, 496, 553, 714
Ganglionic nerve-cells, structure of, 610
Gangrene, hospital, turpentine in, 11; spontaneous, Mr. H. J. Alford on case of, 238
Gant, Mr. F. J., Principles of Surgery, *rev.*, 391; introductory lecture at Royal Free Hospital, 439
Garrod, Dr., Essentials of Materia Medica, *rev.*, 221
Garstang, Dr. W., neuro-mnemonic triangle at base of skull, 701
Gastrotomy for uterine fibrous tumour, Dr. Routh on, 79
Gedney *versus* Smith, case of, 583
Gee, Dr., renal calculi, 715
Generation, spontaneous, 495
Genius and industry, 555
Geography of disease, importance of study of, 588
German doctors in Paris, 371; Naturalists and Physicians, Association of, *see* Association; medical studies, French inquiry into, 616
Gervis, Dr., diseased urinary organs in an infant, 688
Giant, skeleton of a, 612
Gibb, Dr. G. D., larynx of the negro, 400; various forms of glottis, 425; preparations of bromine, 451; fistulous opening between bowel and bladder, 535; growth removed from epiglottis, 639
Gibson, Mr. John H., ascites treated by elaterium and aqua regia, 598
Glaucoma, Mr. Soelberg Wells on, *rev.*, 88; Mr. Solomon on treatment of, 298, 327, 487, 597, 697
Globe on the army medical service, 280
Glottis, various forms of, 425
Glück, Dr. J., hypertrophied breast, 477
Gmelin's *Chemistry*, progress of, 321
Goldsmith, Mr. G. P., puerperal convulsions, 501
Goode, Dr. H., fistulous opening between bowel and bladder, 488
Goodeve, Dr. E., president's address at meeting of Bengal Branch, 35
Goodwin, Dr. J. W., circumscribed inflammation of the liver, 274
Gore, Dr., case of small brain, 174
—— Mr. R. T., mortality of Bath, 400
Gout, Dr. Falconer on Bath waters in, 244
Government commission on venereal diseases, 605, 711; suggested commission on vaccination direct from the cow, 712
Gramshaw, Mr. H., Mr. Carter and the Medical Provident Fund, 372
Grantham, Mr. J., medicated steam in skin-diseases, 230
Granville, Mr. J. M., cold as an anodyne in labour, 136; treatment of parturient women, 533
Gréant, M., capacity of the lungs, 472
Greeks, state medicine among the, 5
Greenhalgh, Dr., pelvimeter, 251; placenta prævia, *ib.*

Greenhow, Dr. E. H., introductory lecture at the Middlesex Hospital, 435
Griffin, Mr., testimonial to, 16, 25, 76, 101, 139, 210, 236, 286, 290, 322, 395, 403, 448, 456, 508, 527, 644, 670; poor-law medical reform, 343, 561, 614, 691; case of strangulated hernia, 464
Grimsdale, Dr., ovariotomy, 67
Gritti's amputation at the knee, 496
Gross, Dr. L. W., gunshot-wound of penis, 288
Growth, new, affecting tibia, 603. *See* Tumour
Gubler, Dr., bromide of potassium as a sedative, 343
Guersant, M., fistulæ after lithotomy in children, 285
Guipon, Dr., bulimic and syncopal dyspepsiæ, 521
Gum-resins, Mr. Morris on liquor potassæ as a solvent of, 85
Gums, morbid growth in from diseased stumps, Mr. S. A. Parker on, 360; Mr. Salter on hypertrophy of, 703
Gunshot-wounds during riot at Belfast, 286; of penis, 288; of foot, with pyæmia and erythematous rash, 373; effects of, 663
Guy, Dr. W. A., and Harley, Dr. J., Hooper's Physician's Vade Mecum, *rev.*, 524
Guyon, M., nature of blood-sweat, 118
Guyot-Dennecy, M., nitre-fumigations in asthma, 660
Guy's Hospital Reports, *rev.*, 602

H.

Habershon, Dr. S. O., bronzing of the skin, 602
Hachenberg, Dr., turpentine in hospital gangrene, 11
Hæmatocele, uterine, Dr. West on, 468
Hæmorrhage from uterine tumours, Dr. Routh on, 29; source of, 285; of doubtful source, Dr. W. Cooper on, 277; cerebral, Mr. T. Jones on, 621; traumatic, treatment of recommended by Celsus, 688
Hæmorrhoids, internal, cases of, 10
Hailstones, conical, 89
Halford, Dr. G. B., proceedings in case of supposed criminal lunacy, 506
Hammond, Surgeon-General W. A., dismissal of, 321
Hancock, Mr., his operation for dividing the ciliary muscle, discussion on in Paris, 397, 422; on section of internal muscles of eye, 559
Hanging, death by, 345
Hanks, Mr. H., certificates in cases of miscarriage, 261
Hare, Dr. H., dislocation of head of radius, 546
Hare-lip, Mr. Fergusson on, 51
Harley, Dr. G., researches on colouring matter of urine, 511
Harrinson, Mr. I., president's address to Reading Branch, 218; gunshot-wound of foot, 373; death from shock, 390; uterine polypus, 575
Harris, Dr. A., hydro-encephalocele, 137
Harrison, Dr. C., cases in the Lincoln County Hospital, 431, 463, 486
Hartig, Forester, effect of frost on roots, 663
Hartshorne, Mr. F. H., medical evidence in law courts, 659, 666, 738; reply of Mr. Thursfield to, 693
Harveian oration, to be delivered in English or Latin, 419; orator for 1865, 733
Haschisch, prohibition of sale of in Turkey, 536
Hastings, Sir Charles, address in Public Health Department of Social Science Association, 379
Hastings prize medal, award of, 192, 194; essay, 509
Haviland, Mr. A., hour of death in disease, 451
Hawkins, Mr. Charles, the late Sir B. Brodie's Croonian lectures, 668; lithotrity, 730
Hayden, Dr. T., fat and sugar as respiratory food, 450
Head, Celsus's treatment of injuries of, 687
Heart, debate on sounds of, 65, 281; Dr. Ormerod on present state of pathology of, 147; effects of paracentesis on, *ib.*; endocardial affections, 148; affections of muscular structure, 152; wound of, 174; fatty degeneration of in diphtheria, Dr. Hillier on, 348; Dr. Handfield Jones on action of tea on, 442; affection of valves of in diphtheria, Mr. Bridger on, 457; vibriones in abscess of, 530; perforation of, 574; ossification of valves of, 575; relation of disease of to apoplexy, Mr. T. Jones on, 621; nervous structures and action of, 638
Heine, Dr., gunshot-wounds in Danish war, 663
Heller's researches on colouring matter of urine, 511
Helmholtz, Professor, light of the sun, 90; sounds of contracting muscles, 664
Hemiplegia, with loss of speech, Dr. James Russell on, 81, 211, 239; of old standing, lesions following, 522; with loss of speech, Dr. H. Jackson's views on, 524
Henery, "Dr.," trial and conviction of, 493, 536, 592; leading article on, 632; application to magistrate regarding, 641
Henke, Professor, structure of knee-joint, 495
Henle, M., structure of the kidneys, 609; new element of retina, *ib.*
Henry, Mr. M., candidature for seat in Parliament, 536
Herapath, Dr. W. B., Address on Chemistry, *rev.*, 525
Herbalist, pathology of a, 430
Hernia, causes of, 230; strangulated, treated by inflation and inversion, Mr. Griffin on, 464; umbilical, Dr. J. Thompson on, 545; modified obturator, 603; inguinal, from abnormal states of vaginal process, 604; strangulated femoral, Dr. J. Thompson on, 673; femoral, relative frequency of, 706; obturator, Mr. Birkett on, *ib.*; of ovarian cyst, 710; strangulated congenital, Mr. Prichard on, 728
Heurteloup, Baron, death of, 454
Hewitt, Dr. Graily, diet of childbed, 452
Hey, Mr. J., disease of knee-joint, 67
Hicks, Dr. J. B., introductory lecture at Guy's Hospital, 436; anencephalous monster, 688
——— Dr. L. G., wound of heart, 174
Higginbottom, Mr. J., questions on erysipelas, 453
Hillier, Dr., impetigo contagiosa, 24; diphtheria in London, 347
Hip-joint, inflammation of in a puerperal woman, 137; Dr. Humphry on excision of, 181; excision of in children, 689
Hippophagy, 289, 429
Hodson, Mr. C. F., therapeutic inquiry on scarlatina, 174
Hofmann, Professor A. W., derivates of aniline, 611; dendritic figures of salts, 663
Hogg, Mr. J., operations on the eyeball, 427
Holmes, Mr. T., abstract of Mr. Fergusson's lectures, 1, 27, 51, 77, 156; caustics in lupus exedens, 47; excision of hip-joint in children, 689; System of Surgery, *rev.*, 703, 729
Homœopath, appointment of a, to an asylum in Australia, 397; a non-registered, action for fees by, 429
Homœopaths, resolutions of Reading Branch on consultations with, 133
Homœopathy, new name for, 506; in New York, 660
Honey as an excipient for pills, 430
Honours to scientific men, 721
Hooper's Physician's Vade-Mecum, *rev.*, 524
Hooping-cough, coal-gas vapours in, 528
Horn, Dr., trachea-perforator, 610
Horseflesh as an article of food, 289, 429, 606
Hospital, Addenbrooke's, 121, 124
——— Birmingham General, donation from musical festival, 376, 481
——— Bluecoat, at Liverpool, bequest to, 259
——— at Brechin, bequests and donations towards, 234
——— City Orthopædic, annual dinner of, 50
——— Devon and Exeter, bequests to, 559, 694
——— for Diseases of the Chest, bequests to, 641, 694, 720, 737
——— at Doncaster, proposed establishment of, 481
——— German, opening of a new, 481
——— Guy's, Dr. Hicks's introductory lecture at, 436; Reports of, *rev.*, 602
——— for Incurables, donation to, 737

Hospital, Jewish, at Norwood, bequest to, 506
——— Liverpool Northern, bequest to, 259
——— Liverpool Southern, bequest to, 259
——— London, foundation of new wing, 50; Dr. Down's introductory lecture at, 416; bequest to, 505; Clinical Lectures and Reports by Medical and Surgical Staff of, *rev.*, 523
——— Metropolitan Free, bequests to, 506, 641
——— Middlesex, bequests to, 47, 103; prizes at, 173; Dr. Greenhow's introductory lecture at, 435
——— National, for Paralysed and Epileptic, appointments in, 536
——— Norfolk and Norwich, bequests to, 641, 694; statistics of lithotomy in, 730
——— Royal Free, bequests to, 47, 103, 641; Mr. Gant's introductory lecture at, 439; donations to, 737
——— Ophthalmic, at Maidstone, bequest to, 694
——— Royal Orthopædic, bequest to, 720
——— Royal Victoria at Netley, visit of Queen to, 234
——— St. Bartholomew's, scholarships at, 259; Mr. Callender's introductory lecture at, 415
——— St. George's, investigation of the case of George King, 583
——— St. John's, for Diseases of the Skin, 470
——— St. Mary's, Mr. Toynbee's introductory lecture at, 418; administration of chloroform at, 494; resignation of Dr. Chambers, 583
——— St. Peter's, for the Cure of Stone, 581
——— St. Thomas's, expenses at, 138; treasurer of, 287; Dr. Clapton's introductory lecture at, 411; resignation of Dr. Brinton, 564; decision in Court of Chancery regarding, 633
——— Samaritan, decision regarding operations, 261; appointment of consulting-physicians to, 618
——— South Devon and East Cornwall, bequest to, 234
——— University College, donations and bequests to, 53, 454, 506, 536, 669, 720
——— at Vienna, new, 720
——— Westminster, bequest to, 103; Dr. Basham's introductory lecture at, 412
Hospital gangrene, turpentine in, 11; convention, resolutions of, 322
Hospitals, military and naval, cost of, 53; in Paris, isolation of patients in, 94, 341; Mr. Image on construction of, 112; Mr. Spencer Wells on mortality in, 384; employment of nuns in, 428; military, sanitary inspection of, 720
Hôtel-Dieu in Paris, history of, 260; new, 288
Howitt, Mr. T., testimonial to, 564
Hughes, Mr. T., appointment at Horse Guards, 617
Humerus, diseased, Mr. C. Steele on, 60; dislocated, Schinzinger's method of reducing, 531
Humphry, Dr. G. M., Cambridge, its University and Colleges, 119; address in surgery, 175, 203; attempt of *Lancet* to obtain address of, 188, 248; vertebral theory of skull, 665
Hutchinson, Mr. J., rare forms of disease connected with syphilis, 263; leucoderma, 523; uterine fibrous tumours, 730; ovariotomy, *ib.*
Hydatid cyst of liver, Mr. Wearne on, 31; uterine, Mr. A. G. Osborn on, 390
Hydrocele, Dr. J. Thompson on, 464
Hydrocephalus, Mr. Young on case of, 600; a cause of protrusion of eyeball, 725
Hydro-encephalocele, case of, 137
Hydropathy at Malvern, 287
Hydrophobia in Liverpool, 66; death from, 170; in Milan, 282; Dr. Chuckerbutty on case resembling, 365
Hygiene, of the Army in India, Mr. S. Clark's Practical Observations on, *rev.*, 579; Dr. Parkes's Manual of, *rev.*, 653, 679
Hypertrophy of gums and alveolar ridges, Mr. Salter on, 703
Hysterical aphonia, Dr. J. Russell on, 619
Hysterotome in uterine disease, Dr. Routh on, 483

I.

Ikin, Mr. J. I., suggestion to Committee of Lancashire Relief Fund, 93
Illegal practice, prosecution for, 118, 371, 396, 423, 447, 551, 617; in France, 528
Image, Mr. W. E., president's address to East Anglian Branch, 112
Impetigo contagiosa, Dr. Hillier on, 24
Imposture, attempted, by a female, 447
India, disposal of dead in, 7; Dr. Chevers on necessity for sanitary measures in, 8; Dr. Chuckerbutty on the state of medicine in, 86, 109; value of life in, 376; mortality of British army in, 377; want of sanitary management in, 421; anatomy in, 455; leprosy in, 482. *See* Army, Indian
Indican in urine, 511, 512
Indigo in urine, 511, 512
Infant, diseased urinary organs in an, 688
Infanticide in London, 234
Infants, Sir C. Hastings on mortality among, 379; Mr. Simon on, 394. *See* Children.
Infirmary, Royal Sea-bathing at Margate, bequest to, 47; Manchester Royal, bequest to, 47; Liverpool Royal, new wards in, 67; bequest to, 259; Leeds, suggestion regarding, 93; Bedford, bequests to, 103, 259; Stafford, bequest to, 321; Liverpool Royal School of Medicine, prizes of, 430; proposed establishment of an, at Doncaster, 481; Edinburgh Royal, bequests to, 564, 669; Arbroath, bequest to, 592; Dundee, bequest to, *ib.*; Whitehaven, bequest to, 641; Cumberland, bequest to, 694; Hereford, retirement of Mr. Lingen, 737
Inframammary pain, Dr. S. Martyn on, 296; Dr. Inman on, 559
Infusions, vegetable, preservation of, 346
Inhibition, Dr. Handfield Jones on, 440
Injections in hæmorrhage from uterine tumours, 29
Inman, Dr. T., inframammary pain, 359; treatment of parturient women, 502; effect of bruises, 535
Inoculation, unskilful, death from, 171
Inquests, 260, 345, 402, 427; *post mortem* examinations at, 345, 527; fees at, 538
Insane, legal responsibility of, 227
Insanity, supposed case of, 506
Insecticide, benzine as an, 616
Insects, phosphorescent, 422
Intermitting respiration, 538
Intestine, fistulous communication of with bladder, Mr. Fearn on, 488; Dr. Gibb on, 535; obstruction of, Mr. Pollock on, 705; recoveries after wound of, 708
Intraocular myotomy, Mr. Solomon on, 237, 362, 479, 734; Mr. Hogg on, 427
Intussusception, Dr. G. H. Philipson on, 357
Inzani and Lusana, MM., nerves of taste, 341
Iodine in uterine fibrous tumours, Dr. Routh on, 29; tincture of, as an application to wounds, 714
Ireland, lunatics in, 28; fossil mammalia in, 89; prison medical officers in, 103; addresses to Lord Lieutenant of, 643; spread of fever in, 738
Iridectomy, discussion in Parisian Surgical Society, 281, 397, 422; as a preliminary to cataract, Dr. Taylor on, 539; M. Desmarres on, 584; Mr. Solomon on glaucoma treated by, 698. *See* Glaucoma.
Iridodesis, Mr. G. Lawson on, 33
Irrigation in treatment of wounds of knee, Dr. Newman on, 623
Italy, curriculum for degree of Doctor in, 398
Itch, aromatic vinegar in, 282

J.

Jackson, Dr. Hughlings, loss of speech in hemiplegia, 524
James, Mr., testimonial to, 486
Jaundice of pregnant females, 709
Jaw, dentigerous cyst of, Mr. Fearn on, 241; Mr. Salter on, 704
Jay, Mr., double monstrosity, 688

Jessen, Dr., German inquiries into natural things, 474
Jews, Dr. Chevers on sanitary laws of, 4; quacks among, 146; length of life of, 528
Joints, Dr. Humphry on excision of, 180; Dr. J. V. Bell on susceptibility of, 520; stiff, restoration of motion in, 586
Joire, M., lesions of nervous centres in general paralysis, 523
Jones, Dr. C. Handfield, Clinical Observations on Functional Nervous Disorders, *rev.*, 440
——— Mr. T., cerebral hæmorrhage, 621
——— Mr. T. Wharton, echinococcus cyst in orbit, 675
——— Mr. W. W., blood-letting, 24
Journal, British Medical, Dr. Ormerod on, 3; South Eastern Branch on, 18; *Ophthalmic Review* on, 225; attacks of the *Lancet* on, 248, 302, 346, 403, 607, 670; letters on, 344, 426; Mr. R. B. Carter on, 370, 507
Journal of Mental Science, 65
——— *Edinburgh Monthly*, 346
Jury of matrons, 712

K.

Kehrer, Dr., corpora lutea, 476
Kemp, Dr., ozone registration, 455
Kidney, calculus in, 48, 715; Dr. Ormerod on connection of disease of with pericardial disease, 147; circulation in the, 476; diseased, effect on poisoning, 600; structure of, 609; affection of after intermittent fever, 611; relation of disease of to apoplexy, Mr. T. Jones on, 621; embolism of arteries of, 707
King, Dr. K., ovarian disease, 432; peculiar case of lithotomy, 573
Kingdon, Mr. J., causes of hernia, 230
Kinglake, Dr. J. H., president's address at meeting of West Somerset Branch, 213
Kingsley, Dr. N. H., treatment of cleft palate, 669, 695; Mr. Sercombe on his artificial velum, 719
Kirkes, Dr. W. S., death of, 660; biography of, 714; memorial of, 738
Kleptomania, case of, 505
Knee-joint, excision for disease of, 67; excision of, Mr. Fergusson on, 156; Dr. Humphry on, 181; discussion on at Lyons, 226; structure of, 495; Gritti's method of amputation at, 496; extensive subcutaneous injury of, 601; Dr. W. Newman on irrigation in wounds of, 623; amputation at, 626
Koberajes, Dr. Chuckerbutty on, 86
Kœberle, M., ovariotomy, 249, 505, 528
Kœnig, M., new stethoscope, 448
Küchenmeister, M., communication of small-pox, 660
Kymographion, 495, 530

L.

Laborde, Dr., chlorate of potash in bronchitis, 578; state of muscles in infantile paralysis, 707
Labour, cold as an anodyne in, 136; bandage after, 168; premature, in obstinate vomiting, 285; treatment after, *see* Parturient Females; complicated by echinococcous tumour, 496; missed, 559; use of ergot in, 591, 615; hydrocephalic fœtus in, 600; treatment of 200 years ago, 682; management of third stage of, 688; difficult, from utero-interstitial pregnancy, 710
Laennec, proposed statue of, 720
Lagos, unhealthiness of, 388
Lancashire Relief Fund, suggestion to Committee of, 93
Lancet, the, on Mr. Turner's candidateship for Council of College of Surgeons, 14, 15; proceedings of regarding Dr. Humphry's address, 188, 248; attacks of on British Medical Journal, 302, 344, 346, 403, 426, 607, 670
Landerer, Dr., salicin in the urine, 137
Lankester, Dr. E., *post mortem* examinations, 345; the Banting system, 565
Laryngoscope, illustration of use of, 639
Larynx, instruments for applying remedies to, 169; of negro, 400; Mr. Pick on syphilitic disease of, 645
Larrey, Baron, proposed statue of at Tarbes, 250; notice regarding, 288
Laugier, M., laceration of nerve, 282
Lavies, Mr., dinner to, 505, 573, 617
Lawson, Mr. G., treatment of congenital cataract, 33, 268
Laycock, Dr., legal responsibility of the insane, 227
Lead, cattle poisoned by, 173; paralysis from, Dr. Falconer on Bath waters in, 245; colic from bread contaminated with, 250; poisoning by, 642
Leading Articles:—Academy of Medicine, prizes of, 712, 713; Acting assistant-surgeons, 43, 163; Action against Mr. E. Bowen for malpraxis, 732; Advertisements of quack medicines in newspapers, 301, 634; Aneurism treated by digital compression, 528; Anthelmintic properties of benzine, 395; Army, British, medical service of, 16, 43, 62, 92, 93, 117, 163, 164, 223, 248, 249, 280, 340, 420, 471, 550, 633; syphilis in, 165; Victoria Cross conferred on medical officers, 398; Army, Indian, medical service of, opinions regarding warrant, 224; new warrant, 631, 657; sanitary state of, 367; Arrest, power of, as regards army medical officers, 249; Arsenic-eating in Styria, 448; Association, British Medical, railway arrangements for meeting of, 64; annual meeting of, 163, 186; Association, Herefordshire Medical, 608; Association, Social Science, Public Health Department of, 396; Association, Medical, of France, 660; Bantingism, 469; Barthez, M., on expectant treatment of pneumonia in children, 713; Benzine as an anthelmintic, 395; Bermuda, yellow fever in, deaths of medical officers from, 471; causes of, 607; Bladder, puncture of the, 584; Blood, effect of deprivation of food on, 64; Botanical teaching, 249; *British Pharmacopœia*, 93, 527; Cæsarean section, case of, in 1757, 281; Calcutta, state of gaol in, 421; Cardio-thyroidean exophthalmia, 340; Carter, Mr. R. B., and the Medical Provident Fund, 330, 339, 370; Chambers, Dr. T. K., recovery of, 420; retirement from St. Mary's Hospital, 583; Children, expectant treatment of pneumonia in, 713; Chloroform, report of Committee of Royal Medical and Chirurgical Society on, 39; deaths from, 65; responsibility of administering, 223; poisoning by, 552; Clinical teaching, 471; College, Royal, of Physicians of London, comitia of, 15; election of Fellows, 42, 733; right of members to title of Doctor, 94; application to, for *ad eundem* diploma of licentiate, 117, 420; resolution regarding Harveian oration, 419; inquiry into Army Medical Service, 550, 733; lecturers for 1865, 733; Leprosy Committee of, *ib.*; communications with on secret remedies, *ib.*; College, Royal, of Surgeons of England, Council and Examiners of, 12, 15, 41, 90, 92, 115, 167; councillors elected, 42; officers, 65; Mr. Green's proposal for voting by written papers, 225; Commission on venereal diseases, 605, 711; suggested, on vaccination direct from the cow, 713; Commissioners in Lunacy, notice regarding private patients, 527; Contagious Diseases Prevention Act, 42, 94; Crimea, causes of death of medical officers in, 164; *Daily Telegraph* on Army Medical Service, 43; Dalhousie, Lord, on Army Medical Service, 16; Danes, mistaken patriotism of, 606; Davenport Brothers, the, 431, 551; Death, a puzzling case of, 493, 526, 583; Deception, attempted, by a female, 447; De Grey and Ripon, Earl, and the Army Medical Service, 92; Desmarres, M., iridectomy, 584; Diday, M., natural history of syphilis, 336; treatment of mentagra, 585; Digital compression in aneurism, 550; Doctor, study for degree of in Italy, 398; Drunkards treated in America as lunatics, 606; Editor, an, imprisoned for alleged calumny, 634; Enucleation of eyes, 526; Ergot taken to produce abortion, death from, 446; Evidence of medical men against each other, 658; Examiners of the Royal College of Surgeons, 12, 61, 90, 115, 167; Eyes, enucleation of, 526; Food, effect of

deprivation of on blood, 64; Free trade in physic, 446; Gedney *versus* Smith, 583; *Globe* on Army Medical Service, 280; Government Commission on Venereal Diseases, 605, 711; Gratuitous medical services, *American Medical Times* on, 167; Griffin, Mr., testimonial to, 16, 395, 448, 527; Harveian oration, language of, 419; Henery, "Dr.", 493, 632; Homœopath, a, appointed visiting medical officer to an asylum, 397; Homœopathy in New York, 660; Horseflesh as an article of food, 606; Hospital, St. John's, 470; a new special for urinary diseases, 581; St. Thomas's, 633; Humphry, Dr., his address and the *Lancet*, 188, 248; Ikin, Mr., suggestion by, 93; Indian Medical Service, *see* Army, Indian; Insult, duty of medical practitioner in case of, 421; Introductory lectures, 469; Iridectomy, discussions on in Paris, 281, 397, 422; M. Desmarres on, 584; Italy, study for medical degree in, 398; JOURNAL, BRITISH MEDICAL, attacks of *Lancet* on, 188, 248, 302, 607; *Journal of Mental Science*, 65; Jury of matrons, 712; Kirkes, Dr., death of, 660; Labour, management of 200 years ago, 682; Lancashire Relief Committee, suggestion to, 93; *Lancet*, the, and Mr. Turner, 14, 15; and Dr. Humphry's address, 188, 248; and the BRITISH MEDICAL JOURNAL, 188, 248, 302, 607; *Lex talionis* in a moral sense, 734; Llewellyn, the late Mr., meeting in Calcutta for memorial to, 371; London, mortality in, 683; Lunatics, illegal reception of, 280, 396, 527; removal of to foreign asylums, 369; Maclagan, Dr. Douglas, the army medical service, 223; Marking soldiers, orders regarding, 249, 340; by remedial agents, 421; Medical Council, the, and the Medical Act, 551, 608; and medical education, 117; duties of, 447; Medical Provident Fund, letter from Dr. Richardson, 118; progress and purposes of, 246, 525; and Mr. Carter, 300, 339, 370; first meeting of directors, 472, 491; the *Lancet* on, 607; Medical schools, number of students in, 495, 527; Mentagra, rapid cure of, 585; *Morning Post* on Army Medical Service, 16; Mortality in London, 683; Mosler, Dr., benzine in trichiniasis, 395; Navy, syphilis in the, 165; *Nederlandsch Archief voor Genees- en Natuurkunde*, 659; Nerves, degeneration and regeneration of, 418; Newly born children, length and weight of, 714; Newspapers, discussion of medical subjects in, 224; charlatanic advertisements in, 301, 634; *Ophthalmic Review*, the, 225; Our own brethren, 658; Paget, Mr. T., and the College of Surgeons, 92; Panum, Dr., effect of deprivation of food, 64; Parturient women, treatment of 200 years ago, 682; Pneumonia in children, expectant treatment of, 713; Poisoning by chloroform, 552; Poisons, custody and sale of, 471; Poor-law medical relief, 37, 527; Prison in Calcutta, defective ventilation of, 421; Prosecutions, vain, 370, 396, 447, 551; Prostitution, legislation for, 42, 94; Public Health, report of medical officer of Privy Council, 393; *Punch* on the Army Medical Service, 249; Puzzling case, 493, 526, 583; Railway arrangements for annual meeting of British Medical Association, 64; Richardson, Dr., on Medical Provident Fund, 118; Robertson, Dr. A., death of, 491; St. John's Hospital for Diseases of the Skin, 470; St. Peter's Hospital for Stone and Urinary Diseases, 581; St. Thomas's Hospital, 633; Sanitary state of the Indian army, 367; "Secret Friend" victim, 493; "Silent Friend" silenced, 632; Society, Royal Medical and Chirurgical, report of Chloroform Committee, 39; for Relief of Widows and Orphans of Medical Men, 584; Soldiers, marking of, 249, 340, 421; Special hospitals, 581; Sperino on syphilis, 336; Spiritualism, proper treatment of, 551; Syme, Mr., on clinical teaching, 471; Syphilis in the army and navy, 165; natural history of, 336; contagion of, 608; Talley, Mr., prosecutions by, 370, 396, 447, 551; *Times* on charlatanic advertisements, 634; Trichiniasis, benzine in, 395; Turner, Mr. T., and the *Lancet*, 14, 15; Typhoid fever, contagiousness of, 472; University of Edinburgh, association of graduates of, 16, 167; Vaccination direct from the cow, 713; Vanzetti's treatment of aneurism by digital compression, 528; Vegetarian diet in hospitals, 634; Venereal diseases, Government commission on, 605, 711; Ventilation of gaol in Calcutta, 421; Victoria Cross, medical recipients of, 398; Von Gräfe on cardio-thyroidean exophthalmia, 340; Vulpian on degeneration and regeneration of nerves, 418; Warrant, Indian medical, *see* Army, Indian; Wilkins, Mr., prosecution of, for illegally keeping lunatics, 280, 396; Wittelshöfer, Dr., imprisonment of, 634; Yellow fever, in Bermuda, deaths of medical officers from, 471; causes of, 607

Leah, Mr. T. C., case of death with tetanic symptoms, 60
Le Briert, Dr. J., poisoning by eating tobacco, 522
Le Cœur, Dr., itch treated by aromatic vinegar, 282
Lectures on Progress of Surgery, Mr. Fergusson's, 1, 27, 51, 77, 156; Lettsomian, on Midwifery and Diseases of Women, Dr. Routh's, 29, 53, 79, 105, 160; on Glaucoma, Mr. Soelberg Wells's, *rev.*, 88; on Scarlatina after Operation, Mr. Paget's, 237; introductory at St. Thomas's Hospital, Dr. Clapton's, 411; at Westminster Hospital, Dr. Basham's, 412; at Manchester Royal School of Medicine, Mr. Stone's, 414; at St. Bartholomew's Hospital, Mr. Callender's, 415; at London Hospital, Dr. Down's, 416; at St. Mary's Hospital, Mr. Toynbee's, 418; at Middlesex Hospital, Dr. Greenhow's, 435; at Guy's Hospital, Dr. Hicks's, 436; at Liverpool Royal Infirmary School of Medicine, Mr. Long's, 437; at Royal Free Hospital, Mr. Gant's, 439; on Diseases of Women, Dr. West's, *rev.*, 465; introductory, leading article on, 469; clinical, on skin-diseases, 470; Dr. T. K. Chambers's, *rev.*, 630; on innocent and malignant tumours, Mr. S. Wells's, 685; at College of Physicians, arrangements regarding, 739
Lectureship on mental diseases in Edinburgh, 641
Lee, Dr. R., nervous structures and action of heart, 638
Leech, the late Mr. John, 564
Leech, an artificial, 686
Legge, Mr. W., treatment of parturient women, 478, 532, 614
Legion of honour, 259
Legislation, sanitary, Dr. W. Chevers on, 7; Sir C. Hastings on, 383
Leith, water of, 556, 557
Lemaire, M., organisms in the air, 167, 387
Leprosy in India, 482; causes of, 523; Committee of College of Physicians on, 733
Leuckart, Professor, fish with many eyes, 478; hermaphrodite bees, 663
Leucoderma, 523
Leucorrhœa, Dr. West on source of discharge in, 467
Lichen, Mr. G. Nayler on, 266
Liddon, Mr. W., cases of ovariotomy, 647
Liebig, Baron, report regarding, 630
Liebreich, M., composition of brain, 475; effect of marriages of consanguinity, 552
Life, value of in India, 376
Ligatures, Dr. Humphry on, 179
Ligè, M., premature labour in obstinate vomiting, 285
Lingen, Mr. C., retirement from Hereford Infirmary, 737
Liquor potassæ a solvent of gum resin, Mr. W. W. Morris on, 85
Lithotomy, Mr. Fergusson on, 77; tearing of urethra in, *ib.*; Dr. Humphry on, 180; in children, fistulæ after, 285; retention of staff in bladder in, Dr. E. Morris on, 490; Mr. Le Gros Clark on, 667; Dr. K. King in case of, 573; statistics of mortality after, 729
Lithotrity, Mr. Fergusson on, 78; Dr. Humphry on, 180; Mr. C. Hawkins on, 730
Liver, Mr. Wearne on compound hydatid cyst of, 31; Dr. Sircar on abscess of, 36; Dr. Goodwin on suppurative inflammation of, 274; cirrhosis of, 687

Liverpool, hydrophobia in, 66; school of medicine, entries at, 527; sanitary improvements in, 669
Livingstone, Dr., on water and fever in Africa, 557
Llewellyn, the late Assistant-surgeon, memorial to, 26, 371; *Daily Telegraph* on, 43; proposed epitaph for, 403
London, old sanitary state and regulations of, 6; mortality in, 74, 454, 683; infanticide in, 234
Long, Mr., case of hydrophobia, 66; introductory lecture at Liverpool Royal Infirmary School of Medicine, 437
Longmore, Mr. T., Manual of Instructions for Testing Vision, *rev.*, 445
Lord, Mr. C. F. J., president's address to Metropolitan Counties Branch, 216
Lowe, Mr. E. J., ozone-tests, 481
—— Mr. S., femoral aneurism, 431; empyema, 486
Lowndes, Mr. H., acupressure, 67; amputation at shoulder-joint, 519; surgical doctrines of Celsus, 687
Lunacy and Law, Dr. Byrne on, *rev.*, 336
Lunatics in Ireland, 28; criminal, new law regarding, 50; in Irish prisons, 171; criminal statistics of, 172; illegal reception of, 259, 280, 396, 618; removal to foreign asylums, 369; in England and Wales, 477: order of commissioners regarding reception of, 527; drunkards treated as, 606
Lungs, supplemental nutrient arteries of, 426; capacity of, 472; peculiar auscultatory phenomenon in cavernous, 529; abscess of, 575; epithelium of vesicles of, 708
Lupus exedens, caustics in, 47
Lyell, Sir Charles, baronetage conferred on, 138
Lymphatic vessels, dilatation of, 284

M.

MacCarthy, Mr. G. D. R., treatment of parturient women, 562, 615
Macdowall, Dr. A., death of, 26
Mackenzie, Dr. M., instruments for applying remedies to larynx, 169
Macker, Dr., poisoning by chloroform, 552
Maclagan, Dr. Craig, arsenic eating in Styria, 448
———— Dr. Douglas, on the army medical service, 223; the *Globe* on remarks of, 280
Maclean, Dr. Charles, death of, 454
Macleod, Dr. G. H. B., Outlines of Surgical Diagnosis, *rev.*, 336
Malarioid disease, 442
Malignant pustule, discussion on in Academy of Medicine, 167
Malpractice, alleged, action for at Liverpool, 732
Malvern, difficulties of hydropathy at, 287
Mammalia, fossil, in Ireland, 89
Manchester, scarlet fever in, 585
Manna, source of, 529
Marcè, M., effect of oil of wormwood, 234
Marcet, Dr., researches on colouring matter of urine, 511
Marey, M., new thermograph, 401
Marking of soldiers, order regarding, 249; new order, 340; by remedial agents, 421
Marriages of consanguinity, 552
Marrotte, M., paracentesis thoracis, 576
Marsh-water, effects of, 654
Martin, the late Mr. Peter, memorial of South Eastern Branch to, 17, 18, 19; resolution of Metropolitan Branch on, 101
——— Mr. T., Dr. George Fordyce, 31; the Medical Provident Fund, 255
Martyn, Dr. S., physiological meaning of inframammary pain, 296
Masse, M., treatment of parasitic diseases, 552
Masters, Mr. M. T., teaching of botany in medical schools, 374
Materia Medica, Dr. Garrod's Essentials of, *rev.*, 221
May, Mr. G., scarlatinal rash after scalp-wound, 428; perforation of heart, 574; subcutaneous injury of knee-joint, 601; amputation of knee-joint, 626
Meade, Mr. R. H., treatment of eczema, 673
Meadows, Dr. A., treatment of vesico-vaginal fistula, 136; bandage after labour, 168
Measles in pigs, detection of, 554
Meat, salt, conversion of into fresh, 89; bad, in London, 171; poisoning from effluvium of, 259; a source of entozoa, 450
Meatus auditorius, sebaceous tumour of, 134; sea-tangle in constriction of, 232
Medical Act, prosecutions under the, *see* Illegal Practice; action of Medical Council on, 551, 608
——— biography, example of, 289
——— contracts with unions, question on, 505
——— Council, action regarding Medical Act, 551, 608; communications with College of Physicians, 733
——— department of army and navy. *See* Army, and Navy
——— education, Dr. Ormerod on, 3; report of Select Committee of General Council on, 117; in Cambridge, 124; in Cambridge, Dr. Paget on, 141; in Italy, 398
——— evidence in law courts, Mr. Hartshorne on 666, 738; Mr. Thursfield on, 693; against medical men, 732
——— fees at coroners' inquests, 402; action for, 429. *See* Action
——— Institution, Liverpool, reports of, 687, 715
——— journalism in America, 104
——— magistrate, a, 505
——— observation, combined, Mr. A. Ransome on, 405
——— officers of health, results of appointment of, 455; appointment of for Marylebone, 536
——— practitioners, professional evidence against, 266, 670; vexatious prosecutions of, 402, 720; duties of in cases of insult, 420
——— profession in Bengal, Dr. Chuckerbutty on, 86, 109
——— Provident Fund, letter from Dr. Richardson, 118, 230; report of Committee on, 198; discussion in meeting of Association on, 200; contributions to Guarantee Fund of, 229, 251, 285, 318, 449, 500, 586; leading articles on, 246, 300, 491, 525; Dr. W. Webb on, 255; Mr. T. Martin on, *ib.*; Mr. Carter's circular regarding, 300, 339, 370; Mr. Carter on, 344, 372; Mr. H. Gramshaw on, 372; directors of, 423, 449, 477, 638; first meeting of directors, 472, 497; vacancies in Board of Directors, 497; application of Guarantee Fund, *ib.*; Treasurer, 498; discussion on responsibilities, *ib.*; Secretary, *ib.*; Executive Committee, *ib.*; instructions to Executive Committee, *ib.*; discussion on limitation of age, *ib.*; application to disability from accident, 499; extension to whole profession, *ib.*; resolutions regarding, 500: bankers, *ib.*; collection of Guarantee Fund, *ib.*
——— services, gratuitous, Dr. W. Ogle on, 24; *American Medical Times* on, 166, 537; letter on, 261; Dr. Nankivell on, 271
——— students, numbers of, 484, 495, 527; in Paris, 573; Russian, in Germany, 647; Polish, in Paris, 720
Medicine, Dr. Chuckerbutty's address on, 86, 109; Dr. Ormerod's address in, 147; the profession of, 278; Dr. Peet's Principles and Practice of, *rev.*, 392; opening of school of at Paris, 642
Medicines, elimination of by perspiration, 341
Meissner, Professor, death of, 101
Memorial to late Mr. P. Martin, 19; to late Professor Miller, 564; to late Dr. Kirkes, 738
Meningitis of base of encephalon, 342
Menstruation, vicarious, 710
Mental disease, lectureship on in Edinburgh, 641
Mentagra, treatment of, 585
Mercury in uterine fibroid disease, Dr. Routh on, 29
Meryon, Dr. E., Researches on Paralysis, *rev.*, 443
Metals, electricity of, 507
Metrotome, 496

Mexican insects, phosphorescent, 422
Mexico, Dr. Chevers on sanitary regulations in, 7
Meyer, Dr., duration of life among Jews, 528
Middleton, Mr. A. E., sanitary statistics of Salisbury, 400
Military prisons, 455
Milk, improved by removing horns of cow, 225; means of suppressing, 717
Miller, the late Professor, illness of, 75; memorial of, 564
Milliners and tailors, proceedings in Parliament regarding, 26
Milroy, the late Dr., 471
——— Dr. G., president's address to Epidemiological Society, 587
Miscarriage, certificates in cases of, 261
Monaghan, Judge, lunatics in gaols, 171
Monkey, diabetes in a, 174
Monsters, artificial production of, 89
Monstrosity, cases of, 688
Mooren, Dr. A., iridectomy before the operation for cataract, 539
Moorhead, Dr. J., the Griffin testimonial fund, 101
Morison, Sir A., lectureship on mental diseases founded by, 641
Morphia, death from, 171
Morris, Dr. E., puncture of the bladder, 257, 534; on retaining the staff in the bladder in lithotomy, 490
——— Mr. W. W., a handful of scraps, 85
Mortality after operations, Mr. S. Wells on, 195, 384; of infants, Sir C. Hastings on, 379; of Clifton, 399; of Bath, 400; of Salisbury, *ib.*; in London, 454, 683; in Scotland, 481; among Chinese, 497; in England, 536
Mosler, Professor, benzine in trichiniasis, 395; case of sclerema, 529; diseased pigs, 554; remarkable affection of cutaneous sensation after apoplexy, 611; appointment of, 684
Mucous membrane of stomach and intestines, condition of in scarlatina, 229
Mumbray, Mr., anti-poisoning bottles, 694
Murmurs, endocardial, Dr. Ormerod on, 148
Muscle, rectus abdominis, Mr. Sympson's case of injury of, 463; ciliary, *see* Ciliary muscle.
Muscles, Dr. Meryon on granular degeneration of, 444; state of in old case of hemiplegia, 422; revivification of in rigor mortis, 530; sounds of during contraction, 664
Mushrooms, abundance of, 377
Myotomy, intraocular. *See* Intraocular myotomy.
Myrrh, tincture of, a vehicle for creasote, 85

N.

Nankivell, Dr. C. B., president's address to South Western Branch, 270
Naphtha, poisoning by spirits of, 345
Napper, Mr. A., treatment of parturient women, 501
Narcotics, Dr. Anstie on, 627
Nasse, Dr., tyrosine, 495
Natural things, German inquiries into, 474
Navy, grievances of assistant-surgeons of, resolution of Lancashire and Cheshire Branch, 133; syphilis in, 165; circulation of obscene publications in, 536; examinations for medical service of, *ib.*; health of the, 612
Nayler, Mr. G., lichen, 266
Neanderthal skull, 609
Necrosis of great toe, 58
Negro, larynx of the, 400; mortality of, 497
Nélaton, M., electricity in nasal polypus, 167
Nerve, median, ligature of, 282; optic, tumour of producing protrusion of eye, 701
Nerves, vaso-motor, discovery of, 340; of taste, 341; degeneration and regeneration of, 418; epithelial tumours of, 522; pneumogastric, influence on submaxillary glands, 523
Nervous phenomena, in diphtheria, Dr. Hillier on, 349; occurring seventeen years after the bite of a dog, Dr. Chuckerbutty on, 365; Disorders, Dr. C. Handfield Jones on, *rev.*, 440; disorders, galvanic current in, 476, 496, 553, 714; centres, organic lesions of in general paralysis, 523
Neuralgia, facial, from diseased teeth, Mr. S. A. Parker on, 360; in general, causes of, 440
Neuro-mnemonic triangle in skull, Dr. W. Garstang on, 701
New Zealand, English weeds in, 536
Newman, Dr. W., fixed ophthalmoscope, 555; penetrating wounds of knee-joint, 623
Newspapers, discussion of medical questions in, 224; charlatanic advertisements in, 301, 634
Nicholls, Dr., vegetarian diet in a hospital, 634
Nightingale, Miss, hospital nurs, 428
Nightingale fund, the, 234
Nile, deposit of the, 259
Nipple, retracted, value of as a sign of cancer, 602
Niven, Mr. D. G., the testimonial to Mr. Griffin, 286
Number 60 as a least common multiple, Mr. W. Morris on, 86
Nunn, Mr. T. W., destructive inflammation of hip in a puerperal woman, 137
Nunneley, Mr. T., vascular protrusion of eyeball, 717
Nuns, hospital, 428
Nurses, Dr. Humphry on, 185; training of, 234; nuns as, 428

O.

Obstetric binder, 558
Obturator hernia. *See* Hernia.
Occlusion of vagina, incisions in, 710
Odling, Dr., testimonial to, 738
Oehl, M., influence of pneumogastric nerves on submaxillary glands, 523
Œsophagus, danger of passing bougies in structure of, 705
Ogle, Dr. W., gratuitous medical services, 24
Oil, volatile, of urine, Dr. Thudichum on, 515
Oke, Dr., Enumeration of Various Diseases, *rev.*, 445
Olecranon, compound comminuted fracture of, 520
Ollier, M., arterio-venous aneurism, 282
Omichmyl, Dr. Thudichum on, 510
Omicholic acid, Dr. Thudichum on, 517
Operations, Dr. Humphry on opium after, 180; causes of mortality after, 195; Mr. S. Wells on, 384; scarlatina after, Mr. Paget on, 237; Dr. Wilks on, 428; Mr. G. May on, *ib.*; Dr. Edmunds on, 453
Ophthalmia, strumous, tartarised antimony in, 102; treatment of, 261
Ophthalmic Review, 225; *Hospital Reports*, 346
Ophthalmoscope, a fixed, 555
Opium after operation, Dr. Humphry on, 180; investigation of alkaloids of, 341; common employment of, 395
Orbit, Mr. Wharton Jones on echinococcus cyst in, 675; Mr. Walton on tumours in, 700; cysts in, *ib.*; fatty tumours in, *ib.*; exostosis of *ib.*; malignant disease of, 701; periostitis of, *ib.*; aneurism by anastomosis in, 717
Orfila, Madame, death of, 250
Ormerod, Dr. E. L., president's address to South Eastern Branch, 3; address in medicine, 147
Osborn, Mr. A. G., uterine hydatids in successive gestations, 390
Osteosarcoma of humerus, Mr. C. Steele on, 60
Ovarian cyst, origin of multilocular, 319; hernia of an, 710
Ovariotomy, cases of, 66, 287, 505; Dr. Humphry on, 183; statistics of, 290, 322; Dr. K. King on, 432; Dr. West on, 468; Mr. W. Liddon on, 647; Mr. Hutchinson on advantages of, 730
Overcrowding, 326; Sir C. Hastings on, 380

Oxygen, uses of inspiration of, 65; inhalation of, 196, 400
Ozæna, treatment of, 10
Ozone registration, 455, 481

P.

Page, Dr. F., necrosis of great toe, 58
Paget, Dr. G. E., president's address at meeting of British Medical Association, 141
—— Mr. J., scarlatina after operations, 237
—— Mr. T., examinerships in the Royal College of Surgeons, 74, 92; retention of urine, 213, 452, 639
Pain, inframammary, Dr. S. Martyn on, 296; Dr. Inman on, 359
Painting of Velpeau, an inaccurate, 65
Palate, cleft, Mr. Fergusson's operation for, 52; Dr. Kingsley's apparatus for, 669, 695, 719; Mr. Pollock on operation on, 704
Pancreas, pressure from the, 209
Panum, Dr., effect of deprivation of food on blood, 64
Paracentesis thoracis, Parisian Hospital Society on, 277; M. Marrotte on, 576
Paralysis of right side, with loss of speech, Dr. Russell on, 81, 211, 239; in diphtheria, Dr. Hillier on, 349; Dr. Meryon's Researches on, *rev.*, 443; Remak's application of electricity in, 476, 496, 553, 714; general, lesions of nervous centres in, 253; infantile, state of muscles in, 707
Paralytic affections, Dr. Falconer on Bath waters in, 245
Paraphimosis, Dr. J. Thompson on, 363
Parasites, Mr. S. Wells on diseases from, 387
Paris, school of medicine in, 642
Parker, Mr. S. A., contributions to dental surgery, 360
——— Mr. W., electricity of metals, 507
Parkes, Dr. E. A., Manual of Practical Hygiene, *rev.*, 653, 679
Parliamentary Bills, report of Committee of Metropolitan Counties Branch on, 99
Parmelia esculenta, source of manna, 529
Parrish, Mr. E., Treatise on Pharmacy, *rev.*, 548
Parson, Mr., necrosis of great toe, 58
Parsons, Dr. C., Bronchitis of Potters, *rev.*, 367
——— Dr. J. G., preservation of vegetable infusions, 346
Parturient females, treatment of, Mr. Pope on, 373, 478, 562, 692; Dr. Graily Hewitt on, 452; Mr. Legge on, 478, 532, 614; Mr. Napper on, 501; Dr. Inman on, 502; Mr. J. M. Granville on, 533; Mr. C. S. Smith on, *ib.*; Mr. G. D. R. MacCarthy on, 562, 615; Dr. T. Skinner on, 562; Dr. H. Candlish on, 589; Mr. E. Crossman on, 590; Dr. W. M. Whitmarsh on, *ib.*; letters on, 615, 640, 692; treatment of 200 years ago, 682
Pasteur, M., his researches on microscopic organisms, 385; phosphorescent Mexican insects, 422
Pathology, Mr. Gant's views of, 391, 439
Patriotism, fanatical, 606
Pavy, Dr., amyloid degeneration, 604
Peet, Dr. J., Principles and Practice of Medicine, *rev.*, 392
Pelizæus, Dr., wound of small intestine, 708
Pelvimeter, a, 251
Pelvis, case of contraction of, 73; standard female, measurements of, 378; echinococcus tumour in, 496; exostosis of, 610
Penis, gunshot-wound of, 288
Pepper, adulterations of, 376
Pepsine from the pancreas, 209
Pericarditis, Dr. Ormerod on, 147; rheumatic, *ib.*; connection with albuminuria, *ib.*; tubercular, *ib.*; anatomical changes in, 148
Perinæal section, Mr. T. Paget on, 213, 452, 639; Dr. E. Morris on, 257, 534; Mr. Pollock on, 588
Periostitis of orbit, Mr. Walton on, 701
Perrin, M., action of alcohol, 249
Peru, ancient roads of, 7
Pétrequin, M., tincture of iodine as an application to wounds, 714
Petroff, M., transformation of urea into carbonate of ammonia, 422
Petroleum ether as a local anæsthetic, 94
Pharmaceutists, use of, 672
Pharmacopœia, British, Dr. Ormerod on, 3; proceedings of Committee on, 93; Dr. Burrows on, *ib.*; Mr. Sandford on, 527
——— *United States*, Mr. Parrish's account of, 548
Pharmacy, Mr. E. Parrish's Treatise on, *rev.*, 548
Philipson, Dr. G. H., intussusception, 359
Phlegmasia dolens, Dr. Chuckerbutty on, 364
Photographs of Fellows of College of Physicians, 15
Photography, application of to microscopic preparations, 476
Phthisis among black troops, 497
Physicians, mortality among, 58
Physiology, Dr. Carpenter's Principles of, *rev.*, 550
Pick, Mr. T. P., syphilitic disease of larynx, 645
Pigs, trichinous, 554; detection of measle in, *ib.*; fed on rice, 649
Pills, honey an excipient for, 430
Pittock, Mr. F. W., placenta prævia in twin-birth, 652
Placenta prævia, Dr. Greenhalgh on, 251; in twin-birth, Mr. Pittock on, 652
Plants, growth of in darkness, 89
Pleurisy, paracentesis thoracis in, 576; causes of sudden death in, 577
Pneumogastric nerves, influence on submaxillary glands, 523
Pneumonia in children, expectant treatment of, 713
Poisoned meat, prohibition of sale of, 172
Poison-bottles, 174, 402
Poisoning by buttercups, 26; by morphia, 171; by lead, 173, 642; by oil of wormwood, 234; by Calabar-beans, 235; by mistake, damages for, 259; by spirits of naphtha, 345; accidental, prevention of, 402; by ergot taken to procure abortion, 446, 503; by yew-berries, 481; accidental, remarks of a druggist on, 506; by eating tobacco, 522; by chloroform, 552; by aconite, in case of diseased kidneys, 600; by tobacco-juice, 617
Poisons, sale of, 394; organic, Mr. Spencer Wells on, 384; suggestions regarding sale of, 471
Poland, Mr. A., mortality after lithotomy, 729
Polli, Dr., his researches on sulphurous acids and sulphites, 387, 448
Pollock, Mr. G., treatment of impervious stricture, 588; treatment of cleft-palate, 669, 704; danger of bougie in œsophageal stricture, 705; intestinal obstructions, *ib.*
Polypus, naso-pharyngeal, electric current in, 167; uterine, 575
Poor-law relief, report of Committee on, 37; Mr. Griffin on, 343, 561, 691; officers, superannuation allowances to, 346, 401
Pope, Mr. T., treatment of parturient women, 373, 478, 563, 692
Porrigo, Dr. Hillier on, 24
Porter, Samuel, sentence on, 234
Portugal, the King of, address to students of the Lisbon Medico-Chirurgical School, 634
Post mortem examinations, Dr. Lankester on, 345; letter on, 427
Potash, chlorate of, in bronchitis, 578; in syphilis, Mr. R. W. Dunn on, 697; caustic, in eczema, 644, 690
Potters, Dr. C. Parsons on Bronchitis of, *rev.*, 367
Pouchet, M., bacteria in bronchitis and coryza, 708
Pregnancy, obstinate vomiting in, 285; effect of diphtheria on, 457; length of cervix uteri in, 496; early, Dr. Routh on diagnosis of, 593; epidemic icterus in, 709; utero-interstitial, 710; mistaken for ovarian disease, 722

Prescriptions, advice on writing, 549
Preyer, Dr., revivification of muscles in rigor mortis, 530
Prichard, Mr. A., strangulated congenital hernia, 728
Prisons, diet in, 260; Indian, state of, 421; military, report on, 455; Mr. S. Clark on construction of, 581
Pritchard, Dr. E. W., sea-tangle in constriction of the meatus auditorius, 232
Prize, Hastings, of British Medical Association, 192, 194, 509; the French Emperor's, for application of voltaic battery, 371; the Actonian, 721
Prizes, at University College, 172; at Middlesex Hospital, 173; at Queen's College, Birmingham, 234; Botanical, at Apothecaries' Hall, 345; at Liverpool Royal Infirmary School of Medicine, 430; Materia Medica, at Apothecaries' Hall, 564; of French Academy of Medicine, 712, 713
Professional indiscretion, 266
Prolapsus ani, case of, 11; uteri, Dr. West on treatment of, 467
Prosecutions, vexatious, against medical men, 402, 447; Reading Pathological Society on, 720; vain, 447, 551
Prostitution, legislation for, 42
Protagon, 475
Protest, a, 173
Proust, M., researches on colouring matter of urine, 509, 512
Pterygium, artificial production of, 610
Public Health, Sir C. Hastings's address on, 379; report of Medical Officer of Privy Council on, 393
Puerperal female, destructive disease of knee-joint in a, 137; fever, *see* Fever.
Pulse, intermittent, in smokers, 94; abnormal, 586
Punch on the army medical service, 249
Purgatives in puerperal fever, 710
Pursell, Dr. J., Rheumatism, Rheumatic Gout, and Sciatica, *rev.*, 366; Exanthematous Diseases, *rev.*, *ib.*
Purulent infection in hospitals, Mr. Spencer Wells on, 385; analogy of to puerperal fever, 386
Puzzling case, a, 493, 526, 583
Pyæmia, Dr. Humphry on, 179; case of, with erythematous rash, 373

Q.

Quackery in France, 528; in Germany, 728
Quacks, and Jews, 146; prosecution of, 493
Queen, visit of to Netley, 234
Quekett, the late Professor, monument to, 429, 536
Quinine, Dr. Handfield Jones on action of, 442

R.

Radcliffe, Dr. C. B., Bantingism, 203
Radius, Dr. H. Hare on dislocation of head of, 546
Railway arrangements for meeting of British Medical Association, 64
Ransom, Dr. W. H., president's address to Midland Branch, 328
Ransome, Mr. A., encephaloid cancer chiefly affecting the bones, 272; need of combined medical observation, 405
Rasch, Dr. A., vaginal douche, 688
Rawdon, Mr., cirrhosis of liver, 687; intestinal perforation, *ib.*
Reali, M., strangulation of the spermatic cord, 284
Rectus abdominis, Mr. Sympson on injury of, 463
Rees, Dr. G. O., renal calculus, 604
Registration of cause of death, Mr. Morris on, 86
Remak, Professor, application of electrical current in paralysis, 476, 496, 553; French committee on, 714
Resin of urine, 510, 516
Respiration, intermitting, 508, 538; causes of movements of, 530
Retina, pigmentation of in consanguineous marriages, 552; new element of, 609
Rheumatism, various modes of treatment of, 118; relation to pericarditis, 147; Dr. Falconer on Bath waters in, 244; Dr. Pursell on, *rev.*, 366; acute, blisters in, 524
Rice as a food for pigs, 649
Richardson, Dr. B. W., letters on Medical Provident Fund, 118, 230; inhalation of oxygen, 196, 400; physiological effects of tobacco, 425; action of nitrate of amyl, 451
Rigor mortis, revivification of muscles in, 530
Rigors, views of Dr. Handfield Jones on, 441
Rindfleisch, Professor, obstetric cases, 530
Robertson, Dr. A., death of, 491
Rome, ancient, sanitary regulations of, 5
Rose, the late Professor, 722
Rosenstein, Dr., affection of kidneys following intermittent fever, 610
Rosenthal, Dr., causes of respiratory movements, 530
Roser, Dr., operation for empyema, 477
Routh, Dr., Lettsomian Lecture on uterine fibrous tumours, 29, 53, 79, 105, 160; statistics of ovariotomy, 290; the hysterotome in uterine disease, 483; diagnosis of early pregnancy, 593; hysteric aphonia, 619
Rowe, Mr., sentence for assault on, 234
Rudinger, Professor, dissections of nerve-fibres, 530
Rugg, Mr. R., testimonial to, 694
Rump, Messrs., testimonial to, 525
Russell, Dr. J., hemiplegia with loss of speech, 81, 211, 239; loss of speech after an epileptiform attack, 408; hysteric aphonia, 619
Russian students in Germany, 647

S.

Salicine in urine, 137
Salisbury, sanitary statistics of, 400
Salter, Mr. S. J. A., congenital hypertrophy of gums, 703; anatomy of antrum of Highmore, 704; dentigerous cyst, *ib.*
Salts, Mr. Morris on camphor water as a solvent of, 85
Sandford, Mr., the *British Pharmacopœia*, 527
Sandwith, Dr. H., Philosophy of Education, *rev.*, 605
Sanitary regulations of various countries, Dr. Chevers on, 4; state of the Indian army, report on, 367; science, Sir C. Hastings on, 379; statistics of Clifton, 399; of Bath, 400; of Salisbury, *ib.*
Sansom, Mr. A. E., action of anæsthetics, 195, 291
Schaafhausen, Professor, spontaneous generation, 495; Neanderthal bones, 609
Scalp-wound followed by scarlet-rash, 428
Scarlatina, condition of stomach and intestines in, 229; after operation, Mr. Paget on, 237; after accident, Mr. Harrinson on case of, 390; Mr. G. May on, 428; Dr. Wilks on, 428; Mr. G. May, jun., on, *ib.*; Dr. Edmunds on, 453; Sir C. Hastings on spread and prevention of, 382; in Manchester, 585
Scharling's researches on omichmyl, 510
Scherer's researches on colouring matter of urine, 511
Schlagintweit, M. R., trade-routes of Central Asia, 553
Schunk's researches on colouring matter of urine, 511
Schutzenberger, M., transformation of coagulated albumen into soluble, 89
Schweigger-Seidel, Dr., structure of the kidney, 609
Sciatica, Dr. Falconer on Bath waters in, 244
Science, popular lectures on in France, 454
Scientific apparatus of celebrated men, 642; men, honours to, 721
Sclerema of skin, 529
Scotland, deaths in, 288, 375, 481, 641
Scott, Mr., fossil mammalia in Ireland, 89
Scurvy, report of medical officer of Privy Council on, 393
Sea-tangle in constriction of the meatus auditorius, 232
Sebaceous tumours of external auditory meatus, 134
Sedative, bromide of potassium as a, 343

Sédillot, M., application of chloroform to judicial purposes, 422
Seitz, Professor, peculiar auscultatory phenomenon in cavernous lungs, 529
Semmola, Dr. M., action of sulphites, 448
Sense of temperature, affection of following apoplexy, 611
Sercombe, Mr. E., artificial palate, 669, 695, 719
Severini, Dr., homœopathic vaccination, 714
Sewage, report of Select Committee on utilisation of, 321; Sir C. Hastings on, 379; Dr. Hughes Bennett on, 556; in Paris, 642; Dr. Parker on effect of gas from, 656; of towns, deputation on, 694
Sharpey, Dr., plasticity of blood-corpuscles, 174
Sheep, small-pox produced in by respiratory organs, 660
Ships, ventilation of, 376
Shock, death from, Mr. Harrinson on, 390
Shoulder-joint, Mr. Lowndes on amputation at, 519
Sibson, Dr., valedictory address to Metropolitan Counties Branch, 100
Sieveking, Dr., the Prince and Princess of Wales, sponsors of child of, 25; journey to Copenhagen, 259
"Silent Friend," silenced, 632
Simmons, Dr., tendo Achillis united by silver-wire, 11
Simulated mutism, detection of by chloroform, 422
Sircar, Dr. M. L., hepatic abscess, 36
Skey, Mr. testimonial to, 50
Skin, application of medicated steam in diseases of, 230; Dr. Falconer on Bath waters in diseases of, 244; Mr. Nayler in diseases of, 266; elimination of medicines by, 341; Mr. E. Wilson's Inquiry into, *rev.*, 366; neuroses of, 442; sclerema of, 529; creasote in parasitic diseases of, 552; bronzing of, 602; Dr. Frazer on Treatment of Diseases of, *rev.*, 630
Skinner, Dr. T., responsibility of chloroform administration, 256; treatment of puerperal women, 562
Skull, vertebral theory of, 665; treatment of wounds of, 612; Dr. Garstang on neuro-mnemonic triangle at base of, 701: osseous closure of apertures in, 702
Small-pox, Sir C. Hastings on spread and prevention of, 382; report of medical officers of Privy Council on, 393; in Africa, 586; produced in sheep through respiration, 660
Smee, Mr., candidature for a seat in Parliament, 536
Smells, Dr. Hughes Bennett on effect of on health, 556
Smith, Mr. C. S., treatment of parturient women, 533
——— Dr. E., the dietary question, 424; nutritive value of foods, *ib.*
Smoking, intermittent pulse from, 94; excessive lesions caused by, 716
Snuff, adulteration of, 376
Social Science Review, 378
Society, Buchan Medical, officers of, 259
——— Cambridge Philosophical, report of, 665
——— Epidemiological, reports of, 587
——— Harveian, of London, reports of, 586
——— Hufeland, of Berlin, prize of, 616
——— Obstetrical, of London, reports of, 73, 136, 168, 251, 558, 688
——— Odontological, reports of, 642, 669
——— Ohio State Medical, curious resolution at, 285
——— Pathological, of Reading, report of, 574, 599, 626
——— Pharmaceutical, deputation of Council of, 618
——— for Relief of Widows and Orphans of Medical Men, annual meeting, 584, 592; donation to, 720
——— Royal, annual meeting of, 665
——— Royal Humane, report on suicides, 721
——— Royal Medical and Chirurgical, report on chloroform, 39; reports of meetings, 134, 229, 319, 638
——— Southampton Medical, annual meeting, 50
——— Sunderland Medico-Chirurgical, officers of, 254
——— Western Medical and Surgical, reports of, 47, 169, 588, 689, 715; officers of, 103
——— Worcestershire Natural History, annual meeting, 288
Soldiers, marking of by remedial agents, 421. *See* Army
Solomon, Mr. J. V., treatment of extreme divergent strabismus, 195, 671; cure of glaucoma without operation, 298; surgical treatment of glaucoma without iridectomy, 327, 487, 597; operations on the eyeball, 362; intraocular myotomy, 479, 734; treatment of glaucoma by division of the ciliary muscles, and by iridectomy, 697
Somerset, West, Dr. Kinglake on diseases in, 214
Soper, Mr. W., spontaneous evolution, 479
Speculum uteri, Dr. West on, 466
Speech, loss of in hemiplegia, Dr. Russell on, 81, 211, 239; from atrophy of tongue, 134; after epileptiform attack, Dr. Russell on, 408; hysteric loss of, Dr. Russell on, 619
Spence, Mr. J., appointment as professor of surgery in Edinburgh, 345
Sperino, Dr., modes of syphilitic infection, 337
Spermatic cord, strangulation of a substitute for castration, 284
Sphenoidal sinuses, protrusion of eye by, 725
Spiegelberg, Dr., length of cervix uteri in pregnancy, 496
Spiritualism, proper treatment of, 551
Spondylolisthesis, cause of, 73
Spontaneous generation, M. Joly's lectures on, 28; discussion on, 495; evolution, 479
Stables, cavalry, sanitary state of, 428
Stamm, Dr., epidemic puerperal fever, 529, 610
Staphyloraphy, Mr. Fergusson on, 52; Mr. Pollock on, 704
State sanitation, Dr. N. Chevers on, 4
Steam, medicated, in skin-diseases, 230
Steele, Mr. C., diseased humerus, 60
Stein, Dr., circulation in the kidneys, 476
Stephens, Dr. J., fatal attempt to procure abortion, 503
Stethoscope, a new, 448
Stilling, Dr., the cerebellum, 495
Stimulants and Narcotics, Dr. Anstie on, *rev.*, 627
Stomach, state of in scarlatina, 229
Stone, Mr., introductory lecture at the Manchester Royal School of Medicine, 414
Strabismus, extreme divergent, Mr. Solomon on treatment of, 195, 671; Mr. Critchett on, 718; from a diseased tooth, Mr. Parker on, 361
Subcutaneous incisions, Dr. Humphry on, 182
Submaxillary glands, influence of pneumogastric nerves on, 523
Sugar, value of as respiratory food, 450
Suggestions regarding British Medical Association, 536, 644
Suicides, diagnosis of mental state of, 341; artful, 486; in Vienna garrison, 722
Sulphites, Dr. Polli's researches on, 387, 448
Sun, light and heat of, 90
Suprarenal capsules, disease of, 602
Surgeon, assault on a, 156; death of a from typhus fever, 401
Surgery, Mr. Fergusson's lectures on progress of, 1, 27, 51, 77, 156; conservative, Mr. Fergusson on, 27; minor conservative, Mr. W. Morris on, 85; Dr. Humphry's address on, 175; Mr. Gant's Principles of, *rev.*, 391; Mr. Gant on pathological practice of, 439; Mr. Holmes's System of, *rev.*, 703, 729
Surgical Diagnosis, Dr. Macleod's Outlines of, *rev.*, 336
Sutures, Dr. Humphry on, 179
Syme, Mr., clinical teaching of, 430, 471
Symonds, Dr. J. A., valedictory address to the British Medical Association, 189; sanitary statistics of Clifton, 399
Sympson, Mr. T., injury of rectus abdominis muscle, 463; dislocation of femur, 486
Syncopal dyspepsia, 521
Syphilis in the army and navy, 165; Dr. Humphry on, 183; Mr. Hutchinson on rare forms of disease connected with, 263; natural history of, 336; transmissibility to animals, 448; contagion of, 608: in army,

. Parkes on prevention of, 680; non-mercurial eatment of, Mr. R. W. Dunn on, 697; congenital, thology of, 708; the Government inquiry into, 605, 1
ilitic disease of the epididymis, 283; of larynx, Mr. ck on, 645
non douche, Dr. Fleming on the, 389

T.

ia medio-canellata, bladder-worms of, 611
ey, Mr., prosecutions by, 370, 396, 447, 551
eworm, a political, 694
dieu, M., rumour regarding, 720
mania, effect of climate of on children, 716
lor, Dr. C., recently improved methods of operating a cataract, 539
, consumption of, 259; action of, 442
th, Mr. S. A. Parker on affections connected with isease of, 360; artificial preparation of mouth for, 642
ndo Achillis united by silver wire, 11
notomy, Dr. Humphry on, 182
stimonial to Mr. Griffin. *See* Griffin, Mr.; to Mr. key, 50; to Mr. W. J. Clements, 172, to Mr. James, 86; to Mr. Cranmer, 505; to Mr. Daniell, 506; to Messrs. Rump, 525; to Mr. Howitt, 564; to Mr. J. Watkins, 617; to Mr. R. Rugg, 694; to Dr. Odling, 38; to Mr. Buckland, 738
anus, Dr. Leah on case with symptoms of, 60; in American Federal army, 260; Mr. Broadbent on recovery in case of, 463
anks to the accoucheur, 285
ermæ Romano-Britannicæ, Dr. Wollaston on, *rev.*, 222
ermograph, a new, 401
ibault, M., honey an excipient for pills, 430
iotherione, 530
omas, Inspector-General Morgan, death of, 505
ompson, Mr. H., honours from the King of the Belgians, 75; paralysis of bladder, 729; treatment of stricture, *ib.*; retention of urine, *ib.*
——— Dr. J., foreign bodies on surface of eye, 231; paraphimosis, 363; hydrocele, 464; notes on hernia, 545, 673
omson, Dr. R. D., death of, 260; resolution of medical officers of health on, 455
orax, shape of in pregnant women and newborn children, 476
oroat, Dr. Fleming on syphon-douche in diseases of, 389
udichum, Dr., Hastings prize-medal awarded to, 193, 195; specimens of trichinæ, 197; colouring matter of bile, 476; migrations of trichinæ, 495; prize-essay on urochrome, 509; thiotherione, 530; chylous urine, 611; anemia, 664
hursfield, Mr. R., medical evidence in law courts, 693
ibia, remarkable growth in, 603
imes, the, on quack advertisements, 634
——— of India on the Indian warrants, 250
obacco, physiological effects of, 425; M. Virchow on, 477; poisoning by eating, 522; poisoning by juice of, 617; diseases from excessive smoking of, 716
ongue, progressive atrophy of, 134; nerves of, 341
oynbee, Mr. J., sebaceous tumour in external auditory meatus, 134; introductory lecture at St. Mary's Hospital, 418
racheotomy, treatment after, 65; in diphtheria, Dr. G. Buchanan on, 323; new instrument for, 610
ransfusion, immediate, 168
rélat, M., lymphatic tumours, 284
richina, specimens of, 197; migrations of, 495; demonstration of, 554
richiniasis, benzine in, 395
richophyton, genesis and treatment of, 552
rousseau, M., ozæna, 10; treatment of acute rheumatism, 118; change of professional chair, 422
uberculat pericarditis, Dr. Ormerod on, 147
Tumours, fibrous, of uterus, Dr. Routh's Lettsomian lectures on, 29, 53, 79, 105, 160; therapeutic treatment of, 29; hæmorrhage from, *ib.*; electricity in, 30; enucleation of, 53; table of cases, 54; reduction of gangrene, 56; gouging, 57; gastronomy, 79, 105, 160; tables of cases, 80, 106; sebaceous, in external auditory meatus, 134; dentigerous, of lower jaw, Mr. Fearn on, 241; fibrous, of uterus, 251; uterine, source of hæmorrhage in, 285; multiple echinococcus in pelvis, 496; epithelial, of nerves, 522; innocent and malignant, Mr. Spencer Wells on, 685; in orbit, Mr. Walton on, 700; uterine fibroid, Mr. Hutchinson on, 730
Tunbridge Wells, riot at, 222
Turin, pay of doctors in, 429
Turnbull, Mr., inquiry into his treatment of deafness, 714
——— Dr. J., chorea, 715
Turner, Mr., the *Lancet* and his candidature for the Council of College of Surgeons, 14, 15; the Royal College of Surgeons, 76
——— Dr. W., supplementary nutriment for the lungs, 426
Turpentine in hospital gangrene, 11
Twin-birth, Mr. Pollock on placenta prævia in, 652
Typhoid fever. *See* Fever.
Typhus fever. *See* Fever.
Tyrosine, chemical inquiries into, 495

U.

Ulceration of cervix uteri, Dr. West on, 466
Umbilical hernia. *See* Hernia.
Union officers, superannuation of, 26
Universities, Parliamentary votes to, 75
University of Cambridge, origin of, 122; present state of, 123; degrees in, 124; means of medical study, *ib.*; chief buildings of, *ib.*; colleges, 125, *see* College; fellowships, etc., 129; Dr. Paget on, 141; pass lists, 481, 668, 721; examiners in, 481, 592; scholarships at, 429, 565
——— of Durham, appointments in, 49, 345
——— of Edinburgh, club of graduates of in London, 16, 592; graduation day, 227; chair of surgery in, 228, 345; pass list, 258; eminent graduates of, 377; meeting of General Council, 536, 613; opening of session, 613; address of principal, *ib.*; number of students in, 641; disturbances at delivery of principal's address, 738
——— of Glasgow, opening of winter session, 536
——— of London, deputation to Lord Palmerston on building for, 26; pass lists, 258, 640, 668
——— of Vienna, *Rector Magnificus* of, 103
University Club, formation of in Edinburgh, 613
Uræmia, production of, 422; theory of, 664
Urea, its conversion into carbonate of ammonia, 422
Urethra, subcutaneous, division of stricture of, 134, 135; various modes of treatment in impervious stricture, 589; Mr. Thompson, treatment of stricture of, 729
Urinary organs, diseased, in an infant, 688
Urine, salicin in, 137; treatment of retention of, Mr. T. Paget on, 213, 452, 639; Dr. E. Morris on, 257, 534; Mr. Pollock on, 589; Mr. H. Thompson on choice of operation in, 729; Dr. W. Cooper on retention of, 276; Dr. Thudichum on colouring matter of, 509, *see* Urochrome; researches of Proust, Scharling, Heller, Schunck, Scherer, Harley, and Marcet on, 509; black substance of Proust, 512; mode of obtaining urochrome from, 513; volatile oil of, 515; preparation of uropittine and uromelamine from, 518; chylous, 611
Urochrome, Dr. Thudichum's prize-essay on, 509; history of investigations on, *ib.*; mode of obtaining, 513; purification of 515; physical and chemical properties of, *ib.*; decomposition of, 516; conclusions and theses regarding, 518
Urohematine, 509
Uromelanine, 517, 518

Uropittine, 516, 518
Urrhodine, 511
Uterine hæmatocele, Dr. West on, 468
Utero-interstitial pregnancy, 710
Uterus, Dr. Routh's lectures on fibrous tumours of, *see* Lectures and Tumours; fibroid tumours of, 136; amputation of cervix, *ib.*; causes of, *ib.*; fibrous tumour of, 251; source of hæmorrhage in tumours of, 285; Dr. Fleming on use of syphon-douche in diseases of, 389; Mr. Osborn on hydatids of, 390; Dr. West on chronic inflammation of, 466; on treatment of prolapsus of, 467; on local application of carbonic acid gas to, 468; Dr. Routh on the hysterotome in diseases of, 483; length of cervix of in pregnancy, 496; Mr. Harrinson on polypus of, 575; Mr. Hutchinson on enucleation of tumours of, 730

V.

Vaccination, Birmingham and Midland Counties Branch on, Sir C. Hastings on, 382; report of Mr. Simon on, 430; direct from the cow, 552, 713; fines for neglect of, 617; certificates of, 695, 723; homœopathic, 714
Vagina, occlusion of, 710
Vaginal douche, 688
Vaginoscope, Dr. Routh on, 594
Vallin, M., extensive wound of face, 283
Valves in abdominal veins, 426; aorta, ossification of, 575
Valvular diseases of heart, Dr. Ormerod on, 148
Vanzetti, M., digital compression in aneurism, 528, 709
Varix, lymphatic, 284
Vaso-motor nerves, discovery of, 340; influence of, 440
Vegetables as a source of entozoa, 450
Veins, abdominal, valves in, 426
Velpeau, M., inaccurate painting of, 65; puncture of bladder, 584
Velum palati, artificial, 669, 695, 719
Venereal diseases, the act for prevention of, 42, 94; Dr. Parkes on, 680; government inquiry into, 605, 711. *See* also Syphilis.
Ventilation of ships, 376; of barracks and tents, 579
Verhegen, M., improvement of milk, 225
Vertebral theory of the skull, 665
Vesico-vaginal fistula, treatment of, 136
Victoria Cross, medical recipients of, 398
Vienna garrison, suicides in, 722
Vinegar, aromatic, in itch, 282
Virchow, counterblast by, 477
Vision, Mr. Longmore's Manual of Instructions for Testing, *rev.*, 445
Vogel, the late Dr., donation from government to sister of, 429
Voltaic battery, prize of French Emperor for application of, 371
Vomiting, obstinate, in pregnancy, 285
Von Gräfe, M., cardio-thyroidean exophthalmia, 340
Von Thaden, Dr., spontaneous expulsion of calculi, 709
Vulpian, M., degeneration and regeneration of nerves, 418

W.

Walford, Mr. T. L., ossification of aortic valves, 575; poisoning (?) and diseased kidney, 600
Walker, Dr. J. W., Diphtheria and Diphtheritic Diseases, *rev.*, 581
Waller, M., change of structure in divided nerves, 419
Walton, Mr. H., foreign bodies in the eye, 58, 433; protrusion of the eyeball, 544, 700, 725
War, regulations of hospitals and wounded in, 322
Ward, Mr. R., and the brothers Davenport, 551
Warrant, the new Indian, 631, 634. *See* Army, India
Wasting palsy, Dr. Meryon on, 444
Water as a source of entozoa, 450; effect of on wound 531; impurities of in India, 580; Dr. Parkes on, 65 propagation of disease by, *ib.*
Watkins, Mr. J., testimonial to, 617
Way, Dr. J., aneurism of arch of aorta, 690
Wearne, Mr. V., compound hydatid cysts of liver, 31
Webb, Dr. W., the Medical Provident Fund, 255
Webber, Mr. W., and Tunbridge Wells, 222
Weber, Dr., topical treatment of nose, 496; effect water on wounds, 531
——— Dr. H., embolism of renal arteries, 707
Weeds, English, in New Zealand, 536
Wells, Dr. E., abscess of lungs, 575; polypoid tumo of rectum, 599; colloid cancer of abdomen, *ib.*; ce bral disease, 601
——— Mr. Soelberg, Glaucoma, and its Cure by Irid tomy, *rev.*, 88
——— Mr. Spencer, causes of excessive mortality af operations, 195, 384; statistics of ovariotomy, 32 lecture on tumours, 685
West, Dr., Lectures on Diseases of Women, *rev.*, 465
Whitelaw, Mr. A., conversion of salt meat into fresh,
Whitmarsh, Dr. W. M., treatment of parturient wome 590
Wickham, Mr. W. J., memorial tablet of, 618
Wigand, Professor, disorganisation of cells in plants, 6
Wilde, Sir W., knighthood conferred on, 103
Wilkins, Mr. H., prosecution of for illegally keepi lunatics, 396
Wilks, Dr. S., scarlatinoid rash after operations, 428
Williams, Mr. Justice, effect of Bantingism on, 345
——— Dr. A. W., missed labour, 559
——— Mr. C., statistics of lithotomy in Norwich Hos pital, 730
Wilson, Mr. E., Inquiry into Diseases of the Skin, *rev* 366; eczema, 567, 690
Winter-journey in Canada, a, 377
Winther, Professor, artificial production of arcus senil and pterygium, 610
Wittelshöfer, Dr., imprisonment of for alleged calumn 589
Wolffian bodies, 403, 476
Wollaston, Dr., Thermæ Romano-Britannicæ, *rev.*, 22
Women, resolution of governors of Samaritan Hospit regarding operations on, 261; English, a Frenc opinion of, 340; Dr. West's Lectures on Diseases o *rev.*, 465
Wood, Sir C., and the Indian Medical Service. *S* Army, Indian.
Woolwich, epidemic disease at, 617
Worcester, Sir C. Hastings on disease in, 381
Workman, Mr. F., report of Reading Pathological So ciety, 574, 599, 626
Wormwood, effect of oil of, 234
Wounds, Dr. Humphry, on treatment of, 178; effect of water on, 531; application of tincture of iodine to, 71
Wrist, Dr. Humphry on excision of, 181

Y.

Yew-berries, poisoning by, 481
Young, Mr., hydrocephalic fœtus, 600

Z.

Zygomatic fossa, protrusion of eye by exostosis in, 725.

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